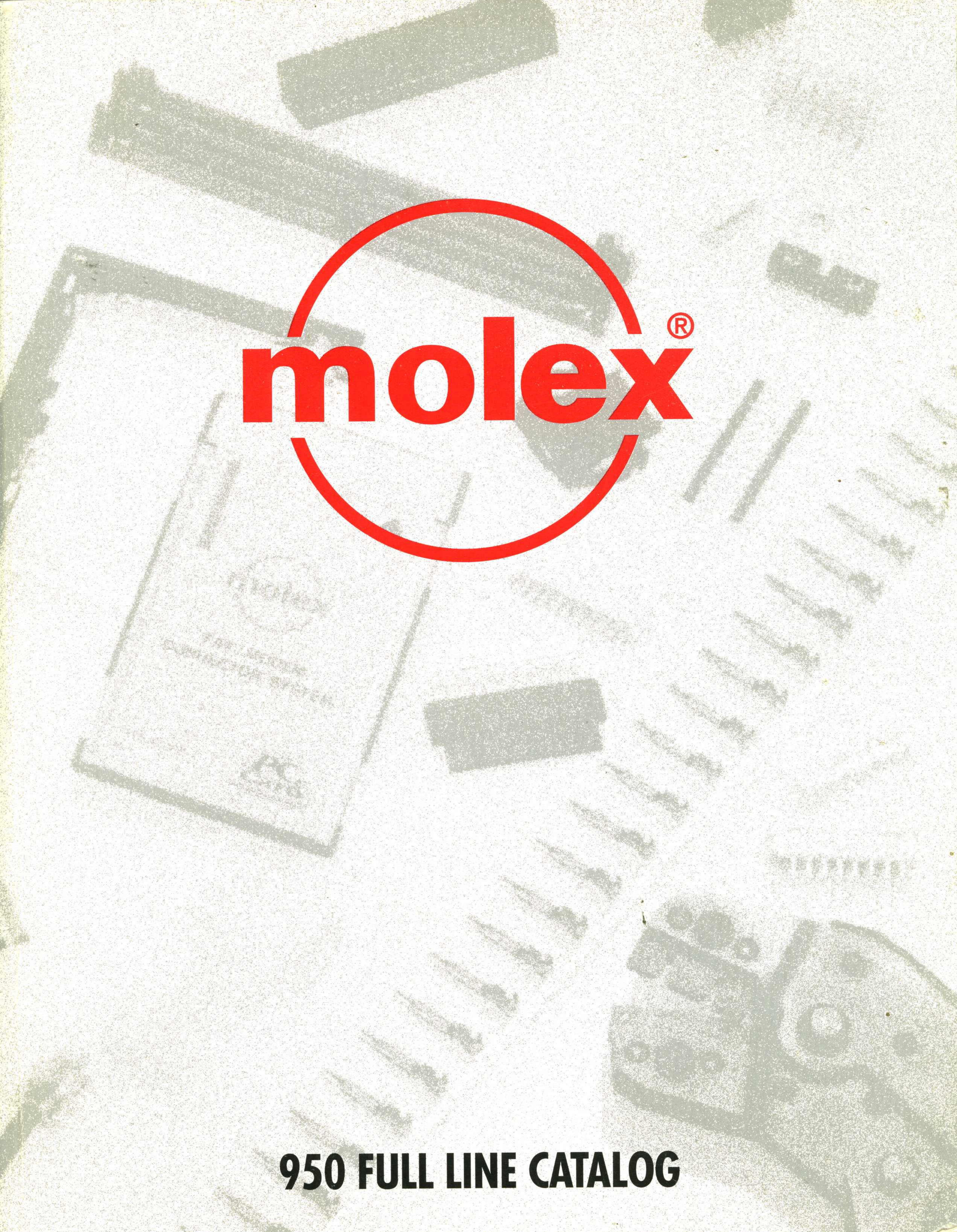
molex®



950 FULL LINE CATALOG

Table of Contents

The Molex catalog is divided into alphabetical sections. Illustrations and brief descriptions of our product lines on this page are followed on the opposite page by tabs that will help you quickly find the sections you need.

molex® Table of Contents

A Worldwide Commitment to Quality in Everything We Do

Molex: A One-Source Supplier

Molex, the second largest connector manufacturer in the world, has been serving customers since 1938. More than 50,000 quality products are available through a network of direct sales representatives and authorized distributors. Besides quality products and services, we also have worldwide design, engineering and manufacturing capabilities that we support with 44 manufacturing facilities in 21 countries. Our size and resources allow us to anticipate and meet customer needs through an aggressive new product development program that emphasizes custom design capabilities.

Industries that we serve include automotive, computer and peripheral, business equipment, home appliance, home entertainment, medical electronics, data communications and telecommunications.

Since reducing the total applied costs of using our products is important, we also offer a complete line of semi- and fully-automated application tooling to support our customers' production requirements.

Molex's Worldwide Operating Philosophy: Total Customer Satisfaction

The quality of our products and services is Molex's number one operating priority. It applies to everything we do for our customers. Our goal is to provide better products and services than any of our competitors. To achieve this, we are dedicated to continuous improvement of each and every one of our value-added processes.

Preferred Version Products

In a few cases Molex manufactures equivalent products with slightly different features in more than one region of the world. The lead times are longer for those versions that are not locally manufactured or stocked.

The wording "Preferred Version in ________________ " has been added near the Ordering Information for those products that are only being actively promoted in one or two areas of the world. This is to steer you toward the alternate products, which will be listed nearby.

Molex began operations in Brookfield, Illinois in 1938 using a proprietary plastic molding material called "Molex" that was developed by the company's founder, Frederick Krehbiel. It was used for a variety of products that included toy guns and clock casings.

In the early 1940s one of Frederick's sons, John H. Krehbiel, Sr., recognized the material's excellent electrical properties and Molex entered the electrical appliance market with a molded terminal block for Hotpoint/G.E. Over the years, Molex continued to increase the range of its products for a variety of consumer and capital goods applications.

Molex entered the global marketplace in 1967, opening a plant in Japan in 1970 and a plant in Ireland in 1971. Dozens of plants have opened since then, and today, more than 70% of Molex's revenues come from products manufactured and sold outside the United States. Molex, which went public in 1972, is traded on the NASDAQ National Market System in the United States and on the London Stock Exchange.

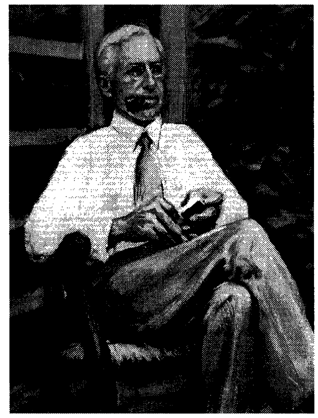
Today, Molex is the second largest connector manufacturer in the world, with extensive worldwide engineering and manufacturing capabilities. Serving original equipment manufacturers in industries that include automotive, computer, business equipment, home appliance, home entertainment, medical equipment, residential construction and telecommunications, Molex offers more than 50,000 products. These are sold through direct sales, distribution and manufacturer's representatives.

Molex plays an active role in helping to develop industry standards for interconnection products, working with standards organizations in many of the markets Molex serves. These include JEDEC, the IEEE, the Video Electronics Standards Association, the Serial System Architecture (SSA) Industry Trade Association, the Multibus Manufacturers Group and the VMEbus International Trade Association.

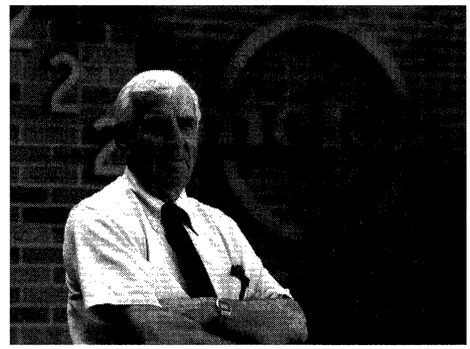
Engineering excellence, combined with innovation and technological leadership, is the hallmark of Molex's new product development process. By using a systematic approach to designing creative, cost-effective interconnection systems, Molex products can help you reduce time-to-market, improve quality and lower total applied costs.

A global network of design, engineering and manufacturing centers remove geographical barriers to engineering excellence, allowing us to serve you through your corporate headquarters or design centers no matter where they are located. Dedicated Application Tooling Groups in the United States, Japan, Ireland, the United Kingdom and Singapore build and service Molex Application Tooling that can help you lower the applied cost of our interconnection systems. This is done through custom and standard application tooling that range from a simple hand tool to sophisticated high-speed robotic assembly systems.

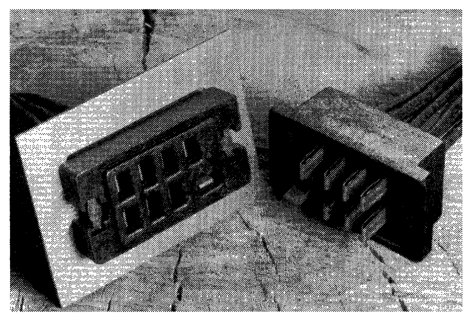
Complementing our worldwide design, engineering, manufacturing and application tooling capabilities are value-added services, such as molding and assembly, that make Molex a one-source supplier for all your interconnection needs.



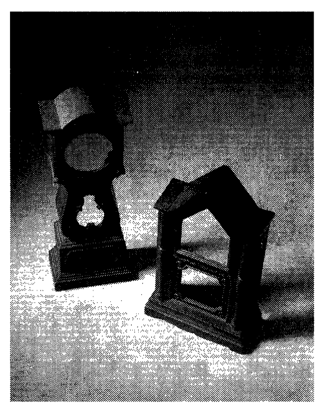
Frederick August Krehbiel, Molex's founder.



John H. Krehbiel, Sr., the son of the founder, recognized that the Molex material had electrical properties that made it ideal for use in connectors.



The first plug and receptacle connector series designed by John, Sr. He went on to obtain 14 patents on his designs.



Offering more than 50,000 interconnection products, Molex has come a long way from the toy guns and clock casings that it first manufactured.

WELCOME

The 950 Molex Full Line Catalog features a new worldwide standard catalog page to make it easier for you to use. All the technical specifications for each part are in the same place on each page. There also is more information about each of our products, including:

- Agency approvals
- Standard packaging (where available)
- *Use With and Mates With* information
- Isometric drawings for easy part identification
- Dual dimensions (millimeters and inches)

To make it easier to compare similar parts, we have begun the process of standardizing the catalog drawings by showing common views.

Tooling used to apply Molex products is on the last page(s) of each Product Section, with Section W featuring expanded Application Tooling information.

We welcome your comments about our new standard catalog page so we can continue to improve the quality of the technical information that we provide about our products. Please fax us at (708) 512-8627 or use the reply card at the back of the book. For a complete guide to the new standard catalog page format, please refer to our Product Page Overview on the following page.

SEARCH TOOLS

Table of Contents
Guide to Molex products by type or application

Section Divider Pages
Detailed breakdown of products within a section

Order No. Index
Molex order number to page number

Engineering No. Index
Molex series/engineering number to page number

Trade Name Index
Molex trade name to page number

Glossary
Definition of common industry terms

For Further Information
Molex worldwide sales offices and distribution network

ORDERING INFORMATION

Phone
For your nearest Molex representative, see the complete listing of Molex direct sales and distributor locations on pages X-1 to X-5.

Mail
For complete mailing information, see the listing of Molex worldwide sales offices on page X-2.

Internet
For information on Molex products and services, access the Molex worldwide web site at http://www.molex.com.

Customer Service
Molex's worldwide team of sales engineers and customer service representatives are nearby and ready to provide answers to all your product, technical and service needs. Contact your local Molex representative today to find out how we can best serve you.

molex® Product Page Overview

Pitch

Trade Name

Product Type/Application

Series/Engineering No.

Product Description

Isometric Drawing

Features and Benefits

Reference Information

Specifications

Orthographic Drawing

Ordering Information/ Dimensions Table

C-Grid

A

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 4 to 25 circuits
- Larger pocket accepts interim clip with end-to-end stacked connectors
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

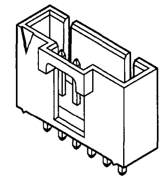
Mechanical
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C

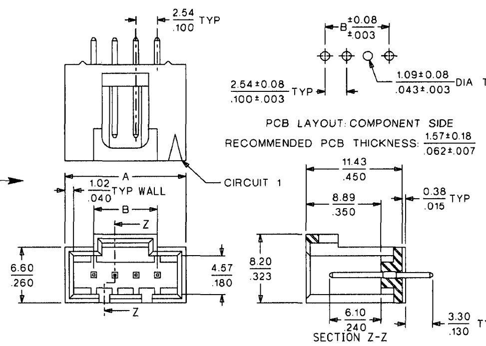
molex®

2.54mm (.100") Pitch
C-Grid SL™
Wire-to-Board
Shrouded Header

70563
Single Row, .180" Pocket
Vertical



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 15µ" Min. Gold	Order No. 30µ" Min. Gold	Order No. 150µ" Tin/Lead	Dimension A	Dimension B
4	• 70563-0003	70563-0108	70563-0038	14.49 (.570)	7.62 (.300)
5	• 70563-0004	70563-0109	70563-0039	17.03 (.670)	10.16 (.400)
6	• 70563-0005	70563-0110	70563-0040	19.59 (.770)	12.70 (.500)
7	• 70563-0006	70563-0111	70563-0041	22.11 (.870)	15.24 (.600)
8	• 70563-0007	70563-0112	70563-0042	24.65 (.970)	17.78 (.700)
9	• 70563-0008	70563-0113	70563-0043	27.19 (1.070)	20.32 (.800)
10	• 70563-0009	70563-0114	70563-0044	29.73 (1.170)	22.86 (.900)
11	• 70563-0010	70563-0115	70563-0045	32.27 (1.270)	25.40 (1.000)
12	• 70563-0011	70563-0116	70563-0046	34.81 (1.370)	27.94 (1.100)
13	• 70563-0012	70563-0117	70563-0047	37.35 (1.470)	30.48 (1.200)
14	• 70563-0013	70563-0118	70563-0048	39.89 (1.570)	33.02 (1.300)
15	• 70563-0014	70563-0119	70563-0049	42.43 (1.670)	35.56 (1.400)
16	• 70563-0015	70563-0120	70563-0050	44.97 (1.770)	38.10 (1.500)
17	• 70563-0016	70563-0121	70563-0051	47.51 (1.870)	40.64 (1.600)
18	• 70563-0017	70563-0122	70563-0052	50.05 (1.970)	43.18 (1.700)
19	• 70563-0018	70563-0123	70563-0053	52.59 (2.070)	45.72 (1.800)
20	• 70563-0019	70563-0124	70563-0054	55.13 (2.170)	48.26 (1.900)
21	• 70563-0020	70563-0125	70563-0055	57.67 (2.270)	50.80 (2.000)
22	• 70563-0021	70563-0126	70563-0056	60.21 (2.370)	53.34 (2.100)
23	• 70563-0022	70563-0127	70563-0057	62.75 (2.470)	55.88 (2.200)
24	• 70563-0023	70563-0128	70563-0058	65.29 (2.570)	58.42 (2.300)
25	• 70563-0024	70563-0129	70563-0059	67.83 (2.670)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
▩ Highlighted area denotes preferred standard product, usually available with shorter lead times

A-28 950

DESCRIPTIONS

Features and Benefits
Pertinent product features

Reference Information
Includes packaging information, agency approvals, and inches or millimeters as original design dimensions

Specifications
Electrical, mechanical and physical product attributes

Pitch
Sections organized by pitch or centerline, smallest to largest

Trade Name
Molex Trade Name Index located on page x

Product Type/Application
Quick reference for product identification

Series/Engineering No.
Engineering No. Index begins on page xviii

Product Description
Differentiating characteristics

Isometric Drawings
Basic three-dimensional product views

Orthographic Drawings
Two-dimensional product drawings

All dimensions are millimeters over inches unless otherwise noted. The catalog drawing provides only basic dimensional information. Contact your local Molex sales representative or office for the most complete and up-to-date detail drawings.

Ordering Information/Dimensions Table
Molex has standardized the information in the dimensions table to reflect millimeters followed by inches

A

Absorption: 1) The amount of moisture a substance will assimilate and retain. 2) The dissipation of energy by radiation passing through a medium.
Accelerated Aging: A test in which voltage, temperature and other parameters are increased above normal operating values to obtain observable deterioration in a relatively short period of time.
Accessories: Mechanical devices, such as cable clamps, added to connectors, and other such attachable hardware that makes up the total connector configuration.
Actuating Force: The force required to move the actuator to the switch operating position.
Adapter: An intermediate device that attaches special accessories and provides for special mounting.
Alloy: A combination of two or more elements of which at least one is a metal.
Ampere: A standard unit of current. Designated as the amount of current that occurs when one volt of emf is applied across one ohm of resistance. An ampere of current is produced by one coulomb of charge passing a point in one second.
Angle Connector: A connector that joins two conductors end to end at a specified angle.
Attenuation: Power or signal strength loss in an electrical system. Decrease in power expressed in decibels (dB).
Axial Displacement: Incremental difference between an initial position and a final position resulting from a force applied along the component's axis.

B

Back Mounted: When a connector is mounted from the inside of a panel or box with its mounting flanges inside the equipment.
Barrel: The portion(s) of a terminal or contact that is crimped.
Bend Radius: The radius of bend that a fiber optic cable can follow without any adverse effect in attenuation or breakage.
Bifurcated Contact: Spring contact that has been split lengthwise to provide two independent contact surfaces. This redundancy assures two points of contact with the mating conductor element.
Blind Mating: A term describing the mating of rack-and-panel connectors via guide or key pins that ensure correct alignment of the connector halves during mating.
Bonded Cable: Round PVC insulated conductors that are placed side by side and chemically joined in a single plane.
Boot: 1) A form placed around wire termination of a multiple-contact connector to hold the liquid potting compound before it hardens. 2) A protective housing, usually made from a resilient material, that prevents moisture entry into a connector.
Braid: Woven bare metallic or tinned copper wire used as shielding for wires and cables and as ground wire for batteries or heavy industrial equipment. Also a woven fibrous protective outer covering over a conductor or cable.
Bulkhead Connector: Type of connector designed for insertion into a panel cutout from the component side.

C

Cable: An assembly of one or more conductors or fiber optic strands within a protective sheath.
Cantilevered Contact: A spring contact in which one or more cantilevered springs provide the contact force.
Capacitance: The ability of a dielectric material between conductors to store an electrical charge when a voltage difference exists between conductors.
Centerline Spacing: See Pitch.
Chamfer: Angle on the inside edge of the barrel entrance of a terminal or connector housing that permits easier insertion of the cable into the barrel or of a plug into a receptacle.
Characteristic Impedance: The impedance that, when connected to the output terminals of a transmission line of any length, makes the line appear infinitely long. The ratio of voltage to current at every point along a transmission line on which there are no standing waves.
Coaxial Cable: 1) A cable consisting of two cylindrical conductors with a common axis. 2) A cylindrical transmission line comprised of a conductor centered inside a metallic tube or shield, separated by a dielectric material, and usually covered by an insulating jacket.
Component Density: The quantity of components on a printed circuit board per unit area.
Composite Cable: A cable containing more than one gauge size or a variety of circuit types.
Concentricity: In a wire or cable, the measurement of the location of the center of the conductor with respect to the geometric center of the circular insulation.
Conductivity: A material's ability to conduct electric current expressed in terms of the current per unit of applied voltage or 1/impedance.
Conductor: An uninsulated wire or combination of wires suitable for carrying electric current.
Connector: A coupling device that provides an electrical and mechanical connection or disconnection between two circuits.
Connector Insertion Loss: The loss of power due to insertion of a mated connector onto a cable.
Contact: The conducting part of a connector that acts with another such part to complete or break a circuit. Also known as terminals.
Contact Bounce: The momentary rebounding occurring between two contact surfaces before they attain firm closure in a switch or keypad.
Contact Capacitance: The capacitance that exists between two open contacts in a switch or keypad.
Contact Durability: Endurance measured by the number of insertion and withdrawal cycles that a connector withstands while remaining within its specified electrical and mechanical performance levels.
Contact Force: See Normal Force.
Contact Insertion Force: The amount of force required to insert a contact into the connector housing.

Contact Pressure: The force that mating surfaces exert against each other.
Contact Rating: The maximum and minimum voltage, current and power that a contact system is capable of carrying under certain specified conditions.
Contact Resistance: Maximum permitted electrical resistance of pin and socket contacts when assembled in a connector under typical service use.
Contact Retention: Defines the minimum axial load in either direction that a contact must withstand while remaining firmly seated in its normal position in the connector housing.
Continuity: A continuous path for the flow of current in an electrical circuit.
Coupler: 1) A component that transfers energy from one circuit to another. 2) An optical component that interconnects three or more optical conductors.
Coupling Ring: A device used on cylindrical connectors to lock a plug and receptacle together. It may or may not make the connector easier to mate/unmate.
Current: A movement of electrons, either positive or negative ions, or holes. The rate of transfer of electricity from one point to another. Current is usually measured in amperes.
Current Carrying Capacity: The maximum current an insulated conductor can safely carry without exceeding its insulation and jacket temperature limitations.
Current Rating: Maximum current that a device is designed to conduct for a specified time at a specified operating temperature.

D

Daisy Chain: Two or more connectors terminated on the same cable. Each connector shares the same electrical path but provides independent signal distribution.
Dielectric: Non-conducting barriers that protect individual conductors from accidental contact with other conductors (a "short circuit") and allow uninterrupted flow or current.
Dielectric Strength: The maximum voltage that a dielectric material can withstand, under specified conditions, without rupturing. It is usually expressed in volts/unit thickness.
Dielectric Withstanding Voltage: Maximum potential gradient that a dielectric material can withstand without failure.
Disengagement Force: See Withdrawal Force.
Dual Beam: A type of stamped-and-formed contact where the female contact holds the male contact between two beams.
Durability: See Contact Durability.

E

Edge Connector: A one-piece receptacle, containing female contacts, designed to receive the edge of a printed circuit board. Usually used to connect a daughter card to a mother board. Also called Card Edge Connector.
Electromagnetic: Pertaining to the combined electric and magnetic fields associated with movements of electrons through conductors.
Engagement and Separation Force: The amount of force needed to engage (mate) and/or separate (unmate) contact elements in mating connectors. Force levels vary with circuit size. Total connector engagement force is approximated by multiplying the number of circuits in the housing by the per circuit engagement (mating) force.

F

Farad (F): A unit of capacitance equal to that of a capacitor that will accumulate a charge of 1 coulomb when a potential difference of 1 volt is applied to it.
Feed Through: 1) A conductor that connects patterns on opposite sides of a printed circuit board. Also called interfacial connection. 2) A connector or terminal block, usually having double-ended terminals that permit simple distribution and bussing of electrical circuits. Also used to describe a bushing in a wall or bulkhead separating compartments at different pressure levels with terminations on both sides.
Ferrule: 1) A short tube used to make solderless connections to shielded or coaxial cable. Also molded into the plastic inserts of multiple contact connectors to provide strong, wear-resistant shoulders on which contact retaining springs can bear. 2) A mechanical fixture used to confine and align the stripped end of a fiber in a fiber optic connector.
Fiber Optic: The technology of active and passive guidance of optical radiation along optical conductors. A method of transmitting light signals through cables made of either plastic or glass.
Flammability: The measure of the material's ability to support combustion.
Flange: A projection extending from or around the periphery of a connector and provided with holes to permit mounting the connector to a panel or to another mating connector half.
Flat Cable: Any cable with two smooth or corrugated, but essentially flat, surfaces.
Flat Conductor Cable: A cable with two or more flat conductors. Flat conductor flexible cables have rectangular, rather than round, cross sections.
Flex Life: The ability of a conductor or cable to withstand repeated bending.
Frequency: The number of times a periodic action occurs in a unit of time. The number of cycles that an electric current completes in one second.

G

Gang Disconnect: A connector that permits the rapid and simultaneous connection and disconnection of two or more electrical circuits.
Gauge: A term used to denote the physical size of a wire.
Grid: An orthogonal network of two sets of parallel, equidistant lines used for locating points on a printed board. Connections should be located on the cross-points of the grid lines.

H

Harness: A group of wires and cables, usually made with breakouts, which are tied together or pulled into a rubber or plastic sheath, and are used to interconnect electric circuits.
Hermaphroditic Connector: An interconnecting device in which both mating parts are identical at their mating surfaces. Also a connector housing that accepts both male and female terminals.
Hi Pot: A dielectric strength test that tests the insulation between two circuits.

I

Impedance: The total opposition that a circuit offers to the flow of alternating current, or any other varying current, at a particular frequency.
Inductance: The property of a circuit or circuit element that opposes a change in current flow, causing current changes to lag behind voltage changes.
Insertion Force: The force required to insert a connector housing into its final position in a printed circuit board or panel cutout.
Insertion Loss: 1) The loss in load power resulting from the insertion of a component, connector, or device. 2) A measure of the attenuation of a device by determining the output of a system before and after the device is inserted into the system.
Insulation Displacement Technology (IDT): A wire termination technique in which an insulated wire is pressed into a terminal slot smaller than the conductor diameter, displacing the insulation, and forming an electrical contact between the terminal and the conductor.
Insulation Resistance: The electrical resistance of the insulating material between any pair of contacts, conductors, or grounding devices in various combinations.

J

Jacket: Outermost layer of insulating material of a cable or wire.
Jackscrew: A screw attached to one-half of a two-piece, multiple-contact connector and used to draw and secure both halves together and to separate them.
Jumper Cable: A short flat cable interconnecting two printed circuit boards or devices.

K

Keying: A mechanical arrangement of inserts and/or shell configurations (referred to as clocking in some instances) that prohibits the mating of mismatched plugs and receptacles. This allows connectors of the same size to be lined up, side-by-side, with no danger of making the wrong connection.

L

Leakage: The undesirable passage of current over the surface of, or through, an insulator.
Life Cycle: A test to determine the length of time before failure in a controlled, usually accelerated, environment.
Loop Resistance: The total resistance of two conductors measured round trip from one end.

M

Mass Termination: A termination method, typically used with discrete wire or ribbon cable, in which two or more insulated conductors are simultaneously terminated to the same connector housing. Termination method is typically insulation displacement.
Mating Force: The force required to mate a connector.
Mismatch, Connector Impedance: Terminal or connector with a different impedance than the circuit or cable it is designed for.
Multimode (Fiber Optic): A fiber that supports the transmission of more than one mode of a given wavelength.
Multiplexing: Combining of information signals from several channels onto one single channel for transmission. The signals being multiplexed are transmitted over the single channel on a single frequency at different times (time division multiplexing) or on different frequencies at the same time (frequency division multiplexing).

N

Normal Force: The force perpendicular to the contact interface. Does not include frictional forces, created from insertion to, or withdrawal from the connector housing.

O

Operating Temperature: The minimum and/or maximum temperature, or temperature range, the connector will operate over.

P

Panel Mount: Method of fixing a connector half to a cut out in a board, panel or frame.
Paddle Card: A small printed circuit board that acts as an interposer for wire termination to a connector.
Pitch: The nominal distance from center-to-center of adjacent conductors.
Plating: The overlaying of a thin coating of metal on metallic components to improve conductivity, provide for easy soldering, or prevent rusting or corrosion.
Polarization: Mechanical guide arrangement in a connector housing, shell or insert that ensures that connector halves are correctly aligned before they can be fully mated.
Polarizing Pin (Key): A pin or keying device on one half of a two-piece connector that mates with an appropriate hole on the other half during connector assembly to assure that only related connector halves can be assembled.
Positive Lock: A type of latch or locking mechanism that holds a die set in an installation tool, or connector housing, so that the parts cannot be accidentally unlocked or unmated.

Q

Quick Disconnect: A type of connector shell that permits rapid locking and unlocking of two connector halves.

R

Rated Temperature: The maximum temperature an electric component can operate at for extended periods without loss of its basic properties.
Rated Voltage: The maximum voltage an electric component can operate at for extended periods without undue degradation or causing a safety hazard.
Receptacle: Usually the half of a two-piece multiple contact connector that contains the female contacts.
Resistance: Property of a conductor that determines the current produced by a given difference of potential.
Ribbon Cable: Flat cable with conductors that have been individually insulated.
Round Conductor Flat Cable: A cable made with parallel round conductors in the same plane.

S

Selective Plating: The process of plating gold only in the mating areas (surfaces) of a contact.
Separation Force: See Engagement Force.
Shield: Device surrounding the portion of a connector that is used for attaching wires or cables to shield against electromagnetic interference, and/or protect connector wires or cable from mechanical damage.
Shield Effectiveness: The relative ability of a shield to screen out undesirable signals.
Shielded Cable: A cable in which a metallic layer is placed around a conductor or group of conductors to prevent electrostatic or electromagnetic interference between the enclosed wires and external fields. The shield may be the metallic sheath of the cable or a metallic layer inside of a non-metallic sheath.
Shunt: A device used to divert part of an electric current.
Single Beam: A stamped-and-formed contact where the female contact holds the male contact between itself and the housing wall.
Single Mode Fiber: A type of fiber optic cable that supports only a single mode of light at a specified bandwidth.
Split Beam: A female contact design where the contact beam is separated into two parts over a portion of its length to provide two points of contact.
Stackable: Refers to placing symmetrical housings (assemblies) side-by-side or end-to-end and where the distance from the last contact in one assembly to the first contact in the next assembly is equal to the distance between any two contacts in the assembly itself.
Standoff: Tiny spacers built into housings to raise the housing from the surface of a printed circuit board.
Straddle Mount: A dual row, surface mount PC tail configuration that allows the printed circuit board to be inserted between two rows. The PC tail rows are then soldered to their respective sides of the printed circuit board.
Strain Relief: Technique involving methods of termination or installation, which reduces the transmission of mechanical stresses to the conductor termination.
Strand: One of the wires, or groups of wires, of any stranded conductor.
Surface Mounting: The electrical connection of components to the surface of a conductive pattern without using component holes.

T

Tensile Strength: Greatest longitudinal stress that a substance can bear without pulling apart.
Terminal: A device that terminates a conductor to a post, stud, chassis or another conductor, or the like, to establish an electrical connection.
Termination Resistance: The opposition to current flow due to the mating interface of a connector and a header or to another connector.
Tolerance: The upper and lower limits of variation from a component's nominal value.
Trifurcon™: A variation of the Molex basic KK® type double cantilever terminal with two additional contact wings in the vertical plane from the main contact interface, for a total of three contact points.
Twisted Pair: A cable composed of two small gauge insulated conductors, twisted together without a common covering. The two conductors of a twisted pair are usually well insulated.

U

Unmating Force: The force required to disconnect a male and female connector.

W

Wire Pull Out: The force required to separate a wire from a contact after termination.
Withdrawal Force: The force required to disconnect the two halves of a connector.

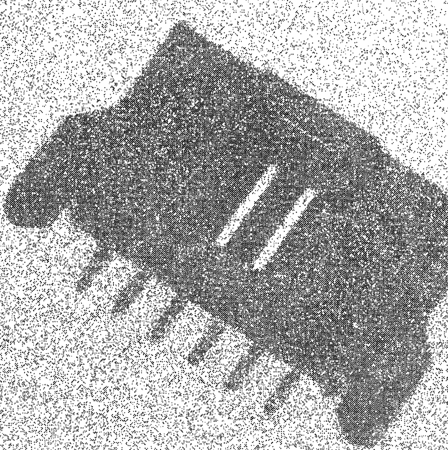
Trade Name Index

Abbreviations

V	volts
A	amperes
max.	maximum
mΩ	milliohm
MΩ	megaohm
min.	minimum
g	grams
lb.	pounds
kg	kilograms
IDT	insulation displacement technology
No.	number
oz	ounces
AWG	wire gauge
mm	millimeters
"	inches
µ"	microinches
µm	microns
UL	Underwriters Laboratories
TYP	typical
SMT	surface mount technology
Ref.	reference
PCB	printed circuit board
DIA	diameter
N	newton
L	liter
m	meter
'	foot
Hz	hertz
ZIF	zero insertion force
FFC	flat flexible cable
FPC	flexible printed circuitry
LIF	low insertion force
R	radius
OTR	offset terminal retention
CKT	circuit

molex Order No. Index

C-Grid



C-Grid®
High Density Connectors
Introduction

Molex presents its 2.54mm (.100") pitch grid interconnection products...C-Grid, the dual row, board-to-board system and C-Grid SL™, the modular, single row wire-to-board and wire-to-wire system.

The proven design of both the C-Grid and C-Grid SL systems features similar material and electrical specifications. Both utilize 0.64mm (.025") square pins and selective Gold or Tin/Lead plating.

C-Grid, based on a .100" grid, is designed for dense electronic packaging. The system includes: vertical and right angle headers in breakaway, shrouded and dual-body styles; vertical and right angle receptacles; headers and receptacles for SMT applications; and a 2-circuit shunt completes the C-Grid product line.

C-Grid SL is designed for high density signal applications. The system includes: low profile latching vertical and right angle headers; 5 stackable, low profile housings for male or female crimp terminals; pre-assembled, single piece pin and receptacle connector assemblies for IDT termination of discrete wire or ribbon cable and piercing crimp termination of FFC/FPC; single and dual row latching interim clips for stacking of subassemblies to form larger connectors; panel mounts for modular wire-to-wire remote interconnections; and SL offers design flexibility and automated harness-making capabilities when combined with our tooling.

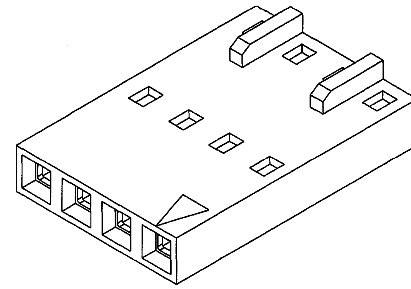
These 4 low profile, stackable housings form the basis of the single row system. Each housing accommodates either male or female terminals, IDT or crimp.

The "A" version is infinitely stackable on the X-Y matrix.

The "C" version has ribs on the front end that polarize and also prevent the housing from twisting off the mating pins during mating/disconnect.

The "D" version has back ribs that polarize, guide and maintain the connector in position in an interim clip or panel mount. It is used with both male and female terminals.

The "G" version has front ribs as well as a positive locking latch and anti-entanglement ribs to prevent wires from catching under the latch during harness-making and storage.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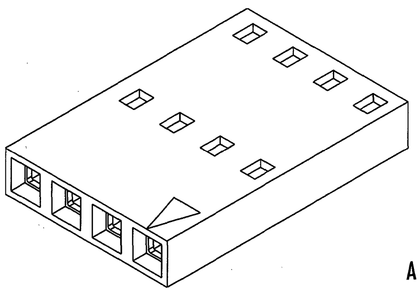
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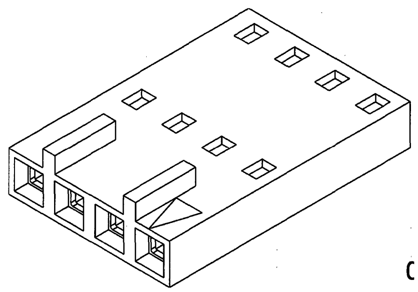
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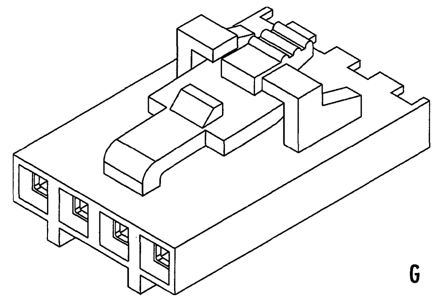
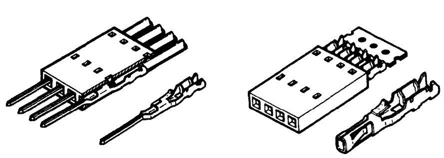
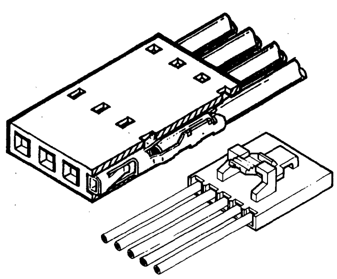

G

C-Grid SL™ boasts pre-assembled, single piece construction of its insulation displacement-type connector assemblies. These can terminate both discrete wire or ribbon cable.

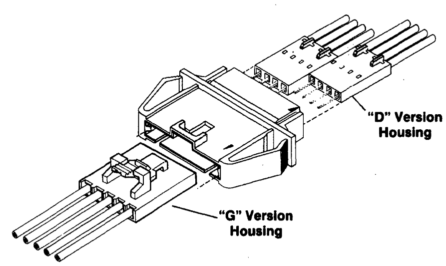


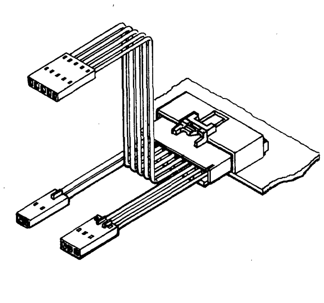
Preloaded assemblies are loaded into plastic tubes that protect the product during shipping and also allow the connector to be integrated into highly automated harness production.

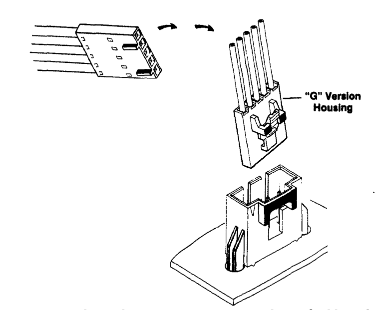


After termination the housings are locked over the terminal and the carrier strip is broken off. This automated process, with built-in diagnostic systems, assures quality products.

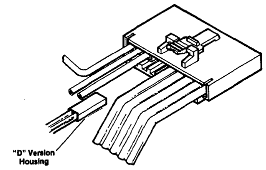
Shown: Wire-to-wire connection using male connectors in "D" version housings. The ribs interface to slots on the underside of the panel mount. Once loaded, the panel mount is fitted into place in the panel. Completing the connection, the female connector, "G" version, is guided through the other end of the panel mount via polarization slots. Positive latch ensures a tight lock.





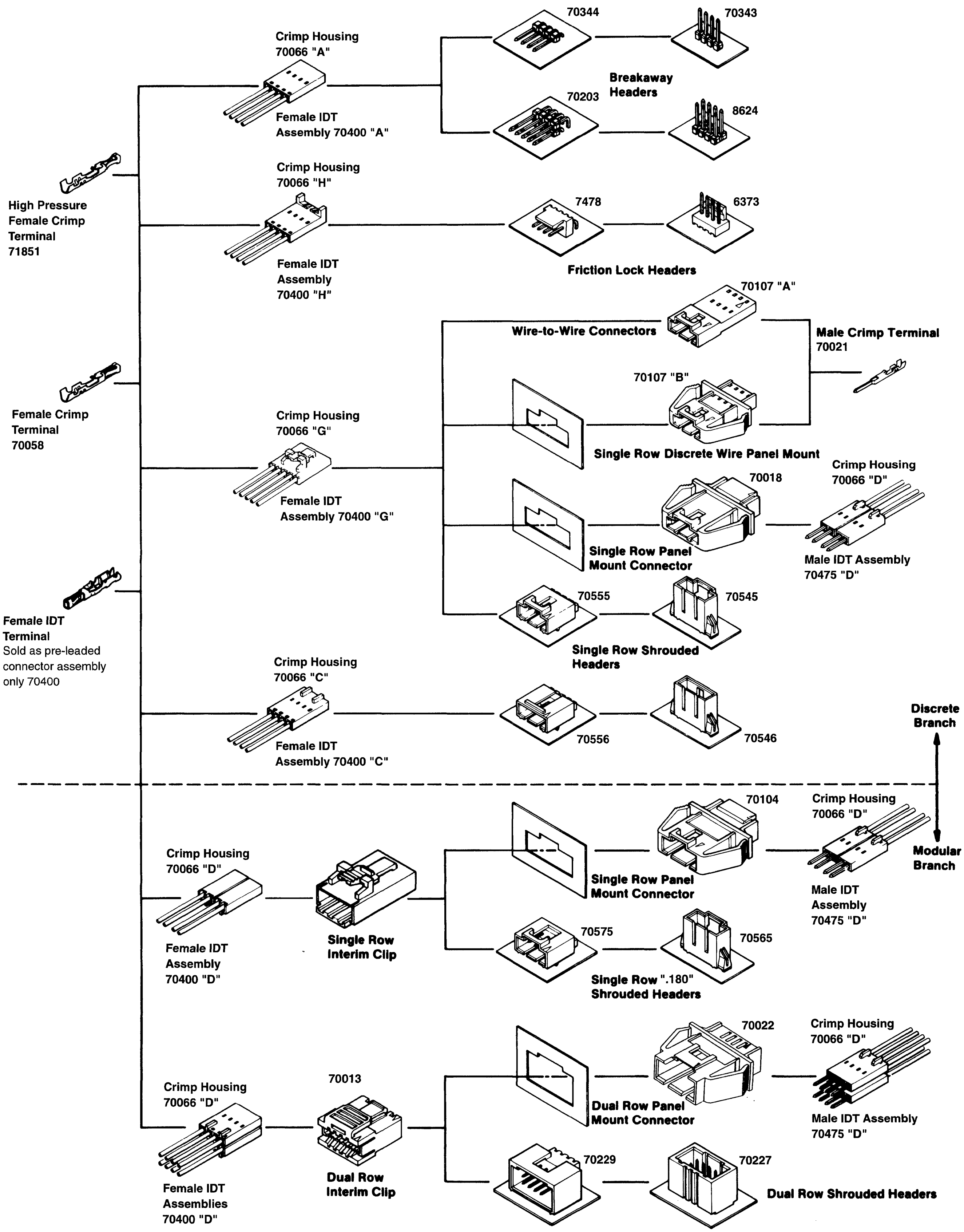


Shown: Wire-to-board connection using a shrouded header with PC board locks and a "G" version female connector. The polarizing ribs on the connector prevent it from breaking or bending the pins on the header during mating and disconnect. Note the positive latching feature.



Shown: Gang loading of subassemblies in an interim clip module. The slots in the clip guide the "D" version housing during loading and also prevent the housing from drifting within the clip.

C-Grid® Modular Interconnection System



FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Terminal

70021 Male, Crimp

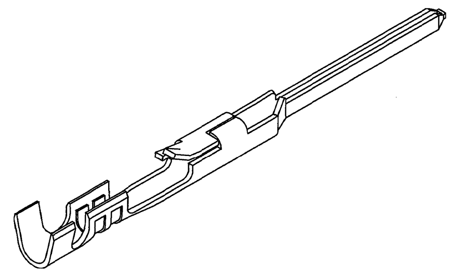
Features and Benefits
- Dual tab strain relief
- Locking tang secures terminal in housing

Reference Information
Product Specification: PS-70021
Packaging: Reel or loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70058 and 71851 female crimp terminals, and 70400 and 70430 connector assemblies
Use With: 70066D and 70107 housings
Designed In: Inches

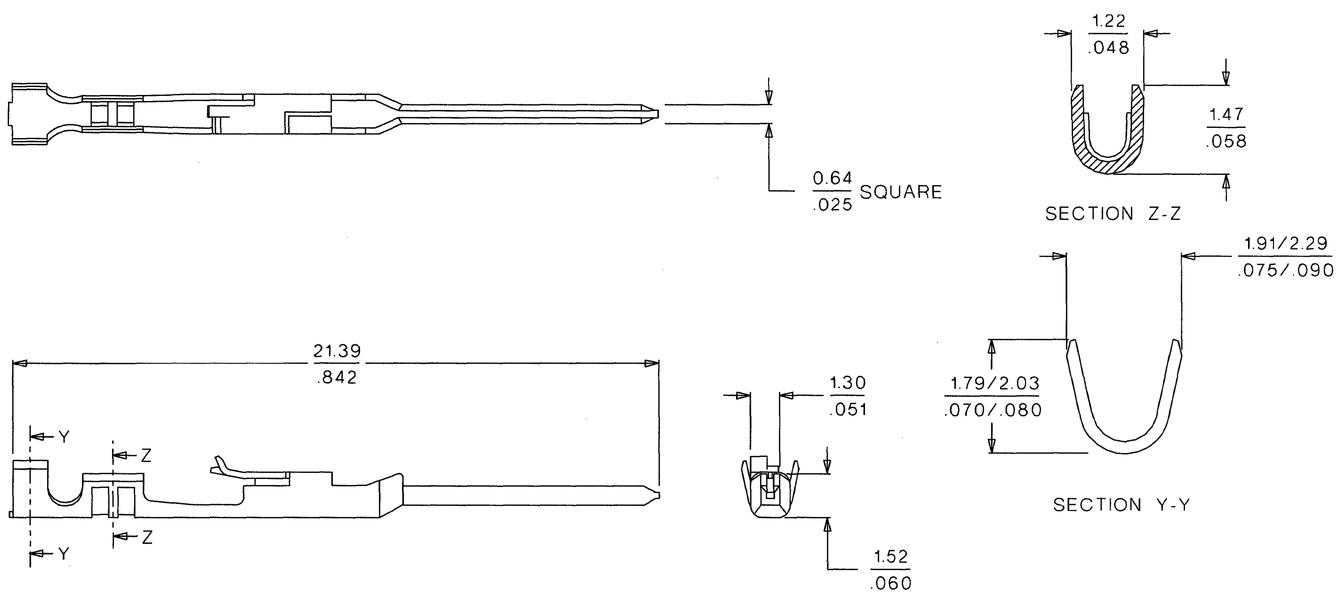
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Pull-Out Force: 4 lb min.
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Wire Accommodation: 22 to 24 and 24 to 30 AWG
Insulation and Wire Gauge Range: See Table
Pin Height: .300" max. to .280" min. (measured from top of housing)



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter
Reel Form			
• 16-02-0116	1	22-24	.064
• 16-02-0078		24-30	.060
• 16-02-0081	2	22-24	.064
• 16-02-0077		24-30	.060
• 16-02-0107	3	22-24	.064
• 16-02-0105		24-30	.060

Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter
Loose Form			
• 16-02-0117	1	22-24	.064
• 16-02-0110		24-30	.060
• 16-02-0115	2	22-24	.064
• 16-02-0109		24-30	.060
• 16-02-0114	3	22-24	.064
• 16-02-0108		24-30	.060

• US Standard Product, available through Molex franchised distributors
Plating No. 1: 30µ" min. Gold in select area over 50µ" min. Nickel overall with 75µ" Tin/Lead in select area
Plating No. 2: 15µ" min. Gold in select area over 50µ" min. Nickel overall with 75µ" min. Tin/Lead in select area
Plating No. 3: 150µ" Tin/Lead over 50µ" Nickel overall
Reels contain 20,000 to 25,000 terminals
▨ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Terminal

70058 Female Box, Crimp

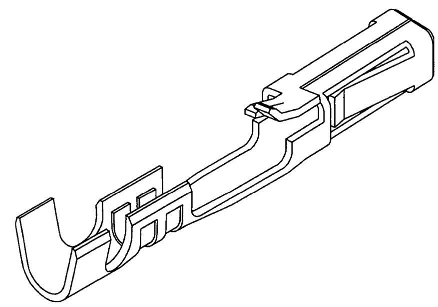
Features and Benefits
- Dual beam, fully enclosed box contact
- Dual tab strain relief
- Locking tang secures terminal in housing

Reference Information
Product Specification: PS-70058
Packaging: Reel or loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70021 male crimp terminals and 0.64mm (.025") square pins
Use With: All 70066 and 70450 housings
Designed In: Inches

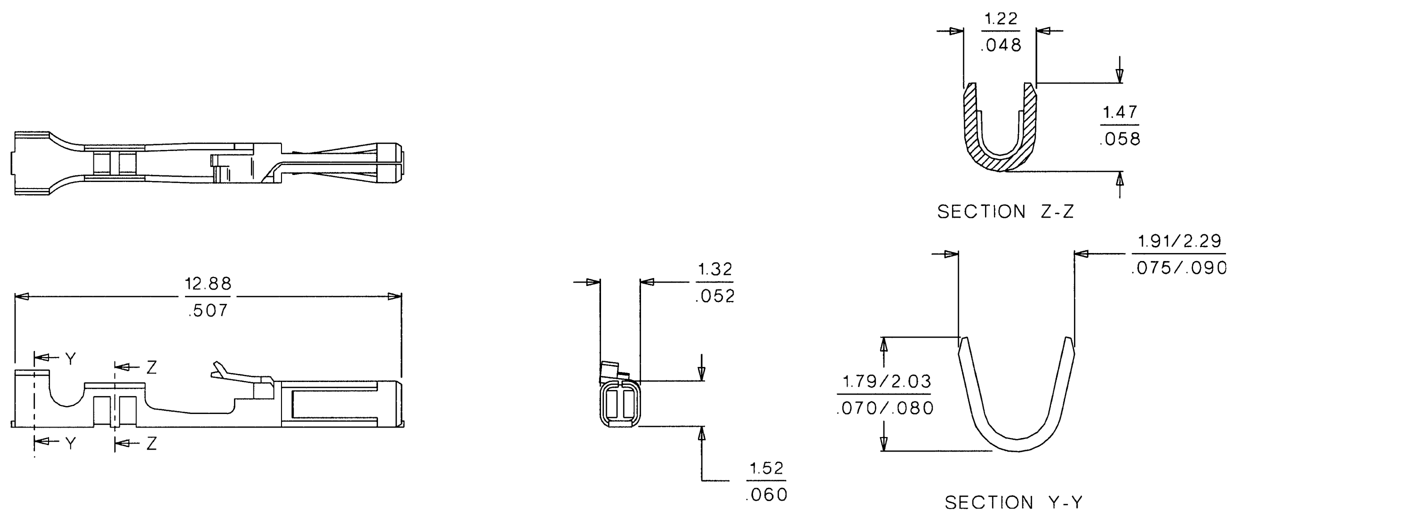
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Insertion Force: 0.32 lb Tin; 0.34 lb Gold
Contact Retention to Housing: 4 lb
Wire Pull-Out Force: 4 lb
Mating Force: 8.0 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g min.
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Wire Accommodation: 22 to 24 and 24 to 30 AWG
Insulation and Wire Gauge Range: See Table
Pin Height: 5.08mm (.200") min. (measured from top of housing/PCB to top of pin) 8.13mm (.320") max.



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter
Reel Form			
• 16-02-0088	1	22-24	.064
• 16-02-0083		24-30	.060
• 16-02-0087	2	22-24	.064
• 16-02-0082		24-30	.060
• 16-02-0086	3	22-24	.064
• 16-02-0069		24-30	.060

Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter
Loose Form			
• 16-02-0104	1	22-24	.064
• 16-02-0098		24-30	.060
• 16-02-0103	2	22-24	.064
• 16-02-0097		24-30	.060
• 16-02-0102	3	22-24	.064
• 16-02-0096		24-30	.060

• US Standard Product, available through Molex franchised distributors
Plating No. 1: 30μ" min. Gold in select area over 50μ" min. Nickel overall with 75μ" Tin/Lead in select area
Plating No. 2: 15μ" min. Gold in select area over 50μ" min. Nickel overall with 75μ" min. Tin/Lead in select area
Plating No. 3: 150μ" Tin/Lead over 50μ" Nickel overall
Reels contain 20,000 to 25,000 terminals
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Terminal

71851

Female, High Force Crimp

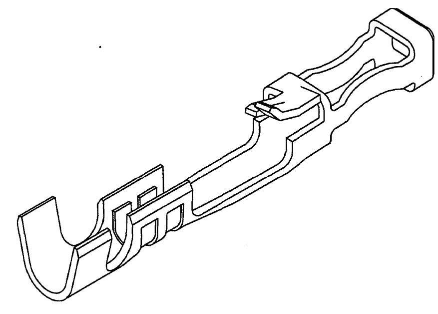
Features and Benefits
- Dual beam, fully enclosed box contact
- Higher mating force than standard crimp terminal
- For use with low current/high vibration applications in small circuit sizes
- Dual tab strain relief
- Locking tang secures terminal in housing

Reference Information
Product Specification: PS-71851
Packaging: Reel or loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70021 male crimp terminals and 0.64mm (.025") square pins
Use With: 70066 and 70450 housings
Designed In: Inches

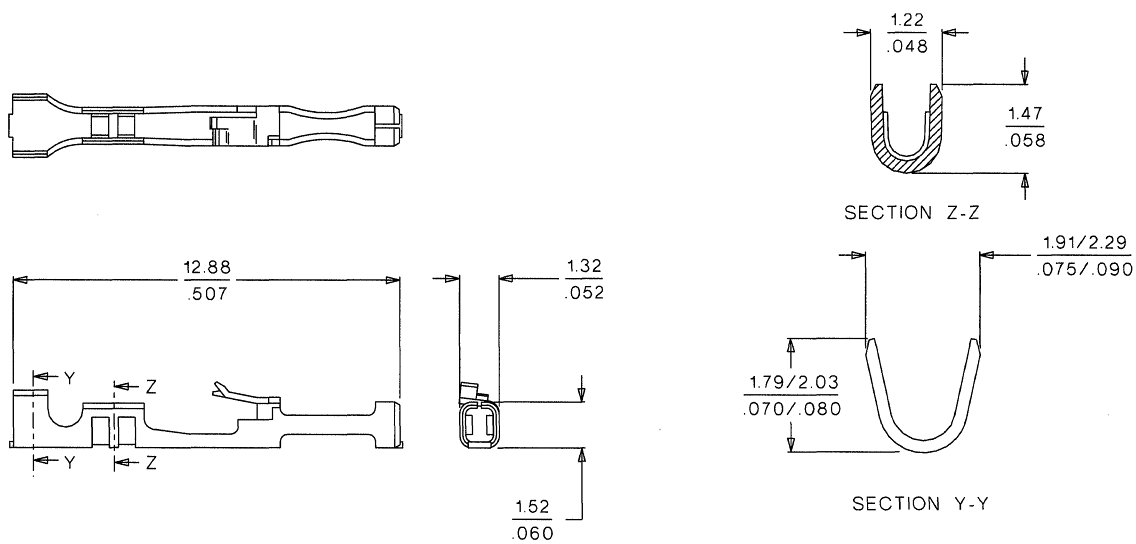
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Insertion Force: 1.44 lb Tin; 0.92 lb Gold
Contact Retention to Housing: 4 lb min.
Wire Pull-Out Force: 4 lb min.
Mating Force: 32 oz max. per circuit
Unmating Force: 4 oz min. per circuit
Normal Force: 200g min.
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Wire Accommodation: 22 to 24 and 24 to 30 AWG
Insulation and Wire Gauge Range: See Table
Mating Pin Height: 5.08mm (.200") min. (measured from top of housing/PCB to top of pin) 8.13mm (.320") max.



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter
Reel Form			
• 16-02-1111	1	22-24	.064
• 16-02-1113		24-30	.060
• 16-02-1124	2	22-24	.064
• 16-02-0119		24-30	.060
• 16-02-1110	3	22-24	.064
• 16-02-1112		24-30	.060

Order No.	Plating	Wire Range (AWG) Stranded	Insulation Maximum Outside Diameter
Loose Form			
• 16-02-1115	1	22-24	.064
• 16-02-1117		24-30	.060
• 16-02-1125	2	22-24	.064
• 16-02-1109		24-30	.060
• 16-02-1114	3	22-24	.064
• 16-02-1116		24-30	.060

• US Standard Product, available through Molex franchised distributors
Plating No. 1: 30μ" min. Gold in select area over 50μ" min. Nickel overall with 75μ" Tin/Lead
Plating No. 2: 15μ" min. Gold in select area over 50μ" min. Nickel overall with 75μ" min. Tin/Lead in select area
Plating No. 3: 150μ" Tin/Lead over 50μ" Nickel overall
Reels contain 20,000 to 25,000 terminals
Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

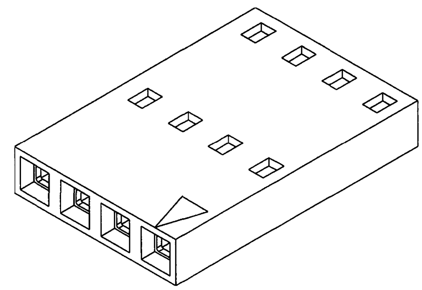
70066

Single Row Version A, Nonpolarized

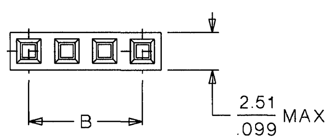
Features and Benefits
- Sizes 2 to 25 circuits
- End-to-end and side-to-side stackable for single or dual row connections to a 2.54mm (.100") pitch grid pin field

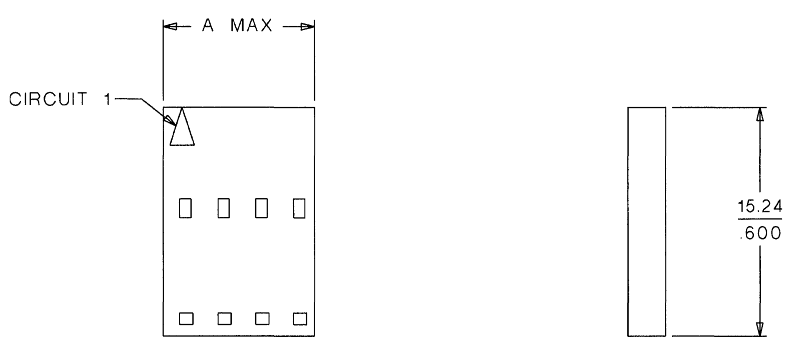
Reference Information
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8624, 42375, 42377, 70203 and 70206 unshrouded headers
Use With: 70021, 70058 and 71851 crimp terminals
Designed In: Inches

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C



Not For Use With C-Grid III™ Components





Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin**
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	• 50-57-9002	5.05 (.199)	2.54 (.100)
3	• 50-57-9003	7.59 (.299)	5.08 (.200)
4	• 50-57-9004	10.13 (.399)	7.62 (.300)
5	• 50-57-9005	12.67 (.499)	10.16 (.400)
6	• 50-57-9006	15.21 (.599)	12.70 (.500)
7	• 50-57-9007	17.75 (.699)	15.24 (.600)
8	• 50-57-9008	20.29 (.799)	17.78 (.700)
9	• 50-57-9009	22.83 (.899)	20.32 (.800)
10	• 50-57-9010	25.37 (.999)	22.86 (.900)
11	• 50-57-9011	27.91 (1.099)	25.40 (1.000)
12	• 50-57-9012	30.45 (1.199)	27.94 (1.100)
13	• 50-57-9013	32.99 (1.299)	30.48 (1.200)
14	• 50-57-9014	35.53 (1.399)	33.02 (1.300)
15	• 50-57-9015	38.07 (1.499)	35.56 (1.400)
16	• 50-57-9016	40.61 (1.599)	38.10 (1.500)
17	• 50-57-9017	43.15 (1.699)	40.64 (1.600)
18	• 50-57-9018	45.69 (1.799)	43.18 (1.700)
19	• 50-57-9019	48.23 (1.899)	45.72 (1.800)
20	• 50-57-9020	50.77 (1.999)	48.26 (1.900)
21	• 50-57-9021	53.31 (2.099)	50.80 (2.000)
22	• 50-57-9022	55.85 (2.199)	53.34 (2.100)
23	• 50-57-9023	58.39 (2.299)	55.88 (2.200)
24	• 50-57-9024	60.93 (2.399)	58.42 (2.300)
25	• 50-57-9025	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

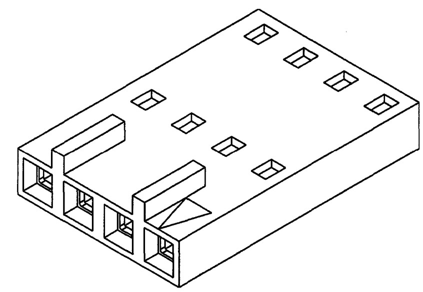
70066

Single Row Version C, Front Ribs

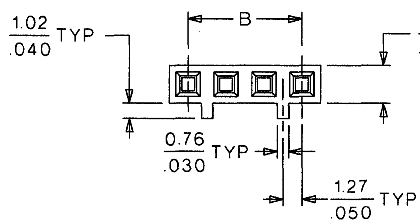
Features and Benefits
- Sizes 2 to 25 circuits
- Front ribs prevent contact damage when unmating the connector from a header; the housing cannot be twisted off pins
- Mates with C-Grid SL headers without locking crown (contact factory)

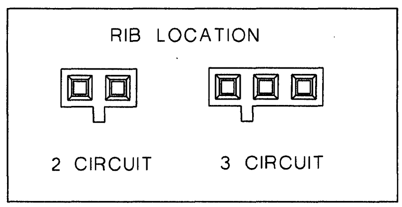
Reference Information
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70544, 70546, 70554 and 70556
Use With: 70058 and 71851 crimp terminals
Designed In: Inches

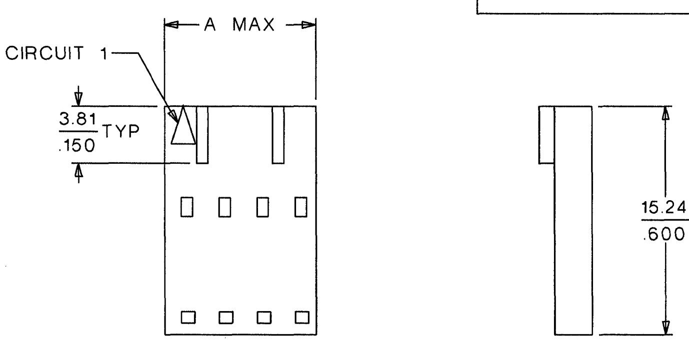
Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C



Not For Use With C-Grid III™ Components







Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	• 50-57-9202	5.05 (.199)	2.54 (.100)
3	• 50-57-9203	7.59 (.299)	5.08 (.200)
4	• 50-57-9204	10.13 (.399)	7.62 (.300)
5	• 50-57-9205	12.67 (.499)	10.16 (.400)
6	• 50-57-9206	15.21 (.599)	12.70 (.500)
7	• 50-57-9207	17.75 (.699)	15.24 (.600)
8	• 50-57-9208	20.29 (.799)	17.78 (.700)
9	• 50-57-9209	22.83 (.899)	20.32 (.800)
10	• 50-57-9210	25.37 (.999)	22.86 (.900)
11	• 50-57-9211	27.91 (1.099)	25.40 (1.000)
12	• 50-57-9212	30.45 (1.199)	27.94 (1.110)
13	• 50-57-9213	32.99 (1.299)	30.48 (1.200)

Circuits	Order No.	Dimension A	Dimension B
14	• 50-57-9214	35.53 (1.399)	33.02 (1.300)
15	• 50-57-9215	38.07 (1.499)	35.56 (1.400)
16	• 50-57-9216	40.61 (1.599)	38.10 (1.500)
17	• 50-57-9217	43.15 (1.699)	40.64 (1.600)
18	• 50-57-9218	45.69 (1.799)	43.18 (1.700)
19	• 50-57-9219	48.23 (1.899)	45.72 (1.800)
20	• 50-57-9220	50.77 (1.999)	48.26 (1.900)
21	• 50-57-9221	53.31 (2.099)	50.80 (2.000)
22	• 50-57-9222	55.85 (2.199)	53.34 (2.100)
23	• 50-57-9223	58.39 (2.299)	55.88 (2.200)
24	• 50-57-9224	60.93 (2.399)	58.42 (2.300)
25	• 50-57-9225	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

70066 Single Row Version D, Back Ribs

Features and Benefits

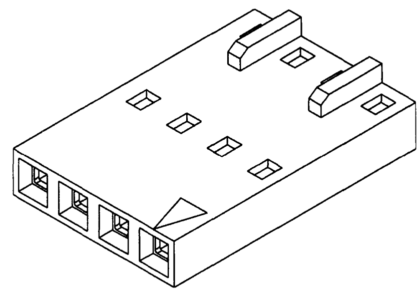
- Sizes 2 to 25 circuits
- Back ribs maintain position of connector housing in interim clip and panel mount, and prevent lateral movement when another housing is removed
- End-to-end stackable inside a single row interim clip or panel mount to form a larger single row connector
- Side-to-side and end-to-end stackable inside a dual row interim clip or panel mount to form a dual row connector

Physical

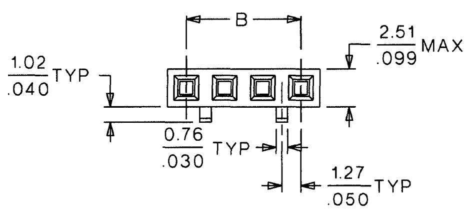
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C

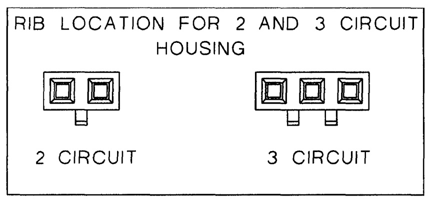
Reference Information

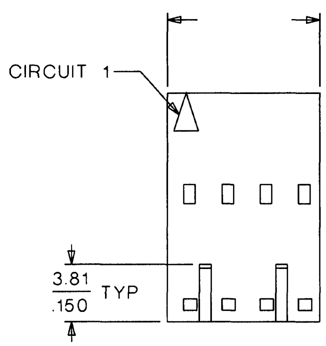
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004 and 70013 as connector assembly, and 70018, 70022 and 70104 as pin assembly
Use With: 70021, 70058 and 71851 crimp terminals
Designed In: Inches

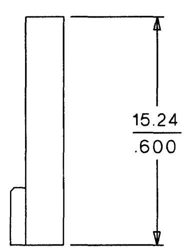


Not For Use With C-Grid III™ Components









Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	• 50-57-9302	5.05 (.199)	2.54 (.100)
3	• 50-57-9303	7.59 (.299)	5.08 (.200)
4	• 50-57-9304	10.13 (.399)	7.62 (.300)
5	• 50-57-9305	12.67 (.499)	10.16 (.400)
6	• 50-57-9306	15.21 (.599)	12.70 (.500)
7	• 50-57-9307	17.75 (.699)	15.24 (.600)
8	• 50-57-9308	20.29 (.799)	17.78 (.700)
9	• 50-57-9309	22.83 (.899)	20.32 (.800)
10	• 50-57-9310	25.37 (.999)	22.86 (.900)
11	• 50-57-9311	27.91 (1.099)	25.40 (1.000)
12	• 50-57-9312	30.45 (1.199)	27.94 (1.100)
13	• 50-57-9313	32.99 (1.299)	30.48 (1.200)
14	• 50-57-9314	35.53 (1.399)	33.02 (1.300)
15	• 50-57-9315	38.07 (1.499)	35.56 (1.400)
16	• 50-57-9316	40.61 (1.599)	38.10 (1.500)
17	• 50-57-9317	43.15 (1.699)	40.64 (1.600)
18	• 50-57-9318	45.69 (1.799)	43.18 (1.700)
19	• 50-57-9319	48.23 (1.899)	45.72 (1.800)
20	• 50-57-9320	50.77 (1.999)	48.26 (1.900)
21	• 50-57-9321	53.31 (2.099)	50.80 (2.000)
22	• 50-57-9322	55.85 (2.199)	53.34 (2.100)
23	• 50-57-9323	58.39 (2.299)	55.88 (2.200)
24	• 50-57-9324	60.93 (2.399)	58.42 (2.300)
25	• 50-57-9325	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

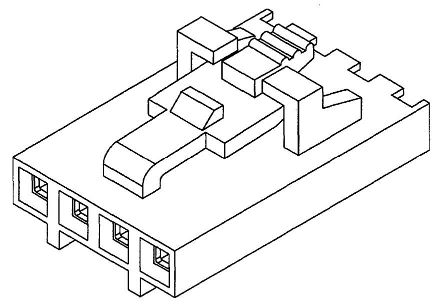
70066

Single Row Version G, Positive Latch

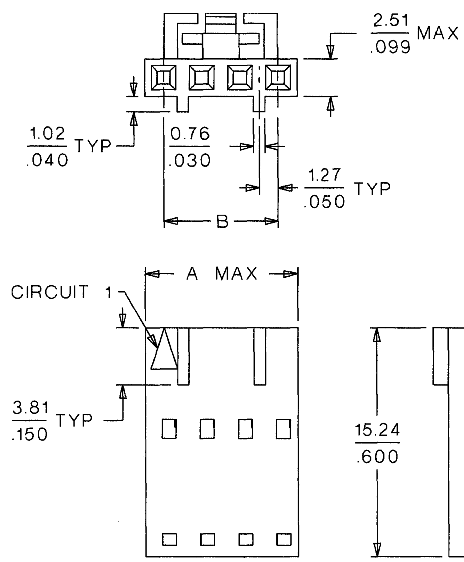
Features and Benefits
- Sizes 2 to 25 circuits
- Positive latch secures housing to locking crown of mating header or panel mount
- Anti-entaglement/overstress ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Front ribs prevent contact damage when unmating the connector from a header; the housing cannot be twisted off pins

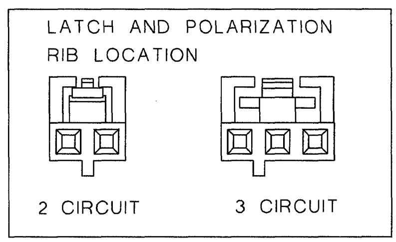
Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C

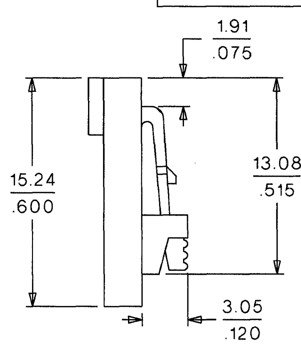
Reference Information
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70018, 70107A/B, 70543, 70545, 70553 and 70555
Use With: 70058 crimp terminals
Designed In: Inches



Not For Use With C-Grid III™ Components







Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	• 50-57-9402	5.05 (.199)	2.54 (.100)
3	• 50-57-9403	7.59 (.299)	5.08 (.200)
4	• 50-57-9404	10.13 (.399)	7.62 (.300)
5	• 50-57-9405	12.67 (.499)	10.16 (.400)
6	• 50-57-9406	15.21 (.599)	12.70 (.500)
7	• 50-57-9407	17.75 (.699)	15.24 (.600)
8	• 50-57-9408	20.29 (.799)	17.78 (.700)
9	• 50-57-9409	22.83 (.899)	20.32 (.800)
10	• 50-57-9410	25.37 (.999)	22.86 (.900)
11	• 50-57-9411	27.91 (1.099)	25.40 (1.000)
12	• 50-57-9412	30.45 (1.199)	27.94 (1.100)
13	• 50-57-9413	32.99 (1.299)	30.48 (1.200)

Circuits	Order No.	Dimension A	Dimension B
14	• 50-57-9414	35.53 (1.399)	33.02 (1.300)
15	• 50-57-9415	38.07 (1.499)	35.56 (1.400)
16	• 50-57-9416	40.61 (1.599)	38.10 (1.500)
17	• 50-57-9417	43.15 (1.699)	40.64 (1.600)
18	• 50-57-9418	45.69 (1.799)	43.18 (1.700)
19	• 50-57-9419	48.23 (1.899)	45.72 (1.800)
20	• 50-57-9420	50.77 (1.999)	48.26 (1.900)
21	• 50-57-9421	53.31 (2.099)	50.80 (2.000)
22	• 50-57-9422	55.85 (2.199)	53.34 (2.100)
23	• 50-57-9423	58.39 (2.299)	55.88 (2.200)
24	• 50-57-9424	60.93 (2.399)	58.42 (2.300)
25	• 50-57-9425	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

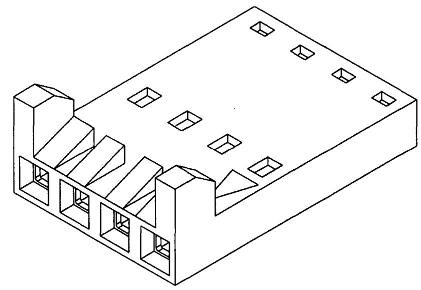
2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

70066 Single Row Version H

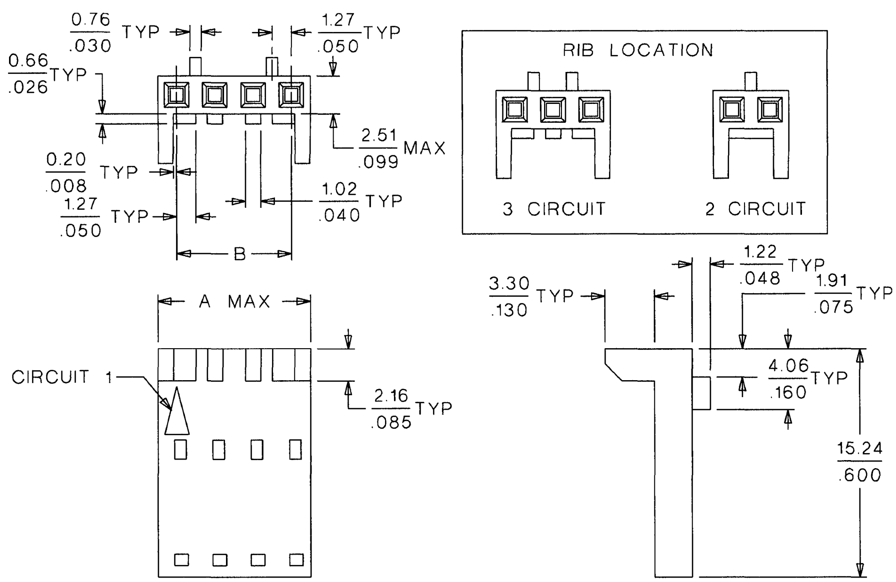
Features and Benefits
- Sizes 2 to 25 circuits
- Stackable end-to-end
- Polarized latching ribs mate with Molex KK® series .100" pitch friction lock headers

Reference Information
UL File No.: E29179
CSA File No.: LR19980
Mates With: 6373 and 7478
Use With: 70058 and 71851 crimp terminals
Designed In: Inches

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C



Not For Use With C-Grid III™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Circuits	Order No.	Dimension A	Dimension B
2	• 50-57-9502	5.05 (.199)	2.54 (.100)	14	• 50-57-9514	35.53 (1.399)	33.02 (1.300)
3	• 50-57-9503	7.59 (.299)	5.08 (.200)	15	• 50-57-9515	38.07 (1.499)	35.56 (1.400)
4	• 50-57-9504	10.13 (.399)	7.62 (.300)	16	• 50-57-9516	40.61 (1.599)	38.10 (1.500)
5	• 50-57-9505	12.67 (.499)	10.16 (.400)	17	• 50-57-9517	43.15 (1.699)	40.64 (1.600)
6	• 50-57-9506	15.21 (.599)	12.70 (.500)	18	• 50-57-9518	45.69 (1.799)	43.18 (1.700)
7	• 50-57-9507	17.75 (.699)	15.24 (.600)	19	• 50-57-9519	48.23 (1.899)	45.72 (1.800)
8	• 50-57-9508	20.29 (.799)	17.78 (.700)	20	• 50-57-9520	50.77 (1.999)	48.26 (1.900)
9	• 50-57-9509	22.83 (.899)	20.32 (.800)	21	• 50-57-9521	53.31 (2.099)	50.80 (2.000)
10	• 50-57-9510	25.37 (.999)	22.86 (.900)	22	• 50-57-9522	55.85 (2.199)	53.34 (2.100)
11	• 50-57-9511	27.91 (1.099)	25.40 (1.000)	23	• 50-57-9523	58.39 (2.299)	55.88 (2.220)
12	• 50-57-9512	30.45 (1.199)	27.94 (1.100)	24	• 50-57-9524	60.93 (2.399)	58.42 (2.300)
13	• 50-57-9513	32.99 (1.299)	30.48 (1.200)	25	• 50-57-9525	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

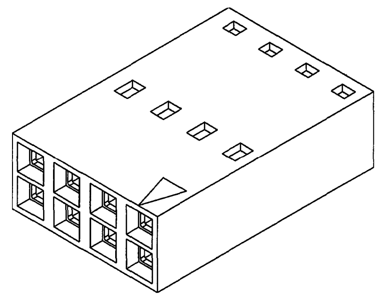
2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

70450 Dual Row Version A, Nonpolarized

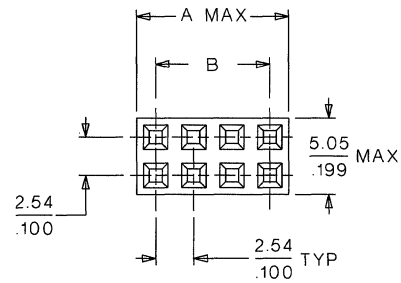
Features and Benefits
- Sizes 4 to 54 circuits
- End-to-end and side-to-side stackable for dual row connections to a 2.54mm (.100") pitch grid pin field

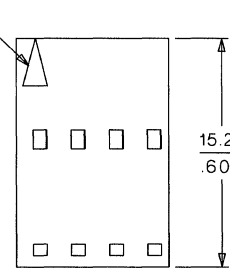
Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C

Reference Information
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8624, 8723, 8724, 70203 and 70206 Molex dual row headers
Use With: 70021, 70058 and 71851 crimp terminals
Designed In: Inches



Not For Use With C-Grid III™ Components





Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	• 22-55-2041	5.05 (.199)	2.54 (.100)
6	• 22-55-2061	7.59 (.299)	5.08 (.200)
8	• 22-55-2081	10.13 (.399)	7.62 (.300)
10	• 22-55-2101	12.67 (.499)	10.16 (.400)
12	• 22-55-2121	15.21 (.599)	12.70 (.500)
14	• 22-55-2141	17.75 (.699)	15.24 (.600)
16	• 22-55-2161	20.29 (.799)	17.78 (.700)
18	• 22-55-2181	22.83 (.899)	20.32 (.800)
20	• 22-55-2201	25.37 (.999)	22.86 (.900)
22	• 22-55-2221	27.91 (1.099)	25.40 (1.000)
24	• 22-55-2241	30.45 (1.199)	27.94 (1.100)
26	• 22-55-2261	32.99 (1.299)	30.48 (1.200)
28	• 22-55-2281	35.53 (1.399)	33.02 (1.300)

Circuits	Order No.	Dimension A	Dimension B
30	• 22-55-2301	38.07 (1.499)	35.56 (1.400)
32	• 22-55-2321	40.61 (1.599)	38.10 (1.500)
34	• 22-55-2341	43.15 (1.699)	40.64 (1.600)
36	• 22-55-2361	45.69 (1.799)	43.18 (1.700)
38	• 22-55-2381	48.23 (1.899)	45.72 (1.800)
40	• 22-55-2401	50.77 (1.999)	48.26 (1.900)
42	• 22-55-2421	53.31 (2.099)	50.80 (2.000)
44	• 22-55-2441	55.85 (2.199)	53.34 (2.100)
46	• 22-55-2461	58.39 (2.299)	55.88 (2.200)
48	• 22-55-2481	60.93 (2.399)	58.42 (2.300)
50	• 22-55-2501	63.47 (2.499)	60.96 (2.400)
52	• 22-55-2521	66.01 (2.599)	63.50 (2.500)
54	• 22-55-2541	68.55 (2.699)	66.04 (2.600)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 4 to 54 circuits
- Polarized to mate with dual row, low profile shrouded headers

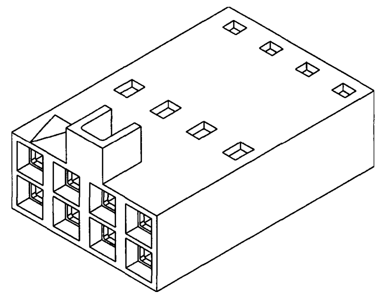
Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C

Reference Information
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70246, 70247 and 90708
Use With: 70058 and 71851 crimp terminals
Designed In: Inches

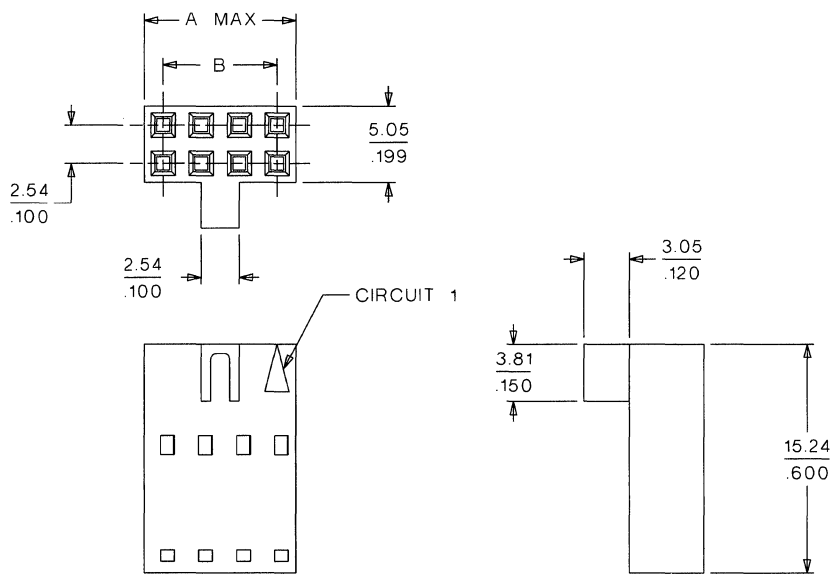
2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

70450

Dual Row Version B, Polarized



Not For Use With C-Grid III™ Components



Delivered on a carrier with 20 pieces per strip.
Actual Size **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	• 22-55-2042	5.05 (.199)	2.54 (.100)
6	• 22-55-2062	7.59 (.299)	5.08 (.200)
8	• 22-55-2082	10.13 (.399)	7.62 (.300)
10	• 22-55-2102	12.67 (.499)	10.16 (.400)
12	• 22-55-2122	15.21 (.599)	12.70 (.500)
14	• 22-55-2142	17.75 (.699)	15.24 (.600)
16	• 22-55-2162	20.29 (.799)	17.78 (.700)
18	• 22-55-2182	22.83 (.899)	20.32 (.800)
20	• 22-55-2202	25.37 (.999)	22.86 (.900)
22	• 22-55-2222	27.91 (1.099)	25.40 (1.000)
24	• 22-55-2242	30.45 (1.199)	27.94 (1.100)
26	• 22-55-2262	32.99 (1.299)	30.48 (1.200)
28	• 22-55-2282	35.53 (1.399)	33.02 (1.300)

Circuits	Order No.	Dimension A	Dimension B
30	• 22-55-2302	38.07 (1.499)	35.56 (1.400)
32	• 22-55-2322	40.61 (1.599)	38.10 (1.500)
34	• 22-55-2342	43.15 (1.699)	40.64 (1.600)
36	• 22-55-2362	45.69 (1.799)	43.18 (1.700)
38	• 22-55-2382	48.23 (1.899)	45.72 (1.800)
40	• 22-55-2402	50.77 (1.999)	48.26 (1.900)
42	• 22-55-2422	53.31 (2.099)	50.80 (2.000)
44	• 22-55-2442	55.85 (2.199)	53.34 (2.100)
46	• 22-55-2462	58.39 (2.299)	55.88 (2.200)
48	• 22-55-2482	60.93 (2.399)	58.42 (2.300)
50	• 22-55-2502	63.47 (2.499)	60.96 (2.400)
52	• 22-55-2522	66.01 (2.599)	63.50 (2.500)
54	• 22-55-2542	68.55 (2.699)	66.04 (2.600)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

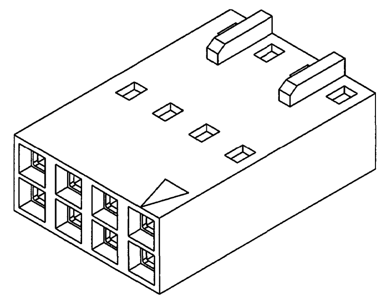
70450

Dual Row Version C, Back Ribs

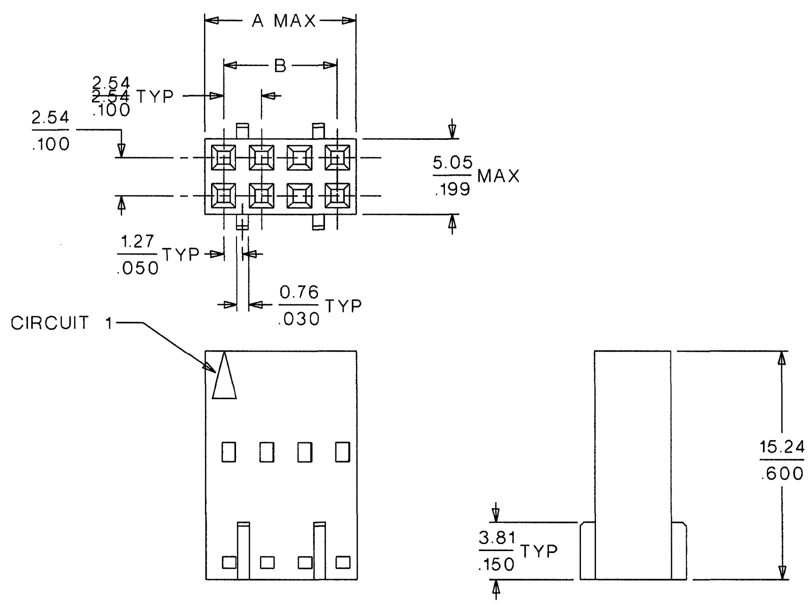
Features and Benefits
- Sizes 4 to 54 circuits
- Designed to be used within 70013 dual row interim clip as a connector assembly or 70022 dual row panel mount as a pin assembly
- End-to-end stackable
- Back ribs maintain position of connector housings in interim clip and panel mount, and prevent lateral movement when another housing is removed

Reference Information
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70013 and 70022
Use With: 70021, 70058 and 71851 crimp terminals
Designed In: Inches

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C



Not For Use With C-Grid III™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	• 22-55-2043	5.05 (.199)	2.54 (.100)
6	• 22-55-2063	7.59 (.299)	5.08 (.200)
8	• 22-55-2083	10.13 (.399)	7.62 (.300)
10	• 22-55-2103	12.67 (.499)	10.16 (.400)
12	• 22-55-2123	15.21 (.599)	12.70 (.500)
14	• 22-55-2143	17.75 (.699)	15.24 (.600)
16	• 22-55-2163	20.29 (.799)	17.78 (.700)
18	• 22-55-2183	22.83 (.899)	20.32 (.800)
20	• 22-55-2203	25.37 (.999)	22.86 (.900)
22	• 22-55-2223	27.91 (1.099)	25.40 (1.000)
24	• 22-55-2243	30.45 (1.199)	27.94 (1.100)
26	• 22-55-2263	32.99 (1.299)	30.48 (1.200)
28	• 22-55-2283	35.53 (1.399)	33.02 (1.300)
30	• 22-55-2303	38.07 (1.499)	35.56 (1.400)
32	• 22-55-2323	40.61 (1.599)	38.10 (1.500)
34	• 22-55-2343	43.15 (1.699)	40.64 (1.600)
36	• 22-55-2363	45.69 (1.799)	43.18 (1.700)
38	• 22-55-2383	48.23 (1.899)	45.72 (1.800)
40	• 22-55-2403	50.77 (1.999)	48.26 (1.900)
42	• 22-55-2423	53.31 (2.099)	50.80 (2.000)
44	• 22-55-2443	55.85 (2.199)	53.34 (2.100)
46	• 22-55-2463	58.39 (2.299)	55.88 (2.200)
48	• 22-55-2483	60.93 (2.399)	58.42 (2.300)
50	• 22-55-2503	63.47 (2.499)	60.96 (2.400)
52	• 22-55-2523	66.01 (2.599)	63.50 (2.500)
54	• 22-55-2543	68.55 (2.699)	66.04 (2.600)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Crimp Housing

70450

Dual Row Version F

Features and Benefits

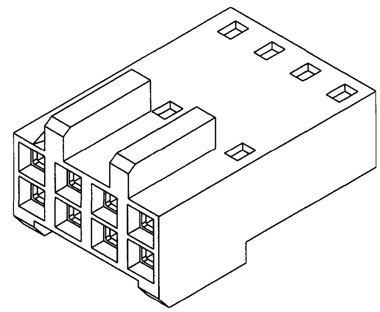
- Sizes 6 to 54 circuits

Reference Information

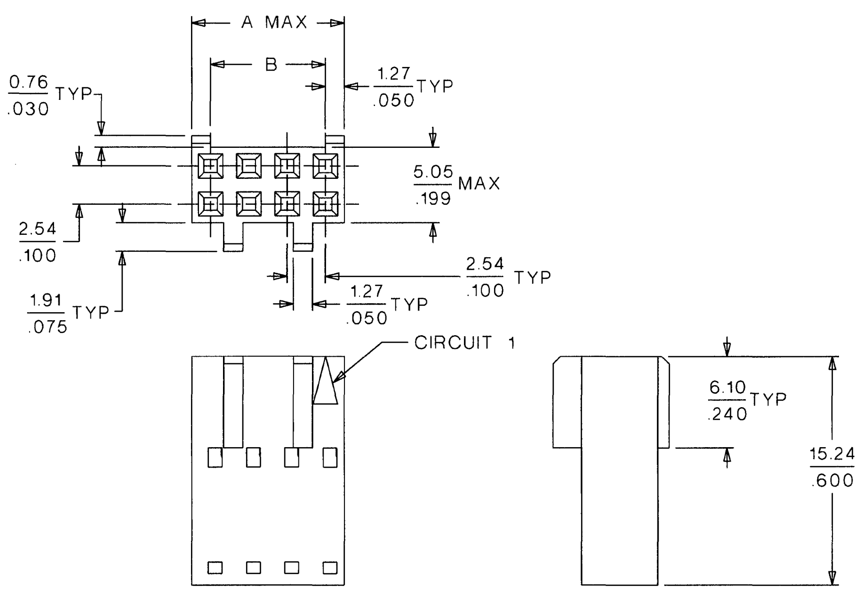
Product Specification: PS-70058
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8723 and 8724
Use With: 70058 and 71851 crimp terminals
Designed In: Inches

Physical

Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C



Not For Use With C-Grid III™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1

Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

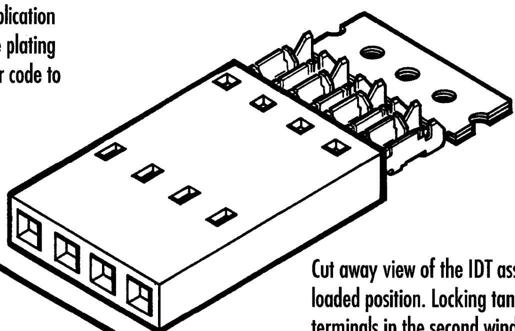
Circuits	Order No.	Dimension A	Dimension B
6	• 22-56-6067	7.59 (.299)	5.08 (.200)
8	• 22-56-6087	10.13 (.399)	7.62 (.300)
10	• 22-56-6107	12.67 (.499)	10.16 (.400)
12	• 22-56-6127	15.21 (.599)	12.70 (.500)
14	• 22-56-6147	17.75 (.699)	15.24 (.600)
16	• 22-56-6167	20.29 (.799)	17.78 (.700)
18	• 22-56-6187	22.83 (.899)	20.32 (.800)
20	• 22-56-6207	25.37 (.999)	22.86 (.900)
22	• 22-56-6227	27.91 (1.099)	25.40 (1.000)
24	• 22-56-6247	30.45 (1.199)	27.94 (1.100)
26	• 22-56-6267	32.99 (1.299)	30.48 (1.200)
28	• 22-56-6287	35.53 (1.399)	33.02 (1.300)
30	• 22-56-6307	38.07 (1.499)	35.56 (1.400)

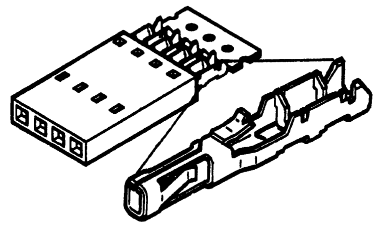
Circuits	Order No.	Dimension A	Dimension B
32	• 22-56-6327	40.61 (1.599)	38.10 (1.500)
34	• 22-56-6347	43.15 (1.699)	40.64 (1.600)
36	• 22-56-6367	45.69 (1.799)	43.18 (1.700)
38	• 22-56-6387	48.23 (1.899)	45.72 (1.800)
40	• 22-56-6407	50.77 (1.999)	48.26 (1.900)
42	• 22-56-6427	53.31 (2.099)	50.80 (2.000)
44	• 22-56-6447	55.85 (2.199)	53.34 (2.100)
46	• 22-56-6467	58.39 (2.299)	55.88 (2.200)
48	• 22-56-6487	60.93 (2.399)	58.42 (2.300)
50	• 22-56-6507	63.47 (2.499)	60.96 (2.400)
52	• 22-56-6527	66.01 (2.599)	63.50 (2.500)
54	• 22-56-6547	68.55 (2.699)	66.04 (2.600)

• US Standard Product, available through Molex franchised distributors

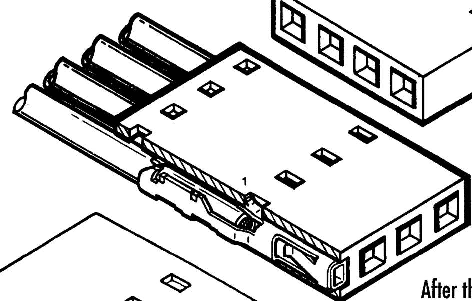
2.54mm (.100") Pitch Specifications for Female Insulation Displacement Connector Assembly

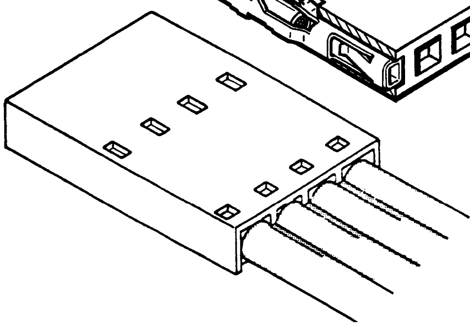
Stamped female terminals are preloaded into first window of housing for presentation of assemblies to application tooling. The carrier is color coded to identify the plating option, and the terminal is stamped with a letter code to distinguish wire gauge of the IDT slot.





Cut away view of the IDT assembly in a loaded position. Locking tangs secure terminals in the second window.





After the cable/wires are terminated, terminals are fully inserted into the housing and locked into the second window. The carrier strip is then broken off. As a result of this automated termination*, the terminals are consistently locked into the housing without damage.

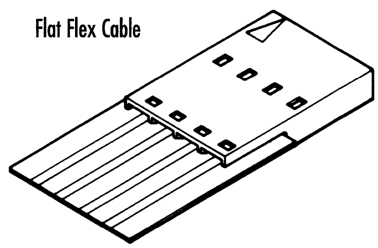
Five styles of single row IDT receptacle assemblies are available in 2 through 25 circuits. The female IDT terminal features a fully enclosed "box" design with dual beams to provide 2 points of contact.

WIRE AND CABLE OPTIONS

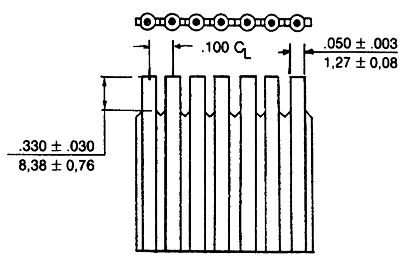
Recommended Molex Cable Engineering No. to use with 70400 series connectors:

Accepts round conductor flat cable from 28 to 24 AWG, with .053" max. outside insulation diameter 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389.

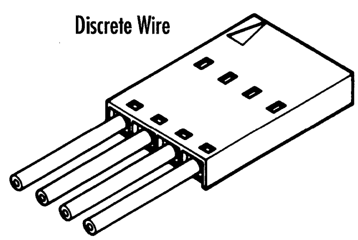
Flat Flex Cable



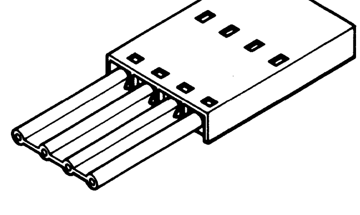
Notch Specification for Ribbon Cable



Discrete Wire



Ribbon Cable



* See application equipment description section W

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Insulation Displacement Connector Assembly

70400

Female, Single Row Version A, Nonpolarized

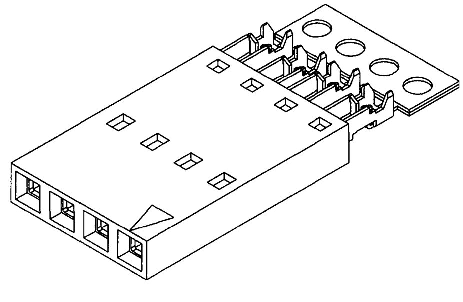
Features and Benefits
- Sizes 2 to 25 circuits
- Preloaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- End-to-end and/or side-to-side stackable for single or dual row connections to a 2.54mm (.100") pitch grid pin field

Reference Information
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8624, 42375, 42377 and 70203
Use With Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

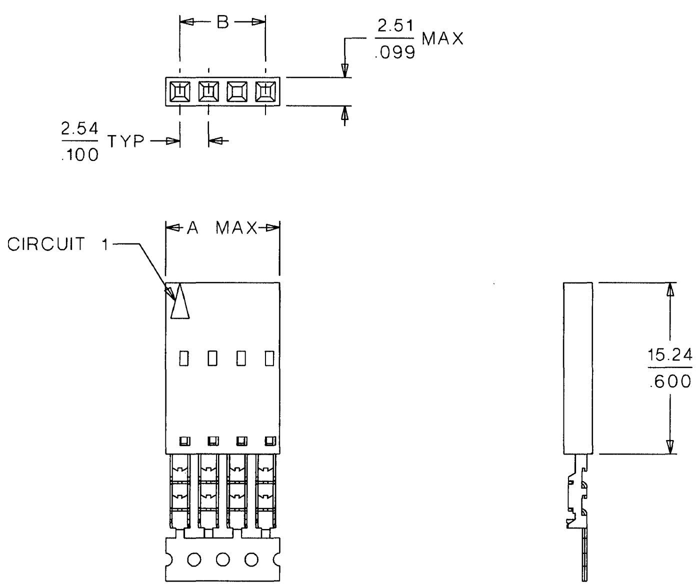
Electrical
Voltage: 250V
Current: 1.2A—28 AWG; 1.8A—26 AWG
3.0A—24 AWG; 3.0A—22 AWG
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Insertion Force: 0.32 lb per circuit
Contact Retention to Housing: 4 lb min.
Terminal Pull-Out Force: 4 lb for 15 seconds
Mating Force: 8.0 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Insulation and Wire Gauge Range: .053" max. with 22 to 28 AWG stranded discrete wire or flat ribbon cable
Pin Height: .320" max. to .200" min. (measured from top of housing or PCB to top of pin)



Not For Use With C-Grid III™ Components



Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge (AWG)
A	24
B	26
C	28
D	22

Note: 2 circuit assemblies supplied as grouped pairs

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15μ" Gold	Yellow
30μ" Gold	Red

Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Wire Accommodation (AWG)	Order No.		
	15μ" Gold	30μ" Gold	150μ" Tin/Lead
28	14-56-2XX5	14-56-3XX2	14-60-0XX5
26	14-56-2XX3	14-56-2XX9	14-60-0XX3
24	• 14-56-2XX1	14-56-2XX7	14-60-0XX1
22	14-56-7XX4	14-56-7XX9	14-56-6XX9
Replace XX with no. of circuits, 02-25			

Circuits	Dimension A	Dimension B
2	5.05 (.199)	2.54 (.100)
3	7.59 (.299)	5.08 (.200)
4	10.13 (.399)	7.62 (.300)
5	12.67 (.499)	10.16 (.400)
6	15.21 (.599)	12.70 (.500)
7	17.75 (.699)	15.24 (.600)

Circuits	Dimension A	Dimension B
8	20.29 (.799)	17.78 (.700)
9	22.83 (.899)	20.32 (.800)
10	25.37 (.999)	22.86 (.900)
11	27.91 (1.099)	25.40 (1.000)
12	30.45 (1.199)	27.94 (1.100)
13	32.99 (1.299)	30.48 (1.200)

Circuits	Dimension A	Dimension B
14	35.53 (1.399)	33.02 (1.300)
15	38.07 (1.499)	35.56 (1.400)
16	40.61 (1.599)	38.10 (1.500)
17	43.15 (1.699)	40.64 (1.600)
18	45.69 (1.799)	43.18 (1.700)
19	48.23 (1.899)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.77 (1.999)	48.26 (1.900)
21	53.31 (2.099)	50.80 (2.000)
22	55.85 (2.199)	53.34 (2.100)
23	58.39 (2.299)	55.88 (2.200)
24	60.93 (2.399)	58.42 (2.300)
25	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Insulation Displacement Connector Assembly

70400

Female, Single Row Version C, Front Ribs

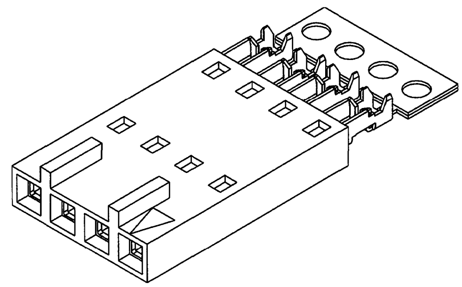
Features and Benefits
- Sizes 2 to 25 circuits
- Preloaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Front polarizing ribs prevent pin damage during disconnect; housing cannot be twisted off pins
- Mates with polarized nonlatching headers (not in catalog)

Reference Information
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70544, 70546, 70554 and 70556
Use With Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

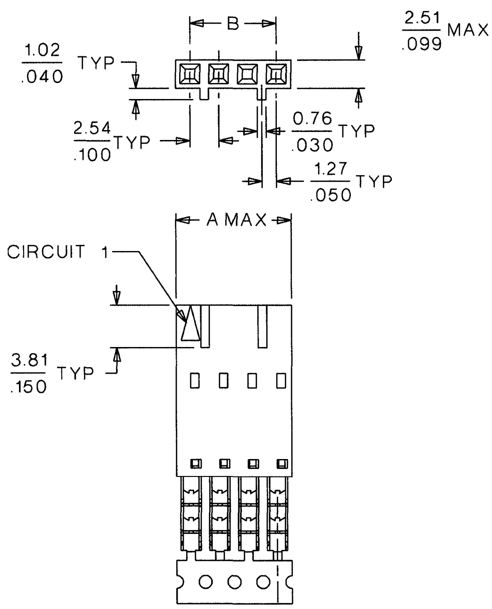
Electrical
Voltage: 250V
Current: 1.2A—28 AWG; 1.8A—26 AWG
3.0A—24 AWG; 3.0A—22 AWG
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 10,000 MΩ min.

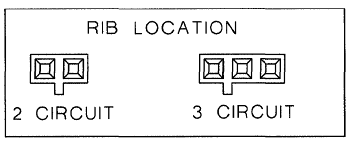
Mechanical
Terminal Pull-Out Force: 4 lb for 15 seconds
Mating Force: 8.0 oz max.
Unmating Force: 1.0 oz min.

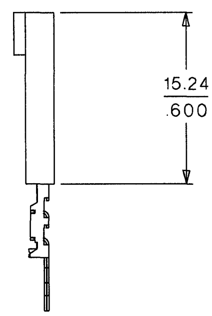
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Insulation and Wire Gauge Range: .053" max. with 22 to 28 AWG stranded discrete wire of flat ribbon cable
Pin Height: .320" max. to .200" min. (measured from top of housing or PCB to top of pin)



Not For Use With C-Grid III™ Components







Wire Gauge Chart

Code Stamped on Terminals	Wire Gauge (AWG)
A	24
B	26
C	28
D	22

Note: 2 circuit assemblies supplied as grouped pairs

Plating Code (Stripe on Carrier Strip)

Plating	Color
Tin/Lead	None
15μ" Gold	Yellow
30μ" Gold	Red

Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Wire Accommodation (AWG)	Order No.		
	15μ" Gold	30μ" Gold	150μ" Tin/Lead
28	14-56-3XX8	14-56-4XX4	14-60-1XX1
26	14-56-3XX6	14-56-4XX2	14-60-0XX9
24	• 14-56-3XX5	14-56-4XX0	14-60-0XX7
22	14-56-7XX5	14-56-8XX0	14-56-7XX0
Replace XX with no. of circuits, 02-25			

Circuits	Dimension A	Dimension B
2	5.05 (.199)	2.54 (.100)
3	7.59 (.299)	5.08 (.200)
4	10.13 (.399)	7.62 (.300)
5	12.67 (.499)	10.16 (.400)
6	15.21 (.599)	12.70 (.500)
7	17.75 (.699)	15.24 (.600)

Circuits	Dimension A	Dimension B
8	20.29 (.799)	17.78 (.700)
9	22.83 (.899)	20.32 (.800)
10	25.37 (.999)	22.86 (.900)
11	27.91 (1.099)	25.40 (1.000)
12	30.45 (1.199)	27.94 (1.100)
13	32.99 (1.299)	30.48 (1.200)

Circuits	Dimension A	Dimension B
14	35.53 (1.399)	33.02 (1.300)
15	38.07 (1.499)	35.56 (1.400)
16	40.61 (1.599)	38.10 (1.500)
17	43.15 (1.699)	40.64 (1.600)
18	45.69 (1.799)	43.18 (1.700)
19	48.23 (1.899)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.77 (1.999)	48.26 (1.900)
21	53.31 (2.099)	50.80 (2.000)
22	55.85 (2.199)	53.34 (2.100)
23	58.39 (2.299)	55.88 (2.200)
24	60.93 (2.399)	58.42 (2.300)
25	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
▩ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Insulation Displacement Connector Assembly

70400

Female, Single Row Version D, Back Ribs

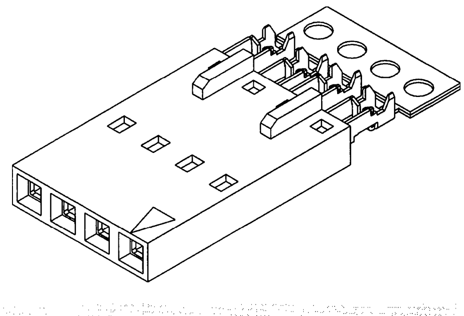
Features and Benefits
- Sizes 2 to 25 circuits
- Preloaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimixe product handling
- Back ribs maintain position of connector assembly in clips and prevent lateral movement when another assembly is removed
- End-to-end stackable inside a single row interim clip to form a larger single row connector
- Back-to-back and end-to-end stackable inside a dual row interim clip to form a dual row connector

Reference Information
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004 and 70013
Use With Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

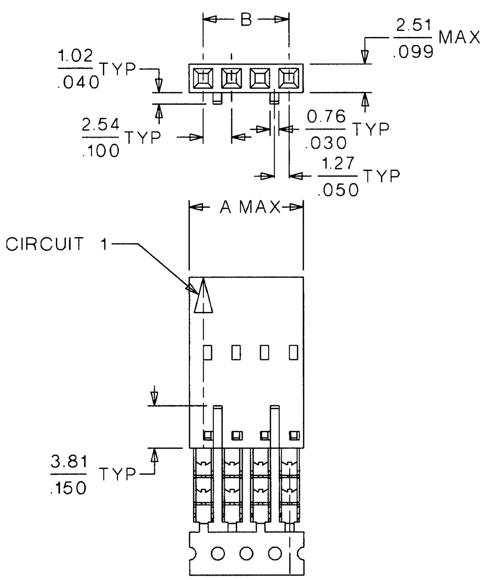
Electrical
Voltage: 250V
Current: 1.2A—28 AWG; 1.8A—26 AWG
3.0A—24 AWG; 3.0A—22 AWG
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 10,000 MΩ min.

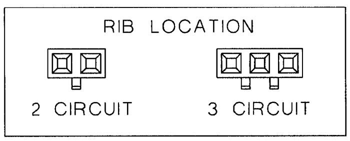
Mechanical
Terminal Pull-Out Force: 4 lb for 15 seconds
Mating Force: 8.0 oz max.
Unmating Force: 1.0 oz min.

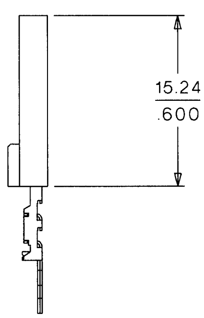
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Insulation and Wire Gauge Range: .053" max. with 22 to 28 AWG stranded discrete wire or flat ribbon cable
Pin Height: .320" max. to .200" min. (measured from top of housing or PCB to top of pin)



Not For Use With C-Grid III™ Components







Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge (AWG)
A	24
B	26
C	28
D	22

Note: 2 circuit assemblies supplied as grouped pairs

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15μ" Gold	Yellow
30μ" Gold	Red

Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Wire Accommodation (AWG)	Order No.		
	15μ" Gold	30μ" Gold	150μ" Tin/Lead
28	14-56-3XX9	14-56-4XX5	14-60-1XX2
26	14-56-3XX7	14-56-4XX3	14-60-1XX0
24	• 14-56-3XX4	14-56-4XX1	14-60-0XX8
22	14-56-7XX6	14-56-8XX1	14-56-7XX1

Replace XX with no. of circuits, 02-25

Circuits	Dimension A	Dimension B
2	5.05 (.199)	2.54 (.100)
3	7.59 (.299)	5.08 (.200)
4	10.13 (.399)	7.62 (.300)
5	12.67 (.499)	10.16 (.400)
6	15.21 (.599)	12.70 (.500)
7	17.75 (.699)	15.24 (.600)

Circuits	Dimension A	Dimension B
8	20.29 (.799)	17.78 (.700)
9	22.83 (.899)	20.32 (.800)
10	25.37 (.999)	22.86 (.900)
11	27.91 (1.099)	25.40 (1.000)
12	30.45 (1.199)	27.94 (1.100)
13	32.99 (1.299)	30.48 (1.200)

Circuits	Dimension A	Dimension B
14	35.53 (1.399)	33.02 (1.300)
15	38.07 (1.499)	35.56 (1.400)
16	40.61 (1.599)	38.10 (1.500)
17	43.15 (1.699)	40.64 (1.600)
18	45.69 (1.799)	43.18 (1.700)
19	48.23 (1.899)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.77 (1.999)	48.26 (1.900)
21	53.31 (2.099)	50.80 (2.000)
22	55.85 (2.199)	53.34 (2.100)
23	58.39 (2.299)	55.88 (2.200)
24	60.93 (2.399)	58.42 (2.300)
25	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Insulation Displacement Connector Assembly

70400

Female, Single Row Version G, Positive Latch

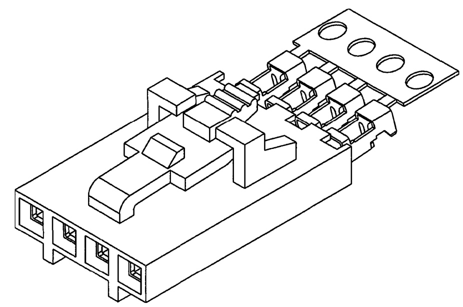
Features and Benefits
- Sizes 2 to 25 circuits
- Preloaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimixe product handling
- Positive latch secures connector to mating header or panel mount
- Front ribs prevent housing from being twisted off pins
- Anti-entanglement/overstress ribs prevent discrete wires from catching under latch during harness manufacturing and storage

Reference Information
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70018, 70107-A, 70107-B, 70543, 70545, 70553 and 70555
Use With Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

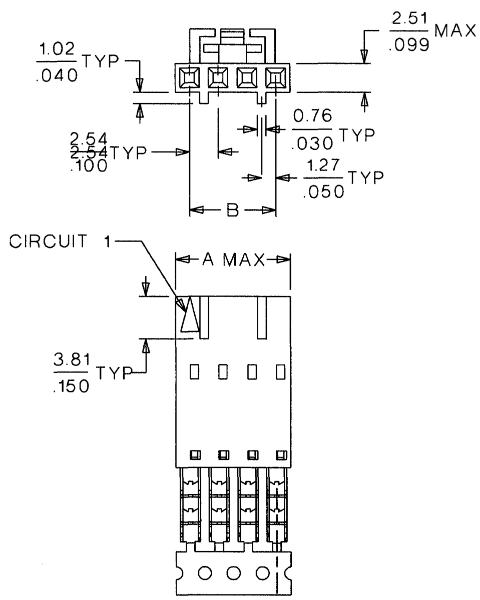
Electrical
Voltage: 250V
Current: 1.2A—28 AWG; 1.8A—26 AWG
3.0A—24 AWG; 3.0A—22 AWG
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 10,000 MΩ min.

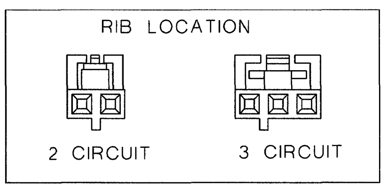
Mechanical
Terminal Pull-Out Force: 4 lb for 15 seconds
Mating Force: 8.0 oz max.
Unmating Force: 1.0 oz min.

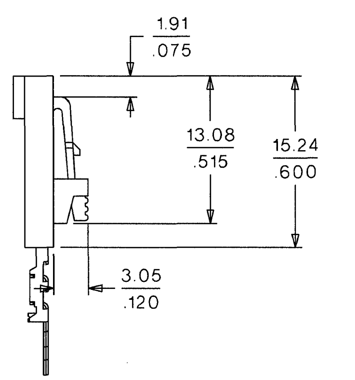
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Insulation and Wire Gauge Range: .053" max. with 22 to 28 AWG stranded discrete wire or flat ribbon cable
Pin Height: .320" max. to .200" min. (measured from top of housing or PCB to top of pin)



Not For Use With C-Grid III™ Components







Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge (AWG)
A	24
B	26
C	28
D	22

Note: 2 circuit assemblies supplied as grouped pairs

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15μ" Gold	Yellow
30μ" Gold	Red

Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Wire Accommodation (AWG)	Order No.		
	15μ" Gold	30μ" Gold	150μ" Tin/Lead
28	14-56-2XX6	14-56-3XX3	14-60-0XX6
26	14-56-2XX4	14-56-3XX1	14-60-0XX4
24	• 14-56-2XX2	14-56-2XX8	14-60-0XX2
22	14-56-7XX7	14-56-8XX2	14-56-7XX2
Replace XX with no. of circuits, 02-25			

Circuits	Dimension A	Dimension B
2	5.05 (.199)	2.54 (.100)
3	7.59 (.299)	5.08 (.200)
4	10.13 (.399)	7.62 (.300)
5	12.67 (.499)	10.16 (.400)
6	15.21 (.599)	12.70 (.500)
7	17.75 (.699)	15.24 (.600)
8	20.29 (.799)	17.78 (.700)
9	22.83 (.899)	20.32 (.800)
10	25.37 (.999)	22.86 (.900)
11	27.91 (1.099)	25.40 (1.000)
12	30.45 (1.199)	27.94 (1.100)
13	32.99 (1.299)	30.48 (1.200)
14	35.53 (1.399)	33.02 (1.300)
15	38.07 (1.499)	35.56 (1.400)
16	40.61 (1.599)	38.10 (1.500)
17	43.15 (1.699)	40.64 (1.600)
18	45.69 (1.799)	43.18 (1.700)
19	48.23 (1.899)	45.72 (1.800)
20	50.77 (1.999)	48.26 (1.900)
21	53.31 (2.099)	50.80 (2.000)
22	55.85 (2.199)	53.34 (2.100)
23	58.39 (2.299)	55.88 (2.200)
24	60.93 (2.399)	58.42 (2.300)
25	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
▩ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Insulation Displacement Connector Assembly

70400

Female, Single Row Version H

C-Grid

A

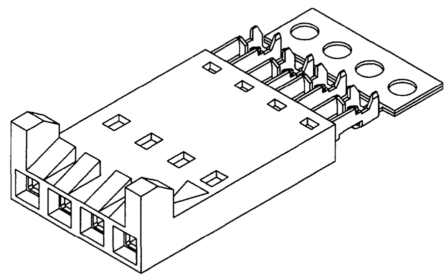
Features and Benefits
- Sizes 2 to 25 circuits
- Preloaded, single-piece construction allows for fully automated termination
- Packaged in mylar film on reels to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end
- Polarized latching ribs
- Mates with Molex KK® series .100" pitch friction lock headers

Reference Information
Packaging: Reel
Tooling Information: AM 60570 or AM 60550
UL File No.: E29179
CSA File No.: LR19980
Mates With: 6373 and 7478
Use With Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

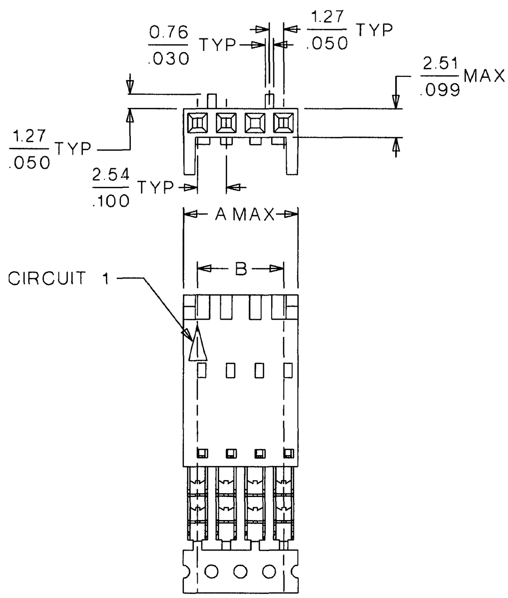
Electrical
Voltage: 250V
Current: 1.2A—28 AWG; 1.8A—26 AWG
3.0A—24 AWG; 3.0A—22 AWG
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 10,000 MΩ min.

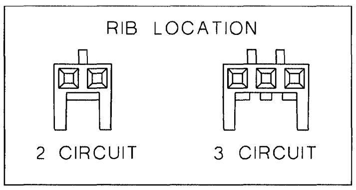
Mechanical
Terminal Pull-Out Force: 4 lb for 15 seconds
Mating Force: 8.0 oz max.
Unmating Force: 1.0 oz min.

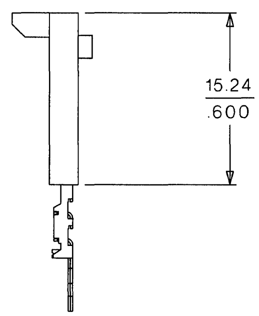
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Insulation and Wire Gauge Range: .053" max. with 22 to 28 AWG stranded discrete wire or flat ribbon cable
Pin Height: .320" max. to .200" min. (measured from top of housing or PCB to top of pin)



Not For Use With C-Grid III™ Components







Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge (AWG)
A	24
B	26
C	28
D	22

Note: 2 to 12 circuit assemblies are grouped within the mylar pocket

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Wire Accommodation (AWG)	Order No.		
	15µ" Gold	30µ" Gold	150µ" Tin/Lead
28	14-60-1XX9	14-60-2XX2	14-60-1XX7
26	14-60-1XX8	14-60-2XX1	14-60-1XX6
24	• 14-56-6XX8	14-60-2XX0	14-60-1XX3
22	14-56-7XX8	14-56-8XX3	14-56-7XX3
Replace XX with no. of circuits, 02-25			

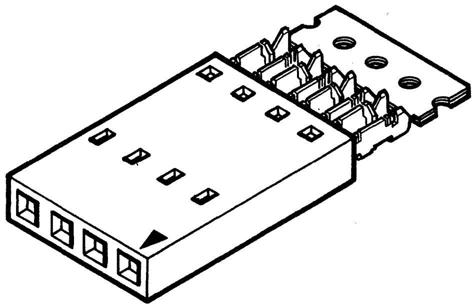
Circuits	Dimension A	Dimension B
2	5.05 (.199)	2.54 (.100)
3	7.59 (.299)	5.08 (.200)
4	10.13 (.399)	7.62 (.300)
5	12.67 (.499)	10.16 (.400)
6	15.21 (.599)	12.70 (.500)
7	17.75 (.699)	15.24 (.600)
8	20.29 (.799)	17.78 (.700)
9	22.83 (.899)	20.32 (.800)

Circuits	Dimension A	Dimension B
10	25.37 (.999)	22.86 (.900)
11	27.91 (1.099)	25.40 (1.000)
12	30.45 (1.199)	27.94 (1.100)
13	32.99 (1.299)	30.48 (1.200)
14	35.53 (1.399)	33.02 (1.300)
15	38.07 (1.499)	35.56 (1.400)
16	40.61 (1.599)	38.10 (1.500)
17	43.15 (1.699)	40.64 (1.600)

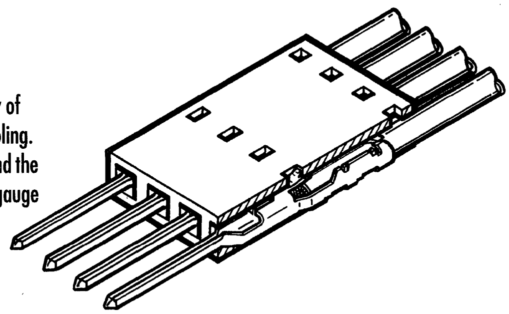
Circuits	Dimension A	Dimension B
18	45.69 (1.799)	43.18 (1.700)
19	48.23 (1.899)	45.72 (1.800)
20	50.77 (1.999)	48.26 (1.900)
21	53.31 (2.099)	50.80 (2.000)
22	55.85 (2.199)	53.34 (2.100)
23	58.39 (2.299)	55.88 (2.200)
24	60.93 (2.399)	58.42 (2.300)
25	63.47 (2.499)	60.96 (2.400)

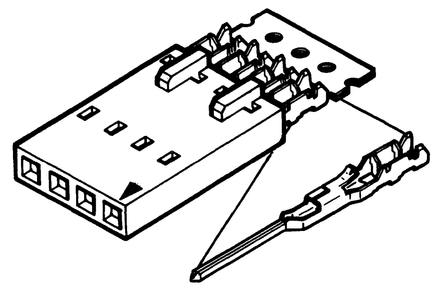
• US Standard Product, available through Molex franchised distributors
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

2.54mm (.100") Pitch Specifications for Male Insulation Displacement Connector Assembly

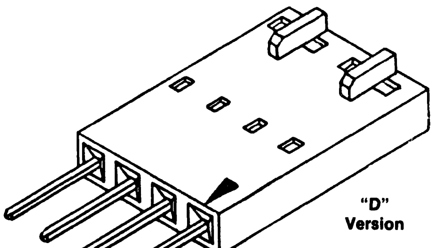


Stamped male terminals are preloaded into first window of housing for presentation of assemblies to application tooling. The carrier is color coded to identify the plating option, and the terminal is stamped with a letter code to distinguish wire gauge of the IDT slot.



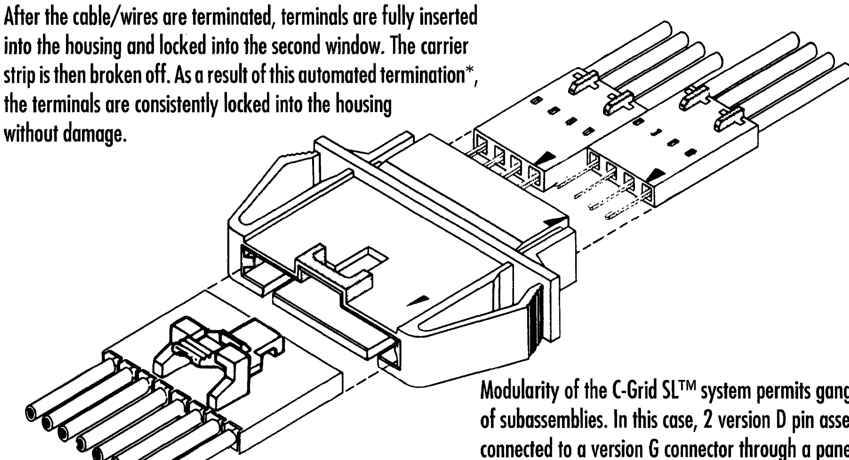


Shown: 70475 "D" Version Connector



"D" Version

After the cable/wires are terminated, terminals are fully inserted into the housing and locked into the second window. The carrier strip is then broken off. As a result of this automated termination*, the terminals are consistently locked into the housing without damage.

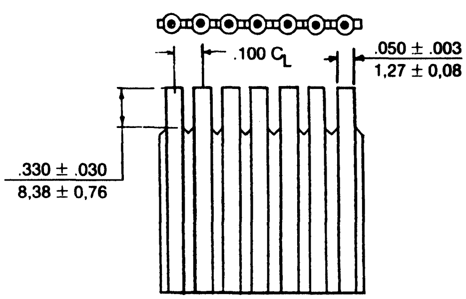


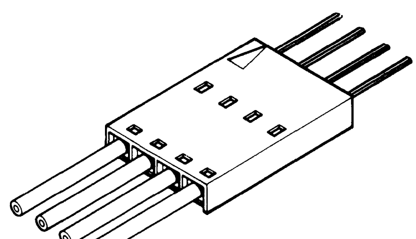
Modularity of the C-Grid SL™ system permits gang loading of subassemblies. In this case, 2 version D pin assemblies are connected to a version G connector through a panel mount housing.

WIRE AND CABLE OPTIONS

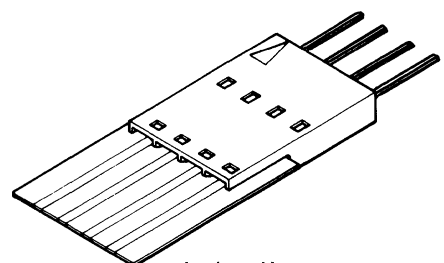
Recommended Molex Cable Engineering No. to use with 70400 Series connectors: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389

Notch Specification for Ribbon Cable

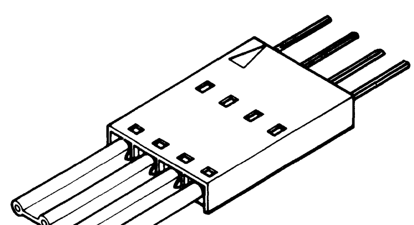




Discrete Wire



Flat Flex Cable



Ribbon Cable

* See application equipment description section W

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Insulation Displacement Connector Assembly

70475

Male, Single Row Version D, Back Ribs

Features and Benefits

- Sizes 2 to 25 circuits
- Preloaded, single-piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Back ribs maintain position of connector assembly in clips; prevents lateral movement when another assembly is removed
- End-to-end stackable inside a single row panel mount connector to form a larger single row connector
- Back-to-back and end-to-end stackable inside a dual row panel mount connector to form a dual row connector

Reference Information

Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70018, 70022 and 70104
Use With Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

Electrical

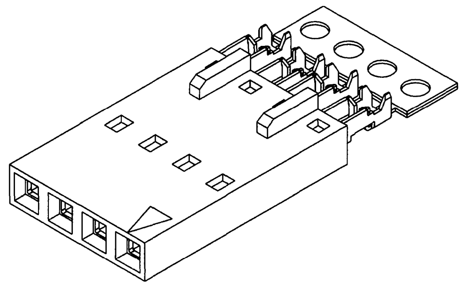
Voltage: 250V
Current: 1.2A—28 AWG; 1.8A—26 AWG
3.0A—24 AWG; 3.0A—22 AWG
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 10,000 MΩ min.

Mechanical

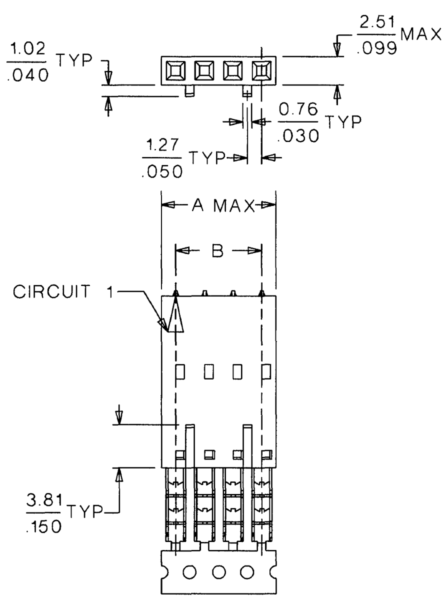
Terminal Pull-Out Force: 4 lb for 15 seconds
Mating Force: 8.0 oz max.
Unmating Force: 1.0 oz min.

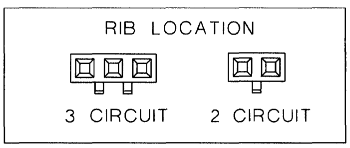
Physical

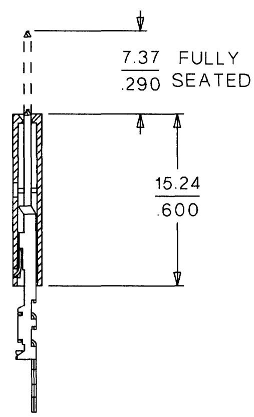
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +120°C
Insulation and Wire Gauge Range: .053" max. with 22 to 28 AWG stranded discrete wire or flat ribbon cable
Pin Height: 300" max. to .280" min. (measured from top of housing or PCB to top of pin)



Not For Use With C-Grid III™ Components







Wire Gauge Chart	
Code Stamped on Terminals	Wire Gauge (AWG)
A	24
B	26
C	28
D	22

Note: 2 circuit housings are preloaded in pairs

Plating Code (Stripe on Carrier Strip)	
Plating	Color
Tin/Lead	None
15µ" Gold	Yellow
30µ" Gold	Red

Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Wire Accommodation (AWG)	Order No.		
	15µ" Gold	30µ" Gold	150µ" Tin/Lead
28	14-44-21XX	14-44-49XX	14-45-18XX
26	14-44-16XX	14-44-29XX	14-45-06XX
24	•14-44-12XX	14-44-25XX	14-45-02XX
22	14-44-53XX	14-44-54XX	14-44-52XX
Replace XX with no. of circuits, 02-25			

Circuits	Dimension B	Dimension A
2	5.05 (.199)	2.54 (.100)
3	7.59 (.299)	5.08 (.200)
4	10.13 (.399)	7.62 (.300)
5	12.67 (.499)	10.16 (.400)
6	15.21 (.599)	12.70 (.500)
7	17.75 (.699)	15.24 (.600)
8	20.29 (.799)	17.78 (.700)
9	22.83 (.899)	20.32 (.800)

Circuits	Dimension B	Dimension A
10	25.37 (.999)	22.86 (.900)
11	27.91 (1.099)	25.40 (1.000)
12	30.45 (1.199)	27.94 (1.100)
13	32.99 (1.299)	30.48 (1.200)
14	35.53 (1.399)	33.02 (1.300)
15	38.07 (1.499)	35.56 (1.400)
16	40.61 (1.599)	38.10 (1.500)
17	43.15 (1.699)	40.64 (1.600)

Circuits	Dimension B	Dimension A
18	45.69 (1.799)	43.18 (1.700)
19	48.23 (1.899)	45.72 (1.800)
20	50.77 (1.999)	48.26 (1.900)
21	53.31 (2.099)	50.80 (2.000)
22	55.85 (2.199)	53.34 (2.100)
23	58.39 (2.299)	55.88 (2.200)
24	60.93 (2.399)	58.42 (2.300)
25	63.47 (2.499)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
Housing version D mates with female connectors when used in panel mount
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70543

Single Row, .120" Pocket Straight

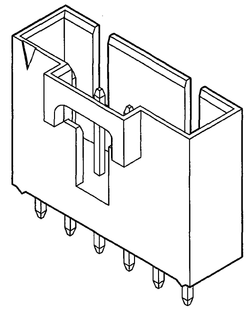
Features and Benefits
- Sizes 2 to 25 circuits
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G
Designed In: Inches

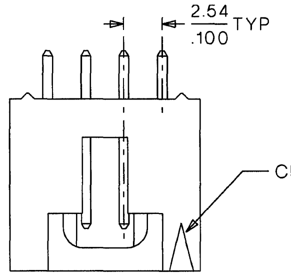
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

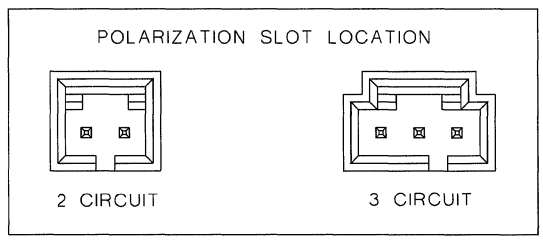
Mechanical
Contact Retention to Housing: 4 lb min.
Wire Pull-Out Force: 4 lb min.
Durability: 25 cycles Tin and 50 cycles Gold

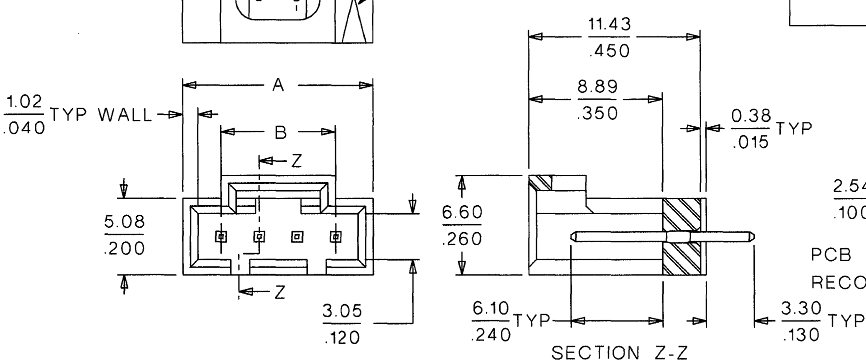
Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C

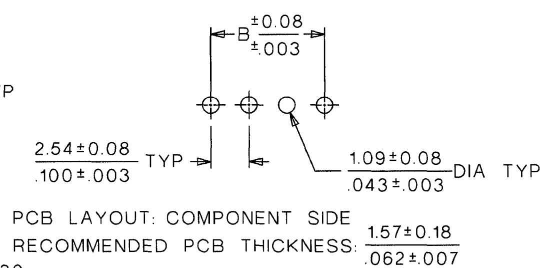


Not For Use With C-Grid III™ Components









ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15μ" Min. Gold	30μ" Min. Gold	150μ" Tin/Lead	A	B
2	• 70543-0001	70543-0106	70543-0036	7.37 (.290)	2.54 (.100)
3	• 70543-0002	70543-0107	70543-0037	10.17 (.400)	5.08 (.200)
4	• 70543-0003	70543-0108	70543-0038	12.71 (.500)	7.62 (.300)
5	• 70543-0004	70543-0109	70543-0039	15.25 (.600)	10.16 (.400)
6	• 70543-0005	70543-0110	70543-0040	17.79 (.700)	12.70 (.500)
7	• 70543-0006	70543-0111	70543-0041	20.33 (.800)	15.24 (.600)
8	• 70543-0007	70543-0112	70543-0042	22.87 (.900)	17.78 (.700)
9	• 70543-0008	70543-0113	70543-0043	25.41 (1.000)	20.32 (.800)
10	• 70543-0009	70543-0114	70543-0044	27.95 (1.100)	22.86 (.900)
11	• 70543-0010	70543-0115	70543-0045	30.49 (1.200)	25.40 (1.000)
12	• 70543-0011	70543-0116	70543-0046	33.03 (1.300)	27.94 (1.100)
13	• 70543-0012	70543-0117	70543-0047	35.57 (1.400)	30.48 (1.200)
14	• 70543-0013	70543-0118	70543-0048	38.11 (1.500)	33.02 (1.300)
15	• 70543-0014	70543-0119	70543-0049	40.65 (1.600)	35.56 (1.400)
16	• 70543-0015	70543-0120	70543-0050	43.19 (1.700)	38.10 (1.500)
17	• 70543-0016	70543-0121	70543-0051	45.73 (1.800)	40.64 (1.600)
18	• 70543-0017	70543-0122	70543-0052	48.27 (1.900)	43.18 (1.700)
19	• 70543-0018	70543-0123	70543-0053	50.81 (2.000)	45.72 (1.800)
20	• 70543-0019	70543-0124	70543-0054	53.35 (2.100)	48.26 (1.900)
21	• 70543-0020	70543-0125	70543-0055	55.89 (2.200)	50.80 (2.000)
22	• 70543-0021	70543-0126	70543-0056	58.43 (2.300)	53.34 (2.100)
23	• 70543-0022	70543-0127	70543-0057	60.97 (2.400)	55.88 (2.200)
24	• 70543-0023	70543-0128	70543-0058	63.51 (2.500)	58.42 (2.300)
25	• 70543-0024	70543-0129	70543-0059	66.05 (2.600)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70545

Single Row, .120" Pocket Straight, TRI-PEG

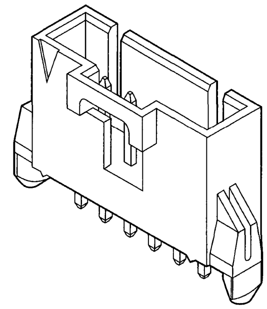
Features and Benefits
- Size 2 to 25 circuits
- PCB locks hold header in place until permanently soldered
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G
Designed In: Inches

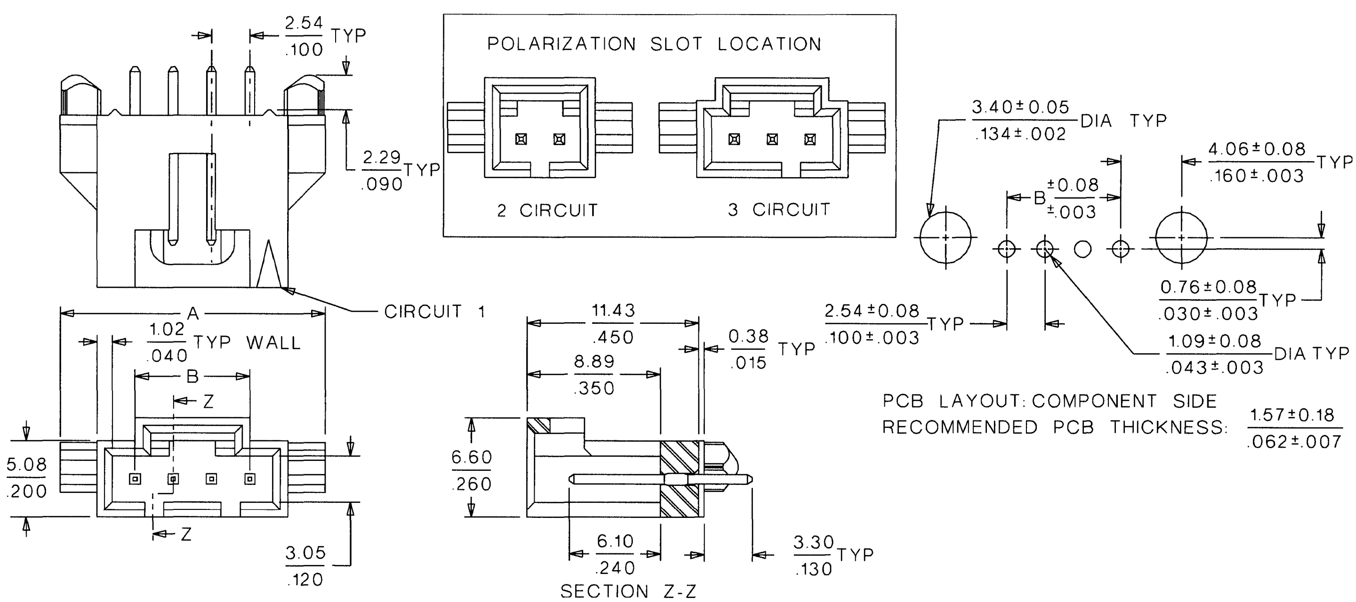
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

Mechanical
Insertion Force to PCB: 10 lb
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 15µ" Min. Gold	30µ" Min. Gold	150µ" Tin/Lead	Dimension A	B
2	• 70545-0036	70545-0071	70545-0001	12.40 (.488)	2.54 (.100)
3	• 70545-0037	70545-0072	70545-0002	14.94 (.588)	5.08 (.200)
4	• 70545-0038	70545-0073	70545-0003	17.48 (.688)	7.62 (.300)
5	• 70545-0039	70545-0074	70545-0004	20.02 (.788)	10.16 (.400)
6	• 70545-0040	70545-0075	70545-0005	22.56 (.888)	12.70 (.500)
7	• 70545-0041	70545-0076	70545-0006	25.10 (.988)	15.24 (.600)
8	• 70545-0042	70545-0077	70545-0007	27.64 (1.088)	17.78 (.700)
9	• 70545-0043	70545-0078	70545-0008	30.18 (1.188)	20.32 (.800)
10	• 70545-0044	70545-0079	70545-0009	32.72 (1.288)	22.86 (.900)
11	• 70545-0045	70545-0080	70545-0010	35.26 (1.388)	25.40 (1.000)
12	• 70545-0046	70545-0081	70545-0011	37.80 (1.488)	27.94 (1.100)
13	• 70545-0047	70545-0082	70545-0012	40.34 (1.588)	30.48 (1.200)

Circuits	Order No. 15µ" Min. Gold	30µ" Min. Gold	150µ" Tin/Lead	Dimension A	B
14	• 70545-0048	70545-0083	70545-0013	42.88 (1.688)	33.02 (1.300)
15	• 70545-0049	70545-0084	70545-0014	45.42 (1.788)	35.56 (1.400)
16	• 70545-0050	70545-0085	70545-0015	47.96 (1.888)	38.10 (1.500)
17	• 70545-0051	70545-0086	70545-0016	50.50 (1.988)	40.64 (1.600)
18	• 70545-0052	70545-0087	70545-0017	53.04 (2.088)	43.18 (1.700)
19	• 70545-0053	70545-0088	70545-0018	55.58 (2.188)	45.72 (1.800)
20	• 70545-0054	70545-0089	70545-0019	58.12 (2.288)	48.26 (1.900)
21	• 70545-0055	70545-0090	70545-0020	60.66 (2.388)	50.80 (2.000)
22	• 70545-0056	70545-0091	70545-0021	63.20 (2.488)	53.34 (2.100)
23	• 70545-0057	70545-0092	70545-0022	65.74 (2.588)	55.88 (2.200)
24	• 70545-0058	70545-0093	70545-0023	68.28 (2.688)	58.42 (2.300)
25	• 70545-0059	70545-0094	70545-0024	70.82 (2.788)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70553

Single Row, .120" Pocket Right Angle, Low Profile

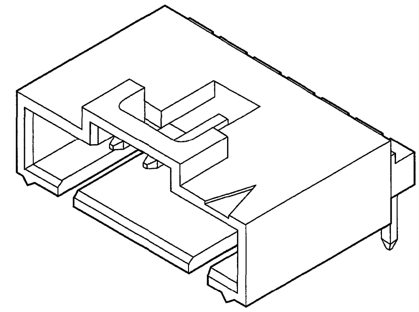
Features and Benefits
- Sizes 2 to 25 circuits
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G
Designed In: Inches

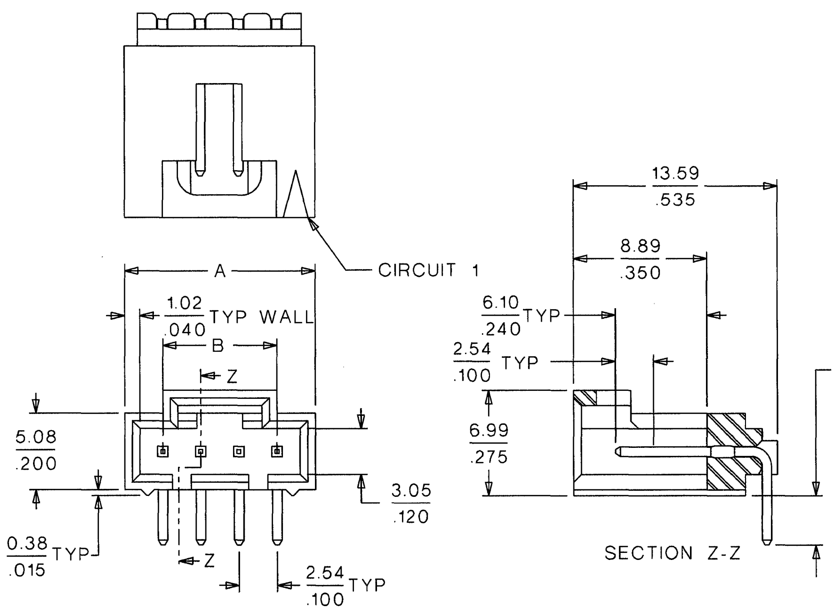
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

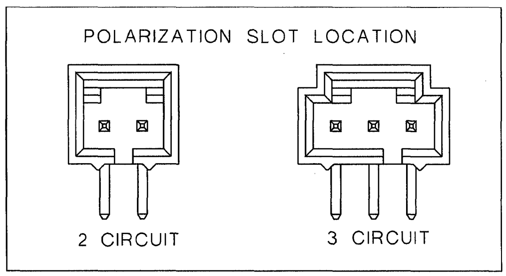
Mechanical
Durability: 25 cycles Tin and 50 cycles Gold

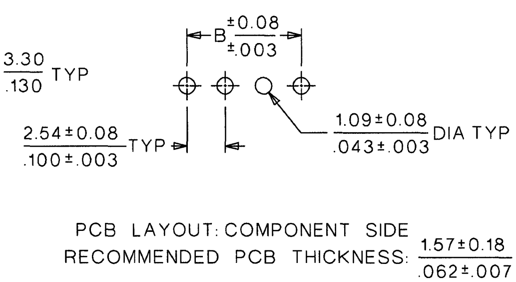
Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 15μ" Min. Gold	Order No. 30μ" Min. Gold	Order No. 150μ" Tin/Lead	Dimension A	Dimension B
2	• 70553-0001	70553-0106	70553-0036	7.37 (.290)	2.54 (.100)
3	• 70553-0002	70553-0107	70553-0037	10.17 (.400)	5.08 (.200)
4	• 70553-0003	70553-0108	70553-0038	12.71 (.500)	7.62 (.300)
5	• 70553-0004	70553-0109	70553-0039	15.25 (.600)	10.16 (.400)
6	• 70553-0005	70553-0110	70553-0040	17.79 (.700)	12.70 (.500)
7	• 70553-0006	70553-0111	70553-0041	20.33 (.800)	15.24 (.600)
8	• 70553-0007	70553-0112	70553-0042	22.87 (.900)	17.78 (.700)
9	• 70553-0008	70553-0113	70553-0043	25.41 (1.000)	20.32 (.800)
10	• 70553-0009	70553-0114	70553-0044	27.95 (1.100)	22.86 (.900)
11	• 70553-0010	70553-0115	70553-0045	30.49 (1.200)	25.40 (1.000)
12	• 70553-0011	70553-0116	70553-0046	33.03 (1.300)	27.94 (1.100)
13	• 70553-0012	70553-0117	70553-0047	35.57 (1.400)	30.48 (1.200)
14	• 70553-0013	70553-0118	70553-0048	38.11 (1.500)	33.02 (1.300)
15	• 70553-0014	70553-0119	70553-0049	40.65 (1.600)	35.56 (1.400)
16	• 70553-0015	70553-0120	70553-0050	43.19 (1.700)	38.10 (1.500)
17	• 70553-0016	70553-0121	70553-0051	45.73 (1.800)	40.64 (1.600)
18	• 70553-0017	70553-0122	70553-0052	48.27 (1.900)	43.18 (1.700)
19	• 70553-0018	70553-0123	70553-0053	50.81 (2.000)	45.72 (1.800)
20	• 70553-0019	70553-0124	70553-0054	53.35 (2.100)	48.26 (1.900)
21	• 70553-0020	70553-0125	70553-0055	55.89 (2.200)	50.80 (2.000)
22	• 70553-0021	70553-0126	70553-0056	58.43 (2.300)	53.34 (2.100)
23	• 70553-0022	70553-0127	70553-0057	60.97 (2.400)	55.88 (2.200)
24	• 70553-0023	70553-0128	70553-0058	63.51 (2.500)	58.42 (2.300)
25	• 70553-0024	70553-0129	70553-0059	66.05 (2.600)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
▪ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70555

Single Row, .120" Pocket Right Angle, TRI-PEG

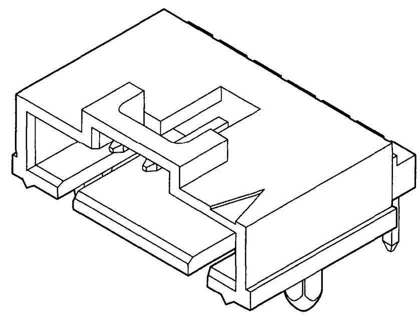
Features and Benefits
- Sizes 2 to 25 circuits
- PCB locks hold header in place until permanently soldered
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G
Designed In: Inches

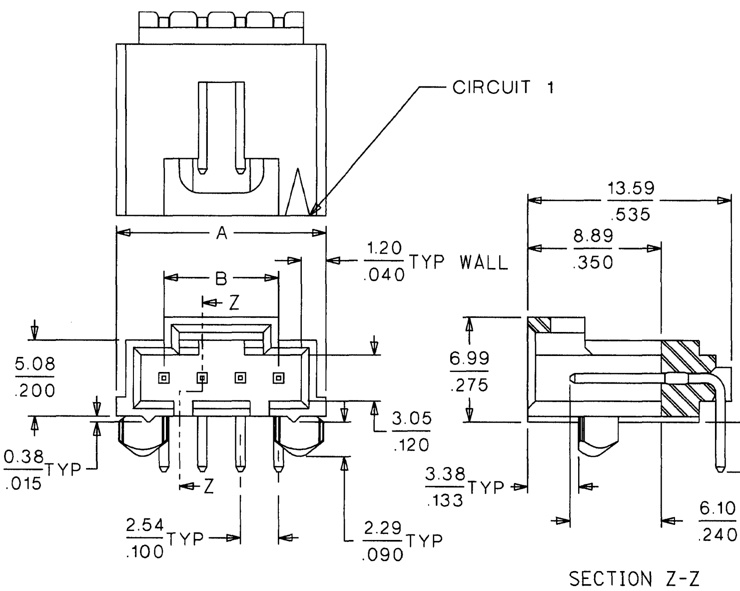
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

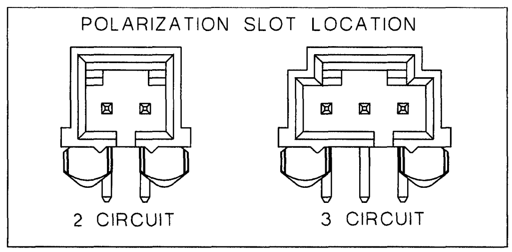
Mechanical
Insertion Force to PCB: 10 lb
Durability: 25 cycles Tin and 50 cycles Gold

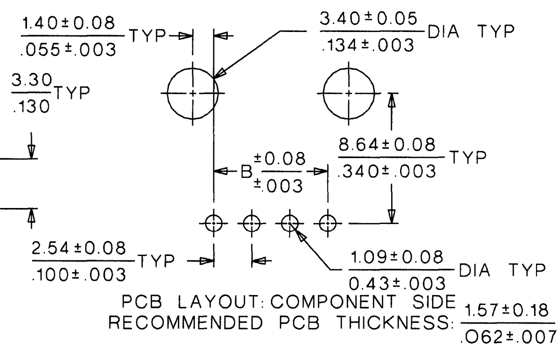
Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 15µ" Min. Gold	Order No. 30µ" Min. Gold	Order No. 150µ" Tin/Lead	Dimension A	Dimension B
2	• 70555-0036	70555-0071	70555-0001	8.53 (.336)	2.54 (.100)
3	• 70555-0037	70555-0072	70555-0002	11.07 (.436)	5.08 (.200)
4	• 70555-0038	70555-0073	70555-0003	13.61 (.536)	7.62 (.300)
5	• 70555-0039	70555-0074	70555-0004	16.15 (.636)	10.16 (.400)
6	• 70555-0040	70555-0075	70555-0005	18.69 (.736)	12.70 (.500)
7	• 70555-0041	70555-0076	70555-0006	21.23 (.836)	15.24 (.600)
8	• 70555-0042	70555-0077	70555-0007	23.77 (.936)	17.78 (.700)
9	• 70555-0043	70555-0078	70555-0008	26.31 (1.036)	20.32 (.800)
10	• 70555-0044	70555-0079	70555-0009	28.85 (1.136)	22.86 (.900)
11	• 70555-0045	70555-0080	70555-0010	31.39 (1.236)	25.40 (1.000)
12	• 70555-0046	70555-0081	70555-0011	33.93 (1.336)	27.94 (1.100)
13	• 70555-0047	70555-0082	70555-0012	36.47 (1.436)	30.48 (1.200)
14	• 70555-0048	70555-0083	70555-0013	39.01 (1.536)	33.02 (1.300)
15	• 70555-0049	70555-0084	70555-0014	41.55 (1.636)	35.56 (1.400)
16	• 70555-0050	70555-0085	70555-0015	44.09 (1.736)	38.10 (1.500)
17	• 70555-0051	70555-0086	70555-0016	46.63 (1.836)	40.64 (1.600)
18	• 70555-0052	70555-0087	70555-0017	49.17 (1.936)	43.18 (1.700)
19	• 70555-0053	70555-0088	70555-0018	51.71 (2.036)	45.72 (1.800)
20	• 70555-0054	70555-0089	70555-0019	54.25 (2.136)	48.26 (1.900)
21	• 70555-0055	70555-0090	70555-0020	56.79 (2.236)	50.80 (2.000)
22	• 70555-0056	70555-0091	70555-0021	59.33 (2.336)	53.34 (2.100)
23	• 70555-0057	70555-0092	70555-0022	61.87 (2.436)	55.88 (2.200)
24	• 70555-0058	70555-0093	70555-0023	64.41 (2.536)	58.42 (2.300)
25	• 70555-0059	70555-0094	70555-0024	66.95 (2.636)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

▣ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

molex®

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70563

Single Row, .180" Pocket Vertical

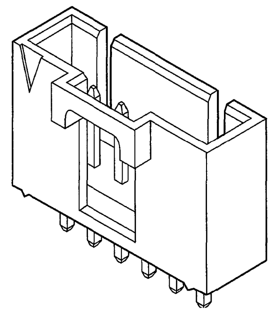
Features and Benefits
- Sizes 4 to 25 circuits
- Larger pocket accepts interim clip with end-to-end stacked connectors
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004
Designed In: Inches

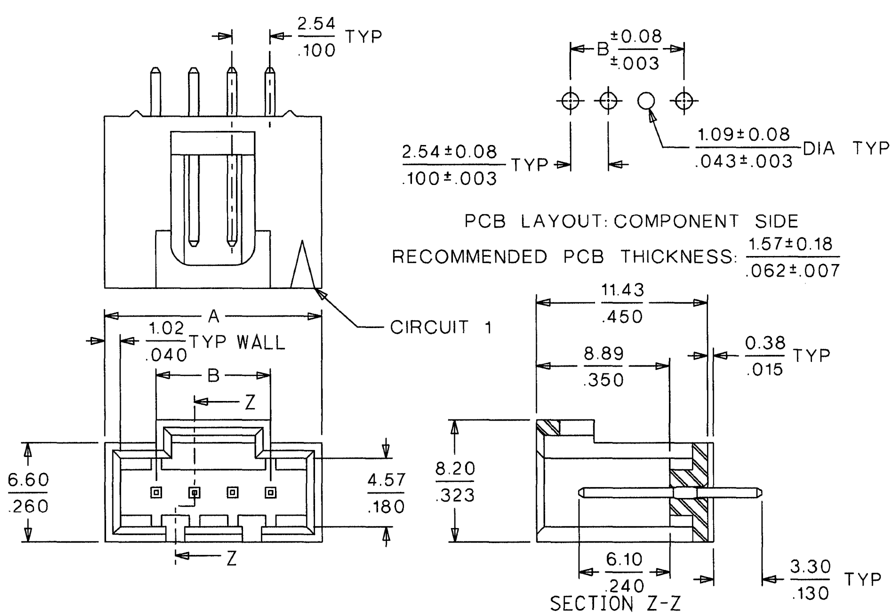
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

Mechanical
Durability: 25 cycles Tin and 50 cycles Gold

Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15μ" Min. Gold	30μ" Min. Gold	150μ" Tin/Lead	A	B
4	• 70563-0003	70563-0108	70563-0038	14.49 (.570)	7.62 (.300)
5	• 70563-0004	70563-0109	70563-0039	17.03 (.670)	10.16 (.400)
6	• 70563-0005	70563-0110	70563-0040	19.59 (.770)	12.70 (.500)
7	• 70563-0006	70563-0111	70563-0041	22.11 (.870)	15.24 (.600)
8	• 70563-0007	70563-0112	70563-0042	24.65 (.970)	17.78 (.700)
9	• 70563-0008	70563-0113	70563-0043	27.19 (1.070)	20.32 (.800)
10	• 70563-0009	70563-0114	70563-0044	29.73 (1.170)	22.86 (.900)
11	• 70563-0010	70563-0115	70563-0045	32.27 (1.270)	25.40 (1.000)
12	• 70563-0011	70563-0116	70563-0046	34.81 (1.370)	27.94 (1.100)
13	• 70563-0012	70563-0117	70563-0047	37.35 (1.470)	30.48 (1.200)
14	• 70563-0013	70563-0118	70563-0048	39.89 (1.570)	33.02 (1.300)

Circuits	Order No.			Dimension	
	15μ" Min. Gold	30μ" Min. Gold	150μ" Tin/Lead	A	B
15	• 70563-0014	70563-0119	70563-0049	42.43 (1.670)	35.56 (1.400)
16	• 70563-0015	70563-0120	70563-0050	44.97 (1.770)	38.10 (1.500)
17	• 70563-0016	70563-0121	70563-0051	47.51 (1.870)	40.64 (1.600)
18	• 70563-0017	70563-0122	70563-0052	50.05 (1.970)	43.18 (1.700)
19	• 70563-0018	70563-0123	70563-0053	52.59 (2.070)	45.72 (1.800)
20	• 70563-0019	70563-0124	70563-0054	55.13 (2.170)	48.26 (1.900)
21	• 70563-0020	70563-0125	70563-0055	57.67 (2.270)	50.80 (2.000)
22	• 70563-0021	70563-0126	70563-0056	60.21 (2.370)	53.34 (2.100)
23	• 70563-0022	70563-0127	70563-0057	62.75 (2.470)	55.88 (2.200)
24	• 70563-0023	70563-0128	70563-0058	65.29 (2.570)	58.42 (2.300)
25	• 70563-0024	70563-0129	70563-0059	67.83 (2.670)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
▩ Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

molex

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70565

Single Row, .180" Pocket Vertical, TRI-PEG

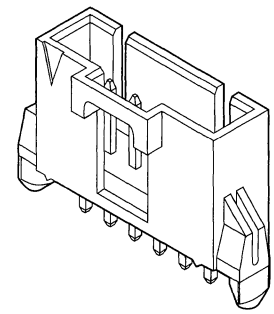
Features and Benefits
- Sizes 4 to 25 circuits
- Larger pocket accepts interim clip with end-to-end stacked connectors
- PCB locks hold header in place until permanently soldered
- Locking crown secures positive latch on clip to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004
Designed In: Inches

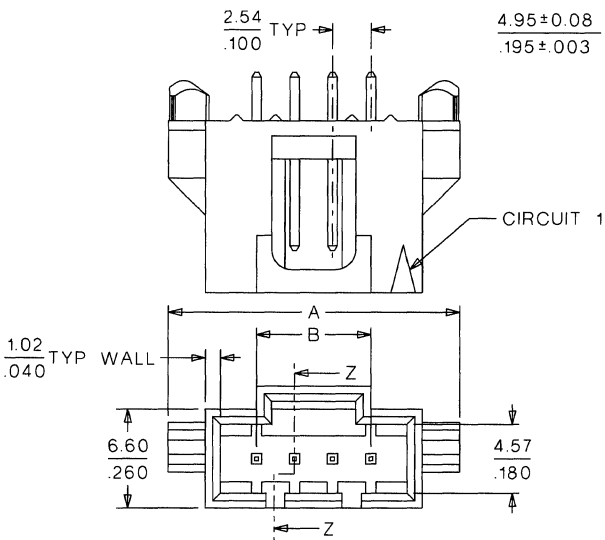
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ

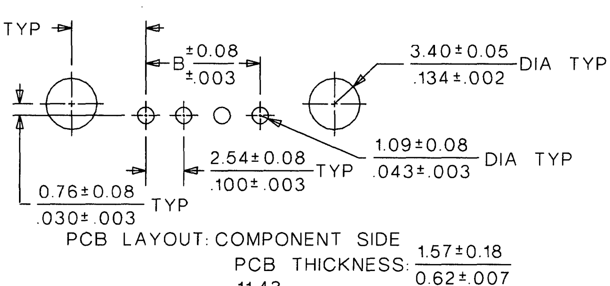
Mechanical
Insertion Force to PCB: 10 lb

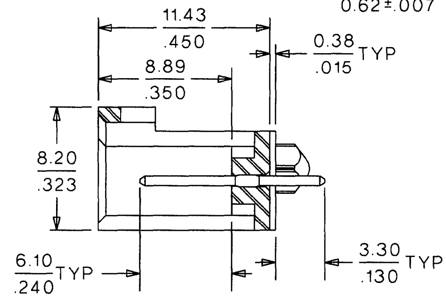
Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15µ" Min. Gold	30µ" Min. Gold	150µ" Tin/Lead	A	B
4	• 70565-0038	70565-0073	70565-0003	19.25 (.758)	7.62 (.300)
5	• 70565-0039	70565-0074	70565-0004	21.79 (.858)	10.16 (.400)
6	• 70565-0040	70565-0075	70565-0005	24.33 (.958)	12.70 (.500)
7	• 70565-0041	70565-0076	70565-0006	26.87 (1.058)	15.24 (.600)
8	• 70565-0042	70565-0077	70565-0007	29.41 (1.158)	17.78 (.700)
9	• 70565-0043	70565-0078	70565-0008	31.95 (1.258)	20.32 (.800)
10	• 70565-0044	70565-0079	70565-0009	34.49 (1.358)	22.86 (.900)
11	• 70565-0045	70565-0080	70565-0010	37.03 (1.458)	25.40 (1.000)
12	• 70565-0046	70565-0081	70565-0011	39.57 (1.558)	27.94 (1.100)
13	• 70565-0047	70565-0082	70565-0012	42.11 (1.658)	30.48 (1.200)
14	• 70565-0048	70565-0083	70565-0013	44.65 (1.758)	33.02 (1.300)

Circuits	Order No.			Dimension	
	15µ" Min. Gold	30µ" Min. Gold	150µ" Tin/Lead	A	B
15	• 70565-0049	70565-0084	70565-0014	47.19 (1.858)	35.56 (1.400)
16	• 70565-0050	70565-0085	70565-0015	49.73 (1.958)	38.10 (1.500)
17	• 70565-0051	70565-0086	70565-0016	52.27 (2.058)	40.64 (1.600)
18	• 70565-0052	70565-0087	70565-0017	54.81 (2.158)	43.18 (1.700)
19	• 70565-0053	70565-0088	70565-0018	57.35 (2.258)	45.72 (1.800)
20	• 70565-0054	70565-0089	70565-0019	59.89 (2.358)	48.26 (1.900)
21	• 70565-0055	70565-0090	70565-0020	62.43 (2.458)	50.80 (2.000)
22	• 70565-0056	70565-0091	70565-0021	64.97 (2.558)	53.34 (2.100)
23	• 70565-0057	70565-0092	70565-0022	67.51 (2.658)	55.88 (2.200)
24	• 70565-0058	70565-0093	70565-0023	70.05 (2.758)	58.42 (2.300)
25	• 70565-0059	70565-0094	70565-0024	72.59 (2.858)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
☐ Highlighted area denotes preferred standard product, usually available with shorter lead times

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header

70573

Single Row, .180" Pocket Right Angle

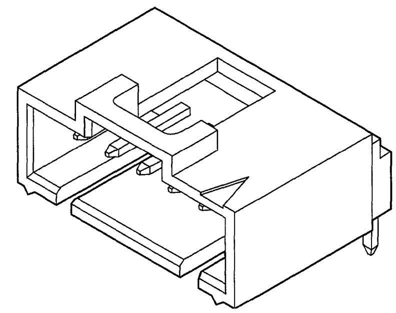
FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 4 to 25 circuits
- Larger pocket accepts interim clip with end-to-end stacked connectors
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Vapor phase and IR process compatible

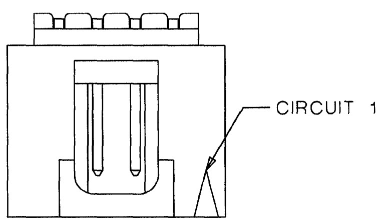
Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004
Designed In: Inches

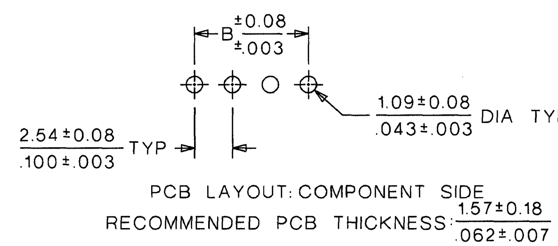
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

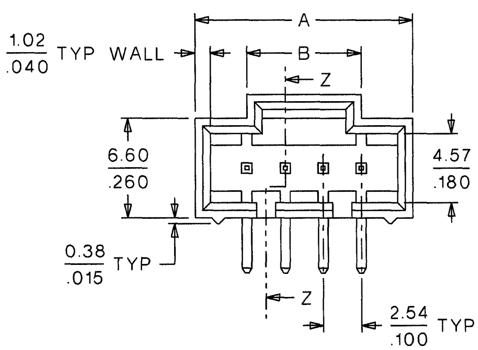
Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C

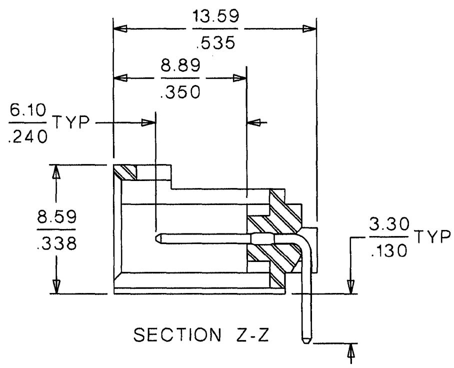


Not For Use With Molex C-Grid III™ Components









ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15µ" Min. Gold	30µ" Min. Gold	150µ" Tin/Lead	A	B
4	• 70573-0003	70573-0108	70573-0038	14.49 (.570)	7.62 (.300)
5	• 70573-0004	70573-0109	70573-0039	17.03 (.670)	10.16 (.400)
6	• 70573-0005	70573-0110	70573-0040	19.59 (.770)	12.70 (.500)
7	• 70573-0006	70573-0111	70573-0041	22.11 (.870)	15.24 (.600)
8	• 70573-0007	70573-0112	70573-0042	24.65 (.970)	17.78 (.700)
9	• 70573-0008	70573-0113	70573-0043	27.19 (1.070)	20.32 (.800)
10	• 70573-0009	70573-0114	70573-0044	29.73 (1.170)	22.86 (.900)
11	• 70573-0010	70573-0115	70573-0045	32.27 (1.270)	25.40 (1.000)
12	• 70573-0011	70573-0116	70573-0046	34.81 (1.370)	27.94 (1.100)
13	• 70573-0012	70573-0117	70573-0047	37.35 (1.470)	30.48 (1.200)
14	• 70573-0013	70573-0118	70573-0048	39.89 (1.570)	33.02 (1.300)
15	• 70573-0014	70573-0119	70573-0049	42.43 (1.670)	35.56 (1.400)
16	• 70573-0015	70573-0120	70573-0050	44.97 (1.770)	38.10 (1.500)
17	• 70573-0016	70573-0121	70573-0051	47.51 (1.870)	40.64 (1.600)
18	• 70573-0017	70573-0122	70573-0052	50.05 (1.970)	43.18 (1.700)
19	• 70573-0018	70573-0123	70573-0053	52.59 (2.070)	45.72 (1.800)
20	• 70573-0019	70573-0124	70573-0054	55.13 (2.170)	48.26 (1.900)
21	• 70573-0020	70573-0125	70573-0055	57.67 (2.270)	50.80 (2.000)
22	• 70573-0021	70573-0126	70573-0056	60.21 (2.370)	53.34 (2.100)
23	• 70573-0022	70573-0127	70573-0057	62.75 (2.470)	55.88 (2.200)
24	• 70573-0023	70573-0128	70573-0058	65.29 (2.570)	58.42 (2.300)
25	• 70573-0024	70573-0129	70573-0059	67.83 (2.670)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch C-Grid SL™ Wire-to-Board Shrouded Header**

70575

Single Row, .180" Pocket Right Angle, TRI-PEG

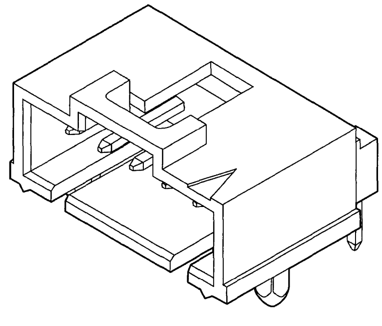
Features and Benefits
- Sizes 4 to 25 circuits
- Larger pocket accepts interim clip with end-to-end stacked connectors
- PCB locks hold header in place until permanently soldered
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-70541
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004
Designed In: Inches

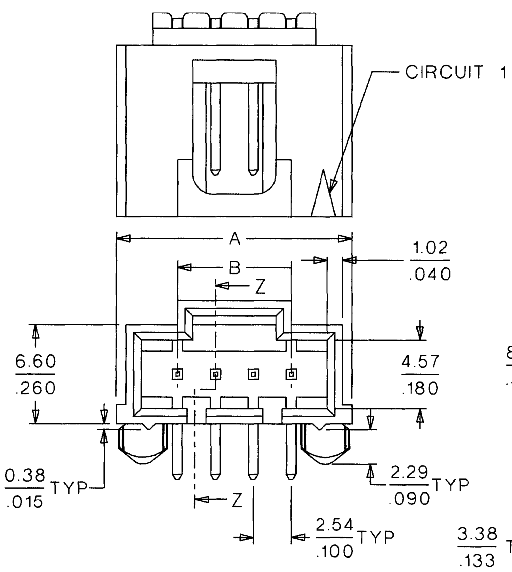
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

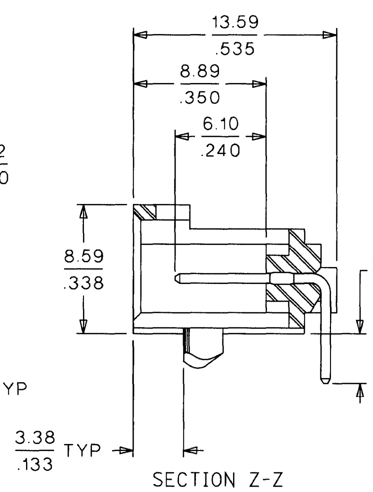
Mechanical
Insertion Force to PCB: 10 lb

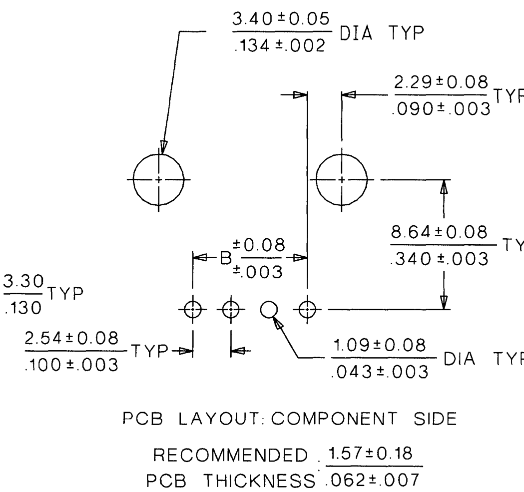
Physical
Housing: Black glass-filled PCT, UL 94V-0
Contact: Phosphor Bronze, .025" square
Plating: See Table
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15μ" Min.Gold	30μ" Min.Gold	150μ" Tin/Lead	A	B
4	• 70575-0038	70575-0073	70575-0003	12.19 (.620)	7.62 (.300)
5	• 70575-0039	70575-0074	70575-0004	14.73 (.720)	10.16 (.400)
6	• 70575-0040	70575-0075	70575-0005	17.27 (.820)	12.70 (.500)
7	• 70575-0041	70575-0076	70575-0006	19.81 (.920)	15.24 (.600)
8	• 70575-0042	70575-0077	70575-0007	22.35 (1.020)	17.78 (.700)
9	• 70575-0043	70575-0078	70575-0008	24.89 (1.120)	20.32 (.800)
10	• 70575-0044	70575-0079	70575-0009	27.43 (1.220)	22.86 (.900)
11	• 70575-0045	70575-0080	70575-0010	29.97 (1.320)	25.40 (1.000)
12	• 70575-0046	70575-0081	70575-0011	32.51 (1.420)	27.94 (1.100)
13	• 70575-0047	70575-0082	70575-0012	35.05 (1.520)	30.48 (1.200)
14	• 70575-0048	70575-0083	70575-0013	37.59 (1.620)	33.02 (1.300)

Circuits	Order No.			Dimension	
	15μ" Min.Gold	30μ" Min.Gold	150μ" Tin/Lead	A	B
15	• 70575-0049	70575-0084	70575-0014	40.13 (1.720)	35.56 (1.400)
16	• 70575-0050	70575-0085	70575-0015	42.67 (1.820)	38.10 (1.500)
17	• 70575-0051	70575-0086	70575-0016	45.21 (1.920)	40.64 (1.600)
18	• 70575-0052	70575-0087	70575-0017	47.75 (2.020)	43.18 (1.700)
19	• 70575-0053	70575-0088	70575-0018	50.29 (2.120)	45.72 (1.800)
20	• 70575-0054	70575-0089	70575-0019	52.83 (2.220)	48.26 (1.900)
21	• 70575-0055	70575-0090	70575-0020	55.37 (2.320)	50.80 (2.000)
22	• 70575-0056	70575-0091	70575-0021	57.91 (2.420)	53.34 (2.100)
23	• 70575-0057	70575-0092	70575-0022	60.45 (2.520)	55.88 (2.200)
24	• 70575-0058	70575-0093	70575-0023	62.99 (2.620)	58.42 (2.300)
25	• 70575-0059	70575-0094	70575-0024	65.53 (2.720)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors
Highlighted area denotes preferred standard product, usually available with shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Wire Connector

70107

Single Row, Version A Without Mounting Ears

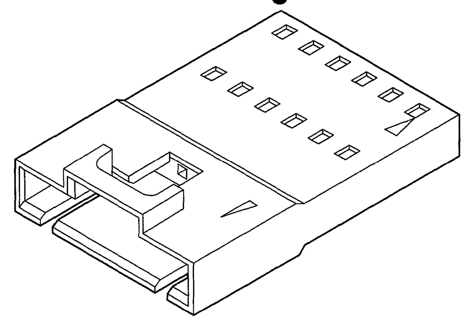
Features and Benefits
- Sizes 2 to 25 circuits
- Used primarily for remote interconnections
- Locking crown secures positive latch to connector
- Polarization slots guide front ribs of mating connector to prevent pin damage

Reference Information
Product Specification: PS-70021
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G connector assemblies
Use With: 70021 crimp terminals
Designed In: Inches

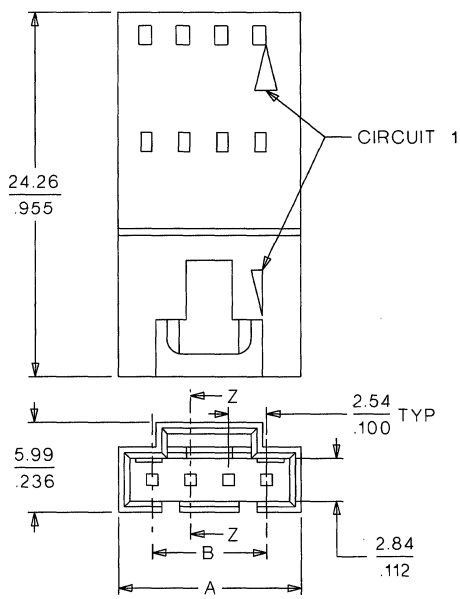
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

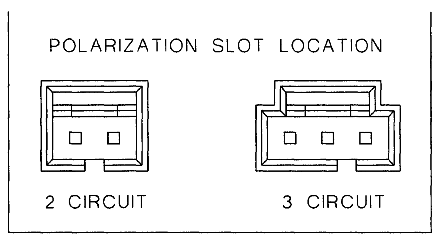
Mechanical
Contact Retention to Housing: 4 lb min.
Wire Pull-out Force: 4 lb min.

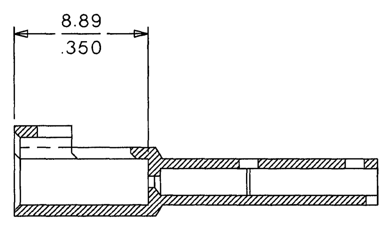
Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C



Not For Use With Molex C-Grid III™ Components







SECTION Z-Z

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	• 70107-0001	7.11 (.280)	2.54 (.100)
3	• 70107-0002	9.65 (.380)	5.08 (.200)
4	• 70107-0003	12.19 (.480)	7.62 (.300)
5	• 70107-0004	14.73 (.580)	10.16 (.400)
6	• 70107-0005	17.27 (.680)	12.70 (.500)
7	• 70107-0006	19.81 (.780)	15.24 (.600)
8	• 70107-0007	22.35 (.880)	17.78 (.700)
9	• 70107-0008	24.89 (.980)	20.32 (.800)
10	• 70107-0009	27.43 (1.080)	22.86 (.900)
11	• 70107-0010	29.97 (1.180)	25.40 (1.000)
12	• 70107-0011	32.51 (1.280)	27.94 (1.100)
13	• 70107-0012	35.05 (1.380)	30.48 (1.200)

Circuits	Order No.	Dimension A	Dimension B
14	• 70107-0013	37.59 (1.480)	33.02 (1.300)
15	• 70107-0014	40.13 (1.580)	33.56 (1.400)
16	• 70107-0015	42.67 (1.680)	38.10 (1.500)
17	• 70107-0016	45.21 (1.780)	40.64 (1.600)
18	• 70107-0017	47.75 (1.880)	43.18 (1.700)
19	• 70107-0018	50.29 (1.980)	45.72 (1.800)
20	• 70107-0019	52.83 (2.080)	48.26 (1.900)
21	• 70107-0020	55.37 (2.180)	50.80 (2.000)
22	• 70107-0021	57.91 (2.280)	53.34 (2.100)
23	• 70107-0022	60.45 (2.380)	55.88 (2.200)
24	• 70107-0023	62.99 (2.480)	58.42 (2.300)
25	• 70107-0024	65.53 (2.580)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 25 circuits
- Used primarily for remote interconnections
- Locking crown secures positive latch to connector
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Mounting ears for insertion into .030 to .090" thick panels

Reference Information
Product Specification: PS-70021
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G connector assemblies
Use With: 70021 crimp terminals
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

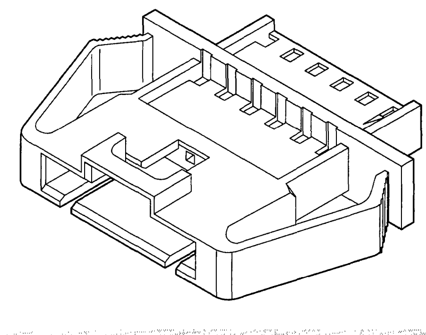
Mechanical
Contact Retention to Housing: 4 lb min.
Wire Pull-Out Force: 4 lb min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +120°C

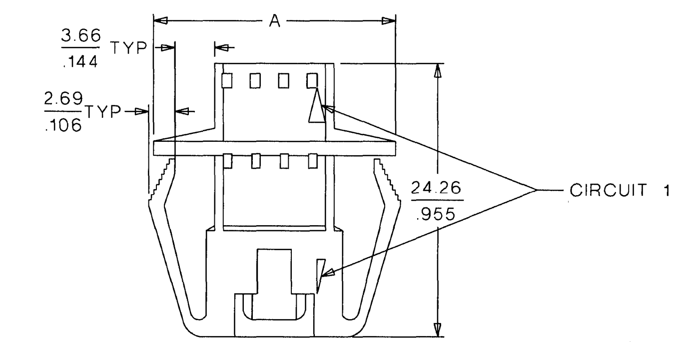
2.54mm (.100") Pitch C-Grid SL™ Wire-to-Wire Panel Mount Connector

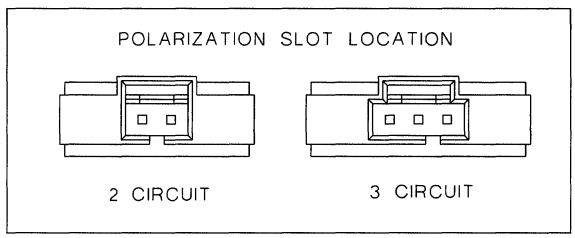
70107

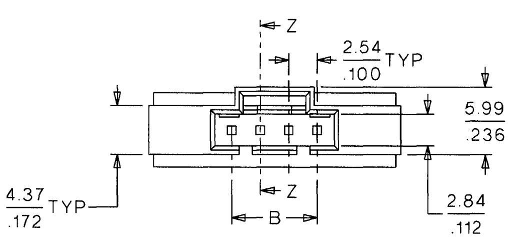
Single Row, Version B With Mounting Ears

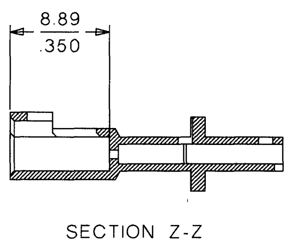


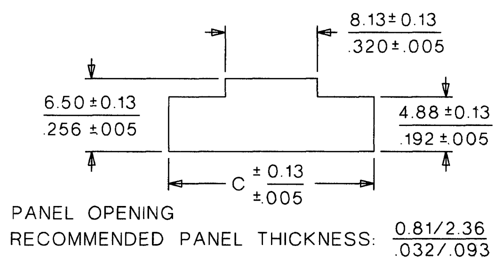
Not For Use With Molex C-Grid III™ Components











ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension Panel Opening C	Circuits	Order No.	Dimension A	Dimension B	Dimension Panel Opening C
2	• 70107-0036	18.03 (.710)	2.54 (.100)	13.08 (.515)	14	• 70107-0048	48.51 (1.910)	33.02 (1.300)	43.56 (1.715)
3	• 70107-0037	20.57 (.810)	5.08 (.200)	15.62 (.615)	15	• 70107-0049	51.05 (2.010)	33.56 (1.400)	46.10 (1.815)
4	• 70107-0038	23.11 (.910)	7.62 (.300)	18.61 (.715)	16	• 70107-0050	53.59 (2.110)	38.10 (1.500)	48.64 (1.915)
5	• 70107-0039	25.65 (1.010)	10.16 (.400)	20.70 (.815)	17	• 70107-0051	56.13 (2.210)	40.64 (1.600)	51.18 (2.015)
6	• 70107-0040	28.19 (1.110)	12.70 (.500)	23.24 (.915)	18	• 70107-0052	58.67 (2.310)	43.18 (1.700)	53.72 (2.115)
7	• 70107-0041	30.73 (1.210)	15.24 (.600)	25.78 (1.015)	19	• 70107-0053	61.21 (2.410)	45.72 (1.800)	56.26 (2.215)
8	• 70107-0042	33.27 (1.310)	17.78 (.700)	28.32 (1.115)	20	• 70107-0054	63.75 (2.510)	48.26 (1.900)	58.80 (2.315)
9	• 70107-0043	35.81 (1.410)	20.32 (.800)	30.86 (1.215)	21	• 70107-0055	66.29 (2.610)	50.80 (2.000)	61.34 (2.415)
10	• 70107-0044	38.35 (1.510)	22.86 (.900)	33.40 (1.315)	22	• 70107-0056	68.83 (2.710)	53.34 (2.100)	63.88 (2.515)
11	• 70107-0045	40.89 (1.610)	25.40 (1.000)	35.94 (1.415)	23	• 70107-0057	71.37 (2.810)	55.88 (2.200)	66.42 (2.615)
12	• 70107-0046	43.43 (1.710)	27.94 (1.100)	38.48 (1.515)	24	• 70107-0058	73.91 (2.910)	58.42 (2.300)	68.96 (2.715)
13	• 70107-0047	45.97 (1.810)	30.48 (1.200)	41.02 (1.615)	25	• 70107-0059	76.45 (3.010)	60.96 (2.400)	71.50 (2.815)

• US Standard Product, available through Molex franchised distributors

C-Grid

A

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 25 circuits
- Used primarily for remote interconnections
- Locking crown secures positive latch to connector
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Mounting ears for insertion into .030 to .090" thick panels
- Mates modular branch pin assemblies to single connector assembly

Reference Information
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70066, 70400 and 70430G front side, and 70066 and 70475D pin assemblies back side
Designed In: Inches

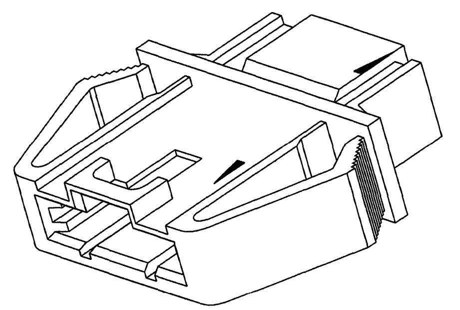
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +125°C

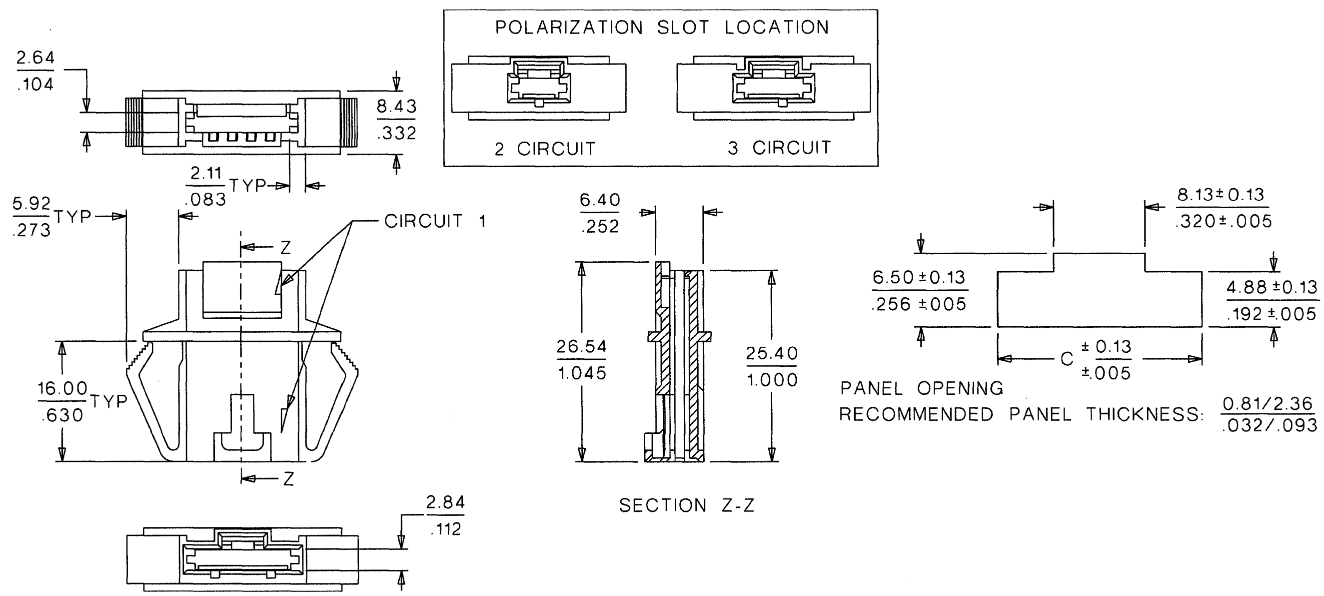
2.54mm (.100") Pitch C-Grid SL™ Wire-to-Wire Panel Mount Connector

70018

Single Row Modular Branch



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension Panel Opening C
2	• 50-65-0202	15.87 (.625)
3	• 50-65-0203	18.41 (.725)
4	• 50-65-0204	20.95 (.825)
5	• 50-65-0205	23.49 (.925)
6	• 50-65-0206	26.03 (1.025)
7	• 50-65-0207	28.57 (1.125)
8	• 50-65-0208	31.11 (1.225)
9	• 50-65-0209	33.65 (1.325)
10	• 50-65-0210	36.19 (1.425)
11	• 50-65-0211	38.73 (1.525)
12	• 50-65-0212	41.27 (1.625)
13	• 50-65-0213	43.81 (1.725)

Circuits	Order No.	Dimension Panel Opening C
14	• 50-65-0214	46.35 (1.825)
15	• 50-65-0215	48.89 (1.925)
16	• 50-65-0216	51.43 (2.025)
17	• 50-65-0217	53.97 (2.125)
18	• 50-65-0218	56.51 (2.225)
19	• 50-65-0219	59.05 (2.325)
20	• 50-65-0220	61.59 (2.425)
21	• 50-65-0221	64.13 (2.525)
22	• 50-65-0222	66.67 (2.625)
23	• 50-65-0223	69.21 (2.725)
24	• 50-65-0224	71.75 (2.825)
25	• 50-65-0225	74.29 (2.925)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Wire Panel Mount Connector

70104

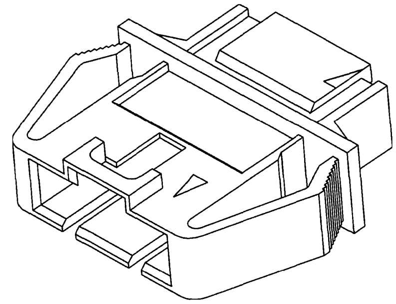
Single Row Modular Branch

Features and Benefits
- Sizes 4 to 25 circuits
- Used primarily for remote interconnections
- Locking crown secures positive latch to connector
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Mounting ears for insertion into .030 to .090" thick panels
- Mates single or modular branch pin assemblies with modular branch connector assemblies in an interim clip

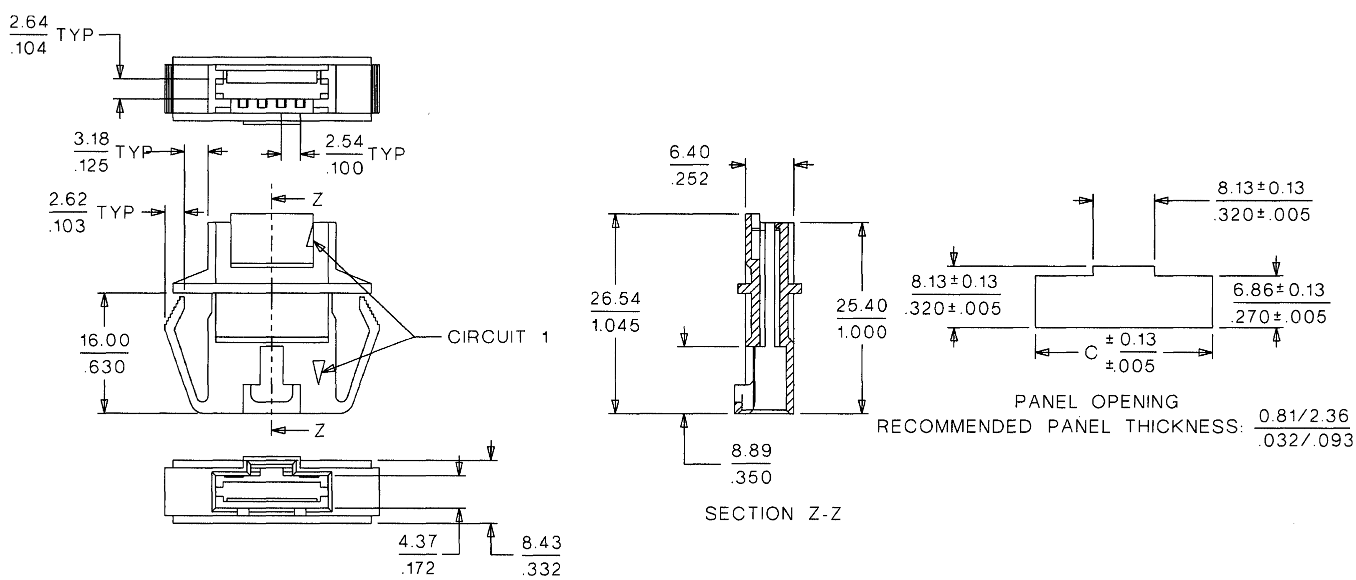
Reference Information
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004 front side, and 70066 and 70475D pin assemblies back side
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension Panel Opening C	Circuits	Order No.	Dimension Panel Opening C
4	• 50-65-0104	20.95 (.825)	15	• 50-65-0115	48.89 (1.925)
5	• 50-65-0105	23.49 (.925)	16	• 50-65-0116	51.43 (2.025)
6	• 50-65-0106	26.03 (1.025)	17	• 50-65-0117	53.97 (2.125)
7	• 50-65-0107	28.57 (1.125)	18	• 50-65-0118	56.51 (2.225)
8	• 50-65-0108	31.11 (1.225)	19	• 50-65-0119	59.05 (2.325)
9	• 50-65-0109	33.65 (1.325)	20	• 50-65-0120	61.59 (2.425)
10	• 50-65-0110	36.19 (1.425)	21	• 50-65-0121	64.13 (2.525)
11	• 50-65-0111	38.73 (1.575)	22	• 50-65-0122	66.67 (2.625)
12	• 50-65-0112	41.27 (1.625)	23	• 50-65-0123	69.21 (2.725)
13	• 50-65-0113	43.81 (1.725)	24	• 50-65-0124	71.75 (2.825)
14	• 50-65-0114	46.35 (1.825)	25	• 50-65-0125	74.79 (2.925)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Wire-to-Wire Panel Mount Connector

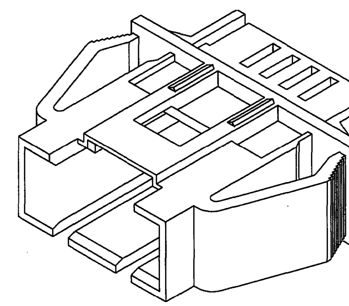
70022 Dual Row Modular Branch

Features and Benefits
- Sizes 6 to 50 circuits
- Used primarily for high density remote interconnections
- Locking crown secures positive latch to connector
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Mates modular branch pin assemblies to modular branch connector assemblies in a dual row configuration

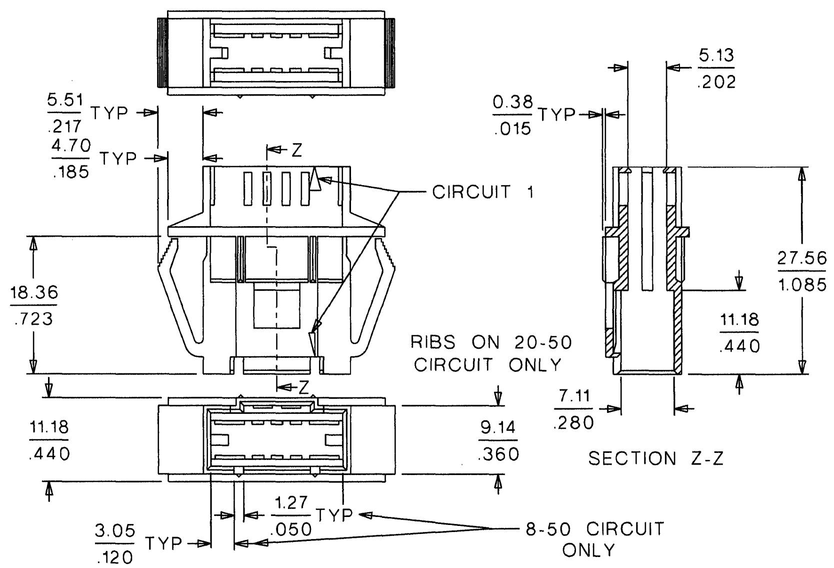
Reference Information
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70013 interim clip front side, and side-to-side stacked 70066 and 70475D on back side
Designed In: Inches

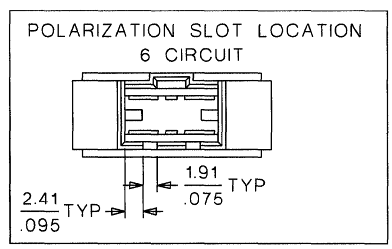
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

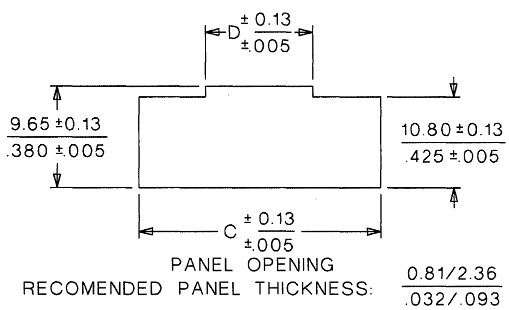
Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension Panel Opening C
6	• 50-65-0006	20.70 (.815)
8	• 50-65-0008	23.24 (.915)
10	• 50-65-0010	25.78 (1.015)
12	• 50-65-0012	28.32 (1.115)
14	• 50-65-0014	30.86 (1.215)
16	• 50-65-0016	33.40 (1.315)
18	• 50-65-0018	35.94 (1.415)
20	• 50-65-0020	38.48 (1.515)
22	• 50-65-0022	41.02 (1.615)
24	• 50-65-0024	43.56 (1.715)
26	• 50-65-0026	46.10 (1.815)
28	• 50-65-0028	48.64 (1.915)

Circuits	Order No.	Dimension Panel Opening C
30	• 50-65-0030	51.18 (2.015)
32	• 50-65-0032	53.72 (2.115)
34	• 50-65-0034	56.26 (2.215)
36	• 50-65-0036	58.80 (2.315)
38	• 50-65-0038	61.34 (2.415)
40	• 50-65-0040	63.88 (2.515)
42	• 50-65-0042	66.42 (2.615)
44	• 50-65-0051	68.96 (2.715)
46	• 50-65-0046	71.50 (2.815)
48	• 50-65-0048	74.04 (2.915)
50	• 50-65-0050	76.58 (3.015)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Interim Clip

70004

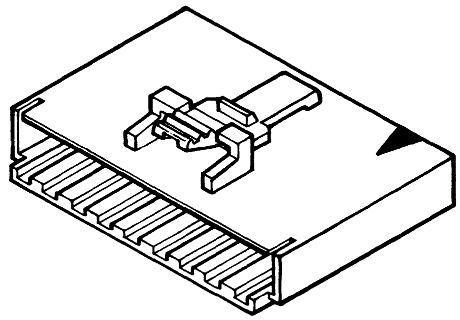
Single Row Modular Branch

Features and Benefits
- Sizes 4 to 25 circuits
- Positive latch retains clip to panel mount or 180° pocket headers
- Anti-entanglement/overstress ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Stacks 70066/70400D assemblies end-to-end to form a larger single row connector

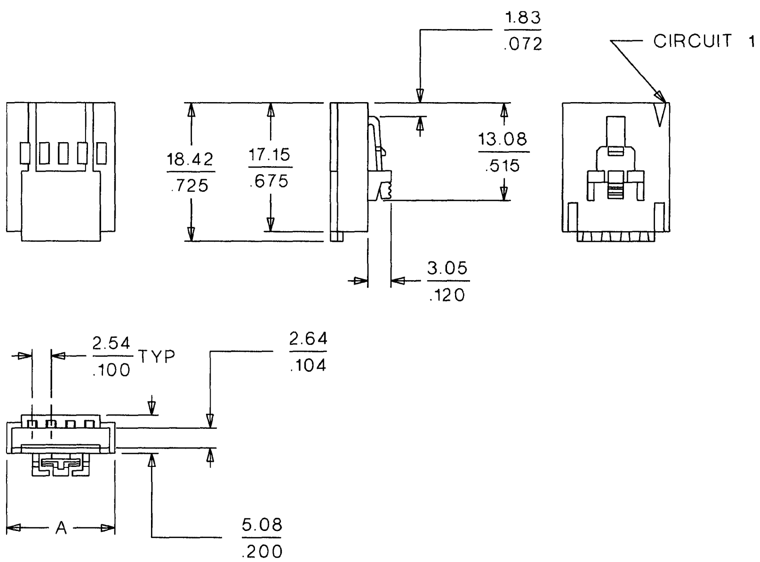
Reference Information
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70104, 70563, 70565, 70573 and 70575
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	• 15-04-5042	11.83 (.466)	7.62 (.300)
5	• 15-04-5052	14.37 (.566)	10.16 (.400)
6	• 15-04-5062	16.91 (.666)	12.70 (.500)
7	• 15-04-5072	19.45 (.766)	15.24 (.600)
8	• 15-04-5082	21.99 (.866)	17.78 (.700)
9	• 15-04-5092	24.53 (.966)	20.32 (.800)
10	• 15-04-5102	27.07 (1.066)	22.86 (.900)
11	• 15-04-5112	29.61 (1.166)	25.40 (1.000)
12	• 15-04-5122	32.15 (1.266)	27.94 (1.100)
13	• 15-04-5132	34.69 (1.366)	30.48 (1.200)
14	• 15-04-5142	37.23 (1.466)	33.02 (1.300)

Circuits	Order No.	Dimension A	Dimension B
15	• 15-04-5152	39.77 (1.566)	35.56 (1.400)
16	• 15-04-5162	42.31 (1.666)	38.10 (1.500)
17	• 15-04-5172	44.85 (1.766)	40.64 (1.600)
18	• 15-04-5182	47.39 (1.866)	43.18 (1.700)
19	• 15-04-5192	49.93 (1.966)	45.72 (1.800)
20	• 15-04-5202	52.47 (2.066)	48.26 (1.900)
21	• 15-04-5212	55.01 (2.166)	50.80 (2.000)
22	• 15-04-5222	57.55 (2.266)	53.34 (2.100)
23	• 15-04-5232	60.09 (2.366)	55.88 (2.200)
24	• 15-04-5242	62.63 (2.466)	58.42 (2.300)
25	• 15-04-5252	65.17 (2.566)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Interim Clip

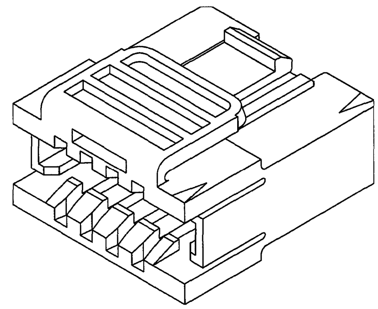
70013 Dual Row

Features and Benefits
- Sizes 6 to 50 circuits
- Positive latch retains clip to dual row panel mount or headers
- Optional front polarization rib available (version B)
- Stacks single row 70066/70400D assemblies side-to-side and end-to-end to form a larger dual row connector, accepts 70450C dual row connector to provide positive latch feature

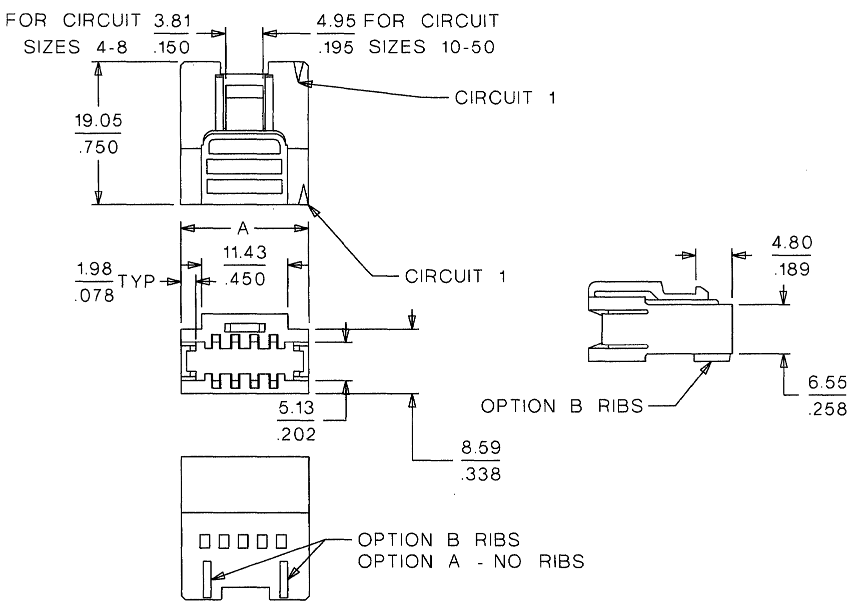
Reference Information
UL File No.: E29179
CSA File No.: LR19980
Mates With: Version A—8723 and 8724
Version B—70022, 70227 and 70229
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V AC rms
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +125°C



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Version A Without Ribs	Order No. Version B With Ribs	Dimension A	Dimension B
6	• 15-04-5061	• 15-04-5064	11.83 (.366)	5.08 (.200)
8	• 15-04-5081	• 15-04-5084	14.37 (.466)	7.62 (.300)
10	• 15-04-5101	• 15-04-5104	16.91 (.566)	10.16 (.400)
12	• 15-04-5121	• 15-04-5124	19.45 (.666)	12.70 (.500)
14	• 15-04-5141	• 15-04-5144	21.99 (.766)	15.24 (.600)
16	• 15-04-5161	• 15-04-5164	24.53 (.866)	17.78 (.700)
18	• 15-04-5181	• 15-04-5184	27.07 (.966)	20.32 (.800)
20	• 15-04-5201	• 15-04-5204	29.61 (1.066)	22.86 (.900)
22	• 15-04-5221	• 15-04-5224	32.15 (1.166)	25.40 (1.000)
24	• 15-04-5241	• 15-04-5244	34.69 (1.266)	27.94 (1.100)
26	• 15-04-5261	• 15-04-5264	37.23 (1.366)	30.48 (1.200)
28	• 15-04-5281	• 15-04-5284	39.77 (1.466)	33.02 (1.300)

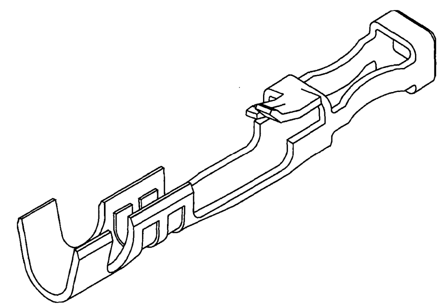
Circuits	Order No. Version A Without Ribs	Order No. Version B With Ribs	Dimension A	Dimension B
30	• 15-04-5301	• 15-04-5304	42.31 (1.566)	35.56 (1.400)
32	• 15-04-5321	• 15-04-5324	44.85 (1.666)	38.10 (1.500)
34	• 15-04-5341	• 15-04-5344	47.39 (1.766)	40.64 (1.600)
36	• 15-04-5361	• 15-04-5364	49.93 (1.866)	43.18 (1.700)
38	• 15-04-5381	• 15-04-5384	52.47 (1.966)	45.72 (1.800)
40	• 15-04-5401	• 15-04-5404	55.01 (2.066)	48.26 (1.900)
42	• 15-04-5421	• 15-04-5424	57.55 (2.166)	50.80 (2.000)
44	• 15-04-5441	• 15-04-5444	60.09 (2.266)	53.34 (2.100)
46	• 15-04-5461	• 15-04-5464	62.63 (2.366)	55.88 (2.200)
48	• 15-04-5481	• 15-04-5484	65.17 (2.466)	58.42 (2.300)
50	• 15-04-5501	• 15-04-5504	67.71 (2.566)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL's Black Max™ High Current Wire-to-Board Terminal

71271 Female, Crimp



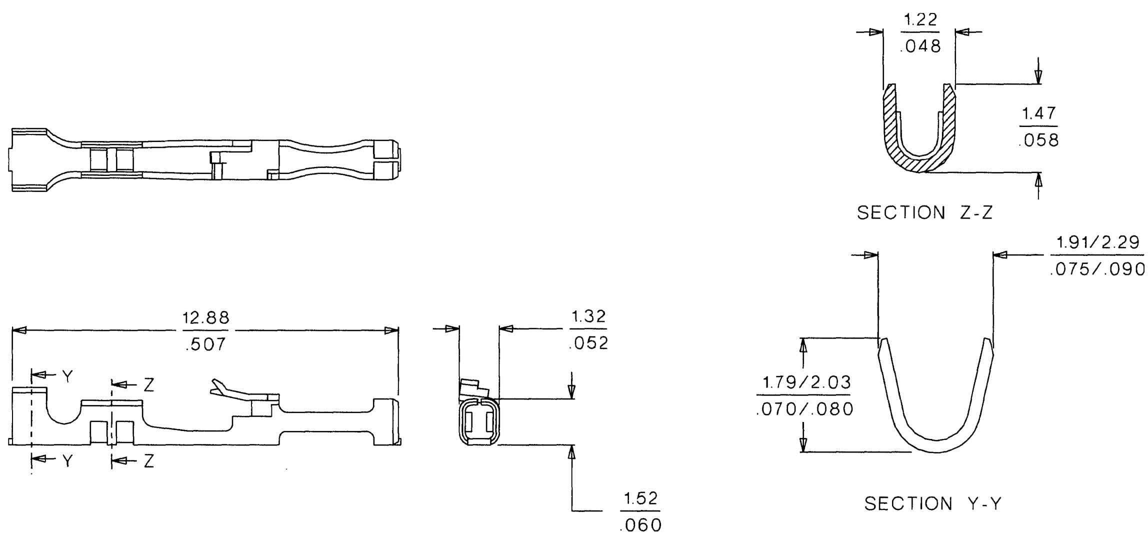
Features and Benefits
- High conductivity copper alloy terminal
- Dual beam fully enclosed box contact with locking lance
- Dual tab strain relief

Reference Information
Product Specification: PS-71271
Packaging: Loose or reel
Tooling Information: Use tooling for 71851
Mates With: 71273, 71274, 71275
and 71276 Black Max headers
Use With: Black Max 70066M version
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 15mΩ max.
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Insertion Force: 840g (1.9 lb) per contact
Contact Retention to Housing: 1.8kg (4 lb)
Wire Pull-Out Force: 2.7kg (6 lb)
Normal Force: 200g min.
Durability: 10 cycles max.

Physical
Contact: High conductivity Copper Alloy
Plating: 150µ" Tin/Lead over 50µ" Nickel
Temperature: -40 to +105°C



ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL's Black Max™ High Current Wire-to-Board Crimp Housing

70066

Single Row Version M

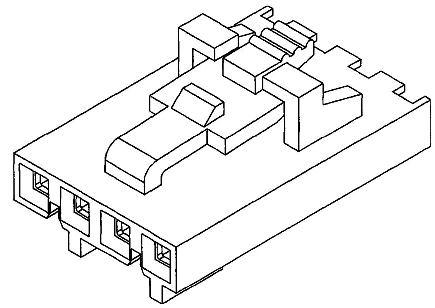
Features and Benefits
- Sizes 2 to 10 circuits
- Polarized to allow mating only to Black Max header assemblies
- Active latch with anti-entanglement/overstress ribs
- Front ribs prevent contact damage when unmating the connector from a header

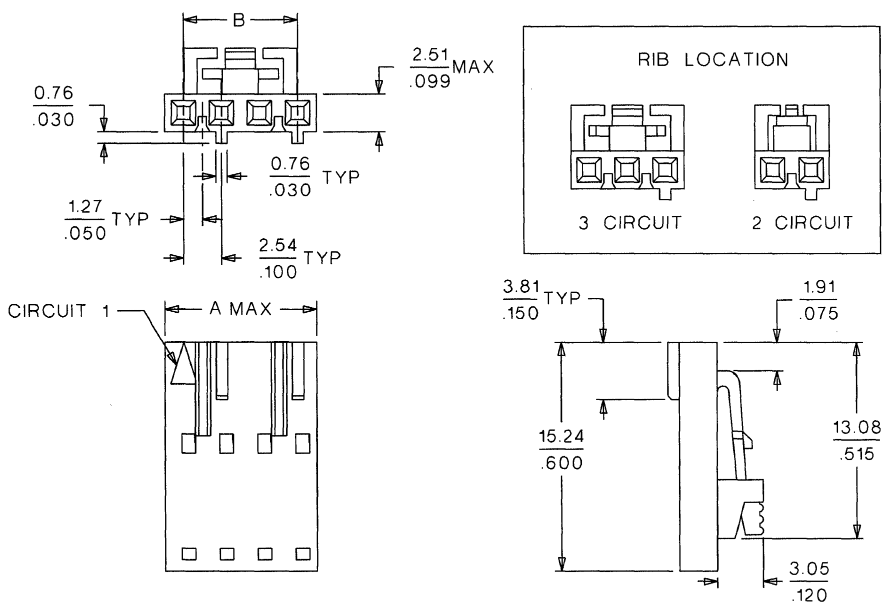
Reference Information
Product Specification: PS-71271
Packaging: Loose
Mates With: 71273, 71274, 71275 and 71276 Black Max headers
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Insertion Force: 840g (1.9 lb) per contact
Contact Retention to Housing: 4 lb min.
Wire Pull-Out Force: 4 lb min.
Mating Force: 1.85 lb per circuit
Unmating Force: 0.73 lb per circuit
Normal Force: 100g min.
Durability: 10 cycles max.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -40 to +105°C
Max. Mating Pin Height: 6.86mm(.270"), min. 5.08mm (.200")





ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 10 circuits
- Polarized to allow mating only to Black Max connector assembly, version M
- Locking crown secures positive latch to header
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-71273
Packaging: Tube
Mates With: 70066M Black Max
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

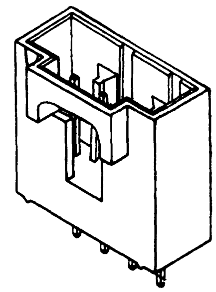
Mechanical
Contact Retention to Housing: 4 lb min.
Wire Pull-Out Force: 4 lb min.
Durability: 10 cycles

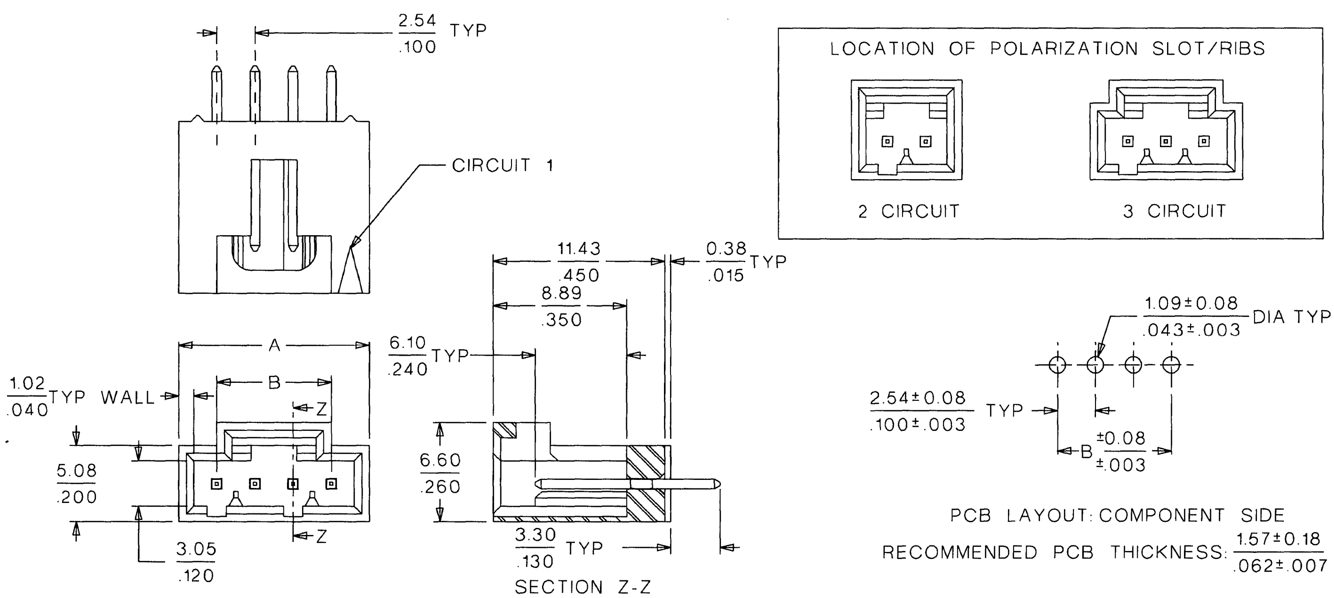
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: 15μ" Tin/Lead
Temperature: -40 to +125°C

molex 2.54mm (.100") Pitch C-Grid SL's Black Max™ High Current Wire-to-Board Header

71273

Vertical Without Retention Pegs





ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL's Black Max™ High Current Wire-to-Board Header

71274

Vertical With Retention Pegs

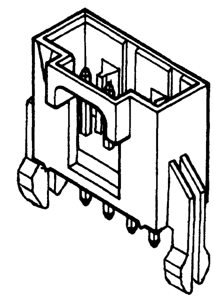
Features and Benefits
- Sizes 2 to 10 circuits
- Polarized to allow mating only to Black Max connector assembly, version M
- Locking crown secures positive latch to header
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

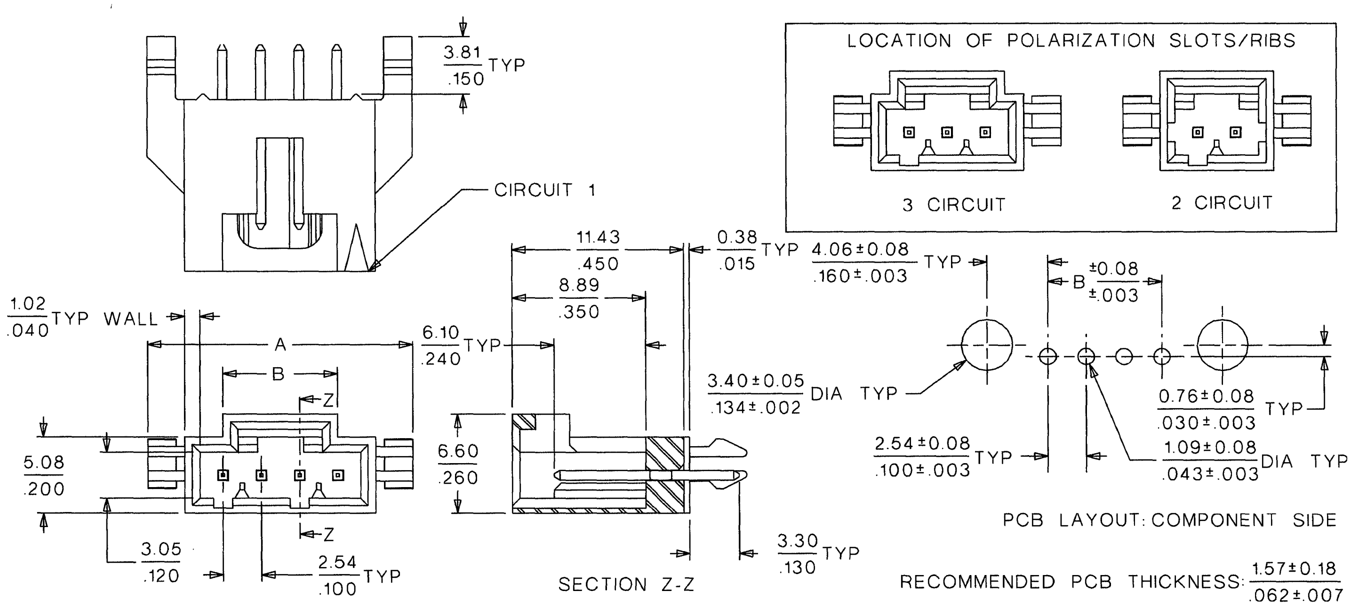
Reference Information
Product Specification: PS-71273
Packaging: Tube
Mates With: 70066M Black Max
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

Mechanical
Insertion Force to PCB: 4 lb
Durability: 10 cycles

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: 15μ" Tin/Gold
Temperature: -40 to +125°C





ORDERING INFORMATION AND DIMENSIONS

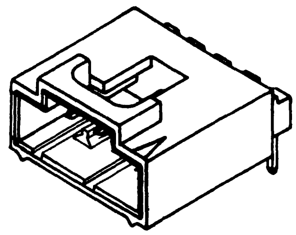
Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL's Black Max™ High Current Wire-to-Board Header

71275

Right Angle Without Retention Pegs



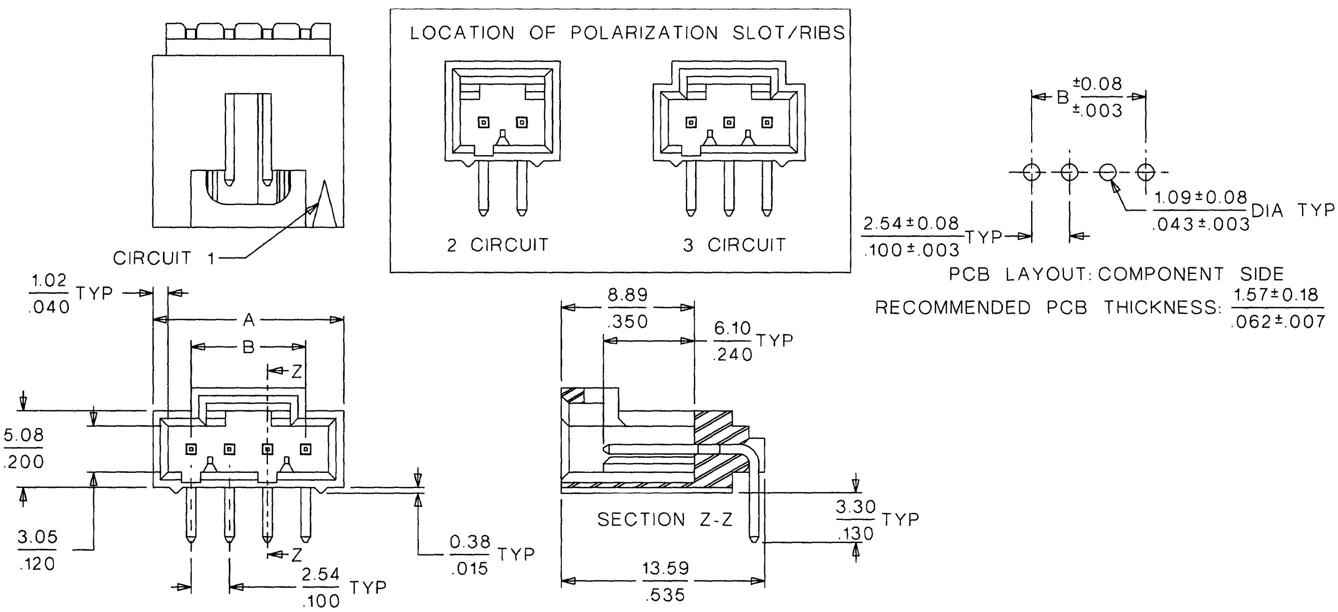
Features and Benefits
- Sizes 2 to 10 circuits
- Polarized to allow mating only to Black Max connector assembly, version M
- Locking crown secures positive latch to header
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

Reference Information
Product Specification: PS-71273
Packaging: Tube
Mates With: 70066M Black Max
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

Mechanical
Durability: 10 cycles

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: 15μ" Tin/Lead
Temperature: -40 to +125°C



ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL's Black Max™ High Current Wire-to-Board Header

71276 Right Angle With Retention Pegs

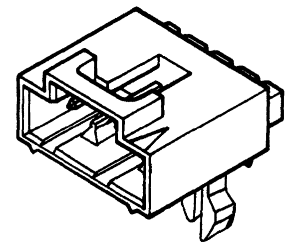
Features and Benefits
- Sizes 2 to 10 circuits
- Polarized to allow mating only to Black Max connector assembly, version M
- Locking crown secures positive latch to header
- Standoffs minimize flux retention
- Vapor phase and IR process compatible

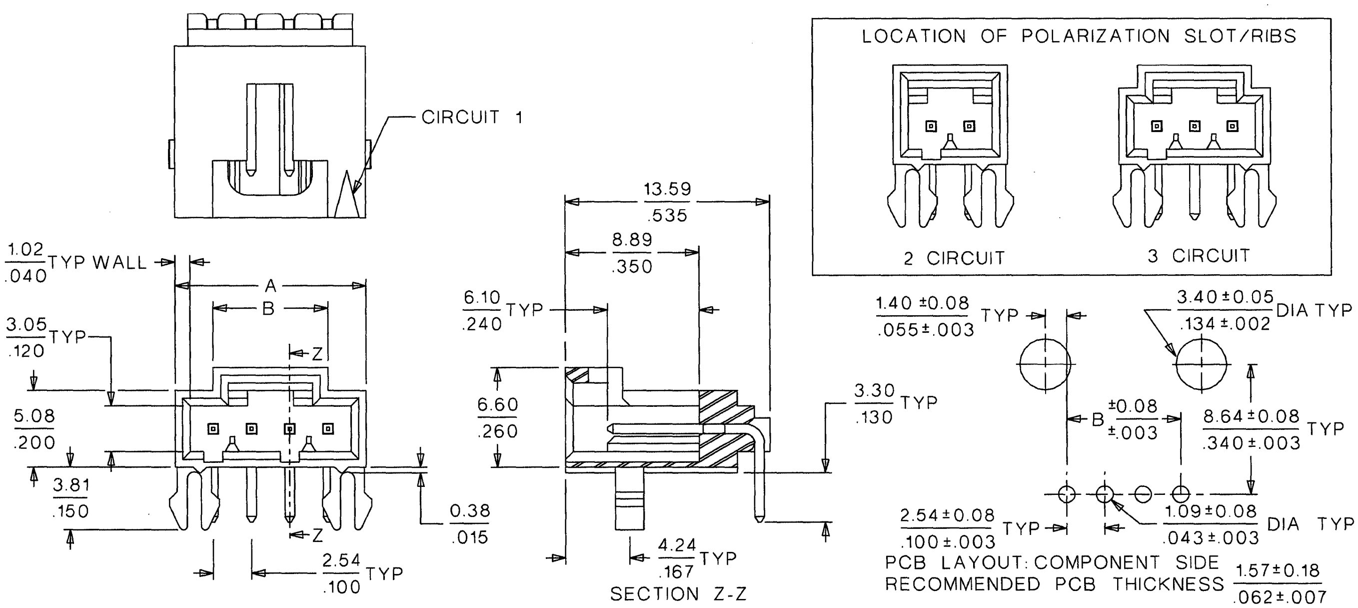
Reference Information
Product Specification: PS-71273
Packaging: Tube
Mates With: 70066M Black Max
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

Mechanical
Insertion Force to PCB: 4 lb
Durability: 10 cycles

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: 15μ" Tin/Lead
Temperature: -40 to +125°C





ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Breakaway Header

42375

Straight

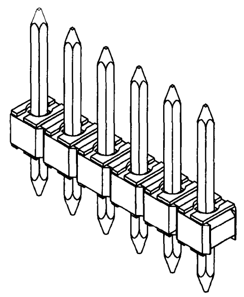
Features and Benefits
- Sizes 2 to 36 circuits
- Surface mount compatible
- Available with kinked PC tails
- .240, .295 and .320" standard mating lengths
- Voids optional

Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 7720, 7859, 7880, 40555, 40556, 70066A, 70400A, 70430, 90147 and 90148
Designed In: Inches

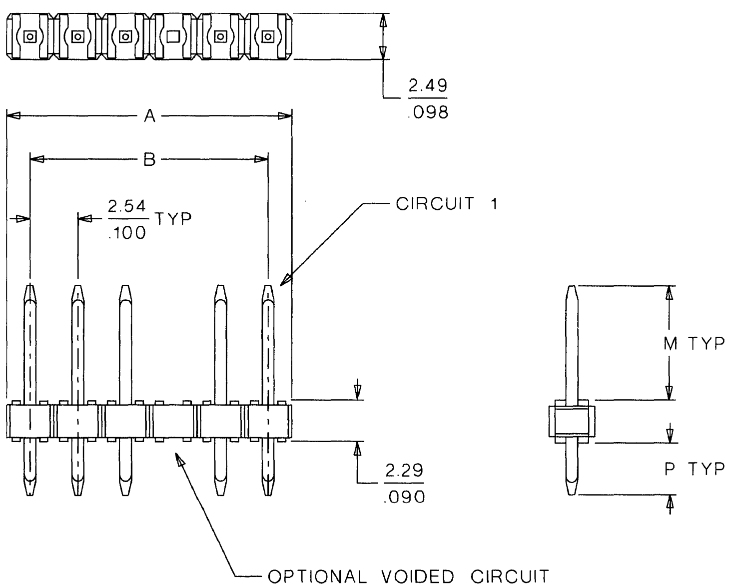
Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

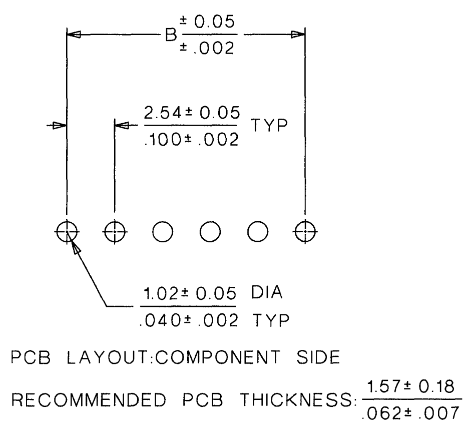
Mechanical
Durability: 25 cycles

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: 0 to +75°C



Not For Use With Molex C-Grid III™ Components





ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.					
	M = 6.09mm (.240") P = 3.18mm (.125")	M = 6.09mm (.240") P = 3.43mm (.135") Kinked PC Tail	M = 7.49mm (.295") P = 3.05mm (.120")	M = 7.49mm (.295") P = 3.43mm (.135") Kinked PC Tail	M = 8.13mm (.320") P = 3.05mm (.120")	M = 8.13mm (.320") P = 3.43mm (.135") Kinked PC Tail
Tin	• 22-28-4XX0	22-28-5XX0	• 22-28-4XX2	22-28-5XX2	• 22-28-4XX1	22-28-5XX1
15μ" select Gold	• 22-28-4XX3	22-28-5XX3	• 22-28-4XX5	22-28-5XX5	• 22-28-4XX4	22-28-5XX4
30μ" select Gold	• 22-28-4XX6	22-28-5XX6	• 22-28-4XX8	22-28-5XX8	• 22-28-4XX7	22-28-5XX7
Replace XX with no. of circuits, 02-36						

Circuits	Dimension A	Dimension B
2	5.08 (.200)	2.54 (.100)
3	7.62 (.300)	5.08 (.200)
4	10.16 (.400)	7.62 (.300)
5	12.70 (.500)	10.16 (.400)
6	15.24 (.600)	12.70 (.500)
7	17.78 (.700)	15.24 (.600)
8	20.32 (.800)	17.78 (.700)
9	22.86 (.900)	20.32 (.800)
10	25.40 (1.000)	22.86 (.900)

Circuits	Dimension A	Dimension B
11	27.94 (1.100)	25.40 (1.000)
12	30.48 (1.200)	27.94 (1.100)
13	33.02 (1.300)	30.48 (1.200)
14	35.56 (1.400)	33.02 (1.300)
15	38.10 (1.500)	35.56 (1.400)
16	40.64 (1.600)	38.10 (1.500)
17	43.18 (1.700)	40.64 (1.600)
18	45.72 (1.800)	43.18 (1.700)
19	48.26 (1.900)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.80 (2.000)	48.26 (1.900)
21	53.34 (2.100)	50.80 (2.000)
22	55.88 (2.200)	53.34 (2.100)
23	58.42 (2.300)	55.88 (2.200)
24	60.96 (2.400)	58.42 (2.300)
25	63.50 (2.500)	60.96 (2.400)
26	66.04 (2.600)	63.50 (2.500)
27	68.58 (2.700)	66.04 (2.600)
28	71.12 (2.800)	68.58 (2.700)

Circuits	Dimension A	Dimension B
29	73.66 (2.900)	71.12 (2.800)
30	76.20 (3.000)	73.66 (2.900)
31	78.74 (3.100)	76.20 (3.000)
32	81.28 (3.200)	78.74 (3.100)
33	83.82 (3.300)	81.28 (3.200)
34	86.36 (3.400)	83.82 (3.300)
35	88.90 (3.500)	86.36 (3.400)
36	91.44 (3.600)	88.90 (3.500)

• US Standard Product, available through Molex franchised distributors (36 circuit only)
Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Breakaway Header

42377

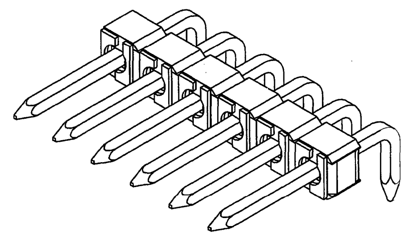
Right Angle

Features and Benefits
- Sizes 2 to 36 circuits
- Surface mount compatible
- Available with kinked PC tails
- .244 or .324" standard mating lengths
- Voids optional

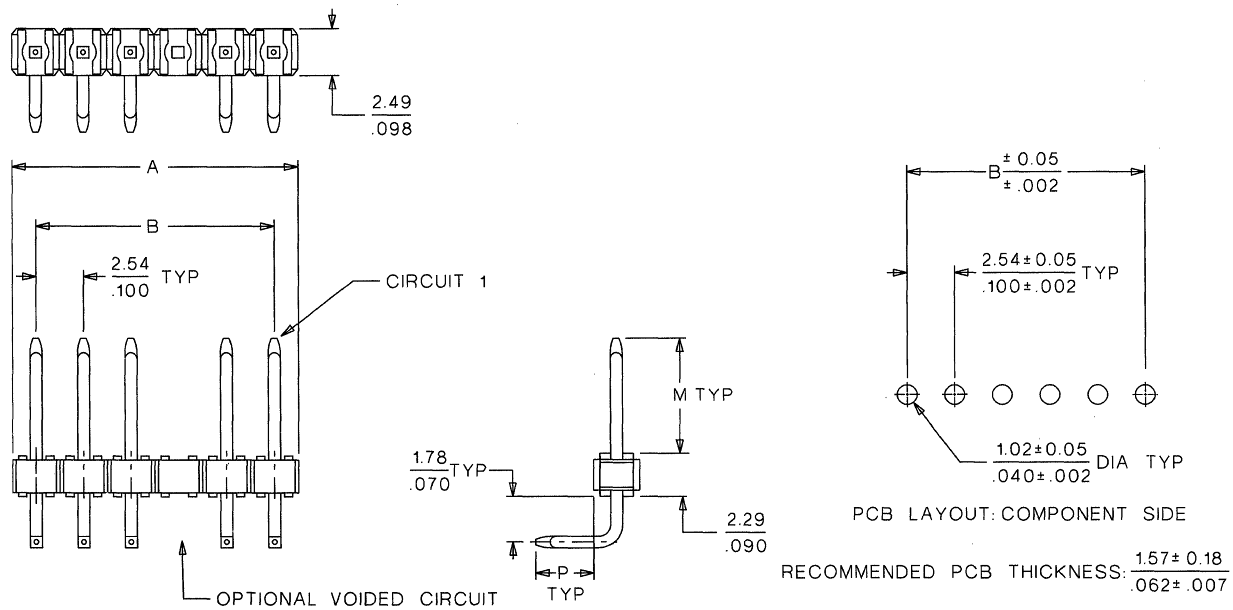
Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 7720, 7859, 7880, 40555, 40556, 70066A, 70400A, 70430, 90147 and 90148
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: 0 to +75°C



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.			
	M = 6.20mm (.244") P = 3.06mm (.120")	M = 6.20mm (.244") P = 3.43mm (.135") Kinked PC Tail	M = 8.23mm (.324") P = 3.06mm (.120")	M = 8.23mm (.324") P = 3.43mm (.135") Kinked PC Tail
Tin	• 22-28-8XX0	22-28-9XX0	• 22-28-8XX1	22-28-9XX1
15µ" select Gold	• 22-28-8XX2	22-28-9XX2	• 22-28-8XX3	22-28-9XX3
30µ" select Gold	• 22-28-8XX4	22-28-9XX4	• 22-28-8XX5	22-28-9XX5
Replace XX with no. of circuits, 02-36				

Circuits	Dimension A	Dimension B
2	5.08 (.200)	2.54 (.100)
3	7.62 (.300)	5.08 (.200)
4	10.16 (.400)	7.62 (.300)
5	12.70 (.500)	10.16 (.400)
6	15.24 (.600)	12.70 (.500)
7	17.78 (.700)	15.24 (.600)
8	20.32 (.800)	17.78 (.700)
9	22.86 (.900)	20.32 (.800)
10	25.40 (1.000)	22.86 (.900)

Circuits	Dimension A	Dimension B
11	27.94 (1.100)	25.40 (1.000)
12	30.48 (1.200)	27.94 (1.100)
13	33.02 (1.300)	30.48 (1.200)
14	35.56 (1.400)	33.02 (1.300)
15	38.10 (1.500)	35.56 (1.400)
16	40.64 (1.600)	38.10 (1.500)
17	43.18 (1.700)	40.64 (1.600)
18	45.72 (1.800)	43.18 (1.700)
19	48.26 (1.900)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.80 (2.000)	48.26 (1.900)
21	53.34 (2.100)	50.80 (2.000)
22	55.88 (2.200)	53.34 (2.100)
23	58.42 (2.300)	55.88 (2.200)
24	60.96 (2.400)	58.42 (2.300)
25	63.50 (2.500)	60.96 (2.400)
26	66.04 (2.600)	63.50 (2.500)
27	68.58 (2.700)	66.04 (2.600)
28	71.12 (2.800)	68.58 (2.700)

Circuits	Dimension A	Dimension B
29	73.66 (2.900)	71.12 (2.800)
30	76.20 (3.000)	73.66 (2.900)
31	78.74 (3.100)	76.20 (3.000)
32	81.28 (3.200)	78.74 (3.100)
33	83.82 (3.300)	81.28 (3.200)
34	86.36 (3.400)	83.82 (3.300)
35	88.90 (3.500)	86.36 (3.400)
36	91.44 (3.600)	88.90 (3.500)

• US Standard Product, available through Molex franchised distributors (36 circuit only)
Note: Dimension M = Mating End and Dimension P = PC Tail

2.54mm (.100") Pitch C-Grid® Breakaway Header

8624 Dual Row, Straight

FEATURES AND SPECIFICATIONS

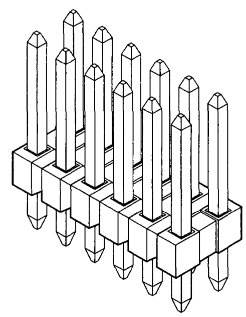
Features and Benefits
- Sizes 4 to 80 circuits
- Stackable side-to-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface
- For high temperature version contact factory, engineering series 70280

Reference Information
Product Specification: PS-8624
Packaging: Bag
UL File No.: E29179 (G)
CSA File No.: LR19980A
Designed In: Inches

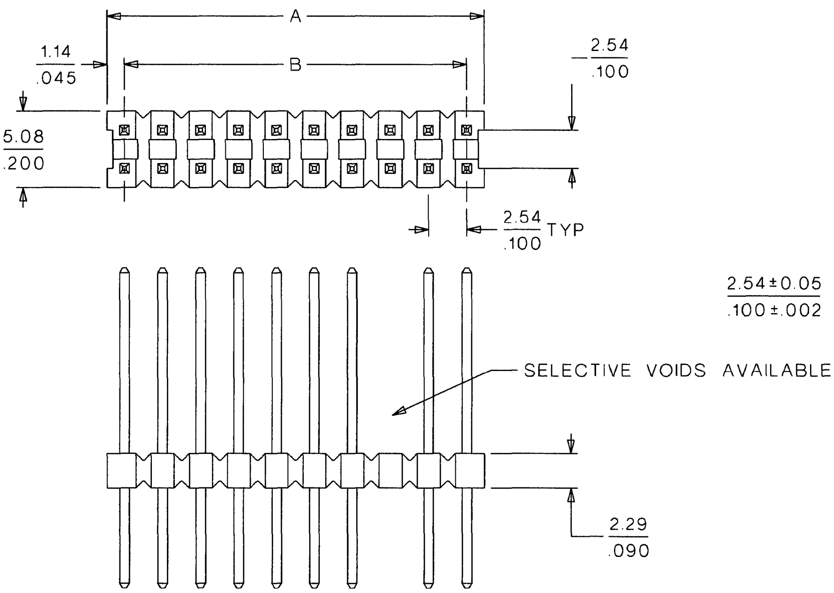
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

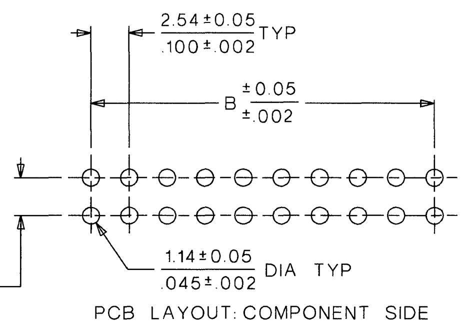
Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With Molex C-Grid III™ Components





ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No. M = 6.10mm (.240") P = 2.80mm (.110")	Order No. M = 8.13mm (.320") P = 2.80mm (.110")
15µ" min. select Gold	• 10-89-1XX1	• 10-89-1XX3
30µ" min. select Gold	• 10-89-2XX1	• 10-89-2XX3
150µ" Tin/Lead, Nickel overall	• 10-88-1XX1	• 10-88-1XX3
Replace XX with no. of circuits, 04-80 (even only), for 2-circuit, see 70343		

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors

Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Retention Pin Breakaway Header

70287 Dual Row, Straight

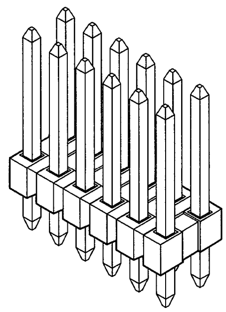
Features and Benefits
- Sizes 4 to 80 circuits
- Kinked PC tail in selected locations for retention to the board
- Stackable side-by-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-8624
Packaging: Tube or bag
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

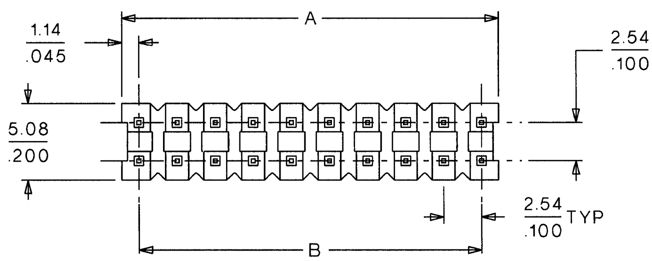
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

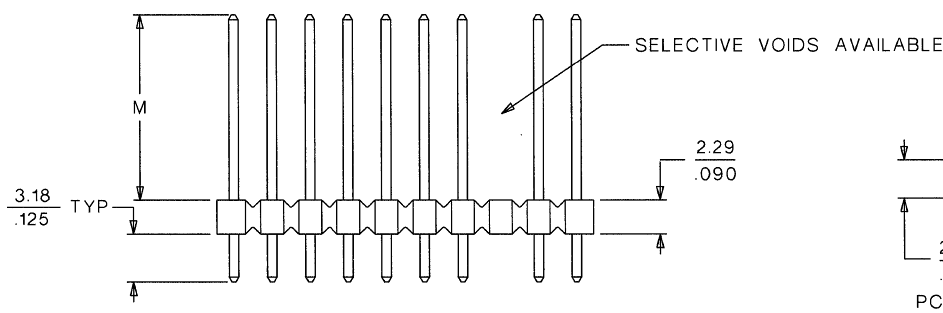
Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

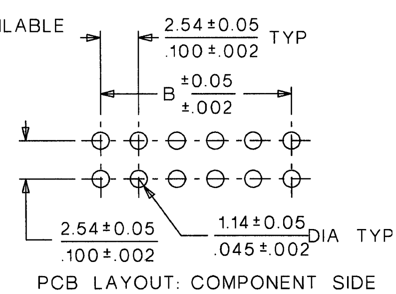
Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	M = 6.10mm (.240")	M = 8.13mm (.320")
15µ" min. select Gold	10-96-7XX5	10-96-7XX6
30µ" min. select Gold	10-96-7XX7	10-96-7XX8
150µ" Tin/Lead, Nickel overall	10-96-7XX3	10-96-7XX4
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

Note: Dimension M = Mating End

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Breakaway Header

70260

Dual Row, Straight Square/Round Pin

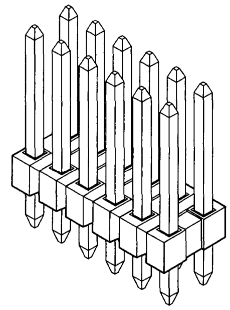
Features and Benefits
- Sizes 4 to 80 circuits
- Stackable side-to-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square/round wire provides 4-sided smooth surface for quality interface
- Insertable into .035" PC hole: aids robotic insertion

Reference Information
Product Specification: PS-70260
Packaging: Tube or bag
UL File No.: E29179 (F)
Designed In: Inches

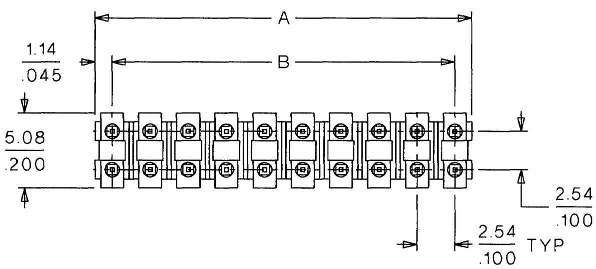
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

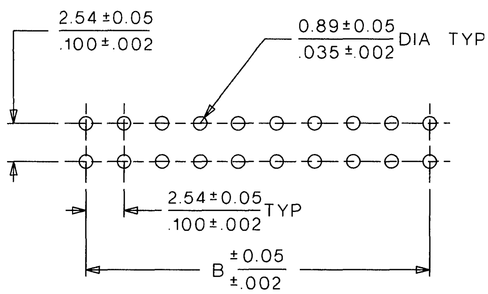
Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

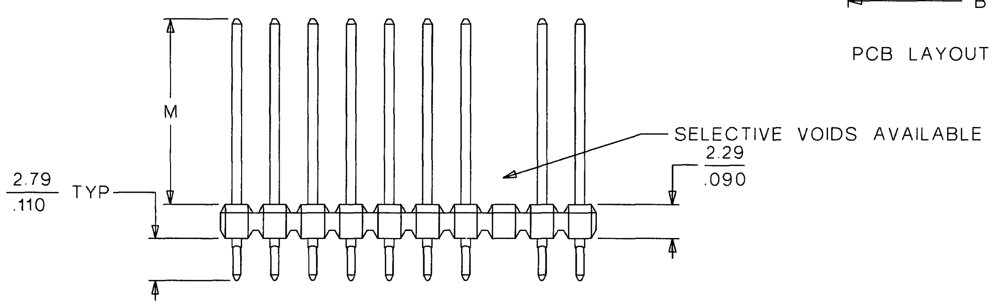


Not For Use With Molex C-Grid III™ Components





PCB LAYOUT: COMPONENT SIDE



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No. M = 6.10mm (.240") P = 2.80mm (.110")	Order No. M = 8.13mm (.320") P = 2.80mm (.110")
15μ" min. select Gold	• 10-89-6XX4	• 10-89-6XX5
30μ" min. select Gold	• 10-89-6XX8	• 10-89-6XX9
150μ" Tin/Lead, Nickel overall	• 10-89-6XX0	• 10-89-6XX1
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors
Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Header

71308 Dual Row, SMT Straight

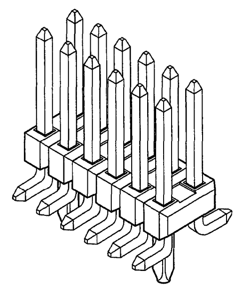
Features and Benefits
- Available with or without retention pegs
- Gull wing surface mount tails
- Vapor phase/IR reflow process compatible
- Stackable end-to-end (on unbroken edges)
- Drawn .025" square wire provides 4-sided smooth interface

Reference Information
Product Specification: PS-71308
Packaging: Tube or box
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

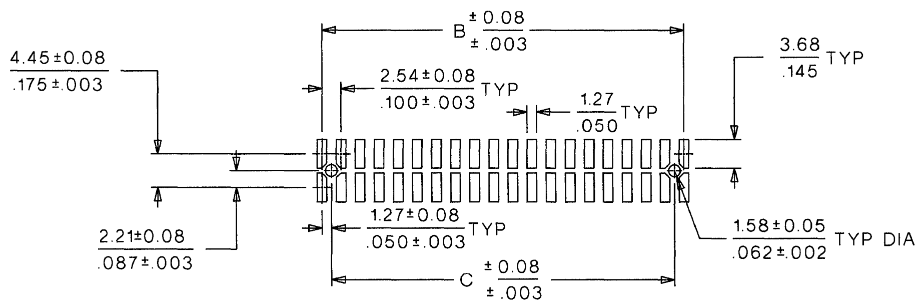
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Insertion Force to PCB: 3.6kg (8 lb) per peg
Durability: 25 cycles Tin/Lead and 50 cycles Gold

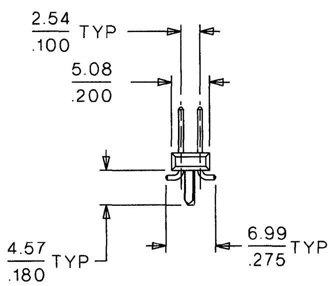
Physical
Housing: High temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C
Screened Paste Thickness: .010 to .015"

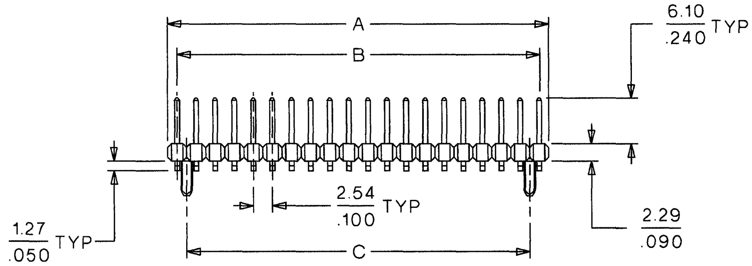


Not For Use With Molex C-Grid III™ Components



PC BOARD PAD LAYOUT





ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	Without PCB Retention Pegs	With PCB Retention Pegs
15µ" min. select Gold	15-91-0XX0	15-91-1XX2
30µ" min. select Gold	15-91-3XX0	15-91-1XX3
150µ" min. select Gold	15-91-2XX0	15-91-1XX1
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B	Dimension C
4	5.08 (.200)	2.54 (.100)	
6	7.62 (.300)	5.08 (.200)	2.54 (.100)
8	10.16 (.400)	7.62 (.300)	5.08 (.200)
10	12.70 (.500)	10.16 (.400)	7.62 (.300)
12	15.24 (.600)	12.70 (.500)	10.16 (.400)
14	17.78 (.700)	15.24 (.600)	12.70 (.500)
16	20.32 (.800)	17.78 (.700)	15.24 (.600)
18	22.86 (.900)	20.32 (.800)	17.78 (.700)
20	25.40 (1.000)	22.86 (.900)	20.32 (.800)
22	27.94 (1.100)	25.40 (1.000)	22.86 (.900)
24	30.48 (1.200)	27.94 (1.100)	25.40 (1.000)
26	33.02 (1.300)	30.48 (1.200)	27.94 (1.100)
28	35.56 (1.400)	33.02 (1.300)	30.48 (1.200)

Circuits	Dimension A	Dimension B	Dimension C
30	38.10 (1.500)	35.56 (1.400)	33.02 (1.300)
32	40.64 (1.600)	38.10 (1.500)	35.56 (1.400)
34	43.18 (1.700)	40.64 (1.600)	38.10 (1.500)
36	45.72 (1.800)	43.18 (1.700)	40.64 (1.600)
38	48.26 (1.900)	45.72 (1.800)	43.18 (1.700)
40	50.80 (2.000)	48.26 (1.900)	45.72 (1.800)
42	53.34 (2.100)	50.80 (2.000)	48.26 (1.900)
44	55.88 (2.200)	53.34 (2.100)	50.80 (2.000)
46	58.42 (2.300)	55.88 (2.200)	53.34 (2.100)
48	60.96 (2.400)	58.42 (2.300)	55.88 (2.200)
50	63.50 (2.500)	60.96 (2.400)	58.42 (2.300)
52	66.04 (2.600)	63.50 (2.500)	60.96 (2.400)
54	68.58 (2.700)	66.04 (2.600)	63.50 (2.500)

Circuits	Dimension A	Dimension B	Dimension C
56	71.12 (2.800)	68.58 (2.700)	66.04 (2.600)
58	73.66 (2.900)	71.12 (2.800)	68.58 (2.700)
60	76.20 (3.000)	73.66 (2.900)	71.12 (2.800)
62	78.74 (3.100)	76.20 (3.000)	73.66 (2.900)
64	81.28 (3.200)	78.74 (3.100)	76.20 (3.000)
66	83.82 (3.300)	81.28 (3.200)	78.74 (3.100)
68	86.36 (3.400)	83.82 (3.300)	81.28 (3.200)
70	88.90 (3.500)	86.36 (3.400)	83.82 (3.300)
72	91.44 (3.600)	88.90 (3.500)	86.36 (3.400)
74	93.98 (3.700)	91.44 (3.600)	88.90 (3.500)
76	96.52 (3.800)	93.98 (3.700)	91.44 (3.600)
78	99.06 (3.900)	96.52 (3.800)	93.98 (3.700)
80	101.60 (4.000)	99.06 (3.900)	96.52 (3.800)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Breakaway Header

70203

Low Profile, Dual Row Right Angle

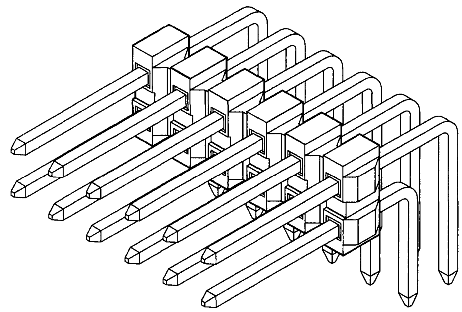
Features and Benefits
- Sizes 4 to 80 circuits
- Low profile: .200" high
- Stackable end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-70203
Packaging: Tube or bag
UL File No.: E29179 (H)
Designed In: Inches

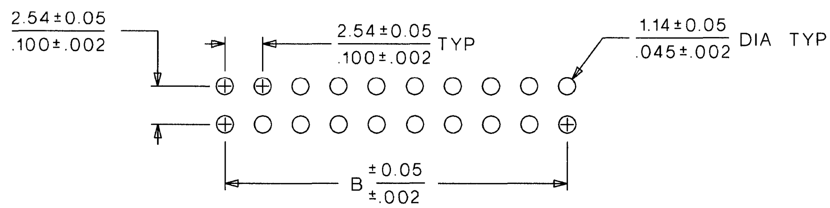
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

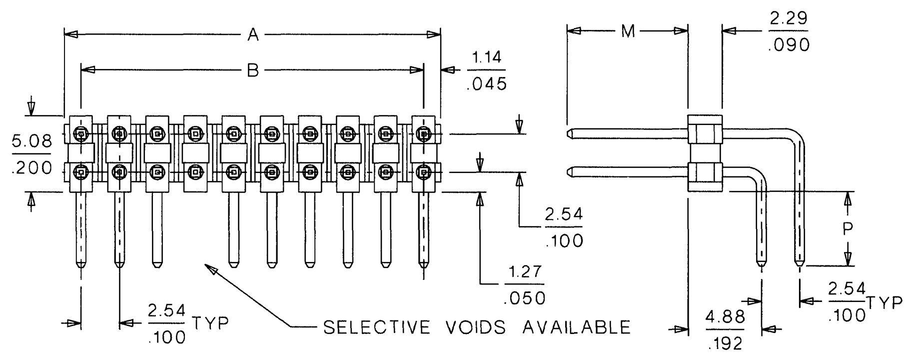
Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With Molex C-Grid III™ Components



PCB LAYOUT: COMPONENT SIDE



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No. M = 6.10mm (.240") P = 2.80mm (.110")	Order No. M = 8.13mm (.320") P = 2.80mm (.110")
15µ" min. select Gold	• 10-89-1XX6	• 10-89-1XX7
30µ" min. select Gold	• 10-89-2XX6	• 10-89-2XX7
150µ" Tin/Lead, Nickel overall	• 10-88-1XX5	• 10-88-1XX6

Replace XX with no. of circuits, 04-80 (even only), for 2-circuit, see 70344

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors
Note: Dimension M = Mating End and Dimension P = PC Tail

C-Grid

A

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 4 to 80 circuits
- Kinked PC tail for retention to the board
- Stackable end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-8624
Packaging: Tube or bag
UL File No.: E29179 (N)
CSA File No.: LR19980A
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

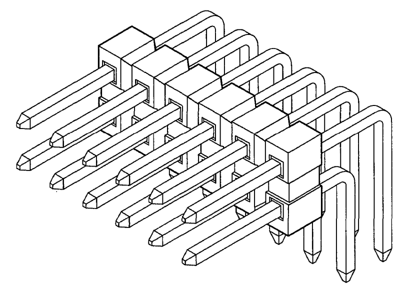
Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

molex®

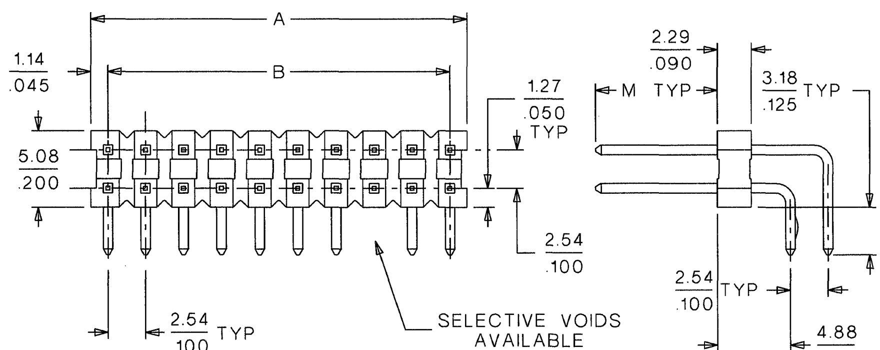
2.54mm (.100") Pitch C-Grid® Retention Pin Breakaway Header

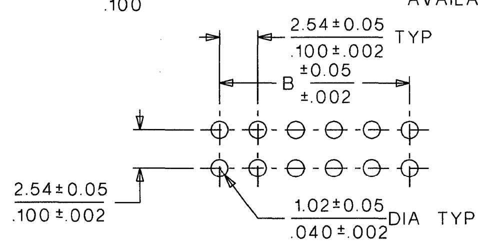
70524

Low Profile, Dual Row Right Angle



Not For Use With C-Grid III™ Components





PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	M = 6.10mm (.240")	M = 8.13mm (.320")
15μ" min. select Gold	10-96-9XX7	10-96-9XX8
30μ" min. select Gold	10-96-9XX9	10-96-4XX7
150μ" Tin/Lead, Nickel overall	10-96-9XX5	10-96-9XX6
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

Note: Dimension M = Mating End

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Breakaway Header

70216 High Profile, Dual Row Right Angle

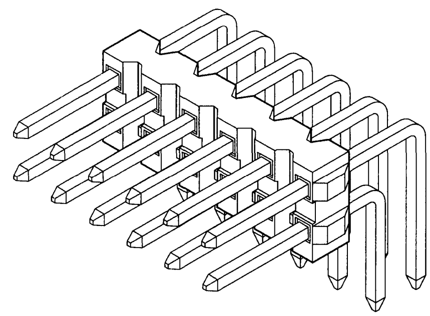
Features and Benefits
- Sizes 4 to 80 circuits
- High profile: .220" high
- Stackable end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-70216
Packaging: Tube or bag
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

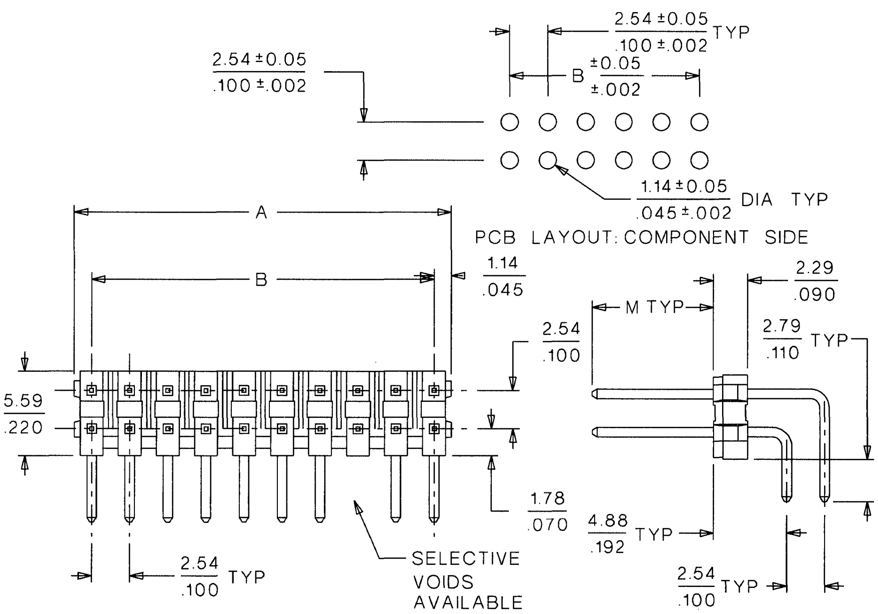
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No. M = 6.10mm (.240") P = 2.80mm (.110")	Order No. M = 8.13mm (.320") P = 2.80mm (.110")
15µ" min. select Gold	• 10-89-4XX2	• 10-89-4XX3
30µ" min. select Gold	• 10-89-4XX6	• 10-89-4XX7
150µ" Tin/Lead, Nickel overall	• 10-88-3XX1	• 10-88-3XX2
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors (80 circuit only)
Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Retention Pin Breakaway Header

70289 High Profile, Dual Row Right Angle

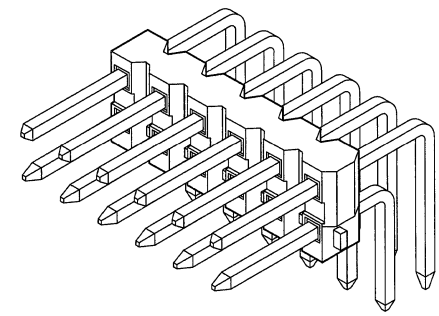
Features and Benefits
- Sizes 4 to 80 circuits
- Kinked PC tail for retention to the board
- Stackable end-to-end (on unbroken edges)
- Extremely stable on board during wave soldering
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-8624
Packaging: Tube or bag
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

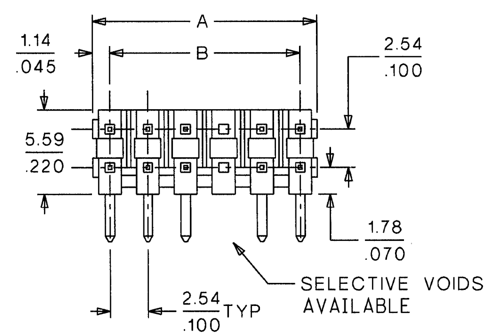
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

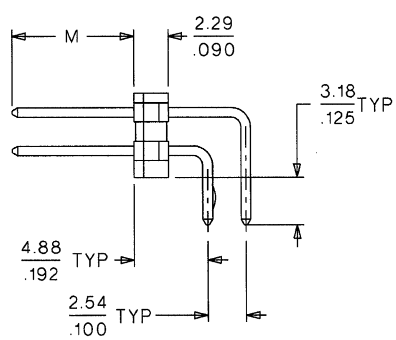
Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

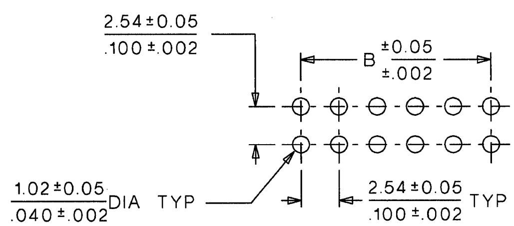
Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components







PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	M = 6.10mm (.240")	M = 8.13mm (.320")
15μ" min. select Gold	• 10-97-0XX3	• 10-97-0XX6
30μ" min. select Gold	• 10-97-0XX7	• 10-97-0XX8
150μ" Tin/Lead, Nickel overall	• 10-96-4XX8	• 10-96-4XX9
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

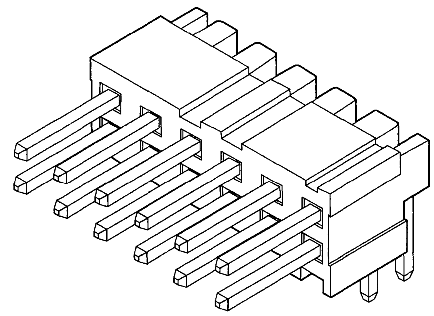
• US Standard Product, available through Molex franchised distributors
Note: Dimension M = Mating End

FEATURES AND SPECIFICATIONS

molex 2.54mm (.100") Pitch C-Grid® Non-Breakaway Header

70206

Dual Row Right Angle



Features and Benefits
- Sizes 4 to 80 circuits
- Stackable end-to-end
- Extremely stable on board during wave soldering
- Standoffs facilitate post solder cleaning
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

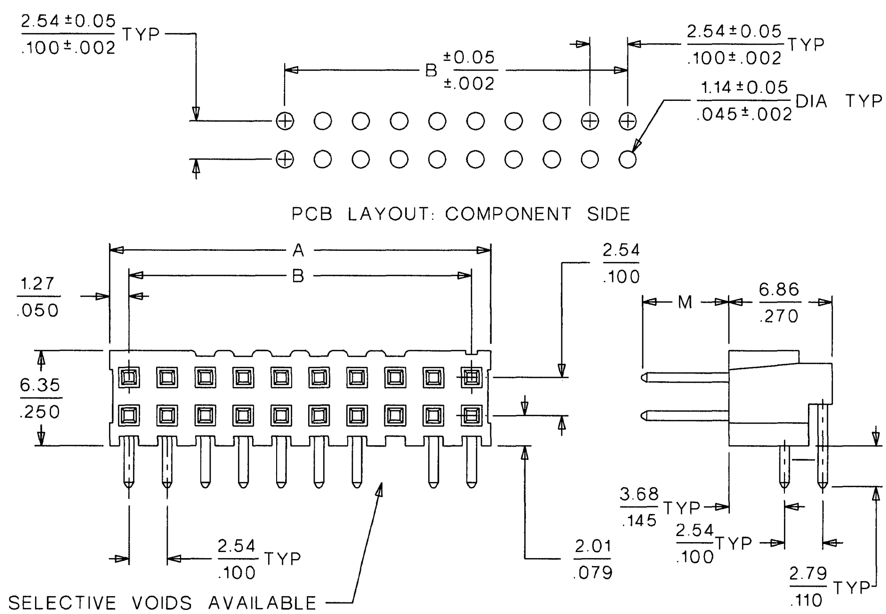
Reference Information
Product Specification: PS-7723
Packaging: Tube
UL File No.: E29179 (H)
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Wafer: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	M = 6.10mm (.240") P = 2.80mm (.110")	M = 8.13mm (.320") P = 2.80mm (.110")
15µ" min. select Gold	• 10-91-1XX1	• 10-91-1XX3
30µ" min. select Gold	• 10-91-2XX1	• 10-91-2XX3
150µ" Tin/Lead, Nickel overall	• 10-90-1XX1	• 10-90-1XX3
Replace XX with no. of circuits, 04-80 (even only)		

Circuits	Dimension A	Dimension B
4	5.08 (.200)	2.54 (.100)
6	7.62 (.300)	5.08 (.200)
8	10.16 (.400)	7.62 (.300)
10	12.70 (.500)	10.16 (.400)
12	15.24 (.600)	12.70 (.500)
14	17.78 (.700)	15.24 (.600)
16	20.32 (.800)	17.78 (.700)
18	22.86 (.900)	20.32 (.800)
20	25.40 (1.000)	22.86 (.900)
22	27.94 (1.100)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.48 (1.200)	27.94 (1.100)
26	33.02 (1.300)	30.48 (1.200)
28	35.56 (1.400)	33.02 (1.300)
30	38.10 (1.500)	35.56 (1.400)
32	40.64 (1.600)	38.10 (1.500)
34	43.18 (1.700)	40.64 (1.600)
36	45.72 (1.800)	43.18 (1.700)
38	48.26 (1.900)	45.72 (1.800)
40	50.80 (2.000)	48.26 (1.900)
42	53.34 (2.100)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.88 (2.200)	53.34 (2.100)
46	58.42 (2.300)	55.88 (2.200)
48	60.96 (2.400)	58.42 (2.300)
50	63.50 (2.500)	60.96 (2.400)
52	66.04 (2.600)	63.50 (2.500)
54	68.58 (2.700)	66.04 (2.600)
56	71.12 (2.800)	68.58 (2.700)
58	73.66 (2.900)	71.12 (2.800)
60	76.20 (3.000)	73.66 (2.900)
62	78.74 (3.100)	76.20 (3.000)

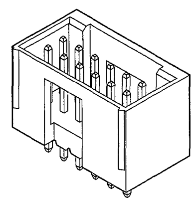
Circuits	Dimension A	Dimension B
64	81.28 (3.200)	78.74 (3.100)
66	83.82 (3.300)	81.28 (3.200)
68	86.36 (3.400)	83.82 (3.300)
70	88.90 (3.500)	86.36 (3.400)
72	91.44 (3.600)	88.90 (3.500)
74	93.98 (3.700)	91.44 (3.600)
76	96.52 (3.800)	93.98 (3.700)
78	99.06 (3.900)	96.52 (3.800)
80	101.60 (4.000)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors
Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

8723 Dual Row, Vertical



Features and Benefits
- Sizes 6 to 72 circuits
- Polarized
- Latch window retains positive lock on 70013 after mating
- 4 wall shielding provides unmated pin protection
- Drawn .025" square wire provides 4-sided smooth surface pin for quality interface
- High temperature version 70567

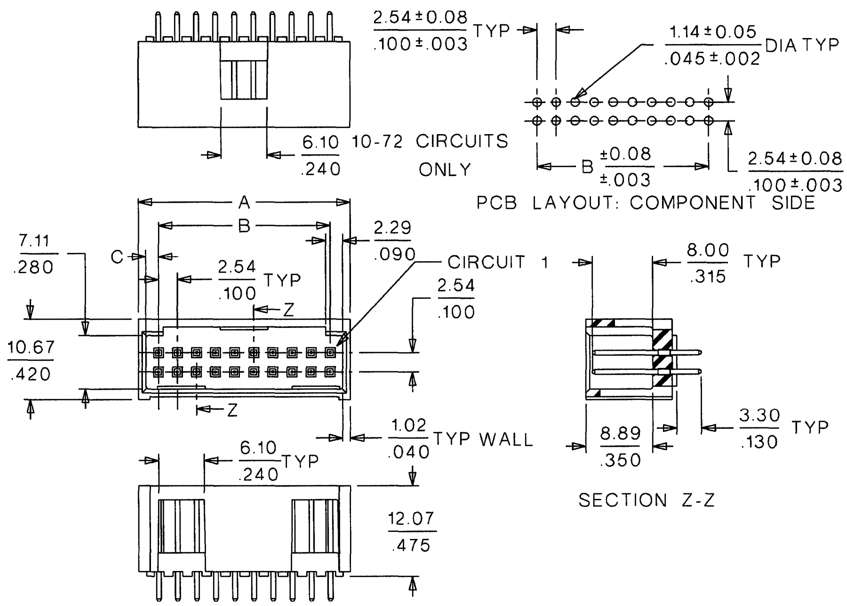
Reference Information
Product Specification: PS-8723
Packaging: Tube
UL File No.: E29179 (J)
Mates With: Version A —70181 and 70450
Version B —70013A (10 to 50 circuits)
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	Version A C = 1.68mm (.066")	Version B C = 3.81mm (.150")
15μ" Gold	• 15-29-60XX	• 15-29-62XX
30μ" Gold	• 15-41-70XX	• 15-41-72XX
150μ" Tin/Lead, Nickel overall	• 15-42-60XX	• 15-42-62XX
Replace XX with no. of circuits, 06-72 (even only)		

Circuits	Dimension Version A A	Version A B	Version B A	Version B B
6	10.47 (.412)	5.08 (.200)	14.74 (.580)	5.08 (.200)
8	13.01 (.512)	7.62 (.300)	17.28 (.680)	7.62 (.300)
10	15.55 (.612)	10.16 (.400)	19.82 (.780)	10.16 (.400)
12	18.09 (.712)	12.70 (.500)	22.36 (.880)	12.70 (.500)
14	20.63 (.812)	15.24 (.600)	24.90 (.980)	15.24 (.600)
16	23.17 (.912)	17.78 (.700)	27.44 (1.080)	17.78 (.700)
18	25.71 (1.012)	20.32 (.800)	29.98 (1.180)	20.32 (.800)
20	28.25 (1.112)	22.86 (.900)	32.52 (1.280)	22.86 (.900)
22	30.79 (1.212)	25.40 (1.000)	35.06 (1.380)	25.40 (1.000)
24	33.33 (1.312)	27.94 (1.100)	37.60 (1.480)	27.94 (1.100)
26	35.87 (1.412)	30.48 (1.200)	40.14 (1.580)	30.48 (1.200)
28	38.41 (1.512)	33.02 (1.300)	42.68 (1.680)	33.02 (1.300)
30	40.95 (1.612)	35.56 (1.400)	45.22 (1.780)	35.56 (1.400)
32	43.49 (1.712)	38.10 (1.500)	47.76 (1.880)	38.10 (1.500)
34	46.03 (1.812)	40.64 (1.600)	50.30 (1.980)	40.64 (1.600)
36	48.57 (1.912)	43.18 (1.700)	52.84 (2.080)	43.18 (1.700)
38	51.11 (2.012)	45.72 (1.800)	55.38 (2.180)	45.72 (1.800)

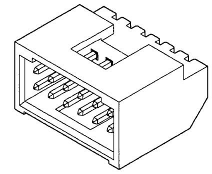
Circuits	Dimension Version A A	Version A B	Version B A	Version B B
40	53.65 (2.112)	48.26 (1.900)	57.92 (2.280)	48.26 (1.900)
42	56.19 (2.212)	50.80 (2.000)	60.46 (2.380)	50.80 (2.000)
44	58.73 (2.312)	53.34 (2.100)	63.00 (2.480)	53.34 (2.100)
46	61.27 (2.412)	55.88 (2.200)	65.54 (2.580)	55.88 (2.200)
48	63.81 (2.512)	58.42 (2.300)	68.08 (2.680)	58.42 (2.300)
50	66.35 (2.612)	60.96 (2.400)	70.62 (2.780)	60.96 (2.400)
52	68.89 (2.712)	63.50 (2.500)	73.16 (2.880)	63.50 (2.500)
54	71.43 (2.812)	66.04 (2.600)	75.70 (2.980)	66.04 (2.600)
56	73.97 (2.912)	68.58 (2.700)	78.24 (3.080)	68.58 (2.700)
58	76.51 (3.012)	71.12 (2.800)	80.78 (3.180)	71.12 (2.800)
60	79.05 (3.112)	73.66 (2.900)	83.32 (3.280)	73.66 (2.900)
62	81.59 (3.212)	76.20 (3.000)	85.86 (3.380)	76.20 (3.000)
64	84.13 (3.312)	78.74 (3.100)	88.40 (3.480)	78.74 (3.100)
66	86.67 (3.412)	81.28 (3.200)	90.94 (3.580)	81.28 (3.200)
68	89.21 (3.512)	83.82 (3.300)	93.48 (3.680)	83.82 (3.300)
70	91.75 (3.612)	86.36 (3.400)	96.02 (3.780)	86.36 (3.400)
72	94.29 (3.712)	88.90 (3.500)	98.56 (3.880)	88.90 (3.500)

• US Standard Product, available through Molex franchised distributors
Note: 2 PC tail lengths available
Note: Dimension C = End Wall

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

8724 Dual Row Right Angle



Not For Use With C-Grid III™ Components

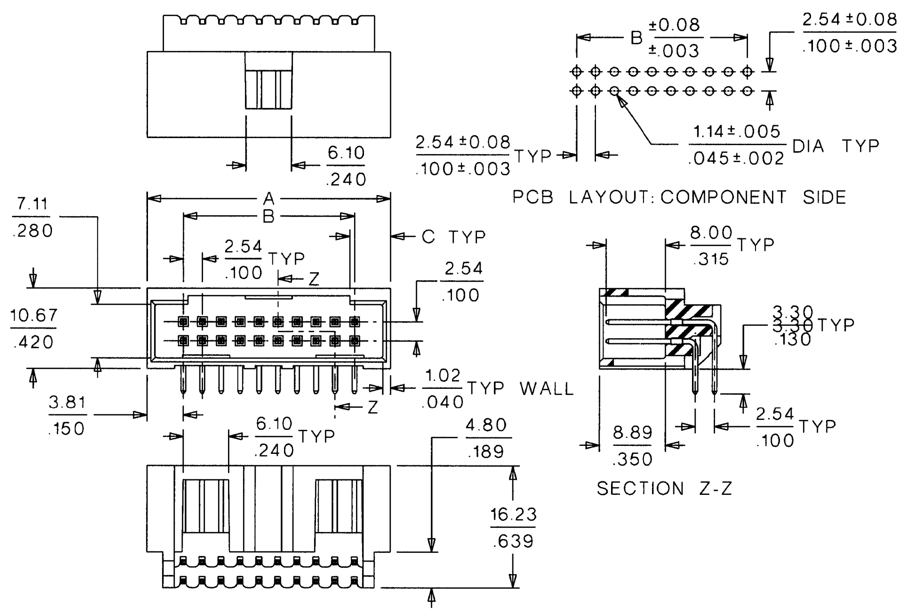
Features and Benefits
- Sizes 6 to 72 circuits
- Polarized
- Latch window retains positive lock on 70013 after mating
- 4 wall shielding provides unmated pin protection
- Standoffs minimize flux retention
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-8723
Packaging: Tube
UL File No.: E29179 (H)
Mates With: Version A—70181 and 70450
Version B—70013A (10 to 50 circuits)
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	Version A C = 1.68mm (.066")	Version B C = 3.81mm (.150")
15μ" Gold	• 15-29-70XX	• 15-29-72XX
30μ" Gold	• 15-41-80XX	• 15-41-82XX
150μ" Tin/Lead, Nickel overall	• 15-42-70XX	• 15-42-72XX
Replace XX with no. of circuits, 06-72 (even only)		

Circuits	Dimension Version A A	Version A B	Version B A	Version B B
6	10.47 (.412)	5.08 (.200)	14.74 (.580)	5.08 (.200)
8	13.01 (.512)	7.62 (.300)	17.28 (.680)	7.62 (.300)
10	15.55 (.612)	10.16 (.400)	19.82 (.780)	10.16 (.400)
12	18.09 (.712)	12.70 (.500)	22.36 (.880)	12.70 (.500)
14	20.63 (.812)	15.24 (.600)	24.90 (.980)	15.24 (.600)
16	23.17 (.912)	17.78 (.700)	27.44 (1.080)	17.78 (.700)
18	25.71 (1.012)	20.32 (.800)	29.98 (1.180)	20.32 (.800)
20	28.25 (1.112)	22.86 (.900)	32.52 (1.280)	22.86 (.900)
22	30.79 (1.212)	25.40 (1.000)	35.06 (1.380)	25.40 (1.000)
24	33.33 (1.312)	27.94 (1.100)	37.60 (1.480)	27.94 (1.100)
26	35.87 (1.412)	30.48 (1.200)	40.14 (1.580)	30.48 (1.200)
28	38.41 (1.512)	33.02 (1.300)	42.68 (1.680)	33.02 (1.300)
30	40.95 (1.612)	35.56 (1.400)	45.22 (1.780)	35.56 (1.400)
32	43.49 (1.712)	38.10 (1.500)	47.76 (1.880)	38.10 (1.500)
34	46.03 (1.812)	40.64 (1.600)	50.30 (1.980)	40.64 (1.600)
36	48.57 (1.912)	43.18 (1.700)	52.84 (2.080)	43.18 (1.700)
38	51.11 (2.012)	45.72 (1.800)	55.38 (2.180)	45.72 (1.800)

Circuits	Dimension Version A A	Version A B	Version B A	Version B B
40	53.65 (2.112)	48.26 (1.900)	57.92 (2.280)	48.26 (1.900)
42	56.19 (2.212)	50.80 (2.000)	60.46 (2.380)	50.80 (2.000)
44	58.73 (2.312)	53.34 (2.100)	63.00 (2.480)	53.34 (2.100)
46	61.27 (2.412)	55.88 (2.200)	65.54 (2.580)	55.88 (2.200)
48	63.81 (2.512)	58.42 (2.300)	68.08 (2.680)	58.42 (2.300)
50	66.35 (2.612)	60.96 (2.400)	70.62 (2.780)	60.96 (2.400)
52	68.89 (2.712)	63.50 (2.500)	73.16 (2.880)	63.50 (2.500)
54	71.43 (2.812)	66.04 (2.600)	75.70 (2.980)	66.04 (2.600)
56	73.97 (2.912)	68.58 (2.700)	78.24 (3.080)	68.58 (2.700)
58	76.51 (3.012)	71.12 (2.800)	80.78 (3.180)	71.12 (2.800)
60	79.05 (3.112)	73.66 (2.900)	83.32 (3.280)	73.66 (2.900)
62	81.59 (3.212)	76.20 (3.000)	85.86 (3.380)	76.20 (3.000)
64	84.13 (3.312)	78.74 (3.100)	88.40 (3.480)	78.74 (3.100)
66	86.67 (3.412)	81.28 (3.200)	90.94 (3.580)	81.28 (3.200)
68	89.21 (3.512)	83.82 (3.300)	93.48 (3.680)	83.82 (3.300)
70	91.75 (3.612)	86.36 (3.400)	96.02 (3.780)	86.36 (3.400)
72	94.29 (3.712)	88.90 (3.500)	98.56 (3.880)	88.90 (3.500)

• US Standard Product, available through Molex franchised distributors
Note: 2 PC tail lengths available
Note: Dimension C = End Wall

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

70227

Dual Row, Vertical With Retention Pegs

Features and Benefits

- Sizes 6 to 72 circuits
- Round PC tails allow smaller PCB holes and aid robotic insertion
- Board retention pegs hold header in place until they are permanently secured by soldering
- Latch window retains positive lock on 70013 after mating
- Standoffs minimize flux retention
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information

Product Specification: PS-70227
Packaging: Tube
UL File No.: E29179 (H)
Mates With: 70013B (6 to 50 circuits)
Designed In: Inches

Electrical

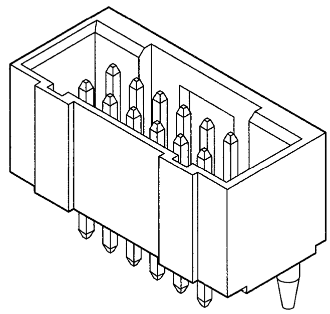
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical

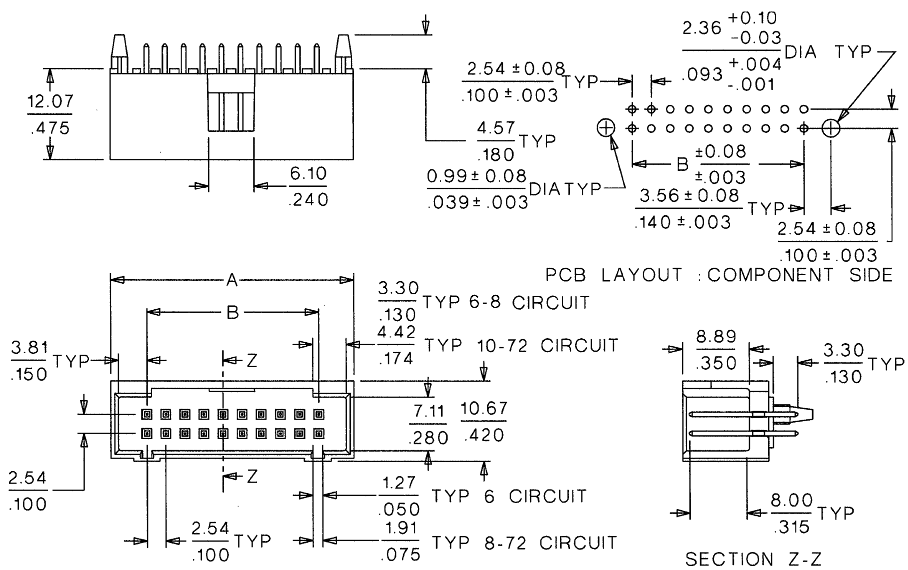
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles

Physical

Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 15µ" min. Select Gold	Order No. Overall Tin	Dimension A	Dimension B
6	15-47-8063	15-47-8064	14.74 (.580)	5.08 (.200)
8	15-47-8083	15-47-8084	17.28 (.680)	7.62 (.300)
10	15-47-8103	15-47-8104	19.82 (.780)	10.16 (.400)
12	15-47-8123	15-47-8124	22.36 (.880)	12.70 (.500)
14	15-47-8143	15-47-8144	24.90 (.980)	15.24 (.600)
16	15-47-8163	15-47-8164	27.44 (1.080)	17.78 (.700)
18	15-47-8183	15-47-8184	29.98 (1.180)	20.32 (.800)
20	15-47-8203	15-47-8204	32.52 (1.280)	22.86 (.900)
22	15-47-8223	15-47-8224	35.06 (1.380)	25.40 (1.000)
24	15-47-8243	15-47-8244	37.60 (1.480)	27.94 (1.100)
26	15-47-8263	15-47-8264	40.14 (1.580)	30.48 (1.200)
28	15-47-8283	15-47-8284	42.68 (1.680)	33.02 (1.300)
30	15-47-8303	15-47-8304	45.22 (1.780)	35.56 (1.400)
32	15-47-8323	15-47-8324	47.76 (1.880)	38.10 (1.500)
34	15-47-8343	15-47-8344	50.30 (1.980)	40.64 (1.600)
36	15-47-8363	15-47-8364	52.84 (2.080)	43.18 (1.700)
38	15-47-8383	15-47-8384	55.38 (2.180)	45.72 (1.800)

Circuits	Order No. 15µ" min. Select Gold	Order No. Overall Tin	Dimension A	Dimension B
40	15-47-8403	15-47-8404	57.92 (2.280)	48.26 (1.900)
42	15-47-8423	15-47-8424	60.46 (2.380)	50.80 (2.000)
44	15-47-8443	15-47-8444	63.00 (2.480)	53.34 (2.100)
46	15-47-8463	15-47-8464	65.54 (2.580)	55.88 (2.200)
48	15-47-8483	15-47-8484	68.08 (2.680)	58.42 (2.300)
50	15-47-8503	15-47-8504	70.62 (2.780)	60.96 (2.400)
52	15-47-8523	15-47-8524	73.16 (2.880)	63.50 (2.500)
54	15-47-8543	15-47-8544	75.70 (2.980)	66.04 (2.600)
56	15-47-8563	15-47-8564	78.24 (3.080)	68.58 (2.700)
58	15-47-8583	15-47-8584	80.78 (3.180)	71.12 (2.800)
60	15-47-8603	15-47-8604	83.32 (3.280)	73.66 (2.900)
62	15-47-8623	15-47-8624	85.86 (3.380)	76.20 (3.000)
64	15-47-8643	15-47-8644	88.40 (3.480)	78.74 (3.100)
66	15-47-8663	15-47-8664	90.94 (3.580)	81.28 (3.200)
68	15-47-8683	15-47-8684	93.48 (3.680)	83.82 (3.300)
70	15-47-8703	15-47-8704	96.02 (3.780)	86.36 (3.400)
72	15-47-8723	15-47-8724	98.56 (3.880)	88.90 (3.500)

Available with polarization slots, no pegs (8723C)

molex®

2.54mm (.100") Pitch C-Grid® Shrouded Header

70567

Dual Row, High-Temperature Through Hole without Pegs Vertical

FEATURES AND SPECIFICATIONS

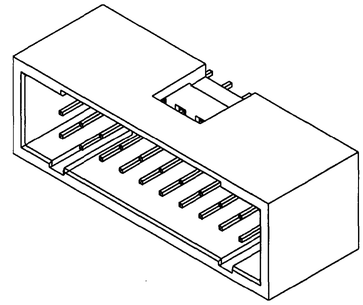
Features and Benefits
- Sizes 6 to 72 circuits
- Robotically insertable and compatible
- Board retention pegs hold header in place until they are permanently secured by soldering
- Latch window retains modular connector assemblies after mating
- Standoffs minimize flux retention
- Round PC tails allow smaller PCB holes and aid robotic insertion
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

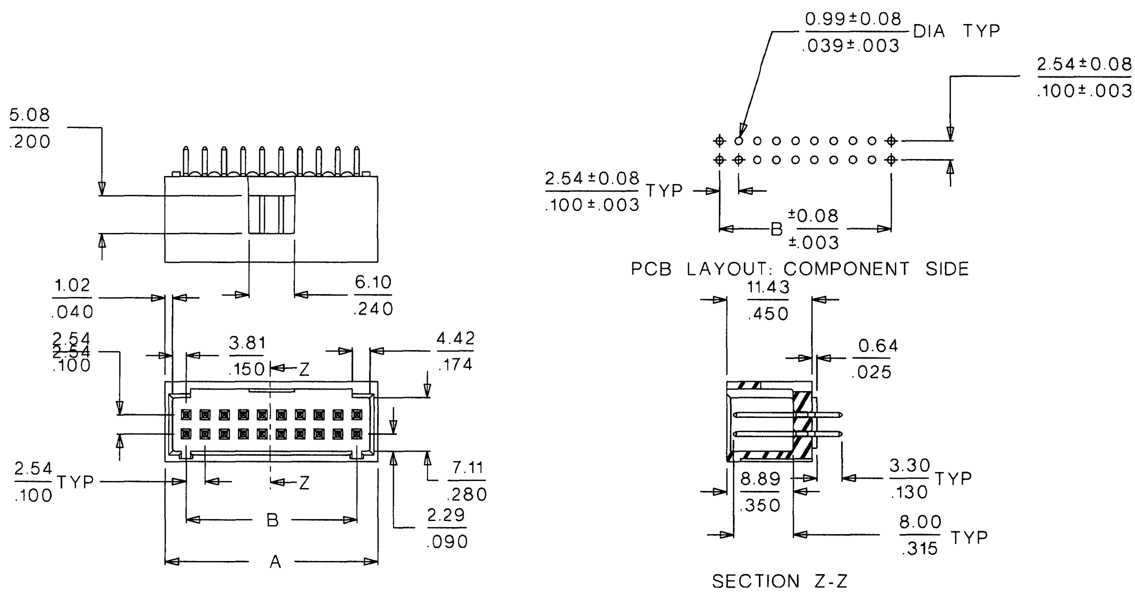
Reference Information
Product Specification: PS-70567
Packaging: Tube
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: High-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension Version A A	Dimension Version A B
6	10.47 (.412)	5.08 (.200)
8	13.01 (.512)	7.62 (.300)
10	15.55 (.612)	10.16 (.400)
12	18.09 (.712)	12.70 (.500)
14	20.63 (.812)	15.24 (.600)
16	23.17 (.912)	17.78 (.700)
18	25.71 (1.012)	20.32 (.800)
20	28.25 (1.112)	22.86 (.900)
22	30.79 (1.212)	25.40 (1.000)
24	33.33 (1.312)	27.94 (1.100)
26	35.87 (1.412)	30.48 (1.200)
28	38.41 (1.512)	33.02 (1.300)
30	40.95 (1.612)	35.56 (1.400)

Circuits	Dimension Version A A	Dimension Version A B
32	43.49 (1.712)	38.10 (1.500)
34	46.03 (1.812)	40.64 (1.600)
36	48.57 (1.912)	43.18 (1.700)
38	51.11 (2.012)	45.72 (1.800)
40	53.65 (2.112)	48.26 (1.900)
42	56.19 (2.212)	50.80 (2.000)
44	58.73 (2.312)	53.34 (2.100)
46	61.27 (2.412)	55.88 (2.200)
48	63.81 (2.512)	58.42 (2.300)
50	66.35 (2.612)	60.96 (2.400)
52	68.89 (2.712)	63.50 (2.500)
54	71.43 (2.812)	66.04 (2.600)
56	73.97 (2.912)	68.58 (2.700)

Circuits	Dimension Version A A	Dimension Version A B
58	76.51 (3.012)	71.12 (2.800)
60	79.05 (3.112)	73.66 (2.900)
62	81.59 (3.212)	76.20 (3.000)
64	84.13 (3.312)	78.74 (3.100)

Circuits	Dimension Version A A	Dimension Version A B
66	86.67 (3.412)	81.28 (3.200)
68	89.21 (3.512)	83.82 (3.300)
70	91.75 (3.612)	86.36 (3.400)
72	94.29 (3.712)	88.90 (3.500)

Plating Option	Order No. Version A End Wall = 1.68mm (.066")
15μ" min. select Gold	15-80-0XX3
30μ" min. select Gold	15-80-0XX5
150μ" Tin/Lead, Nickel overall	15-80-0XX1
Replace XX with no. of circuits, 06-72 (even only)	

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

70568

Dual Row, High-Temperature Through Hole with Pegs Vertical

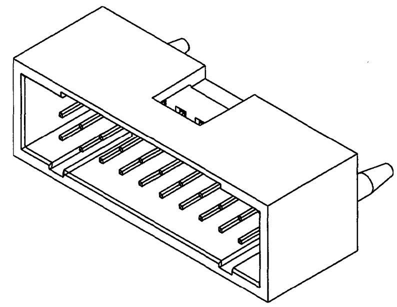
Features and Benefits
- Sizes 6 to 72 circuits
- Robotically insertable and compatible
- Board retention pegs hold header in place until they are permanently secured by soldering
- Latch window retains modular connector assemblies after mating
- Standoffs minimize flux retention
- Round PC tails allow smaller PCB holes and aid robotic insertion
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

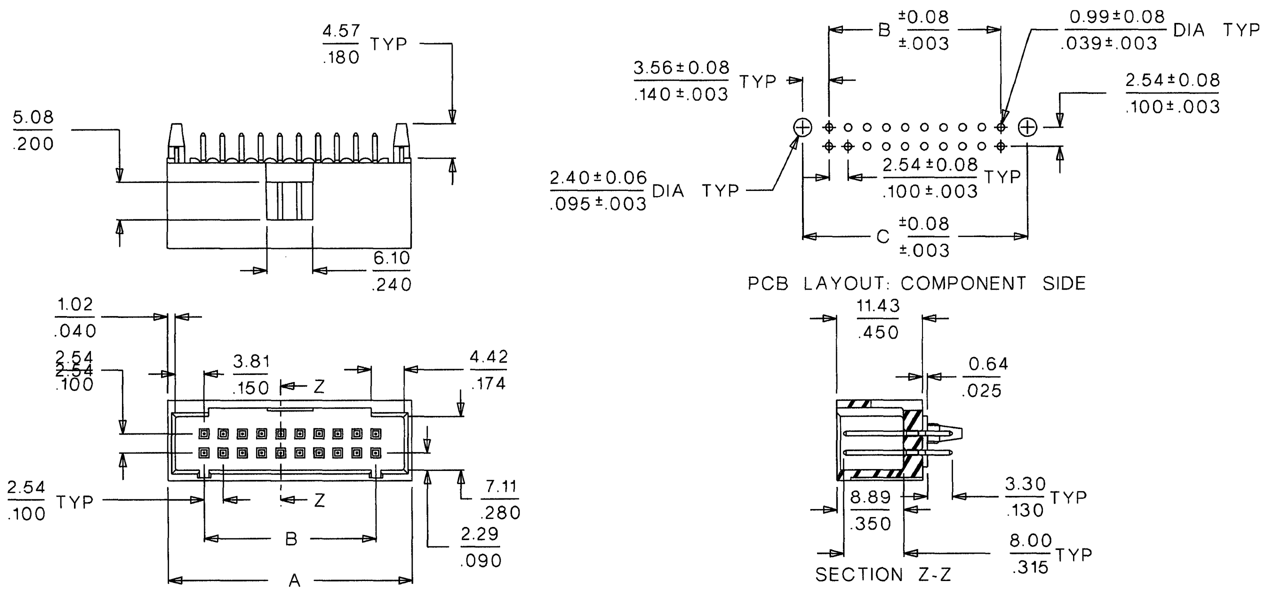
Reference Information
Product Specification: PS-70567
Packaging: Tube
Mates With: 70013B (6 to 50 cicuits)
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: High-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





PCB LAYOUT: COMPONENT SIDE

SECTION Z-Z

ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
6	14.74 (.580)	5.08 (.200)
8	17.28 (.680)	7.62 (.300)
10	19.82 (.780)	10.16 (.400)
12	22.36 (.880)	12.70 (.500)
14	24.90 (.980)	15.24 (.600)
16	27.44 (1.080)	17.78 (.700)
18	29.98 (1.180)	20.32 (.800)
20	32.52 (1.280)	22.86 (.900)
22	35.06 (1.380)	25.40 (1.000)
24	37.60 (1.480)	27.94 (1.100)
26	40.14 (1.580)	30.48 (1.200)
28	42.68 (1.680)	33.02 (1.300)

Circuits	Dimension A	Dimension B
30	45.22 (1.780)	35.56 (1.400)
32	47.76 (1.880)	38.10 (1.500)
34	50.30 (1.980)	40.64 (1.600)
36	52.84 (2.080)	43.18 (1.700)
38	55.38 (2.180)	45.72 (1.800)
40	57.92 (2.280)	48.26 (1.900)
42	60.46 (2.380)	50.80 (2.000)
44	63.00 (2.480)	53.34 (2.100)
46	65.54 (2.580)	55.88 (2.200)
48	68.08 (2.680)	58.42 (2.300)
50	70.62 (2.780)	60.96 (2.400)
52	73.16 (2.880)	63.50 (2.500)

Circuits	Dimension A	Dimension B
54	75.70 (2.980)	66.04 (2.600)
56	78.24 (3.080)	68.58 (2.700)
58	80.78 (3.180)	71.12 (2.800)
60	83.32 (3.280)	73.66 (2.900)
62	85.86 (3.380)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	88.40 (3.480)	78.74 (3.100)
66	90.94 (3.580)	81.28 (3.200)
68	93.48 (3.680)	83.82 (3.300)
70	96.02 (3.780)	86.36 (3.400)
72	98.56 (3.880)	88.90 (3.500)

Plating Option	Order No.
15μ" min. select Gold	15-47-76XX
30μ" min. select Gold	15-47-77XX
150μ" Tin/Lead, Nickel overall	15-47-75XX
Replace XX with no. of circuits, 06-72 (even only)	

Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

71349

Dual Row, SMT With or Without Pegs

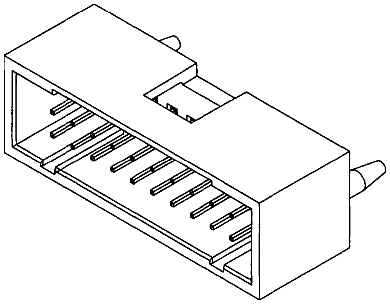
Features and Benefits
- Sizes 6 to 72 circuits
- Robotically insertable and compatible
- Board retention pegs hold header in place until they are permanently secured by soldering
- Latch window retains modular connector assemblies after mating
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

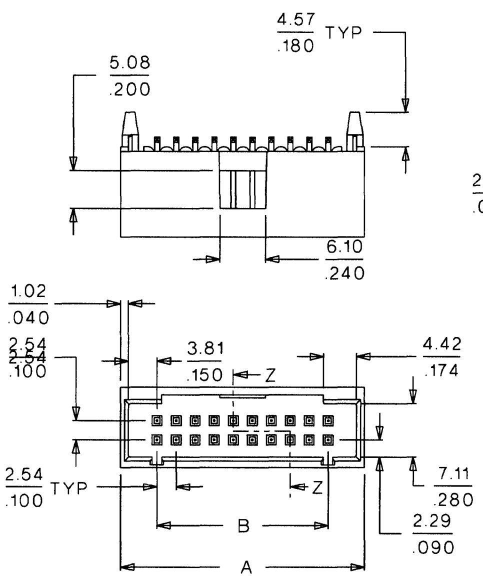
Reference Information
Product Specification: PS-71349
Packaging: Tube
Mates With: 70013B (6 to 50 circuits)
Designed In: Inches

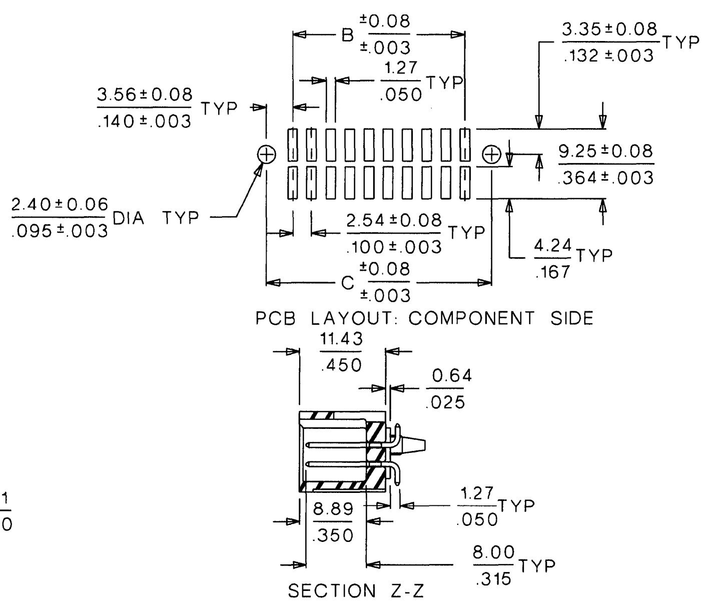
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: High-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C







ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

70229

Dual Row, Right Angle With Retention Pegs

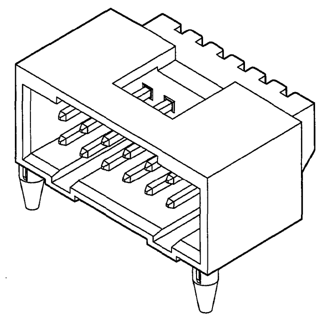
Features and Benefits
- Sizes 6 to 72 circuits
- Round PC tails allow smaller PCB holes and aid robotic insertion
- Board retention pegs hold header in place until they are permanently secured by soldering
- Latch window retains positive lock on 70013 after mating

Reference Information
Product Specification: PS-70227
Packaging: Tube
UL File No.: E29179 (H)
Mates With: 70013B (6 to 50 circuits)
Designed In: Inches

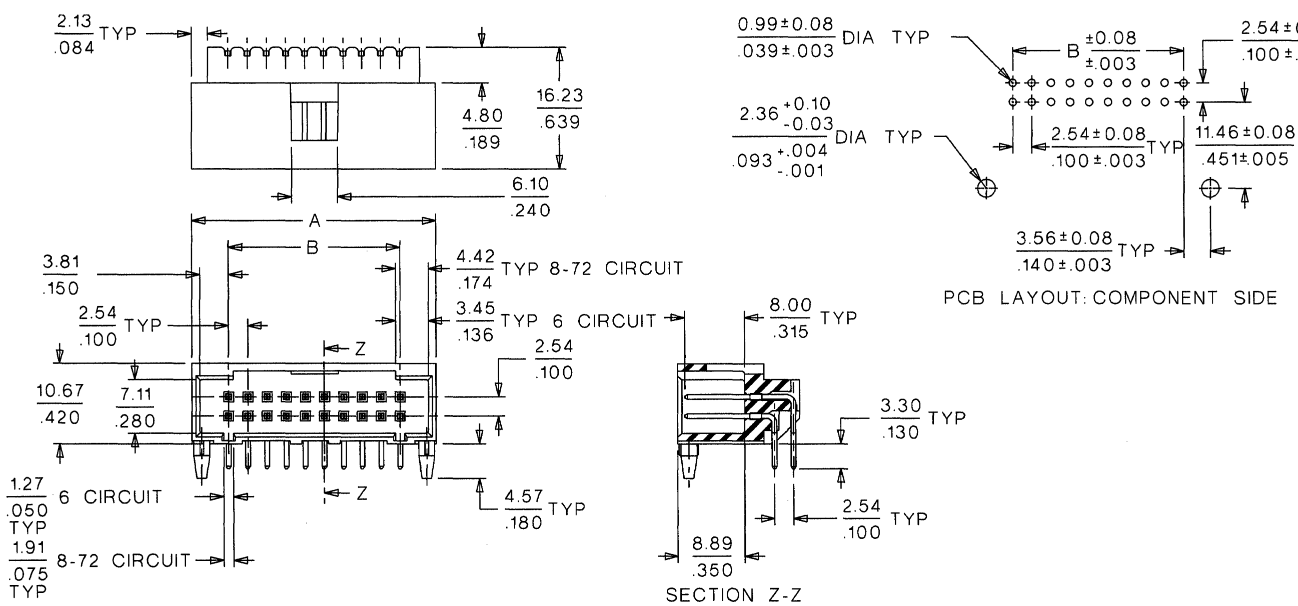
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15μ" min. Select Gold	150μ" Tin/Lead	A	B
6	15-47-6061	15-47-1061	14.74 (.580)	5.08 (.200)
8	15-47-6081	15-47-1081	17.28 (.680)	7.62 (.300)
10	15-47-6101	15-47-1101	19.82 (.780)	10.16 (.400)
12	15-47-6121	15-47-1121	22.36 (.880)	12.70 (.500)
14	15-47-6141	15-47-1141	24.90 (.980)	15.24 (.600)
16	15-47-6161	15-47-1161	27.44 (1.080)	17.78 (.700)
18	15-47-6181	15-47-1181	29.98 (1.180)	20.32 (.800)
20	15-47-6201	15-47-1201	32.52 (1.280)	22.86 (.900)
22	15-47-6221	15-47-1221	35.06 (1.380)	25.40 (1.000)
24	15-47-6241	15-47-1241	37.60 (1.480)	27.94 (1.100)
26	15-47-6261	15-47-1261	40.14 (1.580)	30.48 (1.200)
28	15-47-6281	15-47-1281	42.68 (1.680)	33.02 (1.300)
30	15-47-6301	15-47-1301	45.22 (1.780)	35.56 (1.400)
32	15-47-6321	15-47-1321	47.76 (1.880)	38.10 (1.500)
34	15-47-6341	15-47-1341	50.30 (1.980)	40.64 (1.600)
36	15-47-6361	15-47-1361	52.84 (2.080)	43.18 (1.700)
38	15-47-6381	15-47-1381	55.38 (2.180)	45.72 (1.800)

Circuits	Order No.		Dimension	
	15μ" min. Select Gold	150μ" Tin/Lead	A	B
40	15-47-6401	15-47-1401	57.92 (2.280)	48.26 (1.900)
42	15-47-6421	15-47-1421	60.46 (2.380)	50.80 (2.000)
44	15-47-6441	15-47-1441	63.00 (2.480)	53.34 (2.100)
46	15-47-6461	15-47-1461	65.54 (2.580)	55.88 (2.200)
48	15-47-6481	15-47-1481	68.08 (2.680)	58.42 (2.300)
50	15-47-6501	15-47-1501	70.62 (2.780)	60.96 (2.400)
52	15-47-6521	15-47-1521	73.16 (2.880)	63.50 (2.500)
54	15-47-6541	15-47-1541	75.70 (2.980)	66.04 (2.600)
56	15-47-6561	15-47-1561	78.24 (3.080)	68.58 (2.700)
58	15-47-6581	15-47-1581	80.78 (3.180)	71.12 (2.800)
60	15-47-6601	15-47-1601	83.32 (3.280)	73.66 (2.900)
62	15-47-6621	15-47-1621	85.86 (3.380)	76.20 (3.000)
64	15-47-6641	15-47-1641	88.40 (3.480)	78.74 (3.100)
66	15-47-6661	15-47-1661	90.94 (3.580)	81.28 (3.200)
68	15-47-6681	15-47-1681	93.48 (3.680)	83.82 (3.300)
70	15-47-6701	15-47-1701	96.02 (3.780)	86.36 (3.400)
72	15-47-6721	15-47-1721	98.56 (3.880)	88.90 (3.500)

Available with polarization slots, no pegs (8723C and 8724C)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

70246

Dual Row, Low Profile Straight

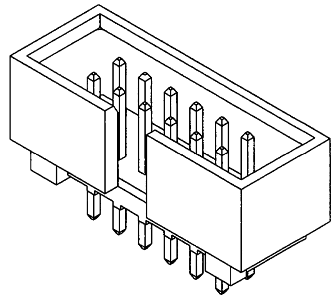
Features and Benefits
- Sizes 8 to 64 circuits
- Polarized slot
- Low profile
- High temperature material version available, contact factory
- For alternate product, see 90708

Reference Information
UL File No.: E29179 (H)
CSA File No.: LR19980A
Mates With: .050" pitch ribbon cable connectors
Designed In: Inches

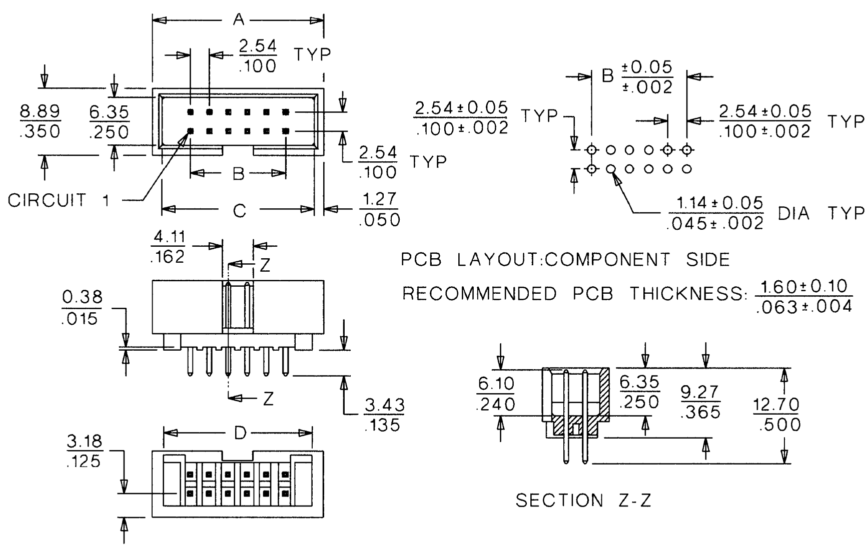
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension			
	15μ" Gold	20μ" Gold	30μ" Gold	A	B	C	D
8	70246-0821	70246-0820	70246-0822	7.62 (.300)	14.73 (.580)	17.78 (.700)	15.25 (.600)
10	70246-1021	70246-1020	70246-1022	10.16 (.400)	17.27 (.680)	20.32 (.800)	17.78 (.700)
14	70246-1421	70246-1420	70246-1422	15.24 (.600)	22.35 (.880)	25.40 (1.000)	22.86 (.900)
16	70246-1621	70246-1620	70246-1622	17.78 (.700)	24.89 (.980)	27.94 (1.100)	25.40 (1.000)
20	70246-2021	70246-2020	70246-2022	22.86 (.900)	29.97 (1.180)	33.02 (1.300)	30.28 (1.200)
26	70246-2621	70246-2620	70246-2622	30.48 (1.200)	37.59 (1.480)	40.64 (1.600)	38.10 (1.500)
34	70246-3421	70246-3420	70246-3422	40.64 (1.600)	47.75 (1.880)	50.80 (2.000)	48.26 (1.900)
40	70246-4021	70246-4020	70246-4022	48.26 (1.900)	55.37 (2.180)	58.42 (2.300)	55.88 (2.200)
44	70246-4421	70246-4420	70246-4422	53.34 (2.100)	60.45 (2.380)	63.50 (2.500)	60.96 (2.400)
50	70246-5021	70246-5020	70246-5022	60.96 (2.400)	68.07 (2.680)	71.12 (2.800)	68.58 (2.700)
56	70246-5621	70246-5620	70246-5622	68.58 (2.700)	75.69 (2.980)	78.74 (3.100)	76.20 (3.000)
60	70246-6021	70246-6020	70246-6022	73.66 (2.900)	80.77 (3.180)	83.82 (3.300)	81.28 (3.200)
64	70246-6421	70246-6420	70246-6422	78.74 (3.100)	85.85 (3.380)	88.90 (3.500)	86.36 (3.400)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

70247

Dual Row, Low Profile Right Angle

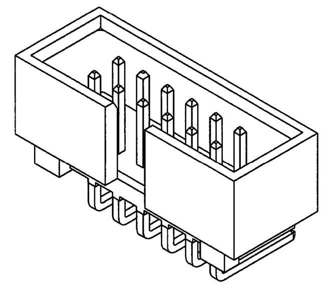
Features and Benefits
- Sizes 8 to 64 circuits
- Polarized slot
- Low profile
- High temperature material version available, contact factory
- For alternate product, see 90709

Reference Information
UL File No.: E29179 (H)
CSA File No.: LR19980A
Mates With: .050" pitch ribbon cable connectors
Designed In: Inches

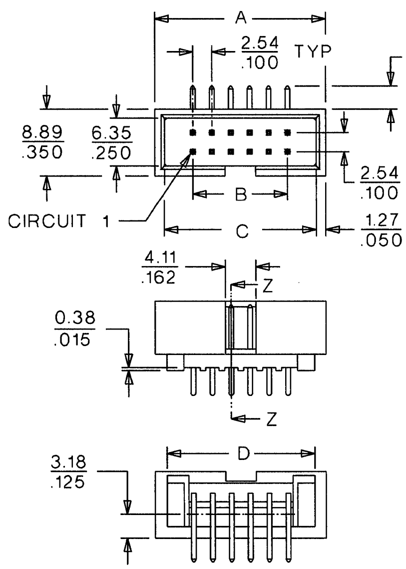
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

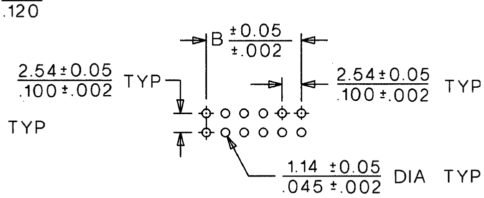
Mechanical
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C

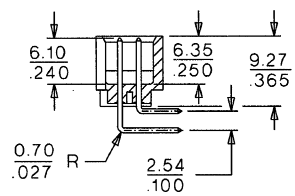


Not For Use With C-Grid III™ Components





PCB LAYOUT:COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 1.60±0.10 / .063±.004



SECTION Z-Z

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension			
	15µ" Gold	20µ" Gold	30µ" Gold	A	B	C	D
8	70247-0801	70247-0800	70247-0802	7.62 (.300)	14.73 (.580)	17.78 (.700)	15.25 (.600)
10	70247-1001	70247-1000	70247-1002	10.16 (.400)	17.27 (.680)	20.32 (.800)	17.78 (.700)
14	70247-1401	70247-1400	70247-1402	15.24 (.600)	22.35 (.880)	25.40 (1.000)	22.86 (.900)
16	70247-1601	70247-1600	70247-1602	17.78 (.700)	24.89 (.980)	27.94 (1.100)	25.40 (1.000)
20	70247-2001	70247-2000	70247-2002	22.86 (.900)	29.97 (1.180)	33.02 (1.300)	30.28 (1.200)
26	70247-2601	70247-2600	70247-2602	30.48 (1.200)	37.59 (1.480)	40.64 (1.600)	38.10 (1.500)
34	70247-3401	70247-3400	70247-3402	40.64 (1.600)	47.75 (1.880)	50.80 (2.000)	48.26 (1.900)
40	70247-4001	70247-4000	70247-4002	48.26 (1.900)	55.37 (2.180)	58.42 (2.300)	55.88 (2.200)
44	70247-4401	70247-4400	70247-4402	53.34 (2.100)	60.45 (2.380)	63.50 (2.500)	60.96 (2.400)
50	70247-5001	70247-5000	70247-5002	60.96 (2.400)	68.07 (2.680)	71.12 (2.800)	68.58 (2.700)
56	70247-5601	70247-5600	70247-5602	68.58 (2.700)	75.69 (2.980)	78.74 (3.100)	76.20 (3.000)
60	70247-6001	70247-6000	70247-6002	73.66 (2.900)	80.77 (3.180)	83.82 (3.300)	81.28 (3.200)
64	70247-6401	70247-6400	70247-6402	78.74 (3.100)	85.85 (3.380)	88.90 (3.500)	86.36 (3.400)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shrouded Header

70204

Dual Row With PC Slot and Guide Ears

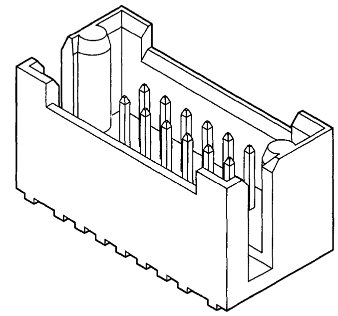
Features and Benefits
- Sizes 8 to 130 circuits
- With PC slot and guide ears for blind-mate applications
- Polarization slots and guide ears assure error free mating
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-70204
Packaging: Tray
UL File No.: E29179 (H)
CSA File No.: LR19980A
Mates With: 7990NA and 71973 with flange
Designed In: Inches

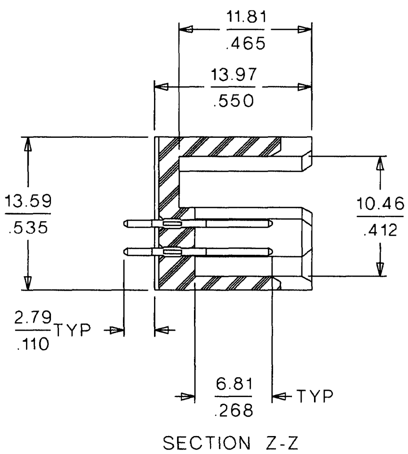
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

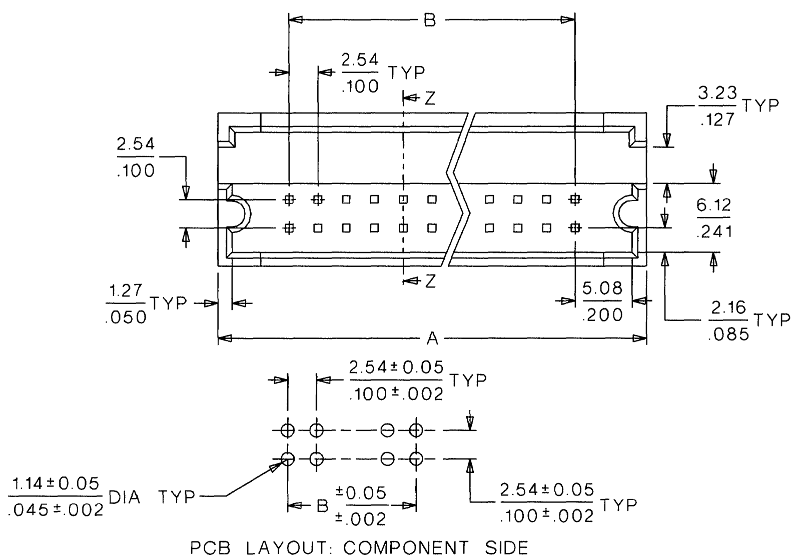
Mechanical
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components





ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
8	20.32 (.800)	7.62 (.300)
10	22.86 (.900)	10.16 (.400)
12	25.40 (1.000)	12.70 (.500)
14	27.94 (1.100)	15.24 (.600)
16	30.48 (1.200)	17.78 (.700)
18	33.02 (1.300)	20.32 (.800)
20	35.56 (1.400)	22.86 (.900)
22	38.10 (1.500)	25.40 (1.000)
24	40.64 (1.600)	27.94 (1.100)
26	43.18 (1.700)	30.48 (1.200)
28	45.72 (1.800)	33.02 (1.300)
30	48.26 (1.900)	35.56 (1.400)
32	50.80 (2.000)	38.10 (1.500)
34	53.34 (2.100)	40.64 (1.600)
36	55.88 (2.200)	43.18 (1.700)
38	58.42 (2.300)	45.72 (1.800)
40	60.96 (2.400)	48.26 (1.900)
42	63.50 (2.500)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	66.04 (2.600)	53.34 (2.100)
46	68.58 (2.700)	55.88 (2.200)
48	71.12 (2.800)	58.42 (2.300)
50	73.66 (2.900)	60.96 (2.400)
52	76.20 (3.000)	63.50 (2.500)
54	78.74 (3.100)	66.04 (2.600)
56	81.28 (3.200)	68.58 (2.700)
58	83.82 (3.300)	71.12 (2.800)
60	86.36 (3.400)	73.66 (2.900)
62	88.90 (3.500)	76.20 (3.000)
64	91.44 (3.600)	78.74 (3.100)
66	93.98 (3.700)	81.28 (3.200)
68	96.52 (3.800)	83.82 (3.300)
70	99.06 (3.900)	86.36 (3.400)
72	101.60 (4.000)	88.90 (3.500)
74	104.14 (4.100)	91.44 (3.600)
76	106.68 (4.200)	93.98 (3.700)
78	109.22 (4.300)	96.52 (3.800)

Circuits	Dimension A	Dimension B
80	111.76 (4.400)	99.06 (3.900)
82	114.30 (4.500)	101.60 (4.000)
84	116.84 (4.600)	104.14 (4.100)
86	119.38 (4.700)	106.68 (4.200)
88	121.92 (4.800)	109.22 (4.300)
90	124.46 (4.900)	111.76 (4.400)
92	127.00 (5.000)	114.30 (4.500)
94	129.54 (5.100)	116.84 (4.600)
96	132.08 (5.200)	119.38 (4.700)
98	134.62 (5.300)	121.92 (4.800)
100	137.16 (5.400)	124.46 (4.900)
102	139.70 (5.500)	127.00 (5.000)
104	142.24 (5.600)	129.54 (5.100)

Circuits	Dimension A	Dimension B
106	144.78 (5.700)	132.08 (5.200)
108	147.32 (5.800)	134.62 (5.300)
110	149.86 (5.900)	137.16 (5.400)
112	152.40 (6.000)	139.70 (5.500)
114	154.94 (6.100)	142.24 (5.600)
116	157.48 (6.200)	144.78 (5.700)
118	160.02 (6.300)	147.32 (5.800)
120	162.56 (6.400)	149.86 (5.900)
122	165.10 (6.500)	152.40 (6.000)
124	167.64 (6.600)	154.94 (6.100)
126	170.18 (6.700)	157.48 (6.200)
128	172.72 (6.800)	160.02 (6.300)
130	175.26 (6.900)	162.56 (6.400)

Plating Options	Order No.
15μ" min. select Gold	• 25-02-6XXX
30μ" min. select Gold	• 25-02-1XXX
150μ" Tin/Lead overall	• 25-02-2XXX
Replace XXX with no. of circuits, 008-130 (even only)	

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Dual Body Breakaway Header

70345

Single Row Straight

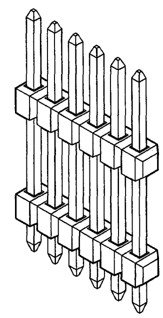
Features and Benefits
- Sizes 2 to 40 circuits
- Maintains the dimension between 2 boards
- Stackable side-by-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Standoffs minimize flux retention
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-70342
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

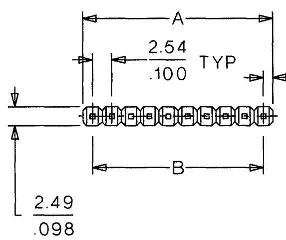
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

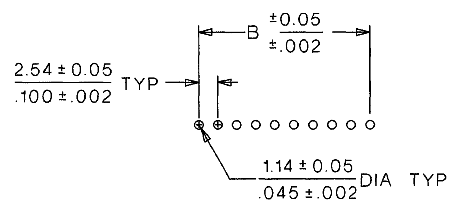
Mechanical
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

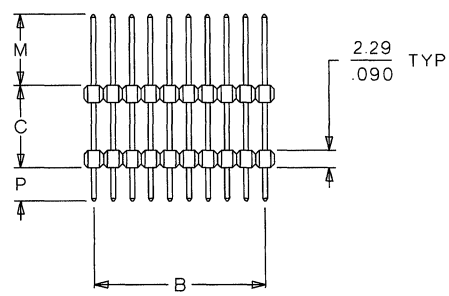


Not For Use With C-Grid III™ Components





PCB LAYOUT: COMPONENT SIDE



ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
2	4.83 (.190)	2.54 (.100)
3	7.37 (.290)	5.08 (.200)
4	9.91 (.390)	7.62 (.300)
5	12.45 (.490)	10.16 (.400)
6	14.99 (.590)	12.70 (.500)
7	17.53 (.690)	15.24 (.600)
8	20.07 (.790)	17.78 (.700)
9	22.61 (.890)	20.32 (.800)
10	25.15 (.990)	22.86 (.900)
11	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
12	30.23 (1.190)	27.94 (1.100)
13	32.77 (1.290)	30.48 (1.200)
14	35.31 (1.390)	33.02 (1.300)
15	37.85 (1.490)	35.56 (1.400)
16	40.39 (1.590)	38.10 (1.500)
17	42.93 (1.690)	40.64 (1.600)
18	45.47 (1.790)	43.18 (1.700)
19	48.01 (1.890)	45.72 (1.800)
20	50.55 (1.990)	48.26 (1.900)
21	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
22	55.63 (2.190)	53.34 (2.100)
23	58.17 (2.290)	55.88 (2.200)
24	60.71 (2.390)	58.42 (2.300)
25	63.25 (2.490)	60.96 (2.400)
26	65.79 (2.590)	63.50 (2.500)
27	68.33 (2.690)	66.04 (2.600)
28	70.87 (2.790)	68.58 (2.700)
29	73.41 (2.890)	71.12 (2.800)
30	75.95 (2.990)	73.66 (2.900)
31	78.49 (3.090)	76.20 (3.000)

Circuits	Dimension A	Dimension B
32	81.03 (3.190)	78.74 (3.100)
33	83.57 (3.290)	81.28 (3.200)
34	86.11 (3.390)	83.82 (3.300)
35	88.65 (3.490)	86.36 (3.400)
36	91.19 (3.590)	88.90 (3.500)
37	93.73 (3.690)	91.44 (3.600)
38	96.27 (3.790)	93.98 (3.700)
39	98.81 (3.890)	96.52 (3.800)
40	101.35 (3.990)	99.06 (3.900)

Order No.
Contact factory to order. Specify dimensions M, C, P and plating—available in 15μ" and 30μ" min. Gold, and 150μ" min. Tin/Lead.

Note: Dimension M = Mating End; Dimension C = Stacking Height; and Dimension P = PC Tail
Also available in dual row version, see 70268

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Dual Body Breakaway Header

70268 Dual Row Straight

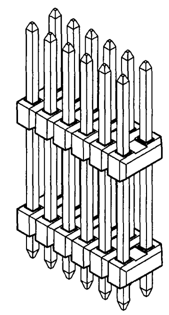
Features and Benefits
- Sizes 4 to 80 circuits
- Maintains the dimensions between 2 boards
- Provides electrical connection between 2 discrete boards and eliminates the need for nylon or aluminum spacers
- Stackable side-to-side and end-to-end (on unbroken edges)
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information
Product Specification: PS-70268
Designed In: Inches

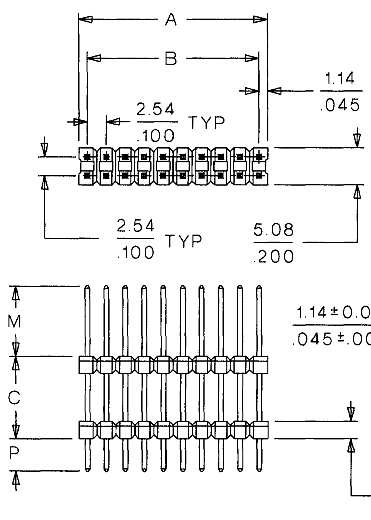
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 1000 MΩ min.

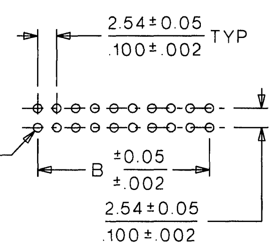
Mechanical
Pin Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components





PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)
30	37.58 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)

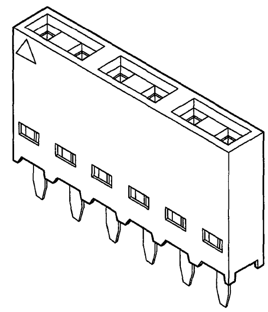
Circuits	Dimension A	Dimension B
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

Order No.
Contact factory to order. Specify dimensions M, C, P and plating—available in 15µ" and 30µ" min. Gold, and 150µ" min. Tin/Lead.

Note: Dimension M = Mating End; Dimension C = Stacking Height; and Dimension P = PC Tail
For 2 circuit, see 70345

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid®
PC Board Connectors
90147
Single Row Vertical



Features and Benefits
- Sizes 2 to 32 circuits
- Contact and plating orientation according to DIN 41651
- Stackable in 2 directions
- Meets HE13/14 specifications
- Suitable for single row headers

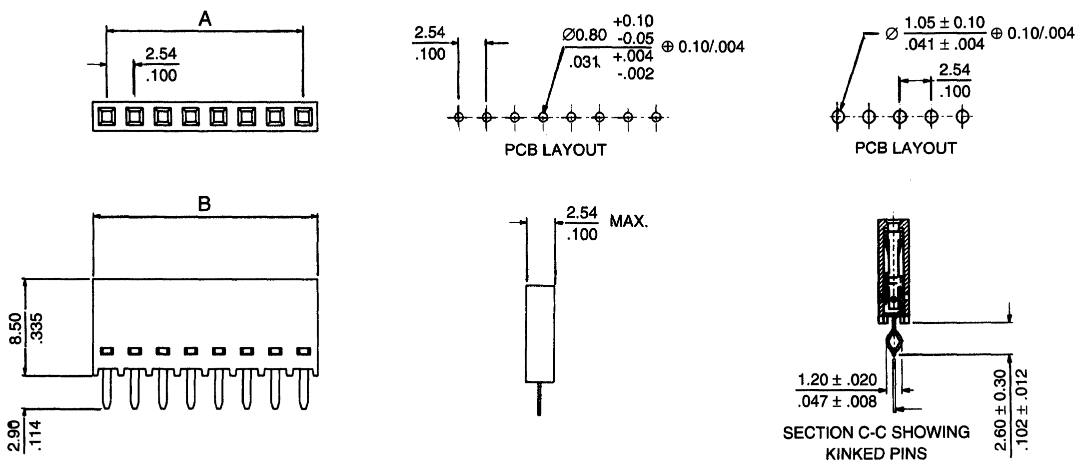
Reference Information
Product Specification: PS-99020-0001
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.64mm (.025") square pins
Use With: 1.57mm (.062") thick PC boards
Designed In: Inches

Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 15N min.
Mating Force: 1N Gold max. and 3N Tin max.
Unmating Force: 0.2N Gold min. and 0.2N Tin min.
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -55 to +125°C
Recommended Mating Pin Length: 5.65mm (.222") min. to 7.00mm (.275") max.

Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension	
	Straight Tail			Kinked Tail				
	Plating A	Plating E	Plating F	Plating A	Plating E	Plating F	A	B
2	90147-1102	90147-1202	90147-1302				2.54 (.100)	5.08 (.200)
3	90147-1103	90147-1203	90147-1303	90147-2103	90147-2203	90147-2303	5.08 (.200)	7.62 (.300)
4	90147-1104	90147-1204	90147-1304	90147-2104	90147-2204	90147-2304	7.62 (.300)	10.16 (.400)
5	90147-1105	90147-1205	90147-1305	90147-2105	90147-2205	90147-2305	10.16 (.400)	12.70 (.500)
6	90147-1106	90147-1206	90147-1306	90147-2106	90147-2206	90147-2306	12.70 (.500)	15.24 (.600)
7	90147-1107	90147-1207	90147-1307	90147-2107	90147-2207	90147-2307	15.24 (.600)	17.78 (.700)
8	90147-1108	90147-1208	90147-1308	90147-2108	90147-2208	90147-2308	17.78 (.700)	20.32 (.800)
9	90147-1109	90147-1209	90147-1309	90147-2109	90147-2209	90147-2309	20.32 (.800)	22.86 (.900)
10	90147-1110	90147-1210	90147-1310	90147-2110	90147-2210	90147-2310	22.86 (.900)	25.40 (1.000)
11	90147-1111	90147-1211	90147-1311	90147-2111	90147-2211	90147-2311	25.40 (1.000)	27.94 (1.100)
12	90147-1112	90147-1212	90147-1312	90147-2112	90147-2212	90147-2312	27.94 (1.100)	30.48 (1.200)
14	90147-1114	90147-1214	90147-1314	90147-2114	90147-2214	90147-2314	33.02 (1.300)	35.56 (1.400)
18	90147-1118	90147-1218	90147-1318	90147-2118	90147-2218	90147-2318	43.18 (1.700)	45.72 (1.800)
25	90147-1125	90147-1225	90147-1325	90147-2125	90147-2225	90147-2325	60.96 (2.400)	63.50 (2.500)
30	90147-1130	90147-1230	90147-1330	90147-2130	90147-2230	90147-2330	73.66 (2.900)	76.20 (3.000)
32	90147-1132	90147-1232	90147-1332	90147-2132	90147-2232	90147-2332	78.74 (3.100)	81.28 (3.200)

For other available circuit sizes contact Molex
Plating A: Color Code Blue— 4μm (160μ") Tin/Lead over Nickel
Plating E: Color Code Red—0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: Color Code Yellow—0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PCB Connector

70181/70851 .100 x .150" Grid
70182/70852 .100 x .100" Grid
Low Profile, Dual Row Vertical

Features and Benefits

- Sizes 4 to 80 circuits
- Low profile: .250" high
- Designed for parallel and perpendicular stacking; also for PCB-to-harness and PCB-to-chassis connections
- Stackable end-to-end and side-to-side on .100" grid
- Dual beam box contact
- Standoffs facilitate post solder cleaning

Reference Information

Product Specification: PS-70181
Packaging: Tray
UL File No.: E29179 (G)
CSA File No.: LR19980A
Designed In: Inches

Electrical

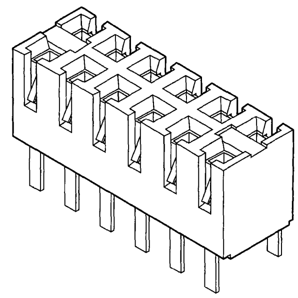
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 100K MΩ min.

Mechanical

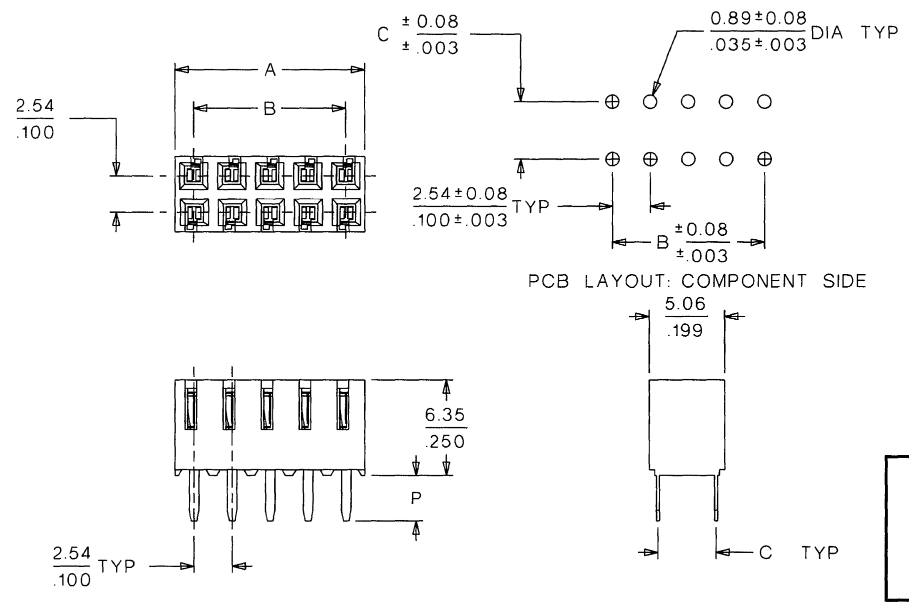
Contact Insertion Force: 227g (0.5 lb)
Contact Retention to Housing: 1.8kg (4 lb)
Normal Force: 150g (0.3 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C
PCB Thickness: 120" tail for .062" thick PCB; .050" tail ideal for thinner substrates: membrane switch and flex circuitry



Not For Use With C-Grid III™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

	70181	70182	70851	70852
PC Tail Grid	2.54 x 3.81mm (.100 x .150")	2.54 x 2.54mm (.100 x .100")	2.54 x 3.81mm (.100 x .150")	2.54 x 2.54mm (.100 x .100")
PC Tail Length Dimension P	3.50mm (.120")	3.50mm (.120")	1.27mm (.050")	1.27mm (.050")
Plating Option	Order No.	Order No.	Order No.	Order No.
15μ" min. select Gold	• 15-44-37XX	• 15-44-36XX	15-47-60XX	15-47-61XX
30μ" select Gold	• 15-44-40XX	• 15-44-41XX	15-47-67XX	15-47-68XX
150μ" Tin/Lead	• 15-45-08XX	• 15-45-09XX	15-45-40XX	15-45-41XX
	Replace XX with **no. of circuits per row** (02-40), example: 20 circuit = 15-44-3710		Replace XX with **total no. of circuits** (04-80), example: 20 circuit = 15-47-6020	

Circuits	Dimension A	Dimension B
4	5.05 (.199)	2.54 (.100)
6	7.59 (.299)	5.08 (.200)
8	10.13 (.399)	7.62 (.300)
10	12.67 (.499)	10.16 (.400)
12	15.21 (.599)	12.70 (.500)
14	17.75 (.699)	15.24 (.600)
16	20.29 (.799)	17.78 (.700)
18	22.83 (.899)	20.32 (.800)
20	25.37 (.999)	22.86 (.900)
22	27.91 (1.099)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.45 (1.199)	27.94 (1.100)
26	32.99 (1.299)	30.48 (1.200)
28	35.53 (1.399)	33.02 (1.300)
30	38.07 (1.499)	35.56 (1.400)
32	40.61 (1.599)	38.10 (1.500)
34	43.15 (1.699)	40.64 (1.600)
36	45.69 (1.799)	43.18 (1.700)
38	48.23 (1.899)	45.72 (1.800)
40	50.77 (1.999)	48.26 (1.900)
42	53.31 (2.099)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.85 (2.199)	53.34 (2.100)
46	58.39 (2.299)	55.88 (2.200)
48	60.93 (2.399)	58.42 (2.300)
50	63.47 (2.499)	60.96 (2.400)
52	66.01 (2.599)	63.50 (2.500)
54	68.55 (2.699)	66.04 (2.600)
56	71.09 (2.799)	68.58 (2.700)
58	73.63 (2.899)	71.12 (2.800)
60	76.17 (2.999)	73.66 (2.900)
62	78.71 (3.099)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.25 (3.199)	78.74 (3.100)
66	83.79 (3.299)	81.28 (3.200)
68	86.33 (3.399)	83.82 (3.300)
70	88.87 (3.499)	86.36 (3.400)
72	91.41 (3.599)	88.90 (3.500)
74	93.95 (3.699)	91.44 (3.600)
76	96.49 (3.799)	93.98 (3.700)
78	99.03 (3.899)	96.52 (3.800)
80	101.57 (3.999)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

molex®

2.54mm (.100") Pitch C-Grid® Receptacle

71850

High Profile, Dual Row High-Temperature, Vertical Through Hole

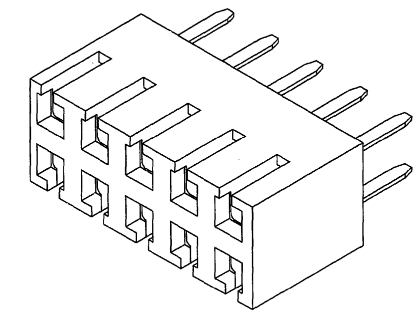
Features and Benefits
- Sizes 4 to 80 circuits
- Available with or without retention pegs
- Gull wing surface mount tails
- High profile: .340" high
- Designed for parallel and perpendicular board stacking; also for PCB-to-harness and PCB-to-chassis connections
- Stackable end-to-end on .100" grid
- Dual beam box contact

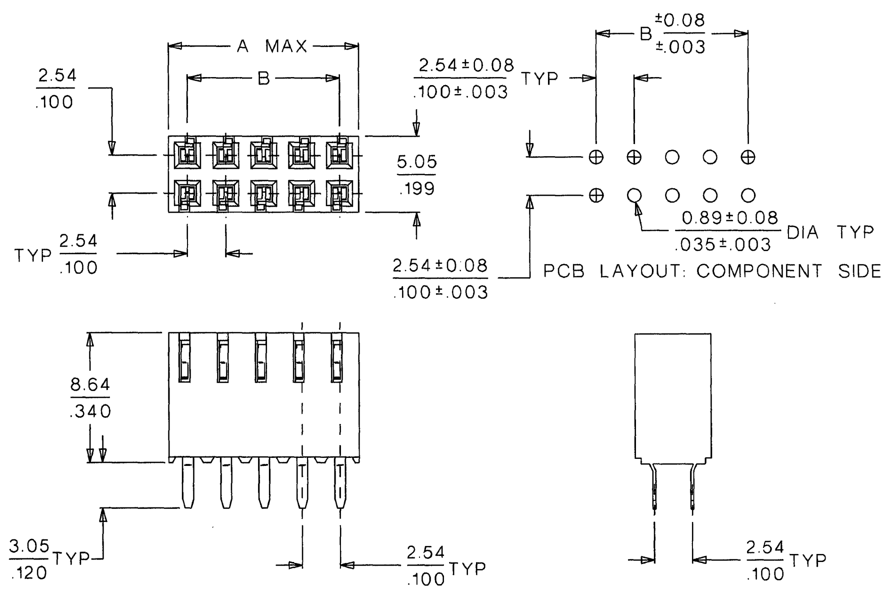
Reference Information
Product Specification: PS-71840
Packaging: Tray
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 182g (0.4 lb)
Insertion Force to PCB: 3.6kg (8 lb) per peg
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
4	5.05 (.199)	2.54 (.100)
6	7.59 (.299)	5.08 (.200)
8	10.13 (.399)	7.62 (.300)
10	12.67 (.499)	10.16 (.400)
12	15.21 (.599)	12.70 (.500)
14	17.75 (.699)	15.24 (.600)
16	20.29 (.799)	17.78 (.700)
18	22.83 (.899)	20.32 (.800)
20	25.37 (.999)	22.86 (.900)
22	27.91 (1.099)	25.40 (1.000)
24	30.45 (1.199)	27.94 (1.100)
26	32.99 (1.299)	30.48 (1.200)
28	35.53 (1.399)	33.02 (1.300)

Circuits	Dimension A	Dimension B
30	38.07 (1.499)	35.56 (1.400)
32	40.61 (1.599)	38.10 (1.500)
34	43.15 (1.699)	40.64 (1.600)
36	45.69 (1.799)	43.18 (1.700)
38	48.23 (1.899)	45.72 (1.800)
40	50.77 (1.999)	48.26 (1.900)
42	53.31 (2.099)	50.80 (2.000)
44	55.85 (2.199)	53.34 (2.100)
46	58.39 (2.299)	55.88 (2.200)
48	60.93 (2.399)	58.42 (2.300)
50	63.47 (2.499)	60.96 (2.400)
52	66.01 (2.599)	63.50 (2.500)
54	68.55 (2.699)	66.04 (2.600)

Circuits	Dimension A	Dimension B
56	71.09 (2.799)	68.58 (2.700)
58	73.63 (2.899)	71.12 (2.800)
60	76.17 (2.999)	73.66 (2.900)
62	78.71 (3.099)	76.20 (3.000)
64	81.25 (3.199)	78.74 (3.100)
66	83.79 (3.299)	81.28 (3.200)
68	86.33 (3.399)	83.82 (3.300)

Circuits	Dimension A	Dimension B
70	88.87 (3.499)	86.36 (3.400)
72	91.41 (3.599)	88.90 (3.500)
74	93.95 (3.699)	91.44 (3.600)
76	96.49 (3.799)	93.98 (3.700)
78	99.03 (3.899)	96.52 (3.800)
80	101.57 (3.999)	99.06 (3.900)

Plating Option	Order No.
15μ" min. select Gold	15-44-58XX
30μ" min. select Gold	15-44-51XX
150μ" Tin/Lead	15-44-68XX
Replace XX with no. of circuits, 04-80 (even only)	

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PCB Connector

71395 High Profile, Dual Row Vertical, SMT

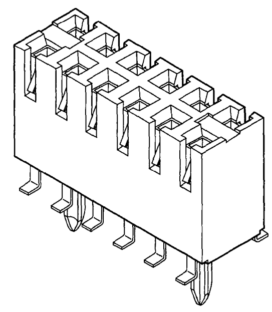
Features and Benefits
- Available with or without retention pegs
- Gull wing surface mount tails
- High profile: .340" high
- Designed for parallel and perpendicular board stacking; also for PCB-to-harness and PCB-to-chassis connections
- Stackable end-to-end on .100" grid

Reference Information
Product Specification: PS-71395
Packaging: Tray
Designed In: Inches

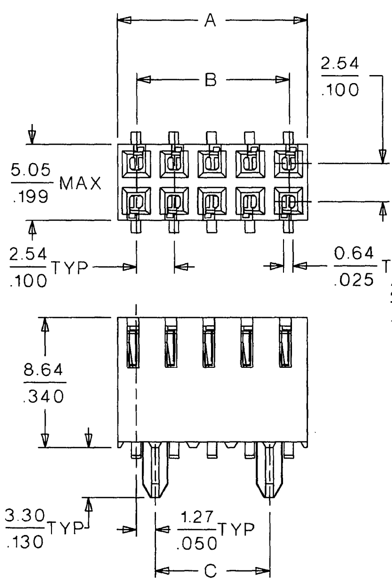
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

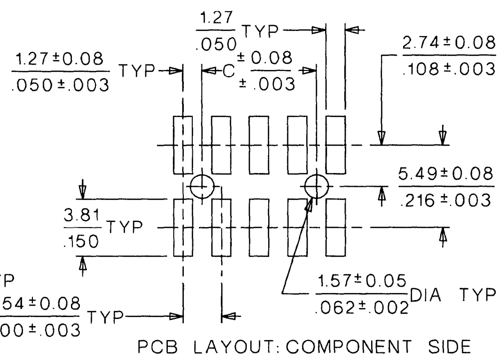
Mechanical
Insertion Force to PCB: 3.6kg (8 lb) per peg
Durability: 25 cycles Tin/Lead and 50 cycles Gold

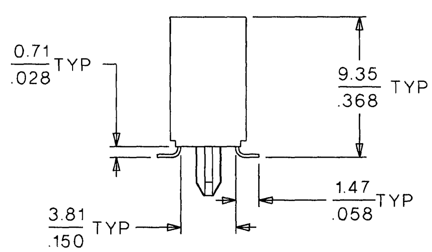
Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C
Screened Paste Thickness: .010 to .015"



Not For Use With Molex C-Grid III™ Components







ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.	
	With PCB Retention Pegs	Without Pegs
15μ" min. Gold	15-45-35XX	15-45-31XX
30μ" min. Gold	15-45-36XX	15-45-33XX
150μ" min. Tin/Lead	15-45-34XX	15-45-32XX
Replace XX with no. of circuits, 08-80 (even only)		

Circuits	Dimension		
	A	B	C
8	10.13 (.399)	7.62 (.300)	5.08 (.200)
10	12.67 (.499)	10.16 (.400)	7.62 (.300)
12	15.21 (.599)	12.70 (.500)	10.16 (.400)
14	17.75 (.699)	15.24 (.600)	12.70 (.500)
16	20.29 (.799)	17.78 (.700)	15.24 (.600)
18	22.83 (.899)	20.32 (.800)	17.78 (.700)
20	25.37 (.999)	22.86 (.900)	20.32 (.800)
22	27.91 (1.099)	25.40 (1.000)	22.86 (.900)
24	30.45 (1.199)	27.94 (1.100)	25.40 (1.000)
26	32.99 (1.299)	30.48 (1.200)	27.94 (1.100)
28	35.53 (1.399)	33.02 (1.300)	30.48 (1.200)
30	38.07 (1.499)	35.56 (1.400)	33.02 (1.300)
32	40.61 (1.599)	38.10 (1.500)	35.56 (1.400)

Circuits	Dimension		
	A	B	C
34	43.15 (1.699)	40.64 (1.600)	38.10 (1.500)
36	45.69 (1.799)	43.18 (1.700)	40.64 (1.600)
38	48.23 (1.899)	45.72 (1.800)	43.18 (1.700)
40	50.77 (1.999)	48.26 (1.900)	45.72 (1.800)
42	53.31 (2.099)	50.80 (2.000)	48.26 (1.900)
44	55.85 (2.199)	53.34 (2.100)	50.80 (2.000)
46	58.39 (2.299)	55.88 (2.200)	53.34 (2.100)
48	60.93 (2.399)	58.42 (2.300)	55.88 (2.200)
50	63.47 (2.499)	60.96 (2.400)	58.42 (2.300)
52	66.01 (2.599)	63.50 (2.500)	60.96 (2.400)
54	68.55 (2.699)	66.04 (2.600)	63.50 (2.500)
56	71.09 (2.799)	68.58 (2.700)	66.04 (2.600)

Circuits	Dimension		
	A	B	C
58	73.63 (2.899)	71.12 (2.800)	68.58 (2.700)
60	76.17 (2.999)	73.66 (2.900)	71.12 (2.800)
62	78.71 (3.099)	76.20 (3.000)	73.66 (2.900)
64	81.25 (3.199)	78.74 (3.100)	76.20 (3.000)
66	83.79 (3.299)	81.28 (3.200)	78.74 (3.100)
68	86.33 (3.399)	83.82 (3.300)	81.28 (3.200)
70	88.87 (3.499)	86.36 (3.400)	83.82 (3.300)
72	91.41 (3.599)	88.90 (3.500)	86.36 (3.400)
74	93.95 (3.699)	91.44 (3.600)	88.90 (3.500)
76	96.49 (3.799)	93.98 (3.700)	91.44 (3.600)
78	99.03 (3.899)	96.52 (3.800)	93.98 (3.700)
80	101.57 (3.999)	99.06 (3.900)	96.52 (3.800)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PCB Connector

70191/70853 .100 x .150" Grid
70192/70854 .100 x .100" Grid
High Profile, Dual Row Vertical

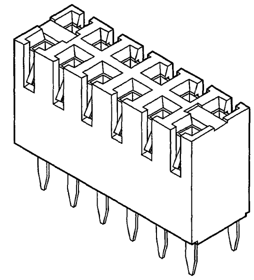
Features and Benefits
- Sizes 4 to 80 circuits
- High profile: .340" high
- Designed for parallel and perpendicular stacking; also for PCB-to-harness and PCB-to-chassis connections
- Stackable end-to-end and side-to-side on .100" grid
- Dual beam box contact
- Standoffs facilitate post solder clearing

Reference Information
Product Specification: PS-70181
UL File No.: E29179 (G)
CSA File No.: LR19980A
Designed In: Inches

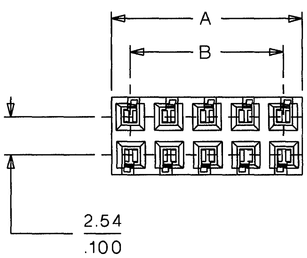
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 100K MΩ min.

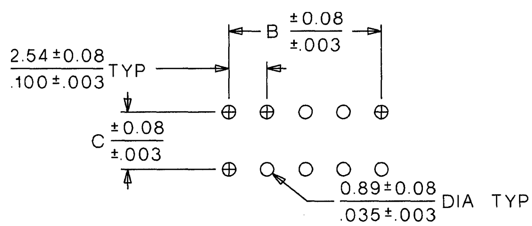
Mechanical
Contact Insertion Force: 227g (0.5 lb)
Contact Retention to Housing: 1.8kg (4 lb)
Normal Force: 150g (0.3 lb)
Durability: 25 cycles Tin/Lead and 50 cycles Gold

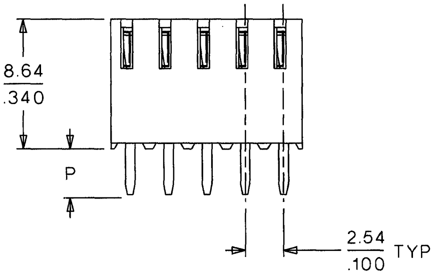
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C
PCB Thickness: .120" tail for .062" thick PCB; .050" tail ideal for thinner substrates: membrane switch and flex circuitry

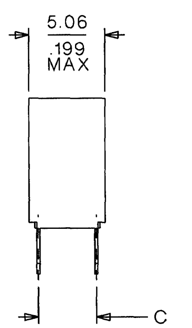


Not For Use With Molex C-Grid III™ Components









Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

	70191	70192	70853	70854
PC Tail Grid	**2.54 x 3.81mm (.100 x .150")**	**2.54 x 2.54mm (.100 x .100")**	**2.54 x 3.81mm (.100 x .150")**	**2.54 x 2.54mm (.100 x .100")**
PC Tail Length Dimension P	**3.50mm (.120")**	**3.50mm (.120")**	**1.27mm (.050")**	**1.27mm (.050")**
Plating Option	**Order No.**	**Order No.**	**Order No.**	**Order No.**
15μ" min. select Gold	• 15-44-33XX	• 15-44-32XX	15-47-65XX	15-47-66XX
30μ" min. select Gold	• 15-44-44XX	• 15-44-45XX	15-47-69XX	15-47-70XX
150μ" Tin/Lead	• 15-45-12XX	• 15-45-13XX	15-45-42XX	15-45-43XX
Replace XX with **no. of circuits per row** (02-40), example: 20 circuit = 15-44-3310			Replace XX with **total no. of circuits** (04-80), example: 20 circuit = 15-47-6520	

Circuits	Dimension A	Dimension B
4	5.05 (.199)	2.54 (.100)
6	7.59 (.299)	5.08 (.200)
8	10.13 (.399)	7.62 (.300)
10	12.67 (.499)	10.16 (.400)
12	15.21 (.599)	12.70 (.500)
14	17.75 (.699)	15.24 (.600)
16	20.29 (.799)	17.78 (.700)
18	22.83 (.899)	20.32 (.800)
20	25.37 (.999)	22.86 (.900)
22	27.91 (1.099)	25.40 (1.000)

Circuits	Dimension A	Dimension B
24	30.45 (1.199)	27.94 (1.100)
26	32.99 (1.299)	30.48 (1.200)
28	35.53 (1.399)	33.02 (1.300)
30	38.07 (1.499)	35.56 (1.400)
32	40.61 (1.599)	38.10 (1.500)
34	43.15 (1.699)	40.64 (1.600)
36	45.69 (1.799)	43.18 (1.700)
38	48.23 (1.899)	45.72 (1.800)
40	50.77 (1.999)	48.26 (1.900)
42	53.31 (2.099)	50.80 (2.000)

Circuits	Dimension A	Dimension B
44	55.85 (2.199)	53.34 (2.100)
46	58.39 (2.299)	55.88 (2.200)
48	60.93 (2.399)	58.42 (2.300)
50	63.47 (2.499)	60.96 (2.400)
52	66.01 (2.599)	63.50 (2.500)
54	68.55 (2.699)	66.04 (2.600)
56	71.09 (2.799)	68.58 (2.700)
58	73.63 (2.899)	71.12 (2.800)
60	76.17 (2.999)	73.66 (2.900)
62	78.71 (3.099)	76.20 (3.000)

Circuits	Dimension A	Dimension B
64	81.25 (3.199)	78.74 (3.100)
66	83.79 (3.299)	81.28 (3.200)
68	86.33 (3.399)	83.82 (3.300)
70	88.87 (3.499)	86.36 (3.400)
72	91.41 (3.599)	88.90 (3.500)
74	93.95 (3.699)	91.44 (3.600)
76	96.49 (3.799)	93.98 (3.700)
78	99.03 (3.899)	96.52 (3.800)
80	101.57 (3.999)	99.06 (3.900)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Receptacle

71840

Low Profile, Dual Row High-Temperature, Vertical

C-Grid

A

Features and Benefits

- Sizes 8 to 80 circuits
- Low profile: .240" high
- Available with or without retention pegs
- Vapor phase/IR reflow process compatible
- Mates with .100" grid male headers
- Stackable end-to-end on .100" grid

Reference Information

Product Specification: PS-70181
Packaging: Tray
Designed In: Inches

Electrical

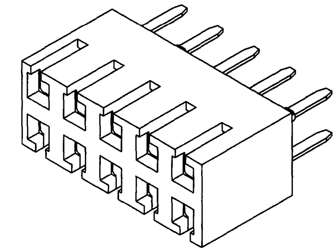
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

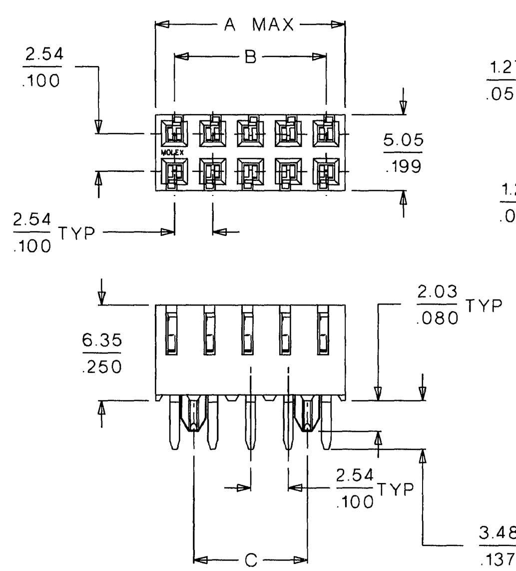
Mechanical

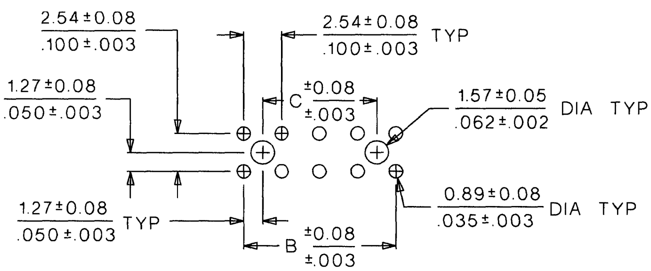
Contact Insertion Force: 182g (0.4 lb)
Insertion Force to PCB: 3.6kg (8 lb) per peg
Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical

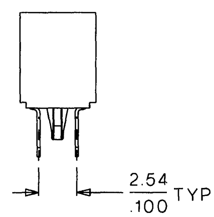
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C







PCB LAYOUT: COMPONENT SIDE



ORDERING INFORMATION

Circuits	Order No.					
	150μ" Tin/Lead, Nickel Overall		15μ" min. Select Gold		30μ" min. Select Gold	
	Peg	No Peg	Peg	No Peg	Peg	No Peg
8	71840-0001	71840-0112	71840-0038	71840-0149	71840-0075	71840-0186
10	71840-0002	71840-0113	71840-0039	71840-0150	71840-0076	71840-0187
12	71840-0003	71840-0114	71840-0040	71840-0151	71840-0077	71840-0188
14	71840-0004	71840-0115	71840-0041	71840-0152	71840-0078	71840-0189
16	71840-0005	71840-0116	71840-0042	71840-0153	71840-0079	71840-0190
18	71840-0006	71840-0117	71840-0043	71840-0154	71840-0080	71840-0191
20	71840-0007	71840-0118	71840-0044	71840-0155	71840-0081	71840-0192
22	71840-0008	71840-0119	71840-0045	71840-0156	71840-0082	71840-0193
24	71840-0009	71840-0120	71840-0046	71840-0157	71840-0083	71840-0194
26	71840-0010	71840-0121	71840-0047	71840-0158	71840-0084	71840-0195
28	71840-0011	71840-0122	71840-0048	71840-0159	71840-0085	71840-0196
30	71840-0012	71840-0123	71840-0049	71840-0160	71840-0086	71840-0197
32	71840-0013	71840-0124	71840-0050	71840-0161	71840-0087	71840-0198
34	71840-0014	71840-0125	71840-0051	71840-0162	71840-0088	71840-0199
36	71840-0015	71840-0126	71840-0052	71840-0163	71840-0089	71840-0200
38	71840-0016	71840-0127	71840-0053	71840-0164	71840-0090	71840-0201
40	71840-0017	71840-0128	71840-0054	71840-0165	71840-0091	71840-0202
42	71840-0018	71840-0129	71840-0055	71840-0166	71840-0092	71840-0203
44	71840-0019	71840-0130	71840-0056	71840-0167	71840-0093	71840-0204

Circuits	Order No.					
	150μ" Tin/Lead, Nickel Overall		15μ" min. Select Gold		30μ" min. Select Gold	
	Peg	No Peg	Peg	No Peg	Peg	No Peg
46	71840-0020	71840-0131	71840-0057	71840-0168	71840-0094	71840-0205
48	71840-0021	71840-0132	71840-0058	71840-0169	71840-0095	71840-0206
50	71840-0022	71840-0133	71840-0059	71840-0170	71840-0096	71840-0207
52	71840-0023	71840-0134	71840-0060	71840-0171	71840-0097	71840-0208
54	71840-0024	71840-0135	71840-0061	71840-0172	71840-0098	71840-0209
56	71840-0025	71840-0136	71840-0062	71840-0173	71840-0099	71840-0210
58	71840-0026	71840-0137	71840-0063	71840-0174	71840-0100	71840-0211
60	71840-0027	71840-0138	71840-0064	71840-0175	71840-0101	71840-0212
62	71840-0028	71840-0139	71840-0065	71840-0176	71840-0102	71840-0213
64	71840-0029	71840-0140	71840-0066	71840-0177	71840-0103	71840-0214
66	71840-0030	71840-0141	71840-0067	71840-0178	71840-0104	71840-0215
68	71840-0031	71840-0142	71840-0068	71840-0179	71840-0105	71840-0216
70	71840-0032	71840-0143	71840-0069	71840-0180	71840-0106	71840-0217
72	71840-0033	71840-0144	71840-0070	71840-0181	71840-0107	71840-0218
74	71840-0034	71840-0145	71840-0071	71840-0182	71840-0108	71840-0219
76	71840-0035	71840-0146	71840-0072	71840-0183	71840-0109	71840-0220
78	71840-0036	71840-0147	71840-0073	71840-0184	71840-0110	71840-0221
80	71840-0037	71840-0148	71840-0074	71840-0185	71840-0111	71840-0222

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PC Board Connectors

90148 Single Row Right Angle

Features and Benefits

- Sizes 2 to 32 circuits
- Contact and plating orientation according to DIN 41651
- Stackable end-to-end
- Meets HE13/14 specifications
- Suitable for single row headers

Reference Information

Product Specification: PS-99020-0001
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.64 (.025") square pins
Use With: 1.57mm (.062") thick PC boards
Designed In: Inches

Electrical

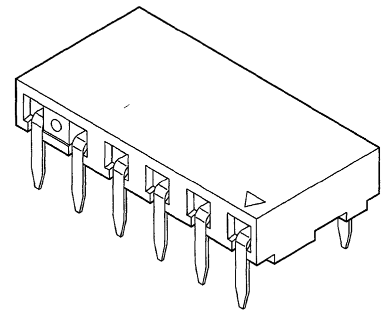
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical

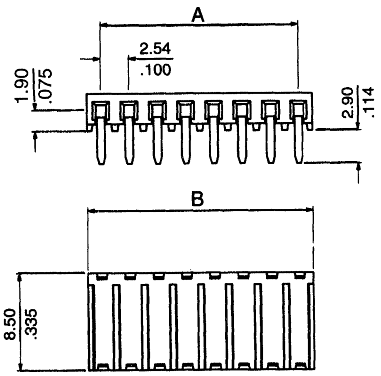
Contact Retention to Housing: 15N min.
Mating Force: 1N Gold max. and 3N Tin max.
Unmating Force: 0.2N Gold min. and 0.2N Tin min.
Normal Force: 1N

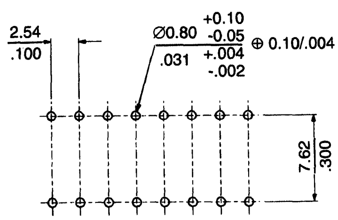
Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -55 to +125°C
Recommended Mating Pin Length: 5.65mm (.222") min. to 7.00mm (.275") max.

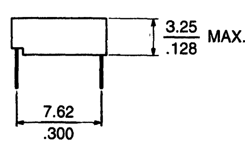


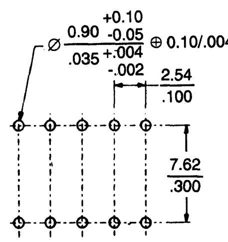
Not For Use With Molex C-Grid III™ Components





PCB LAYOUT





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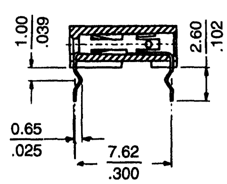


ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension	
	Straight Tail			Kinked Tail				
	Plating A	Plating E	Plating F	Plating A	Plating E	Plating F	A	B
2	90148-1102	90148-1202	90148-1302				2.54 (.100)	5.08 (.200)
4	90148-1104	90148-1204	90148-1304	90148-2104	90148-2204	90148-2304	7.62 (.300)	10.16 (.400)
6	90148-1106	90148-1206	90148-1306	90148-2106	90148-2206	90148-2306	12.70 (.500)	15.24 (.600)
8	90148-1108	90148-1208	90148-1308	90148-2108	90148-2208	90148-2308	17.78 (.700)	20.32 (.800)
10	90148-1110	90148-1210	90148-1310	90148-2110	90148-2210	90148-2310	22.86 (.900)	25.40 (1.000)
12	90148-1112	90148-1212	90148-1312	90148-2112	90148-2212	90148-2312	27.94 (1.100)	30.48 (1.200)
14	90148-1114	90148-1214	90148-1314	90148-2114	90148-2214	90148-2314	33.02 (1.300)	35.56 (1.400)
18	90148-1118	90148-1218	90148-1318	90148-2118	90148-2218	90148-2318	43.18 (1.700)	45.72 (1.800)
30	90148-1130	90148-1230	90148-1330	90148-2130	90148-2230	90148-2330	73.66 (2.900)	76.20 (3.000)
32	90148-1132	90148-1232	90148-1332	90148-2132	90148-2232	90148-2332	78.74 (3.100)	81.28 (3.200)

For other available circuit sizes contact Molex
Plating A: Color Code Blue—4µm (160µ") Tin/Lead over Nickel
Plating E: Color Code Red—0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: Color Code Yellow—0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PCB Connector

7990 Dual Row Right Angle

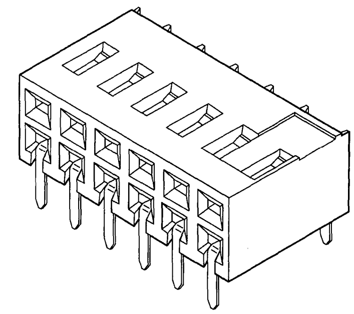
Features and Benefits
- Sizes 8 to 130 circuits
- Designed for perpendicular board stacking
- Dual beam box contact
- Staggered mating depth to lower initial insertion force
- Back row of PC tails slightly longer to ease board loading
- Positive pin stop to prevent shorting between rows

Reference Information
Product Specification: PS-7990
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

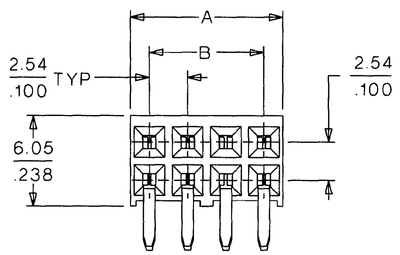
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 100K MΩ min.

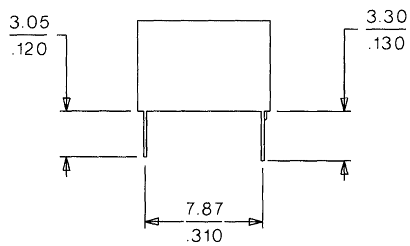
Mechanical
Contact Insertion Force: 227g (0.5 lb)
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead

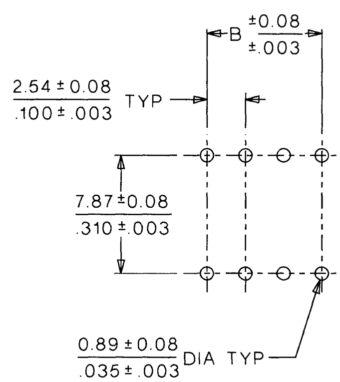
Physical
Housing: High-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 150µ" Tin/Lead
Temperature: -40 to +105°C

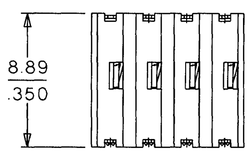


Not For Use With Molex C-Grid III™ Components









Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
8	10.13 (.399)	7.62 (.300)
10	12.67 (.499)	10.16 (.400)
12	15.21 (.599)	12.70 (.500)
14	17.75 (.699)	15.24 (.600)
16	20.29 (.799)	17.78 (.700)
18	22.83 (.899)	20.32 (.800)
20	25.37 (.999)	22.86 (.900)
22	27.91 (1.099)	25.40 (1.000)
24	30.45 (1.199)	27.94 (1.100)
26	32.99 (1.299)	30.48 (1.200)
28	35.53 (1.399)	33.02 (1.300)
30	38.07 (1.499)	33.56 (1.400)
32	40.61 (1.599)	38.10 (1.500)
34	43.15 (1.699)	40.64 (1.600)
36	45.69 (1.799)	43.18 (1.700)
38	48.23 (1.899)	45.72 (1.800)

Circuits	Dimension A	Dimension B
40	50.77 (1.999)	48.26 (1.900)
42	53.31 (2.099)	50.80 (2.000)
44	55.85 (2.199)	53.34 (2.100)
46	58.39 (2.299)	55.88 (2.200)
48	60.93 (2.399)	58.42 (2.300)
50	63.47 (2.499)	60.96 (2.400)
52	66.01 (2.599)	63.50 (2.500)
54	68.55 (2.699)	66.04 (2.600)
56	71.09 (2.799)	68.58 (2.700)
58	73.63 (2.899)	71.12 (2.800)
60	76.17 (2.999)	73.66 (2.900)
62	78.71 (3.099)	76.20 (3.000)
64	81.25 (3.199)	78.74 (3.100)
66	83.79 (3.299)	81.28 (3.200)
68	86.33 (3.399)	83.82 (3.300)
70	88.87 (3.499)	86.36 (3.400)

Circuits	Dimension A	Dimension B
72	91.41 (3.599)	88.90 (3.500)
74	93.95 (3.699)	91.44 (3.600)
76	96.49 (3.799)	93.98 (3.700)
78	99.03 (3.899)	96.52 (3.800)
80	101.57 (3.999)	99.06 (3.900)
82	104.11 (4.099)	101.60 (4.000)
84	106.65 (4.199)	104.14 (4.100)
86	109.19 (4.299)	106.68 (4.200)
88	111.73 (4.399)	109.22 (4.300)
90	114.27 (4.499)	111.76 (4.400)
92	116.81 (4.599)	114.30 (4.500)
94	119.35 (4.699)	116.84 (4.600)
96	121.89 (4.799)	119.38 (4.700)
98	124.43 (4.899)	121.92 (4.800)
100	126.97 (4.999)	124.46 (4.900)
102	129.51 (5.099)	127.00 (5.000)

Circuits	Dimension A	Dimension B
104	132.05 (5.199)	129.54 (5.100)
106	134.59 (5.299)	132.08 (5.200)
108	137.13 (5.399)	134.62 (5.300)
110	139.67 (5.499)	137.16 (5.400)
112	142.21 (5.599)	139.70 (5.500)
114	144.75 (5.699)	142.24 (5.600)
116	147.29 (5.799)	144.78 (5.700)
118	149.83 (5.899)	147.32 (5.800)
120	152.37 (5.999)	149.86 (5.900)
122	154.91 (6.099)	152.40 (6.000)
124	157.45 (6.199)	154.94 (6.100)
126	159.99 (6.299)	157.48 (6.200)
128	162.53 (6.399)	160.02 (6.300)
130	165.07 (6.499)	162.56 (6.400)

Plating Option	Order No.
150µ" Tin/Lead	• 15-38-2XXX
Replace XXX with no. of circuits, 008-130	

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PCB Connector

7990-NA Dual Row Right Angle

Features and Benefits

- Sizes 8 to 130 circuits
- Polarization slots guide connector over mating headers
- Staggered mating depth of contact lowers initial mating force
- Back row of PC tails slightly longer to ease board loading
- Positive pin stop to prevent shorting between rows
- PC tails locked into housing

Reference Information

Product Specification: PS-7990
UL File No.: E29179 (H)
CSA File No.: LR19980A
Mates With: 70204
Designed In: Inches

Electrical

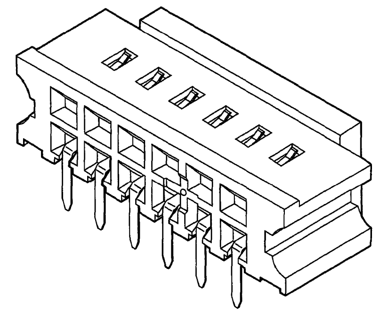
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 100K MΩ min.

Mechanical

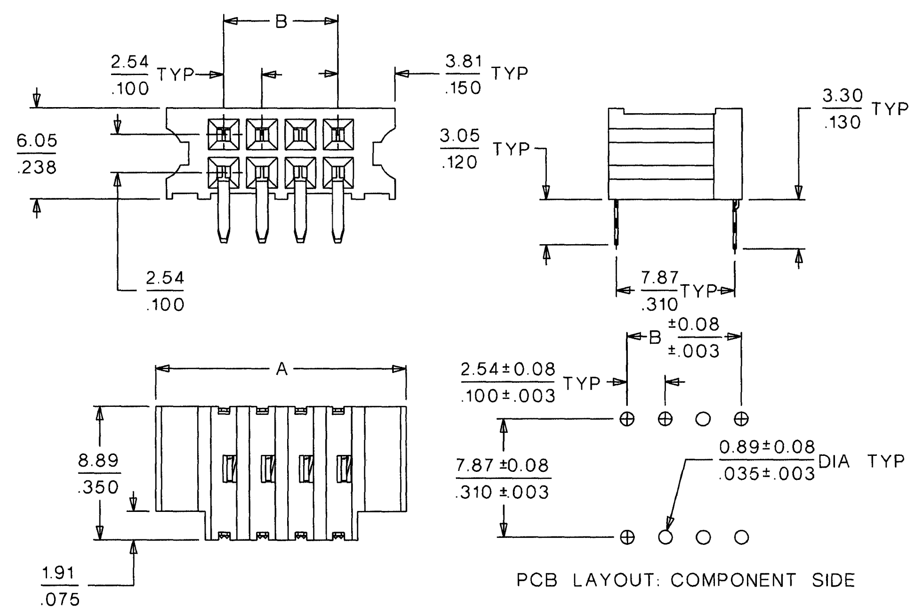
Contact Insertion Force: 227g (0.5 lb)
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead

Physical

Housing: High-temperature thermoplastic LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: 150µ" Tin/Lead
Temperature: -40 to +105°C



Not For Use With Molex C-Grid III™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B	Circuits	Dimension A	Dimension B	Circuits	Dimension A	Dimension B	Circuits	Dimension A	Dimension B
8	15.24 (.600)	7.62 (.300)	40	55.88 (2.200)	48.26 (1.900)	72	96.52 (3.800)	88.90 (3.500)	104	137.16 (5.400)	129.54 (5.100)
10	17.78 (.700)	10.16 (.400)	42	58.42 (2.300)	50.80 (2.000)	74	99.06 (3.900)	91.44 (3.600)	106	139.70 (5.500)	132.08 (5.200)
12	20.32 (.800)	12.70 (.500)	44	60.96 (2.400)	53.34 (2.100)	76	101.60 (4.000)	93.98 (3.700)	108	142.24 (5.600)	134.62 (5.300)
14	22.86 (.900)	15.24 (.600)	46	63.50 (2.500)	55.88 (2.200)	78	104.14 (4.100)	96.52 (3.800)	110	144.78 (5.700)	137.16 (5.400)
16	25.40 (1.000)	17.78 (.700)	48	66.04 (2.600)	58.42 (2.300)	80	106.68 (4.200)	99.06 (3.900)	112	147.32 (5.800)	139.70 (5.500)
18	27.94 (1.100)	20.32 (.800)	50	68.58 (2.700)	60.96 (2.400)	82	109.22 (4.300)	101.60 (4.000)	114	149.86 (5.900)	142.24 (5.600)
20	30.48 (1.200)	22.86 (.900)	52	71.12 (2.800)	63.50 (2.500)	84	111.76 (4.400)	104.14 (4.100)	116	152.40 (6.000)	144.78 (5.700)
22	33.02 (1.300)	25.40 (1.000)	54	73.66 (2.900)	66.04 (2.600)	86	114.30 (4.500)	106.68 (4.200)	118	154.94 (6.100)	147.32 (5.800)
24	35.56 (1.400)	27.94 (1.100)	56	76.20 (3.000)	68.58 (2.700)	88	116.84 (4.600)	109.22 (4.300)	120	157.48 (6.200)	149.86 (5.900)
26	38.10 (1.500)	30.48 (1.200)	58	78.74 (3.100)	71.12 (2.800)	90	119.38 (4.700)	111.76 (4.400)	122	160.02 (6.300)	152.40 (6.000)
28	40.64 (1.600)	33.02 (1.300)	60	81.28 (3.200)	73.66 (2.900)	92	121.92 (4.800)	114.30 (4.500)	124	162.56 (6.400)	154.94 (6.100)
30	43.18 (1.700)	33.56 (1.400)	62	83.82 (3.300)	76.20 (3.000)	94	124.46 (4.900)	116.84 (4.600)	126	165.10 (6.500)	157.48 (6.200)
32	45.72 (1.800)	38.10 (1.500)	64	86.36 (3.400)	78.74 (3.100)	96	127.00 (5.000)	119.38 (4.700)	128	167.64 (6.600)	160.02 (6.300)
34	48.26 (1.900)	40.64 (1.600)	66	88.90 (3.500)	81.28 (3.200)	98	129.54 (5.100)	121.92 (4.800)	130*	170.18 (6.700)	162.56 (6.400)
36	50.80 (2.000)	43.18 (1.700)	68	91.44 (3.600)	83.82 (3.300)	100	132.08 (5.200)	124.46 (4.900)			
38	53.34 (2.100)	45.72 (1.800)	70	93.98 (3.700)	86.36 (3.400)	102	134.62 (5.300)	127.00 (5.000)			

Plating Option	Order No.
150µ" Tin/Lead	• 15-38-3XXX
Replace XXX with no. of circuits, 008-130	

• US Standard Product, available through Molex franchised distributors

* Note: For 130 circuit part see Engineering Series 70057

FEATURES AND SPECIFICATIONS

molex 2.54mm (.100") Pitch C-Grid® Receptacle

71307

Dual Row, Right Angle SMT

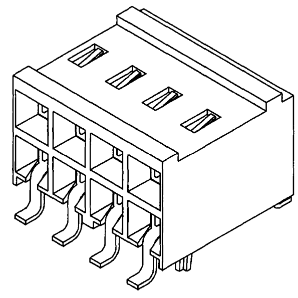
Features and Benefits
- Sizes 8 to 80 circuits
- Designed for perpendicular board stacking
- Dual beam box contact
- Staggered mating depth to lower initial insertion force
- Positive pin stop to prevent shorting between rows

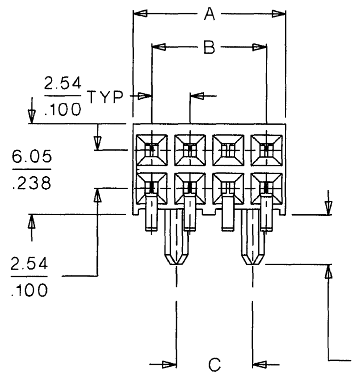
Reference Information
Product Specification: PS-71307
Packaging: Tube
Designed In: Inches

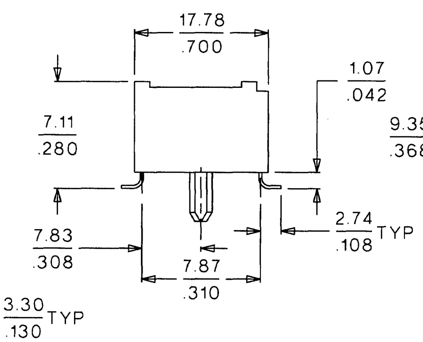
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1 by 10^5 MΩ min.

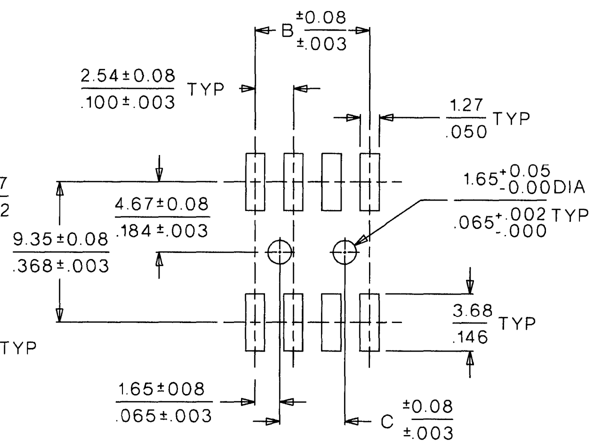
Mechanical
Contact Insertion Force: 227g (0.5 lb)
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 25 cycles Tin/Lead

Physical
Housing: High-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C









PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 1.60 / .063

ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
8	10.13 (.399)	7.62 (.300)
10	12.67 (.499)	10.16 (.400)
12	15.21 (.599)	12.70 (.500)
14	17.75 (.699)	15.24 (.600)
16	20.29 (.799)	17.78 (.700)
18	22.83 (.899)	20.32 (.800)
20	25.37 (.999)	22.86 (.900)
22	27.91 (1.099)	25.40 (1.000)
24	30.45 (1.199)	27.94 (1.100)
26	32.99 (1.299)	30.48 (1.200)
28	35.53 (1.399)	33.02 (1.300)

Circuits	Dimension A	Dimension B
30	38.07 (1.499)	33.56 (1.400)
32	40.61 (1.599)	38.10 (1.500)
34	43.15 (1.699)	40.64 (1.600)
36	45.69 (1.799)	43.18 (1.700)
38	48.23 (1.899)	45.72 (1.800)
40	50.77 (1.999)	48.26 (1.900)
42	53.31 (2.099)	50.80 (2.000)
44	55.85 (2.199)	53.34 (2.100)
46	58.39 (2.299)	55.88 (2.200)
48	60.93 (2.399)	58.42 (2.300)
50	63.47 (2.499)	60.96 (2.400)

Circuits	Dimension A	Dimension B
52	66.01 (2.599)	63.50 (2.500)
54	68.55 (2.699)	66.04 (2.600)
56	71.09 (2.799)	68.58 (2.700)
58	73.63 (2.899)	71.12 (2.800)
60	76.17 (2.999)	73.66 (2.900)
62	78.71 (3.099)	76.20 (3.000)
64	81.25 (3.199)	78.74 (3.100)
66	83.79 (3.299)	81.28 (3.200)
68	86.33 (3.399)	83.82 (3.300)
70	88.87 (3.499)	86.36 (3.400)
72	91.41 (3.599)	88.90 (3.500)

Circuits	Dimension A	Dimension B
74	93.95 (3.699)	91.44 (3.600)
76	96.49 (3.799)	93.98 (3.700)
78	99.03 (3.899)	96.52 (3.800)
80	101.57 (3.999)	99.06 (3.900)

Plating Option	Order No.
150µ" Tin/Lead	15-91-3XX9
Replace XX with no. of circuits, 08-80 (even only)	

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 8 to 130 circuits
- Early entry contact provides .040" additional gold wipe on male post
- Designed for perpendicular board stacking
- Stackable end-to-end
- Flangeless with lower row pin stop offered, contact factory
- Closed bottom insulator to prevent solder wicking

Reference Information
Product Specification: PS-71973
Packaging: Tube
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

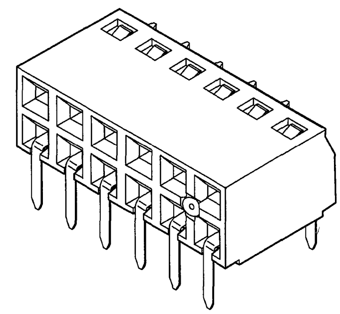
Mechanical
Contact Insertion Force: 272g (0.6 lb)
Contact Retention to Housing: 1.1kg (2.5 lb)
Mating Force: 136g (0.3 lb) per contact
Normal Force: 100g
Durability: 50 cycles Gold

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

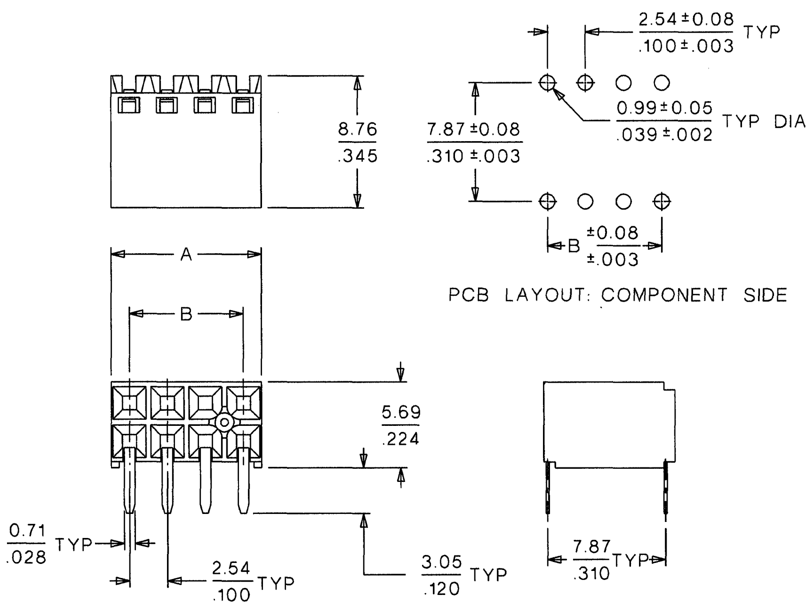
2.54mm (.100") Pitch C-Grid® PCB Connector

71973

Dual Row, Right Angle Early Entry Receptacle Flangeless



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
8	10.03 (.395)	7.62 (.300)
10	12.57 (.495)	10.16 (.400)
12	15.11 (.595)	12.70 (.500)
14	17.65 (.695)	15.24 (.600)
16	20.19 (.795)	17.78 (.700)
18	22.73 (.895)	20.32 (.800)
20	25.27 (.995)	22.86 (.900)
22	27.81 (1.095)	25.40 (1.000)
24	30.35 (1.195)	27.94 (1.100)
26	32.89 (1.295)	30.48 (1.200)
28	35.43 (1.395)	33.02 (1.300)
30	37.97 (1.495)	35.56 (1.400)
32	40.51 (1.595)	38.10 (1.500)
34	43.05 (1.695)	40.64 (1.600)
36	45.59 (1.795)	43.18 (1.700)
38	48.13 (1.895)	45.72 (1.800)
40	50.67 (1.995)	48.26 (1.900)

Circuits	Dimension A	Dimension B
42	53.21 (2.095)	50.80 (2.000)
44	55.75 (2.195)	53.34 (2.100)
46	58.29 (2.295)	55.88 (2.200)
48	60.83 (2.395)	58.42 (2.300)
50	63.37 (2.495)	60.96 (2.400)
52	65.91 (2.595)	63.50 (2.500)
54	68.45 (2.695)	66.04 (2.600)
56	70.99 (2.795)	68.58 (2.700)
58	73.53 (2.895)	71.12 (2.800)
60	76.07 (2.995)	73.66 (2.900)
62	78.61 (3.095)	76.20 (3.000)
64	81.15 (3.195)	78.74 (3.100)
66	83.69 (3.295)	81.28 (3.200)
68	86.23 (3.395)	83.82 (3.300)
70	88.77 (3.495)	86.36 (3.400)
72	91.31 (3.595)	88.90 (3.500)
74	93.85 (3.695)	91.44 (3.600)

Circuits	Dimension A	Dimension B
76	96.39 (3.795)	93.98 (3.700)
78	98.93 (3.895)	96.52 (3.800)
80	101.47 (3.995)	99.06 (3.900)
82	104.01 (4.095)	101.60 (4.000)
84	106.55 (4.195)	104.14 (4.100)
86	109.09 (4.295)	106.68 (4.200)
88	111.63 (4.395)	109.22 (4.300)
90	114.17 (4.495)	111.76 (4.400)
92	116.71 (4.595)	114.30 (4.500)
94	119.25 (4.695)	116.84 (4.600)
96	121.79 (4.795)	119.38 (4.700)
98	124.46 (4.895)	121.92 (4.800)
100	126.87 (4.995)	124.46 (4.900)
102	129.41 (5.095)	127.00 (5.000)
104	131.95 (5.195)	129.54 (5.100)
106	134.49 (5.295)	132.08 (5.200)
108	137.03 (5.395)	134.62 (5.300)

Circuits	Dimension A	Dimension B
110	139.57 (5.495)	137.16 (5.400)
112	142.11 (5.595)	139.70 (5.500)
114	144.65 (5.695)	142.24 (5.600)
116	147.19 (5.795)	144.78 (5.700)
118	149.73 (5.895)	147.32 (5.800)
120	152.27 (5.995)	149.86 (5.900)
122	154.81 (6.095)	152.40 (6.000)
124	157.35 (6.195)	154.94 (6.100)
126	159.89 (6.295)	157.48 (6.200)
128	162.43 (6.395)	160.02 (6.300)
130	164.97 (6.495)	162.56 (6.400)

Plating Option	Order No.
15µ" Gold	71973-02XX
30µ" Gold	71973-03XX
50µ" Gold	71973-04XX

Replace XX with no. of circuits per row, example: 20 circuit = 71973-0210

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Receptacle

71979 Dual Row, Right Angle SMT

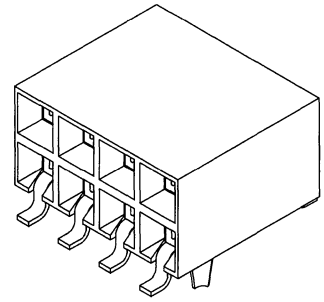
Features and Benefits
- Sizes 4 to 130 circuits
- Early entry contact provides .040" additional Gold wipe on male post
- Designed for perpendicular board stacking
- Stackable end-to-end
- Flangeless with lower row pin stop offered, contact factory

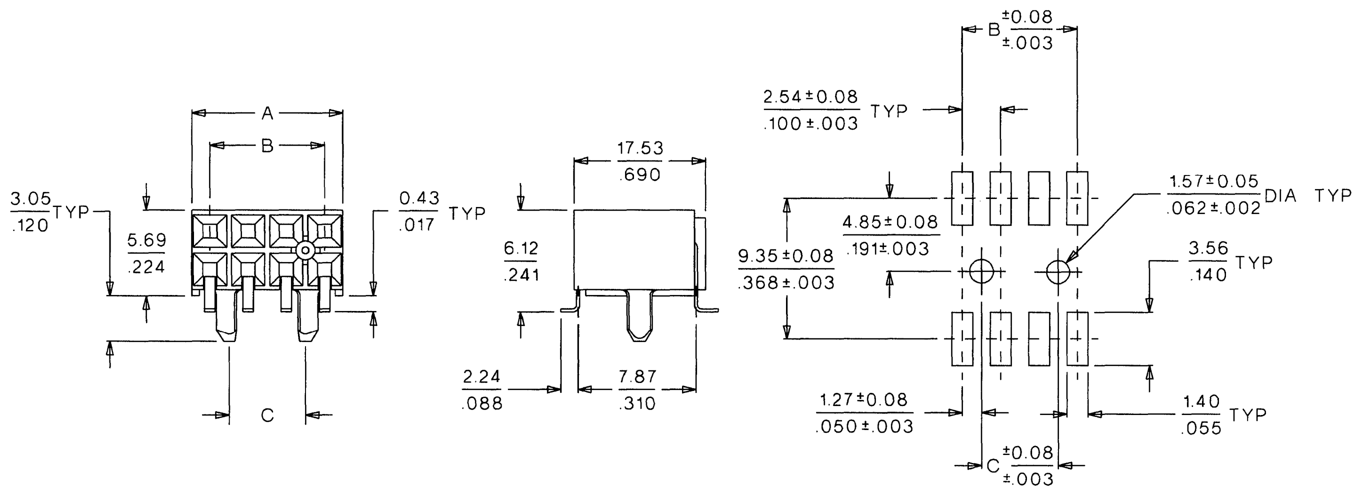
Reference Information
Packaging: Tube
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1 by 10^5 MΩ min.

Mechanical
Contact Insertion Force: 227g (0.5 lb)
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 50 cycles Gold

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Temperature: -40 to +105°C





PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

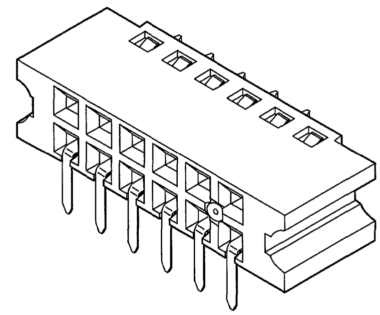
Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® PCB Connector

71973

Dual Row, Right Angle Early Entry Receptacle With Flange



Features and Benefits
- Sizes 8 to 130 circuits
- Early entry contact provides .040" additional gold wipe on male post
- Designed for perpendicular board stacking
- Lower row pin stop offered, contact factory
- Closed bottom insulator to prevent solder wicking
- Flange slides over guide ears on header for blind mate applications

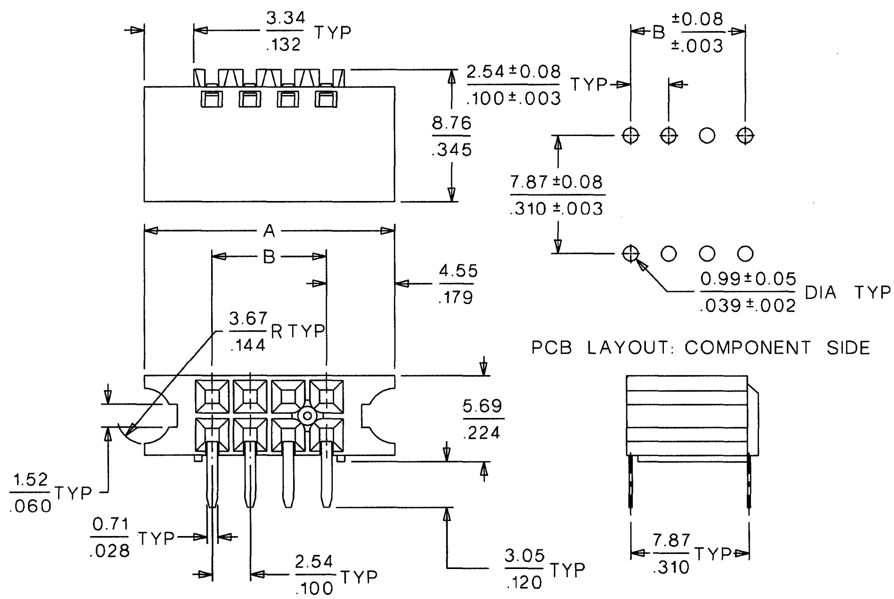
Reference Information
Packaging: Tube
Mates With: 70204
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 272g (0.6 lb)
Contact Retention to Housing: 1.1kg (2.5 lb)
Mating Force: 136g (0.3 lb) per contact
Normal Force: 100g
Durability: 50 cycles Gold

Physical
Housing: High-temperature thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension A	Dimension B
8	16.72 (.588)	7.62 (.300)
10	19.26 (.688)	10.16 (.400)
12	21.80 (.788)	12.70 (.500)
14	24.34 (.888)	15.24 (.600)
16	26.88 (.988)	17.78 (.700)
18	29.42 (1.088)	20.32 (.800)
20	31.96 (1.188)	22.86 (.900)
22	34.50 (1.288)	25.40 (1.000)
24	37.04 (1.388)	27.94 (1.100)
26	39.58 (1.488)	30.48 (1.200)
28	42.12 (1.588)	33.02 (1.300)
30	44.66 (1.688)	35.56 (1.400)
32	47.20 (1.788)	38.10 (1.500)
34	49.74 (1.888)	40.64 (1.600)
36	52.28 (1.988)	43.18 (1.700)
38	54.82 (2.088)	45.72 (1.800)
40	57.36 (2.188)	48.26 (1.900)
42	59.90 (2.288)	50.80 (2.000)
44	62.44 (2.388)	53.34 (2.100)
46	64.98 (2.488)	55.88 (2.200)
48	67.52 (2.588)	58.42 (2.300)
50	70.06 (2.688)	60.96 (2.400)
52	72.60 (2.788)	63.50 (2.500)
54	75.14 (2.888)	66.04 (2.600)
56	77.68 (2.988)	68.58 (2.700)
58	80.22 (3.088)	71.12 (2.800)
60	82.76 (3.188)	73.66 (2.900)
62	85.30 (3.288)	76.20 (3.000)
64	87.84 (3.388)	78.74 (3.100)
66	90.38 (3.488)	81.28 (3.200)
68	92.92 (3.588)	83.82 (3.300)
70	95.46 (3.688)	86.36 (3.400)
72	98.00 (3.788)	88.90 (3.500)
74	100.54 (3.888)	91.44 (3.600)
76	103.08 (3.988)	93.98 (3.700)
78	105.62 (4.088)	96.52 (3.800)
80	108.16 (4.188)	99.06 (3.900)
82	110.70 (4.288)	101.60 (4.000)
84	113.24 (4.388)	104.14 (4.100)
86	115.78 (4.488)	106.68 (4.200)
88	118.32 (4.588)	109.22 (4.300)
90	120.86 (4.688)	111.76 (4.400)
92	123.40 (4.788)	114.30 (4.500)
94	125.94 (4.888)	116.84 (4.600)
96	128.48 (4.988)	119.38 (4.700)
98	131.02 (5.088)	121.92 (4.800)
100	133.56 (5.188)	124.46 (4.900)
102	136.10 (5.288)	127.00 (5.000)
104	138.64 (5.388)	129.54 (5.100)
106	141.18 (5.488)	132.08 (5.200)
108	143.72 (5.588)	134.62 (5.300)
110	146.26 (5.688)	137.16 (5.400)
112	148.80 (5.788)	139.70 (5.500)
114	151.34 (5.888)	142.24 (5.600)
116	153.88 (5.988)	144.78 (5.700)
118	156.42 (6.088)	147.32 (5.800)
120	158.96 (6.188)	149.86 (5.900)
122	161.50 (6.288)	152.40 (6.000)
124	164.04 (6.388)	154.94 (6.100)
126	166.58 (6.488)	157.48 (6.200)
128	169.12 (6.588)	160.02 (6.300)
130	171.66 (6.688)	162.56 (6.400)

Plating Option	Order No.
15μ" Gold	71973-10XX
30μ" Gold	71973-11XX
50μ" Gold	71973-12XX

Replace XX with no. of circuits per row, example: 20 circuit = 71973-1210

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Shunt/Jumper

7859

2-Circuit

Features and Benefits

- Easily applied without soldering and reliable without accidental disconnects
- Low cost alternative to DIP switches
- Increases current flow and decreases resistance vs DIP switches
- Dual beam terminals: 2 points of contact per pin
- Open and closed top versions
- Stackable end-to-end and side-to-side

Reference Information

Product Specification: PS-7859
Packaging: Bulk
UL File No.: E29179 (H)
CSA File No.: LR19980A
Designed In: Inches

Electrical

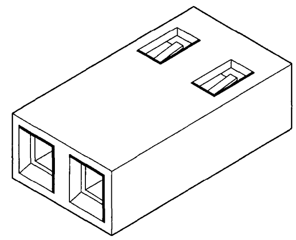
Voltage: 250V
Current: 5.0A
Contact Resistance: 15mΩ max. Gold
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100K MΩ min.

Mechanical

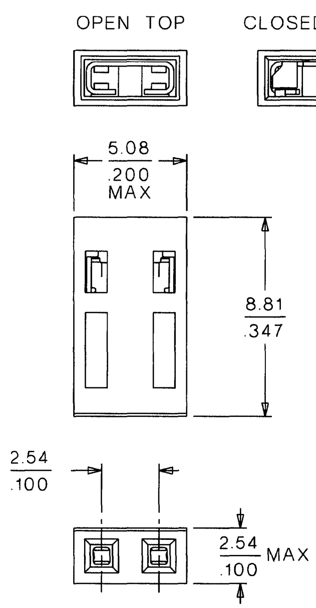
Contact Retention to Housing: 1.8kg (4 lb)
Mating Force: 2.7kg (6 lb)
Unmating Force: 0.5kg (1 lb)
Normal Force: 100g (0.22 lb)
Durability: 25 cycles Tin/Lead and 200 cycles Gold

Physical

Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C



Not For Use With C-Grid III™ Components



ORDERING INFORMATION

Open Top		Closed Top	
Order No.	**Plating**	**Order No.**	**Plating**
• 15-29-1024	15μ" Gold	• 15-29-1025	15μ" Gold
• 15-29-1026	30μ" Gold	• 15-29-1027	30μ" Gold
• 15-38-1024	150μ" Tin/Lead	• 15-38-1026	150μ" Tin/Lead

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid® Ultra Shunt

87092 Ultra Low Profile

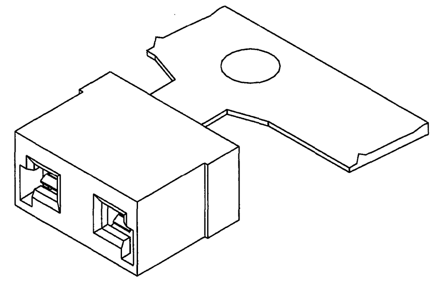
Features and Benefits
- Fully stackable
- Delivered on break-off metal carrier strips for easy handling
- Recommended to be applied after mating header is soldered

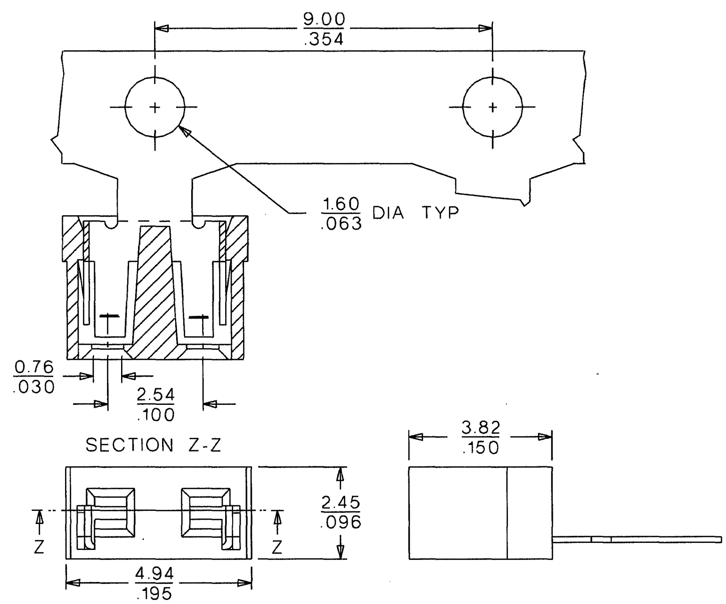
Reference Information
Product Specification: PS-87092
Packaging: Loose or reel
CSA File No.: LR19980
Mates With: .063 and 0.50mm (.025 and .020") square or round pins
Designed In: Inches

Electrical
Current: 3.0A Gold; 1.5A Tin
Contact Resistance: 15mΩ max. Gold; 20mΩ max. Tin
Dielectric Withstanding Voltage: 2000V
Insulation Resistance: 20 MΩ min.

Mechanical
Mating Force: 500g (1.1 lb) max.
Unmating Force: 40g (0.088 lb) min.
Durability: 50 cycles Gold and 20 cycles Tin

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +125°C
Height: 3.70mm (.146") max.





ORDERING INFORMATION

Order No.		Plating No.
On Reels	Loose	
87092-3001	87092-3011	1
87092-3002	87092-3012	2
87092-3003	87092-3013	3
87092-3004	87092-3014	4

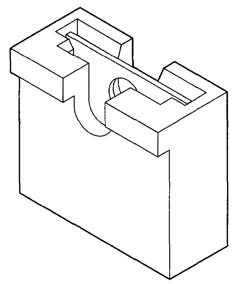
Plating No. 1: 5.00µm (200µ") min. Tin over, 1.27µm (50µ") min. Copper overall
Plating No. 2: 0.38µm (15µ") min. Gold in contact area over 0.76µm (30µ") min. Nickel underplate
Plating No. 3: 0.76µm (30µ") min. Gold in contact area over 0.76µm (30µ") min. Nickel underplate
Plating No. 4: Gold flash 0.0254µm (1µ") min. over 1.27µm (50µ") min. Nickel underplate overall

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch C-Grid® Micro Shunt**

90059

Low Profile



Features and Benefits

- Fully stackable
- Center probe hole—for continuity testing and easy pull-off
- Color-coded housings for plating and identification
- Delivered on break-off carrier strips for easy handling (10 per strip)
- Recommended to be applied after mating header is soldered

Reference Information

Product Specification: PS-90059
Packaging: Strips
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical

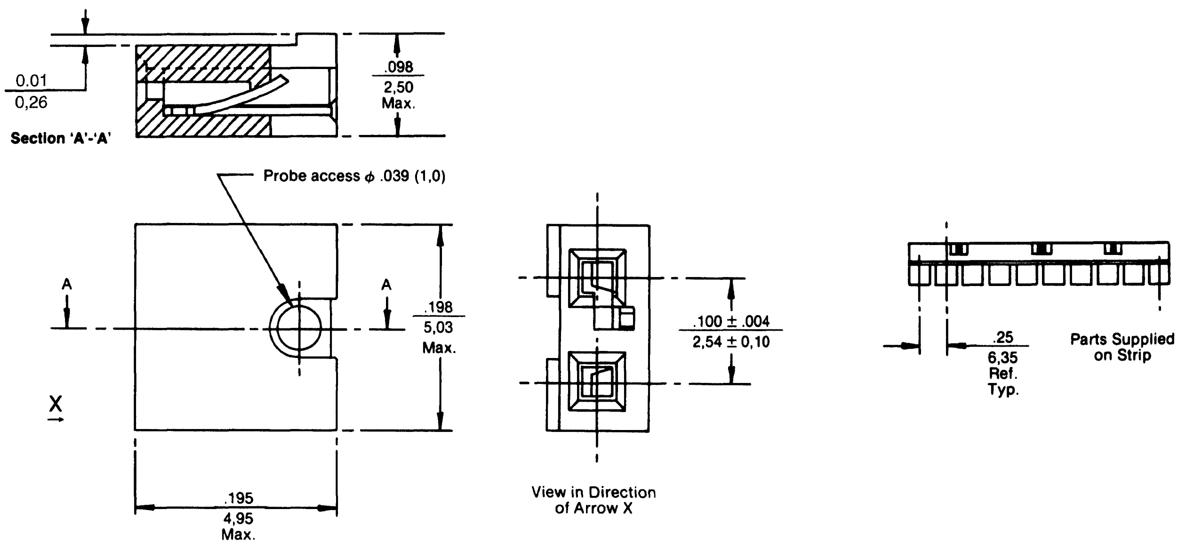
Voltage: 350V
Current: 3.0A Gold; 1.5A Tin
Contact Resistance: 12mΩ max. Gold; 15mΩ max. Tin
Dielectric Withstanding Voltage: 2000V
Insulation Resistance: 2000 MΩ max.

Mechanical

Mating Force: 7N max.
Unmating Force: 0.3N Gold; 0.5N Tin min.
Durability: 50 cycles Gold and 20 cycles Tin

Physical

Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +125°C
Height: 4.95mm (.195") max.



ORDERING INFORMATION

Order No.	Plating No.	Color
• 90059-0009*	1	White
• 90059-0007*	2	Black
90059-0013	3	Black
90059-0014	4	White
90059-0012	5	White

• US Standard Product, available through Molex franchised distributors
* Preferred Version In Europe/Americas
Plating No. 1: 0.38μm (15μ") Gold in contact area over 0.76μm (30μ") Nickel with Gold flash overall
Plating No. 2: 5.0μm (200μ") min. Tin over 0.2μm (8μ") min. Copper
Plating No. 3: 0.9μm (35μ") min. Pretinned
Plating No. 4: 0.1μm (4μ") min. Gold over 1.0μm (40μ") min. Nickel overall
Plating No. 5: 0.76μm (30μ") Gold over 1.27*μm (50μ") Nickel in contact area with 0.2μm (8μ") min. Nickel overall

FEATURES AND SPECIFICATIONS

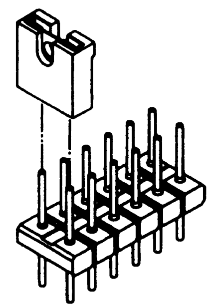
2.54mm (.100") Pitch C-Grid®
Header for Micro Shunt
5547 Dual Row
5548 Triple Row
Low Profile

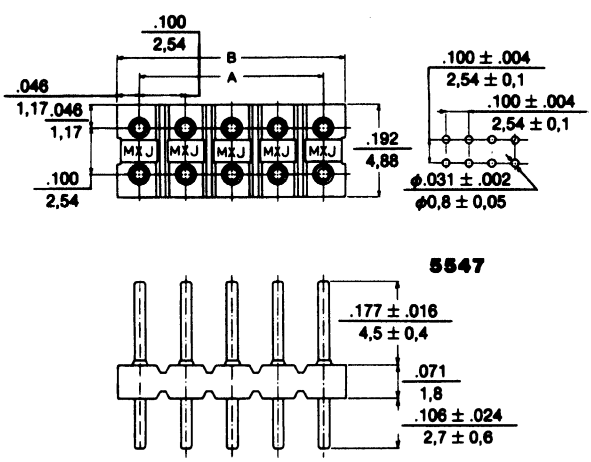
Features and Benefits
- Round wire pins
- Breakaway to smaller sizes

Reference Information
Packaging: Bag
UL File No.: E29179 (H)
Mates With: 90059
Designed In: Millimeters

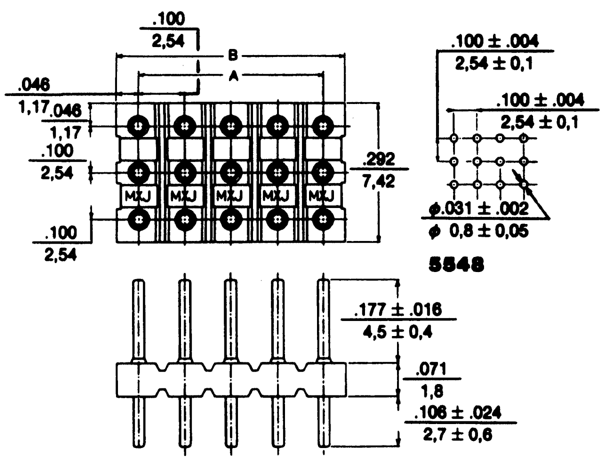
Electrical
Voltage: 250V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C
Mating Pin Length: 4.50mm (.177") max.





5547



5548

ORDERING INFORMATION AND DIMENSIONS

5547—Dual Row

Circuits	Order No.	Dimension A	Dimension B
4	39-27-4042	2.54 (.100)	4.88 (.192)
6	39-27-4062	5.08 (.200)	7.42 (.292)
8	39-27-4082	7.62 (.300)	9.96 (.392)
10	39-27-4102	10.16 (.400)	12.50 (.492)
12	39-27-4122	12.70 (.500)	15.04 (.592)
14	39-27-4142	15.24 (.600)	17.58 (.692)
16	39-27-4162	17.78 (.700)	20.12 (.792)
18	39-27-4182	20.32 (.800)	22.66 (.892)
20	39-27-4202	22.86 (.900)	25.20 (.982)
22	39-27-4222	25.40 (1.000)	27.74 (1.092)
24	39-27-4242	27.94 (1.100)	30.28 (1.192)
26	39-27-4262	30.48 (1.200)	32.82 (1.292)
28	39-27-4282	33.02 (1.300)	35.36 (1.392)
30	39-27-4302	35.56 (1.400)	37.90 (1.492)
32	39-27-4322	38.10 (1.500)	40.44 (1.592)
34	39-27-4342	40.64 (1.600)	42.98 (1.692)

5548—Triple Row

Circuits	Order No.	Dimension A	Dimension B
9	39-27-4094	5.08 (.200)	7.42 (.292)
12	39-27-4124	7.62 (.300)	9.96 (.392)
15	39-27-4154	10.16 (.400)	12.50 (.492)
18	39-27-4184	12.70 (.500)	15.04 (.592)
21	39-27-4214	15.24 (.600)	17.58 (.692)
24	39-27-4244	17.78 (.700)	20.12 (.792)
27	39-27-4274	20.32 (.800)	22.66 (.892)
30	39-27-4304	22.86 (.900)	25.20 (.992)
36	39-27-4364	27.94 (1.100)	30.28 (1.192)

INTRODUCTION

The C-Grid III 2.54mm (.100") pitch post and receptacle interconnection system offers complete design flexibility and modular components that provide the widest range of electronic packaging alternatives. C-Grid III is a highly versatile 2.54mm interconnection system offering unique design features:

Surface Treatment

C-Grid III is available in 3 standard platings. Two performance levels of selective Gold and one of Tin/Lead, all over a Nickel-plated substrate, guarantee the optimum ration of quality versus cost for your application.

Flexibility

C-Grid III has been developed to meet the latest industry requirements. Two different termination techniques, solder tail, crimp and insulation displacement, are combined in a complete interconnection system which is based on north/south contact orientation. Headers will accept both discrete wire and ribbon cable connectors.

Advantage by Design

C-Grid III box contact design employs the same mating concept with all termination techniques. A uniform locking system on all contacts allows full interchangeability inside different housing styles.

Interchangeability

C-Grid III is fully compatible with the industry standard DIN 41651 as well as the French norm HE-13/14. Moreover, it is fully intermateable/interchangeable with Molex's QF-50 product range.

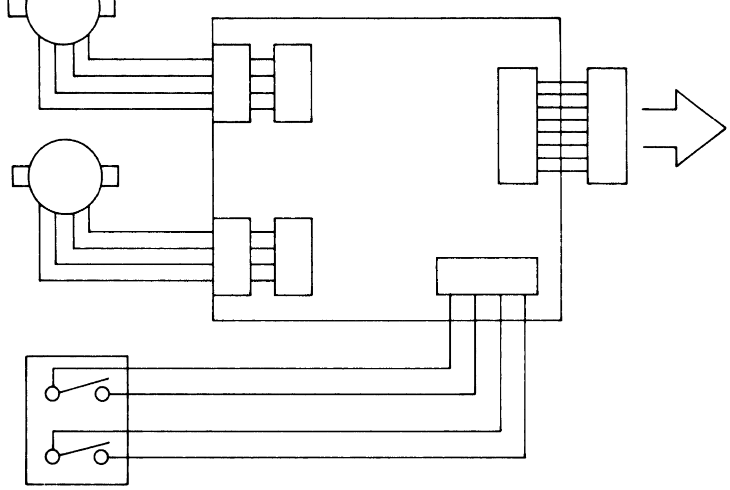
Lower Applied Cost

C-Grid III system incorporates a wide range of advanced application tooling, from manually operated hand tools to semi-automatic harness making machines.

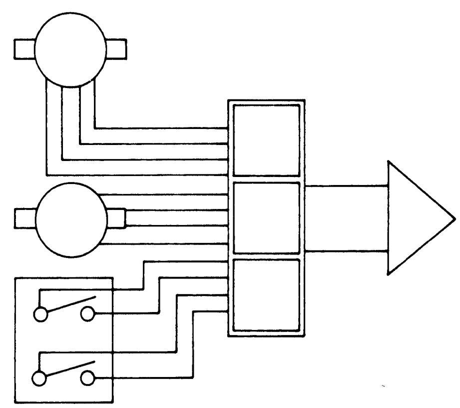
C-Grid III offers the widest range of interconnection packaging alternatives in the electronic market today.

Not For Use With Molex C-Grid SL™ Components

PC Board with Four Interconnections



C-Grid III Modules Clustered in One Header



FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Terminal

90119 Female Crimp

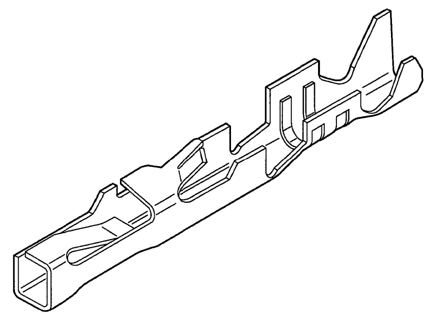
Features and Benefits
- Fully enclosed contact box
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress

Reference Information
Product Specification: PS-99020-0001
Packaging: Reel and loose
Mates With: 0.64mm (.025") square pins
Use With: 90123, 90142, 90143, 90156 and 90160
Designed In: Inches

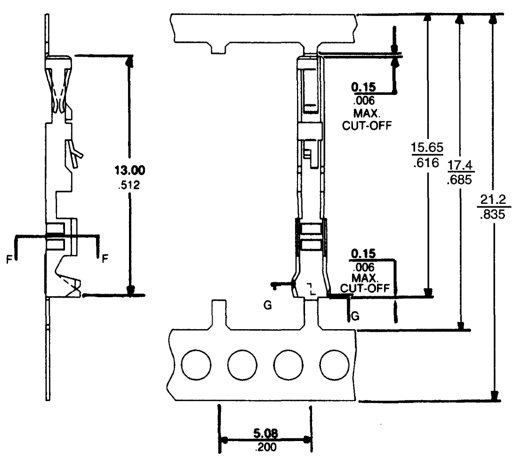
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.

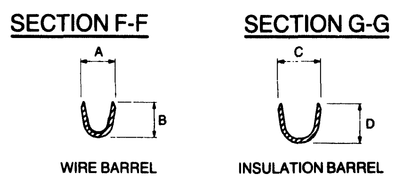
Mechanical
Contact Retention to Housing: 15N (1.5kgf)
Normal Force: 1N

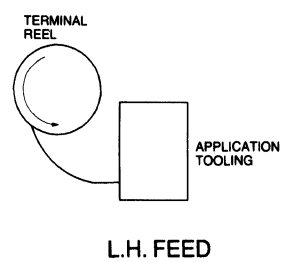
Physical
Contact: Copper Alloy
Plating: See Table
Wire Range: 22 to 24 and 26 to 28 AWG
Wire Insulation Diameter: 1.70mm (.067") max.



Not For Use With Molex C-Grid SL™ Components







ORDERING INFORMATION AND DIMENSIONS

Order No.	Plating Option	Form	Wire Size (AWG)	Insulation Diameter Range	Dimension A	Dimension B	Dimension C	Dimension D
90119-0109	A	On Reel — Left Hand Feed	22-24	1.02/1.47 (.040/.058)	1.70 (.067)	1.70 (.067)	2.10 (.083)	1.90 (.075)
90119-0110	E							
90119-0111	F							
90119-0120	A		26-28	0.76/1.22 (.030/.048)	1.37 (.054)	1.37 (.054)	2.00 (.079)	1.70 (.067)
90119-0121	E							
90119-0122	F							
90119-2109	A	Loose Pieces	22-24	1.02/1.47 (.040/.058)	1.70 (.067)	1.70 (.067)	2.10 (.083)	1.90 (.075)
90119-2110	E							
90119-2111	F							
90119-2120	A		26-28	0.76/1.22 (.030/.048)	1.37 (.054)	1.37 (.054)	2.00 (.079)	1.70 (.067)
90119-2121	E							
90119-2122	F							

For other available versions contact Molex
Plating A: 1.75µm (69µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
▩ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Modular Crimp Connector Housing

90123

Single Row

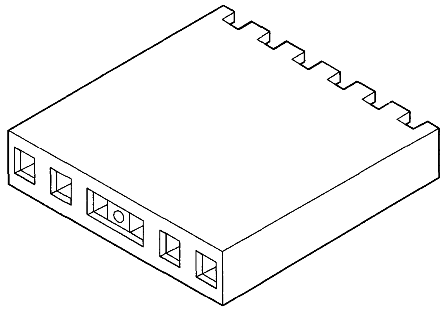
Features and Benefits
- Sizes 2 to 32 circuits
- 2 and 4 polarizing buttons
- Stackable in 2 directions
- No lost end circuits with use of adapters 90136, 90139 and 90140

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: 90120, 90121 and 90136
Use With: 90119, 90139, 90140 and 90296
Designed In: Inches

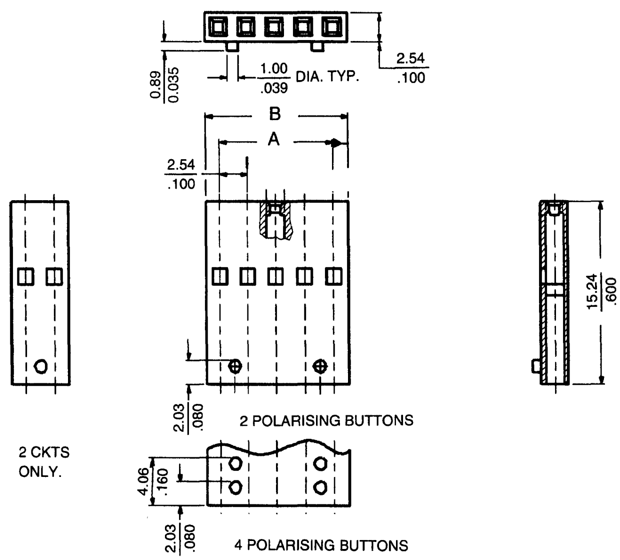
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 15N min.
Normal Force: 1N

Physical
Housing: Black polyphenylene oxide, UL 94V-1
Temperature: -55 to +105°C
Polarization: Use 2 button version only with single row adapter and use 2 and 4 button versions with dual row adapter



Not For Use With Molex C-Grid SL™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	2 Buttons	4 Buttons	A	B
2	90123-0102	90123-0202*	2.54 (.100)	5.08 (.200)
3	90123-0103	90123-0203	5.08 (.200)	7.62 (.300)
4	90123-0104	90123-0204	7.62 (.300)	10.16 (.400)
5	90123-0105	90123-0205	10.16 (.400)	12.70 (.500)
6	90123-0106	90123-0206	12.70 (.500)	15.24 (.600)
7	90123-0107	90123-0207	15.24 (.600)	17.78 (.700)
8	90123-0108	90123-0208	17.78 (.700)	20.32 (.800)
9	90123-0109	90123-0209	20.32 (.800)	22.86 (.900)
10	90123-0110	90123-0210	22.86 (.900)	25.40 (1.000)
12	90123-0112	90123-0212	27.94 (1.100)	30.38 (1.200)
15	90123-0115	90123-0215	35.56 (1.400)	38.10 (1.500)
18	90123-0118	90123-0218	43.18 (1.700)	45.72 (1.800)
20	90123-0120	90123-0220	48.26 (1.900)	50.80 (2.000)
25	90123-0125	90123-0225	60.96 (2.400)	63.50 (2.500)
32	90123-0132	90123-0232	78.74 (3.100)	81.28 (3.200)

* 2 buttons only
For other available circuit sizes contact Molex

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Modular Crimp Connector Housing

90143 Dual Row

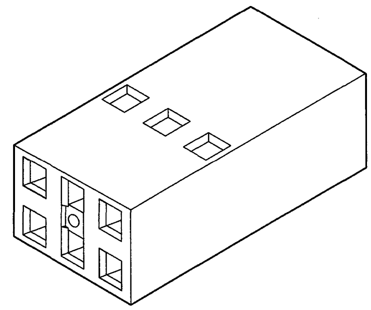
Features and Benefits
- Sizes 4 to 64 circuits
- With and without polarizing buttons
- Stackable end-to-end
- Polarized version for use with dual row adapter 90140
- No lost end circuits with use of adapter 90140

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: 90122, 90130 and 90131
Use With: 90119 and 90290
Designed In: Inches

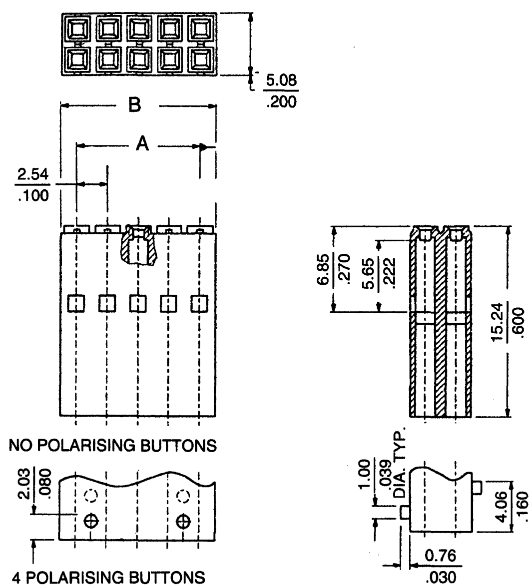
Electrical
Voltage: 350V max.
Current: 3.0A max.
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 15N min.
Normal Force: 1N

Physical
Housing: Black polyphenylene oxide, UL 94V-1
Temperature: -55 to +105°C
Polarization: 4 buttons for use with adapter 90140



Not For Use With Molex C-Grid SL™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	0 Buttons	4 Buttons	A	B
4	90143-0004	90143-0104*	2.54 (.100)	5.08 (.200)
6	90143-0006	90143-0106	5.08 (.200)	7.62 (.300)
8	90143-0008	90143-0108	7.62 (.300)	10.16 (.400)
10	90143-0010	90143-0110	10.16 (.400)	12.70 (.500)
12	90143-0012	90143-0112	12.70 (.500)	15.24 (.600)
14	90143-0014	90143-0114	15.24 (.600)	17.78 (.700)
16	90143-0016	90143-0116	17.78 (.700)	20.32 (.800)
20	90143-0020	90143-0120	22.86 (.900)	25.40 (1.000)
26	90143-0026	90143-0126	30.48 (1.200)	33.02 (1.300)
34	90143-0034	90143-0134	40.64 (1.600)	43.18 (1.700)
40	90143-0040	90143-0140	48.26 (1.900)	50.80 (2.000)
50	90143-0050	90143-0150	60.96 (2.400)	63.50 (2.500)
60	90143-0060	90143-0160	73.66 (2.900)	76.20 (3.000)
64	90143-0064	90143-0164	78.74 (3.100)	81.28 (3.200)

* 0 buttons only
For other available circuit sizes contact Molex

2.54mm (.100") Pitch C-Grid III™ Crimp Connector Housing

90156 Single Row

FEATURES AND SPECIFICATIONS

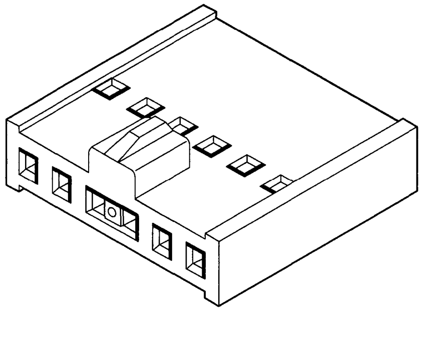
Features and Benefits
- Sizes 2 to 32 circuits
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: 90120, 90121 and 90136
Use With: 90119 and 90290
Designed In: Inches

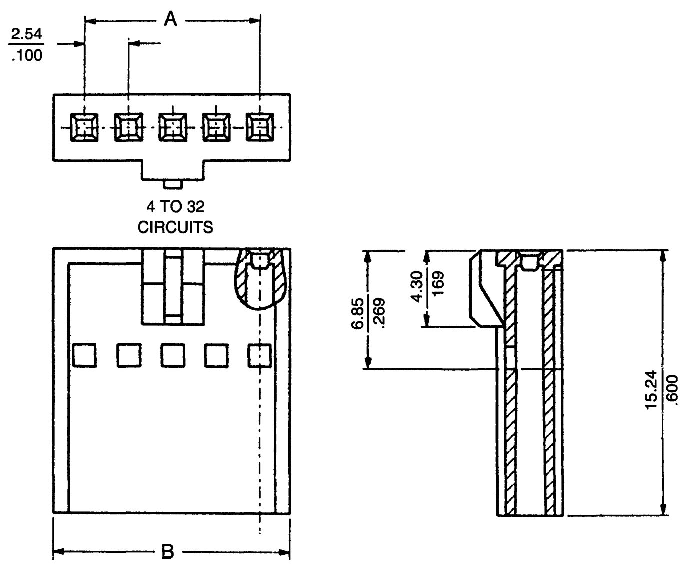
Electrical
Voltage: 350V
Current: 3.0A max.
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 15N min.
Normal Force: 1N

Physical
Housing: Black polyphenylene oxide, UL 94V-1
Temperature: -55 to +105°C



Not For Use With Molex C-Grid SL™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	90156-0142	2.54 (.100)	6.14 (.242)
3	90156-0143	5.08 (.200)	8.68 (.342)
4	90156-0144	7.62 (.300)	11.22 (.442)
5	90156-0145	10.16 (.400)	13.76 (.542)
6	90156-0146	12.70 (.500)	16.30 (.642)
7	90156-0147	15.24 (.600)	18.84 (.742)
8	90156-0148	17.78 (.700)	21.38 (.842)
9	90156-0149	20.32 (.800)	23.92 (.942)
10	90156-0150	22.86 (.900)	26.46 (1.042)
12	90156-0152	27.94 (1.100)	31.54 (1.242)
15	90156-0155	35.56 (1.400)	39.16 (1.542)
18	90156-0158	43.18 (1.700)	46.78 (1.842)
22	90156-0162	53.34 (2.100)	56.94 (2.242)
25	90156-0165	60.96 (2.400)	64.56 (2.542)
30	90156-0170	73.66 (2.900)	77.26 (3.042)
32	90156-0172	78.74 (3.100)	82.34 (3.242)

For other available circuit sizes contact Molex

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Crimp Connector Housing

90142 Dual Row

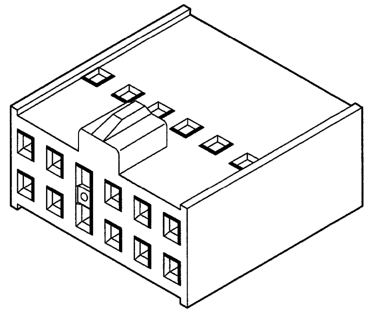
Features and Benefits
- Sizes 6 to 64 circuits
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: 90122, 90130 and 90131
Use With: 90119 and 90290
Designed In: Inches

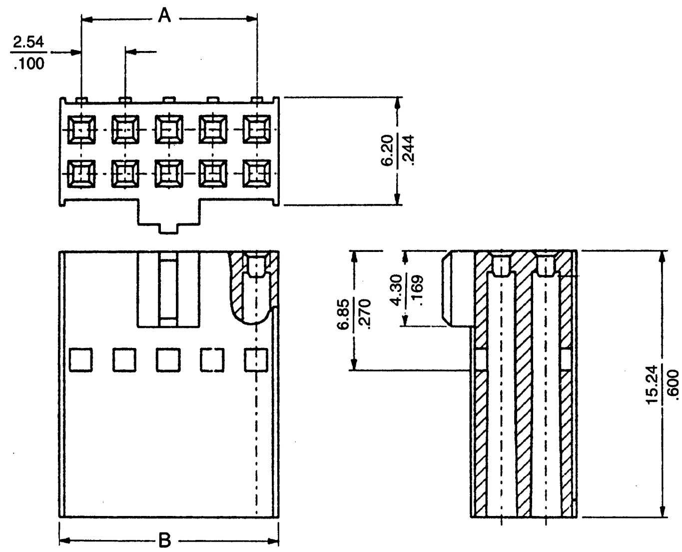
Electrical
Voltage: 350V
Current: 3.0A max.
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 15N min.
Normal Force: 1N

Physical
Housing: Black polyphenylene oxide, UL 94V-1
Temperature: -55 to +105°C



Not For Use With Molex C-Grid SL™ Components



Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
6	90142-0006	5.08 (.200)	7.77 (.306)
8	90142-0008	7.62 (.300)	10.31 (.406)
10	90142-0010	10.16 (.400)	12.85 (.506)
12	90142-0012	12.70 (.500)	15.39 (.606)
14	90142-0014	15.24 (.600)	17.93 (.706)
16	90142-0016	17.78 (.700)	20.47 (.806)
18	90142-0018	20.32 (.800)	23.01 (.906)
20	90142-0020	22.86 (.900)	25.55 (1.006)
24	90142-0024	27.94 (1.100)	30.63 (1.206)
26	90142-0026	30.48 (1.200)	33.17 (1.306)
30	90142-0030	35.56 (1.400)	38.25 (1.506)
34	90142-0034	40.64 (1.600)	43.33 (1.706)
40	90142-0040	48.26 (1.900)	50.95 (2.006)
50	90142-0050	60.96 (2.400)	63.65 (2.506)
60	90142-0060	73.66 (2.900)	76.35 (3.006)
64	90142-0064	78.74 (3.100)	81.43 (3.206)

For other available circuit sizes contact Molex

FEATURES AND SPECIFICATIONS

molex

2.54mm (.100") Pitch C-Grid III™ Crimp Connector Housing

90160 Dual Row

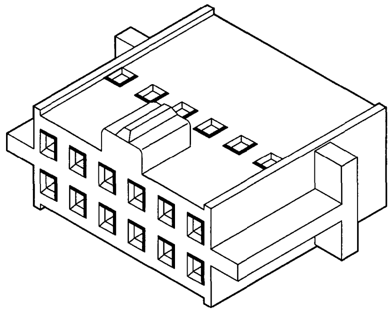
Features and Benefits
- Sizes 8 to 64 circuits
- Locking shoulders according to DIN 41651
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 90130
Use With: 90119 and 90290
Designed In: Inches

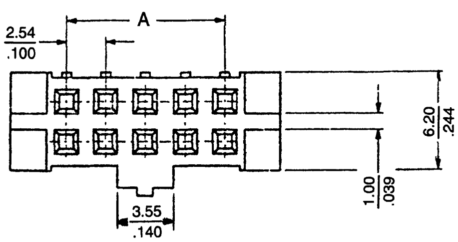
Electrical
Voltage: 350V
Current: 3.0A max.
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

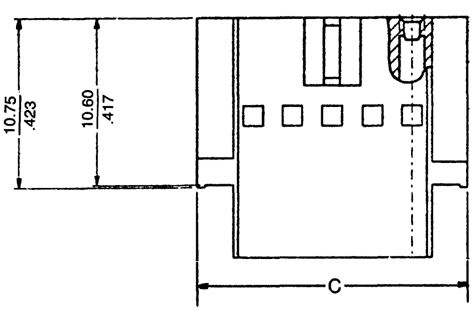
Mechanical
Contact Retention to Housing: 15N min.
Normal Force: 1N

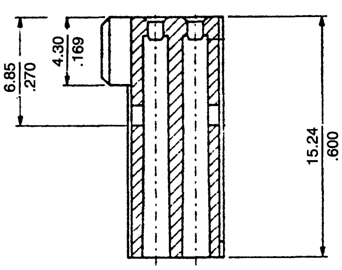
Physical
Housing: Black polyphenylene oxide, UL 94V-1
Temperature: -55 to +105°C



Not For Use With Molex C-Grid SL™ Components







Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
8	90160-0108	7.62 (.300)	14.93 (.588)	14.78 (.582)
10	90160-0110	10.16 (.400)	17.47 (.688)	17.32 (.682)
12	90160-0112	12.70 (.500)	20.01 (.788)	19.86 (.782)
14	90160-0114	15.24 (.600)	22.55 (.888)	22.40 (.882)
16	90160-0116	17.78 (.700)	25.09 (.988)	24.94 (.982)
20	90160-0120	22.86 (.900)	30.17 (1.188)	30.02 (1.182)
26	90160-0126	30.48 (1.200)	37.79 (1.488)	37.64 (1.482)
34	90160-0134	40.64 (1.600)	47.95 (1.888)	47.80 (1.882)
40	90160-0140	48.26 (1.900)	55.57 (2.188)	55.42 (2.182)
50	90160-0150	60.96 (2.400)	68.27 (2.688)	68.12 (2.682)
60	90160-0160	73.66 (2.900)	80.97 (3.188)	80.82 (3.182)
64	90160-0164	78.74 (3.100)	86.05 (3.388)	85.90 (3.382)

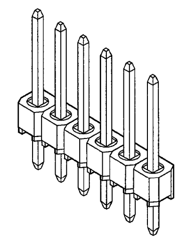
For other available circuit sizes contact Molex

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Header

90120

Single Row Straight



Features and Benefits
- Sizes 2 to 40 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

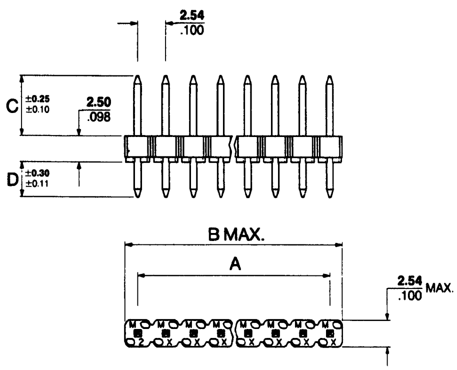
Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

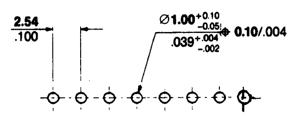
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

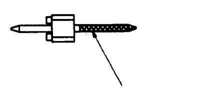
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT



EXTENT OF GOLD PLATE

Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
2	90120-0122	90120-0762	90120-0922	2.54 (.100)	5.08 (.200)
3	90120-0123	90120-0763	90120-0923	5.08 (.200)	7.62 (.300)
4	90120-0124	90120-0764	90120-0924	7.62 (.300)	10.16 (.400)
5	90120-0125	90120-0765	90120-0925	10.16 (.400)	12.70 (.500)
6	90120-0126	90120-0766	90120-0926	12.70 (.500)	15.24 (.600)
7	90120-0127	90120-0767	90120-0927	15.24 (.600)	17.78 (.700)
8	90120-0128	90120-0768	90120-0928	17.78 (.700)	20.32 (.800)
9	90120-0129	90120-0769	90120-0929	20.32 (.800)	22.86 (.900)
10	90120-0130	90120-0770	90120-0930	22.86 (.900)	25.40 (1.000)
11	90120-0131	90120-0771	90120-0931	25.40 (1.000)	27.94 (1.100)
12	90120-0132	90120-0772	90120-0932	27.94 (1.100)	30.48 (1.200)
13	90120-0133	90120-0773	90120-0933	30.48 (1.200)	33.02 (1.300)
14	90120-0134	90120-0774	90120-0934	33.02 (1.300)	35.56 (1.400)
15	90120-0135	90120-0775	90120-0935	35.56 (1.400)	38.10 (1.500)
16	90120-0136	90120-0776	90120-0936	38.10 (1.500)	40.64 (1.600)
17	90120-0137	90120-0777	90120-0937	40.64 (1.600)	43.18 (1.700)
18	90120-0138	90120-0778	90120-0938	43.18 (1.700)	45.72 (1.800)
19	90120-0139	90120-0779	90120-0939	45.72 (1.800)	48.76 (1.900)
20	90120-0140	90120-0780	90120-0940	48.76 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
21	90120-0141	90120-0781	90120-0941	50.80 (2.000)	53.34 (2.100)
22	90120-0142	90120-0782	90120-0942	53.34 (2.100)	55.88 (2.200)
23	90120-0143	90120-0783	90120-0943	55.88 (2.200)	58.42 (2.300)
24	90120-0144	90120-0784	90120-0944	58.42 (2.300)	60.46 (2.400)
25	90120-0145	90120-0785	90120-0945	60.46 (2.400)	63.50 (2.500)
26	90120-0146	90120-0786	90120-0946	63.50 (2.500)	66.04 (2.600)
27	90120-0147	90120-0787	90120-0947	66.04 (2.600)	68.58 (2.700)
28	90120-0148	90120-0788	90120-0948	68.58 (2.700)	71.12 (2.800)
29	90120-0149	90120-0789	90120-0949	71.12 (2.800)	73.66 (2.900)
30	90120-0150	90120-0790	90120-0950	73.66 (2.900)	76.20 (3.000)
31	90120-0151	90120-0791	90120-0951	76.20 (3.000)	78.24 (3.100)
32	90120-0152	90120-0792	90120-0952	78.24 (3.100)	81.28 (3.200)
33	90120-0153	90120-0793	90120-0953	81.28 (3.200)	83.82 (3.300)
34	90120-0154	90120-0794	90120-0954	83.82 (3.300)	86.36 (3.400)
35	90120-0155	90120-0795	90120-0955	86.36 (3.400)	88.90 (3.500)
36	90120-0156	90120-0796	90120-0956	88.90 (3.500)	91.44 (3.600)
37	90120-0157	90120-0797	90120-0957	91.44 (3.600)	93.98 (3.700)
38	90120-0158	90120-0798	90120-0958	93.98 (3.700)	96.52 (3.800)
39	90120-0159	90120-0799	90120-0959	96.52 (3.800)	99.06 (3.900)
40	90120-0160	90120-0800	90120-0960	99.06 (3.900)	101.60 (4.000)

For other available versions contact Molex
Plating A: 4μm (160μ") Tin/Lead over Nickel
Plating E: 0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: 0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
▩ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch C-Grid III™ Header**

90121

Single Row Right Angle

C-Grid

A

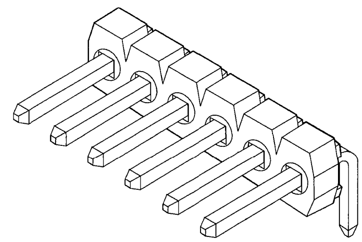
Features and Benefits
- Sizes 2 to 40 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

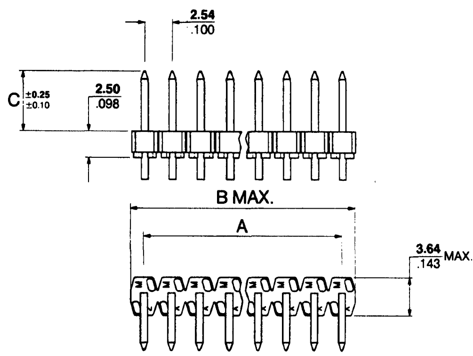
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

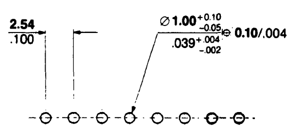
Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

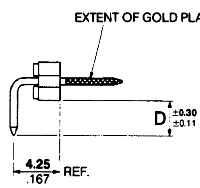


Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT



Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
2	90121-0122	90121-0762	90121-0922	2.54 (.100)	5.08 (.200)
3	90121-0123	90121-0763	90121-0923	5.08 (.200)	7.62 (.300)
4	90121-0124	90121-0764	90121-0924	7.62 (.300)	10.16 (.400)
5	90121-0125	90121-0765	90121-0925	10.16 (.400)	12.70 (.500)
6	90121-0126	90121-0766	90121-0926	12.70 (.500)	15.24 (.600)
7	90121-0127	90121-0767	90121-0927	15.24 (.600)	17.78 (.700)
8	90121-0128	90121-0768	90121-0928	17.78 (.700)	20.32 (.800)
9	90121-0129	90121-0769	90121-0929	20.32 (.800)	22.86 (.900)
10	90121-0130	90121-0770	90121-0930	22.86 (.900)	25.40 (1.000)
11	90121-0131	90121-0771	90121-0931	25.40 (1.000)	27.94 (1.100)
12	90121-0132	90121-0772	90121-0932	27.94 (1.100)	30.48 (1.200)
13	90121-0133	90121-0773	90121-0933	30.48 (1.200)	33.02 (1.300)
14	90121-0134	90121-0774	90121-0934	33.02 (1.300)	35.56 (1.400)
15	90121-0135	90121-0775	90121-0935	35.56 (1.400)	38.10 (1.500)
16	90121-0136	90121-0776	90121-0936	38.10 (1.500)	40.64 (1.600)
17	90121-0137	90121-0777	90121-0937	40.64 (1.600)	43.18 (1.700)
18	90121-0138	90121-0778	90121-0938	43.18 (1.700)	45.72 (1.800)
19	90121-0139	90121-0779	90121-0939	45.72 (1.800)	48.76 (1.900)
20	90121-0140	90121-0780	90121-0940	48.76 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
21	90121-0141	90121-0781	90121-0941	50.80 (2.000)	53.34 (2.100)
22	90121-0142	90121-0782	90121-0942	53.34 (2.100)	55.88 (2.200)
23	90121-0143	90121-0783	90121-0943	55.88 (2.200)	58.42 (2.300)
24	90121-0144	90121-0784	90121-0944	58.42 (2.300)	60.46 (2.400)
25	90121-0145	90121-0785	90121-0945	60.46 (2.400)	63.50 (2.500)
26	90121-0146	90121-0786	90121-0946	63.50 (2.500)	66.04 (2.600)
27	90121-0147	90121-0787	90121-0947	66.04 (2.600)	68.58 (2.700)
28	90121-0148	90121-0788	90121-0948	68.58 (2.700)	71.12 (2.800)
29	90121-0149	90121-0789	90121-0949	71.12 (2.800)	73.66 (2.900)
30	90121-0150	90121-0790	90121-0950	73.66 (2.900)	76.20 (3.000)
31	90121-0151	90121-0791	90121-0951	76.20 (3.000)	78.24 (3.100)
32	90121-0152	90121-0792	90121-0952	78.24 (3.100)	81.28 (3.200)
33	90121-0153	90121-0793	90121-0953	81.28 (3.200)	83.82 (3.300)
34	90121-0154	90121-0794	90121-0954	83.82 (3.300)	86.36 (3.400)
35	90121-0155	90121-0795	90121-0955	86.36 (3.400)	88.90 (3.500)
36	90121-0156	90121-0796	90121-0956	88.90 (3.500)	91.44 (3.600)
37	90121-0157	90121-0797	90121-0957	91.44 (3.600)	93.98 (3.700)
38	90121-0158	90121-0798	90121-0958	93.98 (3.700)	96.52 (3.800)
39	90121-0159	90121-0799	90121-0959	96.52 (3.800)	99.06 (3.900)
40	90121-0160	90121-0800	90121-0960	99.06 (3.900)	101.60 (4.000)

For other available versions contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
▨ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Header

90131 Dual Row Straight

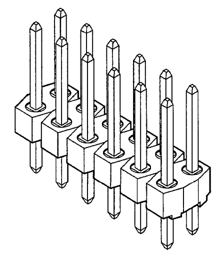
Features and Benefits
- Sizes 4 to 80 circuits
- Easy breakaway to smaller sizes
- Stackable side-to-side
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention and high mechanical stability after soldering

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

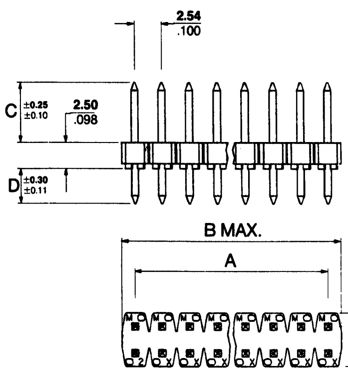
Electrical
Voltage: 350V max.
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

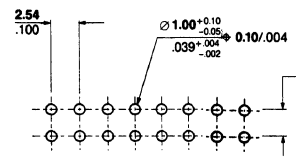
Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

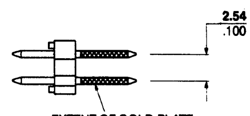


Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT



Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
4	90131-0122	90131-0762	90131-0922	2.54 (.100)	5.08 (.200)
6	90131-0123	90131-0763	90131-0923	5.08 (.200)	7.62 (.300)
8	90131-0124	90131-0764	90131-0924	7.62 (.300)	10.16 (.400)
10	90131-0125	90131-0765	90131-0925	10.16 (.400)	12.70 (.500)
12	90131-0126	90131-0766	90131-0926	12.70 (.500)	15.24 (.600)
14	90131-0127	90131-0767	90131-0927	15.24 (.600)	17.78 (.700)
16	90131-0128	90131-0768	90131-0928	17.78 (.700)	20.32 (.800)
18	90131-0129	90131-0769	90131-0929	20.32 (.800)	22.86 (.900)
20	90131-0130	90131-0770	90131-0930	22.86 (.900)	25.40 (1.000)
22	90131-0131	90131-0771	90131-0931	25.40 (1.000)	27.94 (1.100)
24	90131-0132	90131-0772	90131-0932	27.94 (1.100)	30.48 (1.200)
26	90131-0133	90131-0773	90131-0933	30.48 (1.200)	33.02 (1.300)
28	90131-0134	90131-0774	90131-0934	33.02 (1.300)	35.56 (1.400)
30	90131-0135	90131-0775	90131-0935	35.56 (1.400)	38.10 (1.500)
32	90131-0136	90131-0776	90131-0936	38.10 (1.500)	40.64 (1.600)
34	90131-0137	90131-0777	90131-0937	40.64 (1.600)	43.18 (1.700)
36	90131-0138	90131-0778	90131-0938	43.18 (1.700)	45.72 (1.800)
38	90131-0139	90131-0779	90131-0939	45.72 (1.800)	48.76 (1.900)
40	90131-0140	90131-0780	90131-0940	48.76 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
42	90131-0141	90131-0781	90131-0941	50.80 (2.000)	53.34 (2.100)
44	90131-0142	90131-0782	90131-0942	53.34 (2.100)	55.88 (2.200)
46	90131-0143	90131-0783	90131-0943	55.88 (2.200)	58.42 (2.300)
48	90131-0144	90131-0784	90131-0944	58.42 (2.300)	60.46 (2.400)
50	90131-0145	90131-0785	90131-0945	60.46 (2.400)	63.50 (2.500)
52	90131-0146	90131-0786	90131-0946	63.50 (2.500)	66.04 (2.600)
54	90131-0147	90131-0787	90131-0947	66.04 (2.600)	68.58 (2.700)
56	90131-0148	90131-0788	90131-0948	68.58 (2.700)	71.12 (2.800)
58	90131-0149	90131-0789	90131-0949	71.12 (2.800)	73.66 (2.900)
60	90131-0150	90131-0790	90131-0950	73.66 (2.900)	76.20 (3.000)
62	90131-0151	90131-0791	90131-0951	76.20 (3.000)	78.24 (3.100)
64	90131-0152	90131-0792	90131-0952	78.24 (3.100)	81.28 (3.200)
66	90131-0153	90131-0793	90131-0953	81.28 (3.200)	83.82 (3.300)
68	90131-0154	90131-0794	90131-0954	83.82 (3.300)	86.36 (3.400)
70	90131-0155	90131-0795	90131-0955	86.36 (3.400)	88.90 (3.500)
72	90131-0156	90131-0796	90131-0956	88.90 (3.500)	91.44 (3.600)
74	90131-0157	90131-0797	90131-0957	91.44 (3.600)	93.98 (3.700)
76	90131-0158	90131-0798	90131-0958	93.98 (3.700)	96.52 (3.800)
78	90131-0159	90131-0799	90131-0959	96.52 (3.800)	99.06 (3.900)
80	90131-0160	90131-0800	90131-0960	99.06 (3.900)	101.60 (4.000)

For other available versions contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
▧ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 4 to 80 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

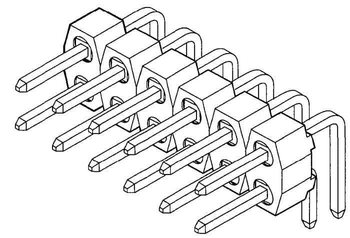
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

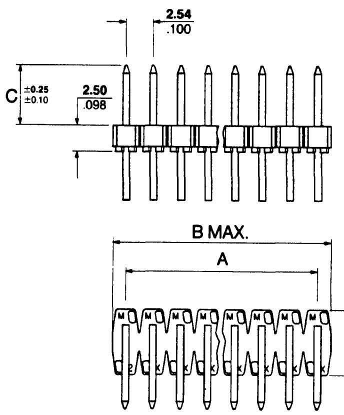
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

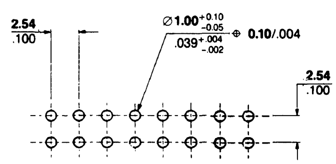
2.54mm (.100") Pitch C-Grid III™ Header

90122 Dual Row Right Angle

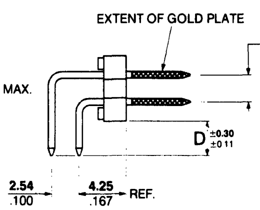


Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT



Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
4	90122-0122	90122-0762	90122-0922	2.54 (.100)	5.08 (.200)
6	90122-0123	90122-0763	90122-0923	5.08 (.200)	7.62 (.300)
8	90122-0124	90122-0764	90122-0924	7.62 (.300)	10.16 (.400)
10	90122-0125	90122-0765	90122-0925	10.16 (.400)	12.70 (.500)
12	90122-0126	90122-0766	90122-0926	12.70 (.500)	15.24 (.600)
14	90122-0127	90122-0767	90122-0927	15.24 (.600)	17.78 (.700)
16	90122-0128	90122-0768	90122-0928	17.78 (.700)	20.32 (.800)
18	90122-0129	90122-0769	90122-0929	20.32 (.800)	22.86 (.900)
20	90122-0130	90122-0770	90122-0930	22.86 (.900)	25.40 (1.000)
22	90122-0131	90122-0771	90122-0931	25.40 (1.000)	27.94 (1.100)
24	90122-0132	90122-0772	90122-0932	27.94 (1.100)	30.48 (1.200)
26	90122-0133	90122-0773	90122-0933	30.48 (1.200)	33.02 (1.300)
28	90122-0134	90122-0774	90122-0934	33.02 (1.300)	35.56 (1.400)
30	90122-0135	90122-0775	90122-0935	35.56 (1.400)	38.10 (1.500)
32	90122-0136	90122-0776	90122-0936	38.10 (1.500)	40.64 (1.600)
34	90122-0137	90122-0777	90122-0937	40.64 (1.600)	43.18 (1.700)
36	90122-0138	90122-0778	90122-0938	43.18 (1.700)	45.72 (1.800)
38	90122-0139	90122-0779	90122-0939	45.72 (1.800)	48.76 (1.900)
40	90122-0140	90122-0780	90122-0940	48.76 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
42	90122-0141	90122-0781	90122-0941	50.80 (2.000)	53.34 (2.100)
44	90122-0142	90122-0782	90122-0942	53.34 (2.100)	55.88 (2.200)
46	90122-0143	90122-0783	90122-0943	55.88 (2.200)	58.42 (2.300)
48	90122-0144	90122-0784	90122-0944	58.42 (2.300)	60.46 (2.400)
50	90122-0145	90122-0785	90122-0945	60.46 (2.400)	63.50 (2.500)
52	90122-0146	90122-0786	90122-0946	63.50 (2.500)	66.04 (2.600)
54	90122-0147	90122-0787	90122-0947	66.04 (2.600)	68.58 (2.700)
56	90122-0148	90122-0788	90122-0948	68.58 (2.700)	71.12 (2.800)
58	90122-0149	90122-0789	90122-0949	71.12 (2.800)	73.66 (2.900)
60	90122-0150	90122-0790	90122-0950	73.66 (2.900)	76.20 (3.000)
62	90122-0151	90122-0791	90122-0951	76.20 (3.000)	78.24 (3.100)
64	90122-0152	90122-0792	90122-0952	78.24 (3.100)	81.28 (3.200)
66	90122-0153	90122-0793	90122-0953	81.28 (3.200)	83.82 (3.300)
68	90122-0154	90122-0794	90122-0954	83.82 (3.300)	86.36 (3.400)
70	90122-0155	90122-0795	90122-0955	86.36 (3.400)	88.90 (3.500)
72	90122-0156	90122-0796	90122-0956	88.90 (3.500)	91.44 (3.600)
74	90122-0157	90122-0797	90122-0957	91.44 (3.600)	93.98 (3.700)
76	90122-0158	90122-0798	90122-0958	93.98 (3.700)	96.52 (3.800)
78	90122-0159	90122-0799	90122-0959	96.52 (3.800)	99.06 (3.900)
80	90122-0160	90122-0800	90122-0960	99.06 (3.900)	101.60 (4.000)

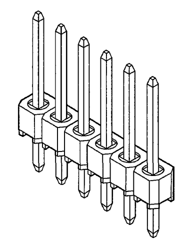
For other available versions contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Kinked Pin Header

90627

Single Row Straight



Features and Benefits
- Sizes 2 to 40 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

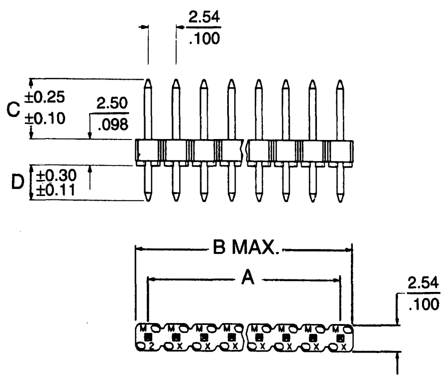
Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

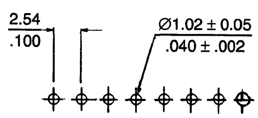
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

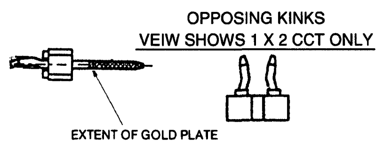
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT



Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
2	90627-0122	90627-0762	90627-0922	2.54 (.100)	5.08 (.200)
3	90627-0123	90627-0763	90627-0923	5.08 (.200)	7.62 (.300)
4	90627-0124	90627-0764	90627-0924	7.62 (.300)	10.16 (.400)
5	90627-0125	90627-0765	90627-0925	10.16 (.400)	12.70 (.500)
6	90627-0126	90627-0766	90627-0926	12.70 (.500)	15.24 (.600)
7	90627-0127	90627-0767	90627-0927	15.24 (.600)	17.78 (.700)
8	90627-0128	90627-0768	90627-0928	17.78 (.700)	20.32 (.800)
9	90627-0129	90627-0769	90627-0929	20.32 (.800)	22.86 (.900)
10	90627-0130	90627-0770	90627-0930	22.86 (.900)	25.40 (1.000)
11	90627-0131	90627-0771	90627-0931	25.40 (1.000)	27.94 (1.100)
12	90627-0132	90627-0772	90627-0932	27.94 (1.100)	30.48 (1.200)
13	90627-0133	90627-0773	90627-0933	30.48 (1.200)	33.02 (1.300)
14	90627-0134	90627-0774	90627-0934	33.02 (1.300)	35.56 (1.400)
15	90627-0135	90627-0775	90627-0935	35.56 (1.400)	38.10 (1.500)
16	90627-0136	90627-0776	90627-0936	38.10 (1.500)	40.64 (1.600)
17	90627-0137	90627-0777	90627-0937	40.64 (1.600)	43.18 (1.700)
18	90627-0138	90627-0778	90627-0938	43.18 (1.700)	45.72 (1.800)
19	90627-0139	90627-0779	90627-0939	45.72 (1.800)	48.26 (1.900)
20	90627-0140	90627-0780	90627-0940	48.26 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
21	90627-0141	90627-0781	90627-0941	50.80 (2.000)	53.34 (2.100)
22	90627-0142	90627-0782	90627-0942	53.34 (2.100)	55.88 (2.200)
23	90627-0143	90627-0783	90627-0943	55.88 (2.200)	58.42 (2.300)
24	90627-0144	90627-0784	90627-0944	58.42 (2.300)	60.46 (2.400)
25	90627-0145	90627-0785	90627-0945	60.46 (2.400)	63.50 (2.500)
26	90627-0146	90627-0786	90627-0946	63.50 (2.500)	66.04 (2.600)
27	90627-0147	90627-0787	90627-0947	66.04 (2.600)	68.58 (2.700)
28	90627-0148	90627-0788	90627-0948	68.58 (2.700)	71.12 (2.800)
29	90627-0149	90627-0789	90627-0949	71.12 (2.800)	73.66 (2.900)
30	90627-0150	90627-0790	90627-0950	73.66 (2.900)	76.20 (3.000)
31	90627-0151	90627-0791	90627-0951	76.20 (3.000)	78.24 (3.100)
32	90627-0152	90627-0792	90627-0952	78.24 (3.100)	81.28 (3.200)
33	90627-0153	90627-0793	90627-0953	81.28 (3.200)	83.82 (3.300)
34	90627-0154	90627-0794	90627-0954	83.82 (3.300)	86.36 (3.400)
35	90627-0155	90627-0795	90627-0955	86.36 (3.400)	88.90 (3.500)
36	90627-0156	90627-0796	90627-0956	88.90 (3.500)	91.44 (3.600)
37	90627-0157	90627-0797	90627-0957	91.44 (3.600)	93.98 (3.700)
38	90627-0158	90627-0798	90627-0958	93.98 (3.700)	96.52 (3.800)
39	90627-0159	90627-0799	90627-0959	96.52 (3.800)	99.06 (3.900)
40	90627-0160	90627-0800	90627-0960	99.06 (3.900)	101.60 (4.000)

For other available versions contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
▩ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Kinked Pin Header

90629

Single Row Right Angle

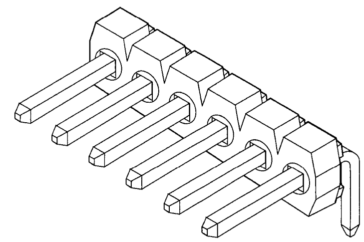
Features and Benefits
- Sizes 2 to 40 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

Reference Information
Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

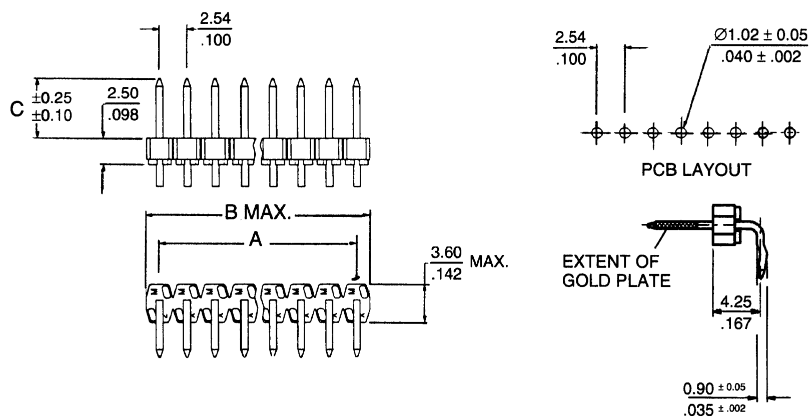
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



Not For Use With Molex C-Grid SL™ Components



Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
2	90629-0122	90629-0762	90629-0922	2.54 (.100)	5.08 (.200)
3	90629-0123	90629-0763	90629-0923	5.08 (.200)	7.62 (.300)
4	90629-0124	90629-0764	90629-0924	7.62 (.300)	10.16 (.400)
5	90629-0125	90629-0765	90629-0925	10.16 (.400)	12.70 (.500)
6	90629-0126	90629-0766	90629-0926	12.70 (.500)	15.24 (.600)
7	90629-0127	90629-0767	90629-0927	15.24 (.600)	17.78 (.700)
8	90629-0128	90629-0768	90629-0928	17.78 (.700)	20.32 (.800)
9	90629-0129	90629-0769	90629-0929	20.32 (.800)	22.86 (.900)
10	90629-0130	90629-0770	90629-0930	22.86 (.900)	25.40 (1.000)
11	90629-0131	90629-0771	90629-0931	25.40 (1.000)	27.94 (1.100)
12	90629-0132	90629-0772	90629-0932	27.94 (1.100)	30.48 (1.200)
13	90629-0133	90629-0773	90629-0933	30.48 (1.200)	33.02 (1.300)
14	90629-0134	90629-0774	90629-0934	33.02 (1.300)	35.56 (1.400)
15	90629-0135	90629-0775	90629-0935	35.56 (1.400)	38.10 (1.500)
16	90629-0136	90629-0776	90629-0936	38.10 (1.500)	40.64 (1.600)
17	90629-0137	90629-0777	90629-0937	40.64 (1.600)	43.18 (1.700)
18	90629-0138	90629-0778	90629-0938	43.18 (1.700)	45.72 (1.800)
19	90629-0139	90629-0779	90629-0939	45.72 (1.800)	48.26 (1.900)
20	90629-0140	90629-0780	90629-0940	48.26 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
21	90629-0141	90629-0781	90629-0941	50.80 (2.000)	53.34 (2.100)
22	90629-0142	90629-0782	90629-0942	53.34 (2.100)	55.88 (2.200)
23	90629-0143	90629-0783	90629-0943	55.88 (2.200)	58.42 (2.300)
24	90629-0144	90629-0784	90629-0944	58.42 (2.300)	60.46 (2.400)
25	90629-0145	90629-0785	90629-0945	60.46 (2.400)	63.50 (2.500)
26	90629-0146	90629-0786	90629-0946	63.50 (2.500)	66.04 (2.600)
27	90629-0147	90629-0787	90629-0947	66.04 (2.600)	68.58 (2.700)
28	90629-0148	90629-0788	90629-0948	68.58 (2.700)	71.12 (2.800)
29	90629-0149	90629-0789	90629-0949	71.12 (2.800)	73.66 (2.900)
30	90629-0150	90629-0790	90629-0950	73.66 (2.900)	76.20 (3.000)
31	90629-0151	90629-0791	90629-0951	76.20 (3.000)	78.24 (3.100)
32	90629-0152	90629-0792	90629-0952	78.24 (3.100)	81.28 (3.200)
33	90629-0153	90629-0793	90629-0953	81.28 (3.200)	83.82 (3.300)
34	90629-0154	90629-0794	90629-0954	83.82 (3.300)	86.36 (3.400)
35	90629-0155	90629-0795	90629-0955	86.36 (3.400)	88.90 (3.500)
36	90629-0156	90629-0796	90629-0956	88.90 (3.500)	91.44 (3.600)
37	90629-0157	90629-0797	90629-0957	91.44 (3.600)	93.98 (3.700)
38	90629-0158	90629-0798	90629-0958	93.98 (3.700)	96.52 (3.800)
39	90629-0159	90629-0799	90629-0959	96.52 (3.800)	99.06 (3.900)
40	90629-0160	90629-0800	90629-0960	99.06 (3.900)	101.60 (4.000)

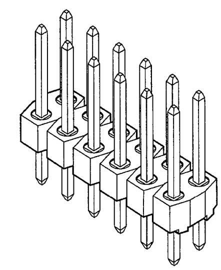
For other available versions contact Molex
Plating A: 4μm (160μ") Tin/Lead over Nickel
Plating E: 0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: 0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
☐ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Kinked Pin Header

90628

Dual Row Straight



Features and Benefits

- Sizes 4 to 80 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention and high mechanical stability after soldering
- Stackable side-to-side

Reference Information

Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

Electrical

Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

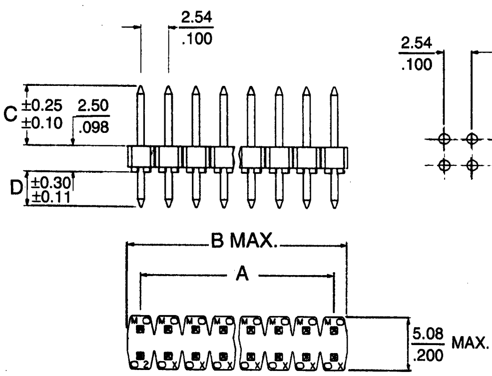
Mechanical

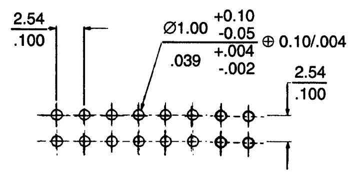
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical

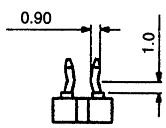
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

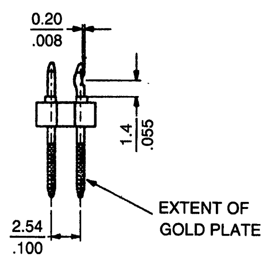
Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT





Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
4	90628-0122	90628-0762	90628-0922	2.54 (.100)	5.08 (.200)
6	90628-0123	90628-0763	90628-0923	5.08 (.200)	7.62 (.300)
8	90628-0124	90628-0764	90628-0924	7.62 (.300)	10.16 (.400)
10	90628-0125	90628-0765	90628-0925	10.16 (.400)	12.70 (.500)
12	90628-0126	90628-0766	90628-0926	12.70 (.500)	15.24 (.600)
14	90628-0127	90628-0767	90628-0927	15.24 (.600)	17.78 (.700)
16	90628-0128	90628-0768	90628-0928	17.78 (.700)	20.32 (.800)
18	90628-0129	90628-0769	90628-0929	20.32 (.800)	22.86 (.900)
20	90628-0130	90628-0770	90628-0930	22.86 (.900)	25.40 (1.000)
22	90628-0131	90628-0771	90628-0931	25.40 (1.000)	27.94 (1.100)
24	90628-0132	90628-0772	90628-0932	27.94 (1.100)	30.48 (1.200)
26	90628-0133	90628-0773	90628-0933	30.48 (1.200)	33.02 (1.300)
28	90628-0134	90628-0774	90628-0934	33.02 (1.300)	35.56 (1.400)
30	90628-0135	90628-0775	90628-0935	35.56 (1.400)	38.10 (1.500)
32	90628-0136	90628-0776	90628-0936	38.10 (1.500)	40.64 (1.600)
34	90628-0137	90628-0777	90628-0937	40.64 (1.600)	43.18 (1.700)
36	90628-0138	90628-0778	90628-0938	43.18 (1.700)	45.72 (1.800)
38	90628-0139	90628-0779	90628-0939	45.72 (1.800)	48.76 (1.900)
40	90628-0140	90628-0780	90628-0940	48.26 (1.900)	50.80 (2.000)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
42	90628-0141	90628-0781	90628-0941	50.80 (2.000)	53.34 (2.100)
44	90628-0142	90628-0782	90628-0942	53.34 (2.100)	55.88 (2.200)
46	90628-0143	90628-0783	90628-0943	55.88 (2.200)	58.42 (2.300)
48	90628-0144	90628-0784	90628-0944	58.42 (2.300)	60.46 (2.400)
50	90628-0145	90628-0785	90628-0945	60.46 (2.400)	63.50 (2.500)
52	90628-0146	90628-0786	90628-0946	63.50 (2.500)	66.04 (2.600)
54	90628-0147	90628-0787	90628-0947	66.04 (2.600)	68.58 (2.700)
56	90628-0148	90628-0788	90628-0948	68.58 (2.700)	71.12 (2.800)
58	90628-0149	90628-0789	90628-0949	71.12 (2.800)	73.66 (2.900)
60	90628-0150	90628-0790	90628-0950	73.66 (2.900)	76.20 (3.000)
62	90628-0151	90628-0791	90628-0951	76.20 (3.000)	78.24 (3.100)
64	90628-0152	90628-0792	90628-0952	78.24 (3.100)	81.28 (3.200)
66	90628-0153	90628-0793	90628-0953	81.28 (3.200)	83.82 (3.300)
68	90628-0154	90628-0794	90628-0954	83.82 (3.300)	86.36 (3.400)
70	90628-0155	90628-0795	90628-0955	86.36 (3.400)	88.90 (3.500)
72	90628-0156	90628-0796	90628-0956	88.90 (3.500)	91.44 (3.600)
74	90628-0157	90628-0797	90628-0957	91.44 (3.600)	93.98 (3.700)
76	90628-0158	90628-0798	90628-0958	93.98 (3.700)	96.52 (3.800)
78	90628-0159	90628-0799	90628-0959	96.52 (3.800)	99.06 (3.900)
80	90628-0160	90628-0800	90628-0960	99.06 (3.900)	101.60 (4.000)

For other available versions contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
▒ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Kinked Pin Header

90630

Dual Row Right Angle

C-Grid **A**

Features and Benefits

- Sizes 4 to 80 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

Reference Information

Product Specification: PS-99020-0001
Packaging: Bag
Mates With: C-Grid III Housing and Connectors
Designed In: Inches

Electrical

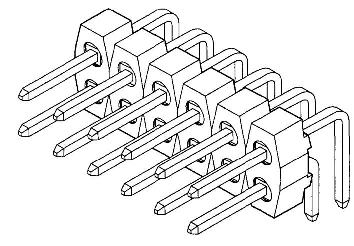
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 5000 MΩ min.

Mechanical

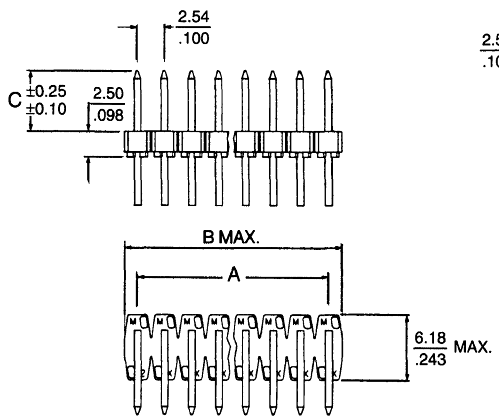
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

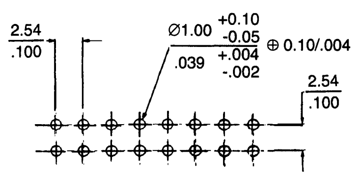
Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



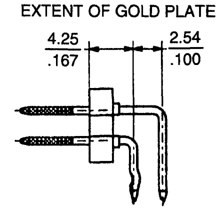
Not For Use With Molex C-Grid SL™ Components





PCB LAYOUT

EXTENT OF GOLD PLATE



Order Nos. below reflect standard
Dim. C (Mating End) 6.75mm (.266")
Dim. D (PC Tail) 2.90mm (.114")

Dimension			
C	6.75 (.266)	5.75 (.226)	5.75 (.226)
D	4.50 (.177)	2.90 (.114)	4.50 (.177)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
4	90630-0122	90630-0762	90630-0922	2.54 (.100)	5.08 (.200)
6	90630-0123	90630-0763	90630-0923	5.08 (.200)	7.62 (.300)
8	90630-0124	90630-0764	90630-0924	7.62 (.300)	10.16 (.400)
10	90630-0125	90630-0765	90630-0925	10.16 (.400)	12.70 (.500)
12	90630-0126	90630-0766	90630-0926	12.70 (.500)	15.24 (.600)
14	90630-0127	90630-0767	90630-0927	15.24 (.600)	17.78 (.700)
16	90630-0128	90630-0768	90630-0928	17.78 (.700)	20.32 (.800)
18	90630-0129	90630-0769	90630-0929	20.32 (.800)	22.86 (.900)
20	90630-0130	90630-0770	90630-0930	22.86 (.900)	25.40 (1.000)
22	90630-0131	90630-0771	90630-0931	25.40 (1.000)	27.94 (1.100)
24	90630-0132	90630-0772	90630-0932	27.94 (1.100)	30.48 (1.200)
26	90630-0133	90630-0773	90630-0933	30.48 (1.200)	33.02 (1.300)
28	90630-0134	90630-0774	90630-0934	33.02 (1.300)	35.56 (1.400)
30	90630-0135	90630-0775	90630-0935	35.56 (1.400)	38.10 (1.500)
32	90630-0136	90630-0776	90630-0936	38.10 (1.500)	40.64 (1.600)
34	90630-0137	90630-0777	90630-0937	40.64 (1.600)	43.18 (1.700)
36	90630-0138	90630-0778	90630-0938	43.18 (1.700)	45.72 (1.800)
38	90630-0139	90630-0779	90630-0939	45.72 (1.800)	48.76 (1.900)
40	90630-0140	90630-0780	90630-0940	48.26 (1.900)	50.80 (2.000)
42	90630-0141	90630-0781	90630-0941	50.80 (2.000)	53.34 (2.100)
44	90630-0142	90630-0782	90630-0942	53.34 (2.100)	55.88 (2.200)
46	90630-0143	90630-0783	90630-0943	55.88 (2.200)	58.42 (2.300)
48	90630-0144	90630-0784	90630-0944	58.42 (2.300)	60.46 (2.400)
50	90630-0145	90630-0785	90630-0945	60.46 (2.400)	63.50 (2.500)
52	90630-0146	90630-0786	90630-0946	63.50 (2.500)	66.04 (2.600)
54	90630-0147	90630-0787	90630-0947	66.04 (2.600)	68.58 (2.700)
56	90630-0148	90630-0788	90630-0948	68.58 (2.700)	71.12 (2.800)
58	90630-0149	90630-0789	90630-0949	71.12 (2.800)	73.66 (2.900)
60	90630-0150	90630-0790	90630-0950	73.66 (2.900)	76.20 (3.000)
62	90630-0151	90630-0791	90630-0951	76.20 (3.000)	78.24 (3.100)
64	90630-0152	90630-0792	90630-0952	78.24 (3.100)	81.28 (3.200)
66	90630-0153	90630-0793	90630-0953	81.28 (3.200)	83.82 (3.300)
68	90630-0154	90630-0794	90630-0954	83.82 (3.300)	86.36 (3.400)
70	90630-0155	90630-0795	90630-0955	86.36 (3.400)	88.90 (3.500)
72	90630-0156	90630-0796	90630-0956	88.90 (3.500)	91.44 (3.600)
74	90630-0157	90630-0797	90630-0957	91.44 (3.600)	93.98 (3.700)
76	90630-0158	90630-0798	90630-0958	93.98 (3.700)	96.52 (3.800)
78	90630-0159	90630-0799	90630-0959	96.52 (3.800)	99.06 (3.900)
80	90630-0160	90630-0800	90630-0960	99.06 (3.900)	101.60 (4.000)

For other available versions contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
▢ Highlighted area denotes Molex European standard product, usually available within shorter lead times

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch C-Grid III™ Shrouded Header**

90136

Single Row Straight

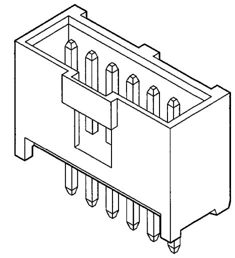
Features and Benefits
- Sizes 1 to 32 circuits
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Tray
Mates With: 90123 and 90156
Designed In: Inches

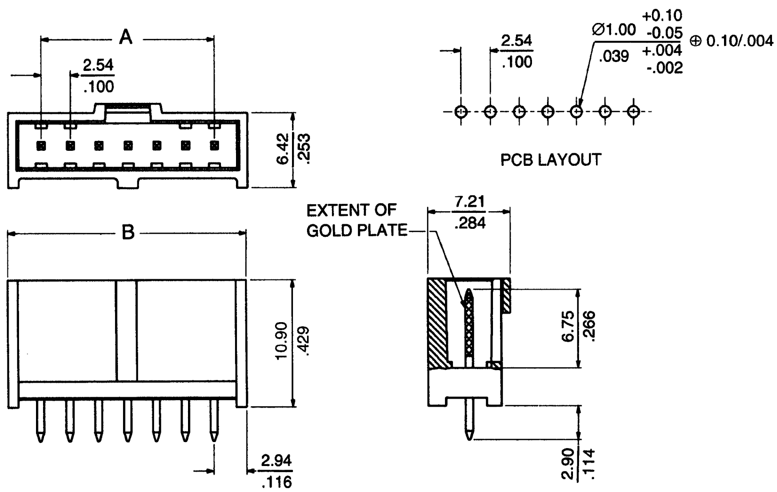
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Resistance: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



Not For Use With Molex C-Grid SL™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
2	90136-1102	90136-1202	90136-1302	2.54 (.100)	8.43 (.332)
3	90136-1103	90136-1203	90136-1303	5.08 (.200)	10.97 (.432)
4	90136-1104	90136-1204	90136-1304	7.62 (.300)	13.51 (.532)
5	90136-1105	90136-1205	90136-1305	10.16 (.400)	16.05 (.632)
6	90136-1106	90136-1206	90136-1306	12.70 (.500)	18.59 (.732)
7	90136-1107	90136-1207	90136-1307	15.24 (.600)	21.13 (.832)
8	90136-1108	90136-1208	90136-1308	17.78 (.700)	23.67 (.932)
9	90136-1109	90136-1209	90136-1309	20.32 (.800)	26.21 (1.032)
10	90136-1110	90136-1210	90136-1310	22.86 (.900)	28.75 (1.132)
12	90136-1112	90136-1212	90136-1312	27.94 (1.100)	33.83 (1.332)
15	90136-1115	90136-1215	90136-1315	35.56 (1.400)	41.45 (1.632)
18	90136-1118	90136-1218	90136-1318	43.18 (1.700)	49.07 (1.932)
22	90136-1122	90136-1222	90136-1322	53.34 (2.100)	59.23 (2.332)
25	90136-1125	90136-1225	90136-1325	60.96 (2.400)	66.85 (2.632)
30	90136-1130	90136-1230	90136-1330	73.66 (2.900)	79.55 (3.132)
32	90136-1132	90136-1232	90136-1332	78.74 (3.100)	84.63 (3.332)

For other available circuit sizes contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Shrouded Header

90136

Single Row Right Angle

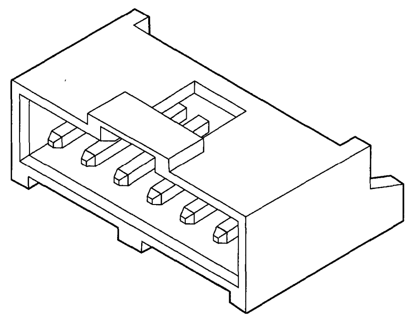
Features and Benefits
- Sizes 1 to 32 circuits
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention, polarized and friction lock
- 1 through 6 circuits with endwall stabilization features

Reference Information
Product Specification: PS-99020-0001
Packaging: Tray
Mates With: 90123 and 90156
Designed In: Inches

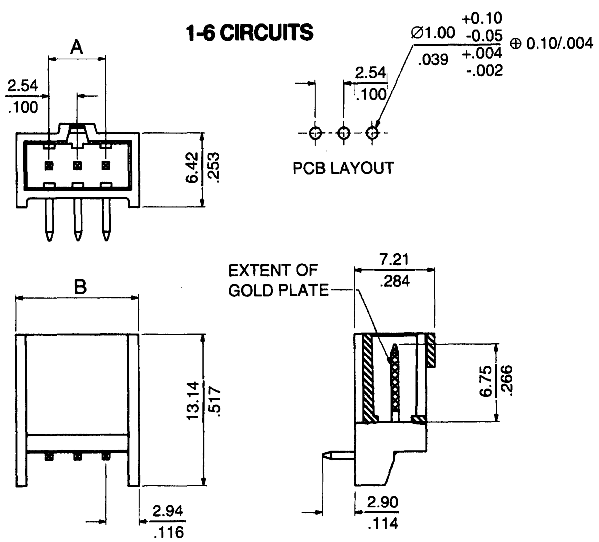
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

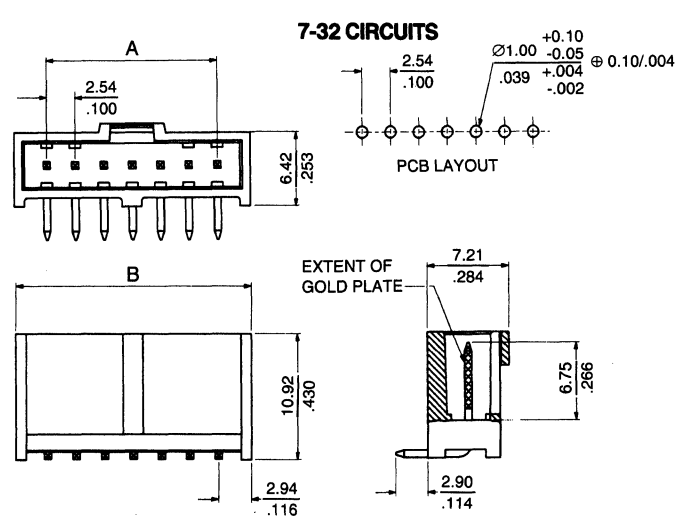
Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



Not For Use With Molex C-Grid SL™ Components





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
2	90136-2102	90136-2202	90136-2302	2.54 (.100)	8.43 (.332)
3	90136-2103	90136-2203	90136-2303	5.08 (.200)	10.97 (.432)
4	90136-2104	90136-2204	90136-2304	7.62 (.300)	13.51 (.532)
5	90136-2105	90136-2205	90136-2305	10.16 (.400)	16.05 (.632)
6	90136-2106	90136-2206	90136-2306	12.70 (.500)	18.59 (.732)
7	90136-2107	90136-2207	90136-2307	15.24 (.600)	21.13 (.832)
8	90136-2108	90136-2208	90136-2308	17.78 (.700)	23.67 (.932)
9	90136-2109	90136-2209	90136-2309	20.32 (.800)	26.21 (1.032)
10	90136-2110	90136-2210	90136-2310	22.86 (.900)	28.75 (1.132)
12	90136-2112	90136-2212	90136-2312	27.94 (1.100)	33.83 (1.332)
15	90136-2115	90136-2215	90136-2315	35.56 (1.400)	41.45 (1.632)
18	90136-2118	90136-2218	90136-2318	43.18 (1.700)	49.07 (1.932)
22	90136-2122	90136-2222	90136-2322	53.34 (2.100)	59.23 (2.332)
25	90136-2125	90136-2225	90136-2325	60.96 (2.400)	66.85 (2.632)
30	90136-2130	90136-2230	90136-2330	73.66 (2.900)	79.55 (3.132)
32	90136-2132	90136-2232	90136-2332	78.74 (3.100)	84.63 (3.332)

For other available circuit sizes contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Shrouded Header

90130

Dual Row, Straight Fully Loaded

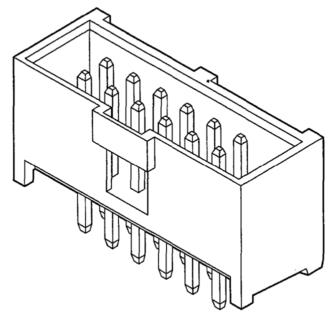
Features and Benefits
- Sizes 6 to 64 circuits
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Tray
Mates With: 90142
Designed In: Inches

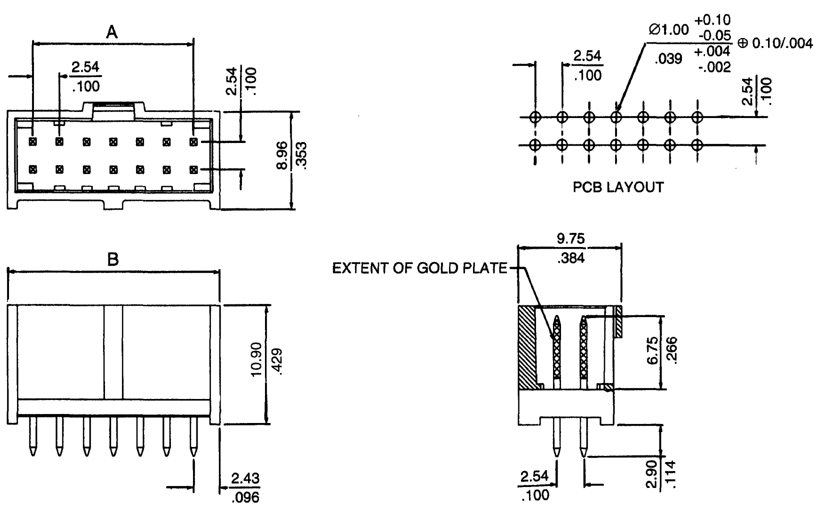
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



Not For Use With Molex C-Grid SL™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
6	90130-1106	90130-1206	90130-1306	5.08 (.200)	9.96 (.392)
8	90130-1108	90130-1208	90130-1308	7.62 (.300)	12.50 (.492)
10	90130-1110	90130-1210	90130-1310	10.16 (.400)	15.04 (.592)
12	90130-1112	90130-1212	90130-1312	12.70 (.500)	17.58 (.692)
14	90130-1114	90130-1214	90130-1314	15.24 (.600)	20.12 (.792)
16	90130-1116	90130-1216	90130-1316	17.78 (.700)	22.66 (.892)
18	90130-1118	90130-1218	90130-1318	20.32 (.800)	25.20 (.992)
20	90130-1120	90130-1220	90130-1320	22.86 (.900)	27.74 (1.092)
24	90130-1124	90130-1224	90130-1324	27.94 (1.100)	32.82 (1.292)
26	90130-1126	90130-1226	90130-1326	30.48 (1.200)	35.36 (1.392)
30	90130-1130	90130-1230	90130-1330	35.56 (1.400)	40.44 (1.592)
34	90130-1134	90130-1234	90130-1334	40.64 (1.600)	45.52 (1.792)
38	90130-1138	90130-1238	90130-1338	45.72 (1.800)	50.60 (1.992)
40	90130-1140	90130-1240	90130-1340	48.26 (1.900)	53.14 (2.092)
50	90130-1150	90130-1250	90130-1350	60.96 (2.400)	65.84 (2.592)
60	90130-1160	90130-1260	90130-1360	73.66 (2.900)	78.54 (3.092)
64	90130-1164	90130-1264	90130-1364	78.74 (3.100)	83.62 (3.292)

For other available circuit sizes contact Molex
Plating A: 4μm (160μ") Tin/Lead over Nickel
Plating E: 0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: 0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Shrouded Header

90130

Dual Row, Straight Voided Pins

Features and Benefits

- Sizes 8 to 40 circuits
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- Polarized
- Friction lock

Reference Information

Product Specification: PS-99020-0001
Packaging: Tray
Mates With: 90123, 90143 and 90160
Designed In: Inches

Electrical

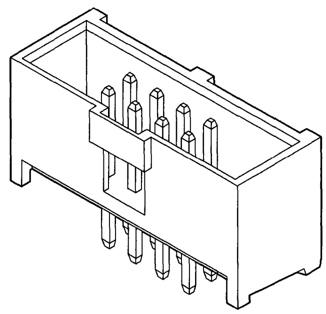
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical

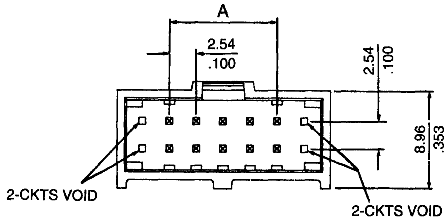
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin

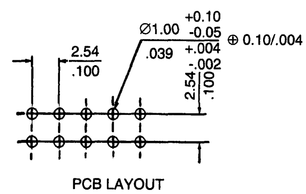
Physical

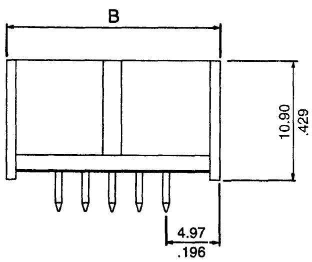
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C

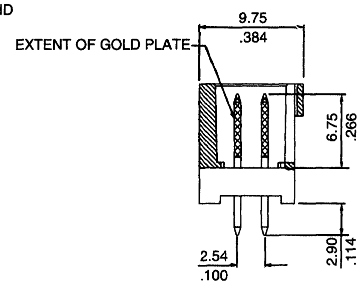


Not For Use With Molex C-Grid SL™ Components









ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
8	90130-2112	90130-2212	90130-2312	7.62 (.300)	17.58 (.692)
10	90130-2114	90130-2214	90130-2314	10.16 (.400)	20.12 (.792)
12	90130-2116	90130-2216	90130-2316	12.70 (.500)	22.66 (.892)
14	90130-2118	90130-2218	90130-2318	15.24 (.600)	25.20 (.992)
16	90130-2120	90130-2220	90130-2320	17.78 (.700)	27.74 (1.092)
18	90130-2122	90130-2222	90130-2322	20.32 (.800)	30.28 (1.192)
20	90130-2124	90130-2224	90130-2324	22.86 (.900)	32.82 (1.292)
24	90130-2128	90130-2228	90130-2328	27.94 (1.100)	37.90 (1.492)
26	90130-2130	90130-2230	90130-2330	30.48 (1.200)	40.44 (1.592)
30	90130-2134	90130-2234	90130-2334	35.56 (1.400)	45.52 (1.792)
34	90130-2138	90130-2238	90130-2338	40.64 (1.600)	50.60 (1.992)
38	90130-2142	90130-2242	90130-2342	45.72 (1.800)	55.68 (2.192)
40	90130-2144	90130-2244	90130-2344	48.26 (1.900)	58.22 (2.292)

For other available circuit sizes contact Molex
Plating A: 4μm (160μ") Tin/Lead over Nickel
Plating E: 0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: 0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Shrouded Header

90130

Dual Row, Right Angle Fully Loaded

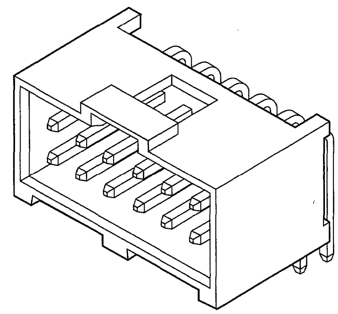
Features and Benefits
- Sizes 6 to 64 circuits
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Tray
Mates With: 90142
Designed In: Inches

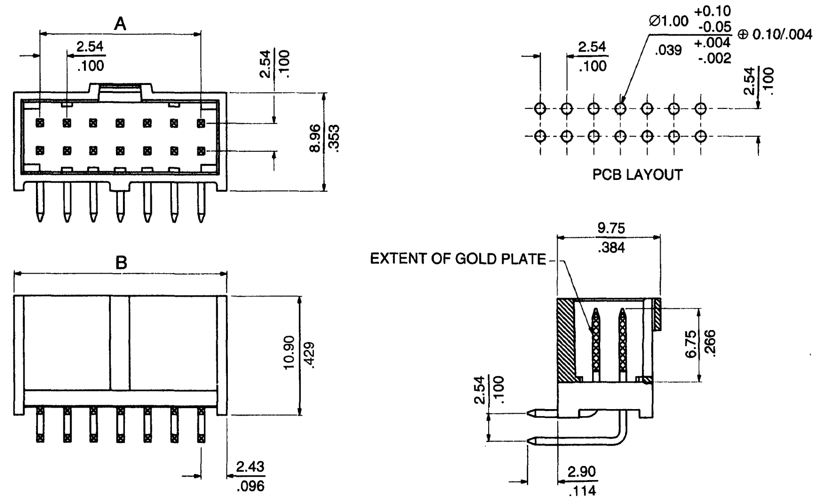
Electrical
Voltage: 350V max.
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Nominal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



Not For Use With Molex C-Grid SL™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
6	90130-3106	90130-3206	90130-3306	5.08 (.200)	9.96 (.392)
8	90130-3108	90130-3208	90130-3308	7.62 (.300)	12.50 (.492)
10	90130-3110	90130-3210	90130-3310	10.16 (.400)	15.04 (.592)
12	90130-3112	90130-3212	90130-3312	12.70 (.500)	17.58 (.692)
14	90130-3114	90130-3214	90130-3314	15.24 (.600)	20.12 (.792)
16	90130-3116	90130-3216	90130-3316	17.78 (.700)	22.66 (.892)
18	90130-3118	90130-3218	90130-3318	20.32 (.800)	25.20 (.992)
20	90130-3120	90130-3220	90130-3320	22.86 (.900)	27.74 (1.092)
24	90130-3124	90130-3224	90130-3324	27.94 (1.100)	32.82 (1.292)
26	90130-3126	90130-3226	90130-3326	30.48 (1.200)	35.36 (1.392)
30	90130-3130	90130-3230	90130-3330	35.56 (1.400)	40.44 (1.592)
34	90130-3134	90130-3234	90130-3334	40.64 (1.600)	45.52 (1.792)
38	90130-3138	90130-3238	90130-3338	45.72 (1.800)	50.60 (1.992)
40	90130-3140	90130-3240	90130-3340	48.26 (1.900)	53.14 (2.092)
50	90130-3150	90130-3250	90130-3350	60.96 (2.400)	65.84 (2.592)
60	90130-3160	90130-3260	90130-3360	73.66 (2.940)	78.54 (3.092)
64	90130-3164	90130-3264	90130-3364	78.74 (3.100)	83.62 (3.292)

For other available circuit sizes contact Molex
Plating A: 4μm (160μ") Tin/Lead over Nickel
Plating E: 0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: 0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ Shrouded Header

90130 Dual Row, Right Angle Voided Pin

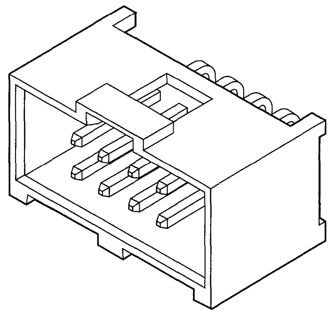
Features and Benefits
- Sizes 8 to 64 circuits
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- Polarized
- Friction lock

Reference Information
Product Specification: PS-99020-0001
Packaging: Tray
Mates With: 90123, 90143 and 90160
Designed In: Inches

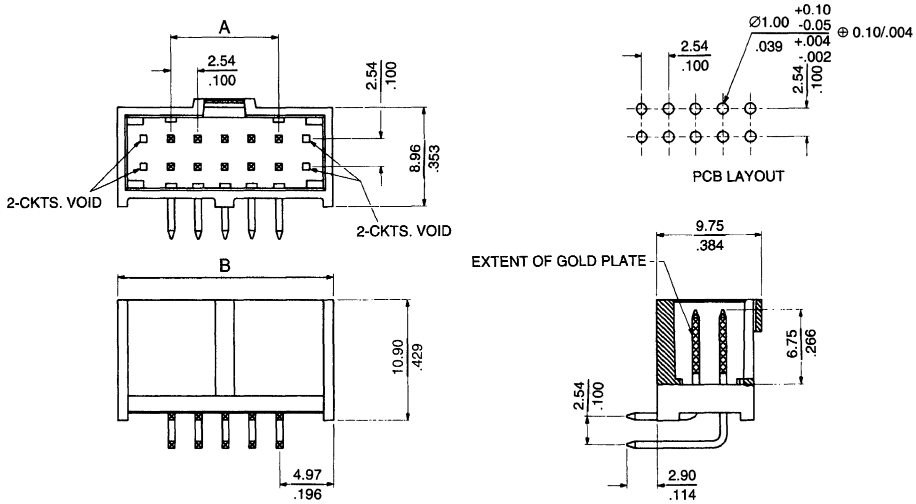
Electrical
Voltage: 350V max.
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 20N (2.0kgf) min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy, 0.64mm (.025") square pins
Plating: See Table
Temperature: -55 to +125°C



Not For Use With Molex C-Grid SL™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
8	90130-4112	90130-4212	90130-4312	7.62 (.300)	17.58 (.692)
10	90130-4114	90130-4214	90130-4314	10.16 (.400)	20.12 (.792)
12	90130-4116	90130-4216	90130-4316	12.70 (.500)	22.66 (.892)
14	90130-4118	90130-4218	90130-4318	15.24 (.600)	25.20 (.992)
16	90130-4120	90130-4220	90130-4320	17.78 (.700)	27.74 (1.092)
18	90130-4122	90130-4222	90130-4322	20.32 (.800)	30.28 (1.192)
20	90130-4124	90130-4224	90130-4324	22.86 (.900)	32.82 (1.292)
24	90130-4128	90130-4228	90130-4328	27.94 (1.100)	37.90 (1.492)
26	90130-4130	90130-4230	90130-4330	30.48 (1.200)	40.44 (1.592)
30	90130-4134	90130-4234	90130-4334	35.56 (1.400)	45.52 (1.792)
34	90130-4138	90130-4238	90130-4338	40.64 (1.600)	50.60 (1.992)
38	90130-4142	90130-4242	90130-4342	45.72 (1.800)	55.68 (2.192)
40	90130-4144	90130-4244	90130-4344	48.26 (1.900)	58.22 (2.292)
50	90130-4154	90130-4254	90130-4354	60.96 (2.400)	70.92 (2.792)
60	90130-4164	90130-4264	90130-4364	73.66 (2.900)	83.62 (3.292)
64	90130-4168	90130-4268	90130-4368	78.74 (3.100)	88.70 (3.492)

For other available circuit sizes contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ PC Board Connectors

90151

Dual Row Vertical

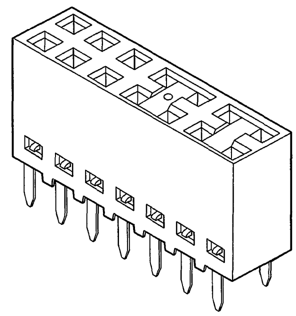
Features and Benefits
- Sizes 4 to 64 circuits
- Contact and plating orientation according to DIN 41651
- Stackable in 2 directions
- Meets HE 13/14 specification

Reference Information
Product Specification: PS-99020-0001
Packaging: Tube
Mates With: 0.64mm (.025") square pins
Use With: 1.57mm (.062") thick PC boards
Designed In: Inches

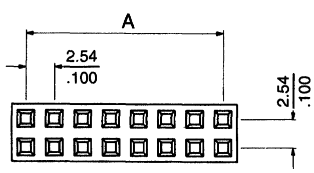
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

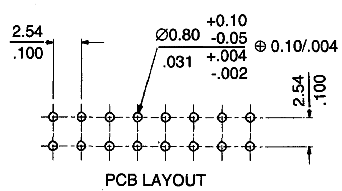
Mechanical
Contact Retention to Housing: 15N min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

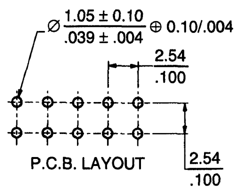
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -55 to +125°C
Recommended Mating Pin Length: 5.65mm (.222") min. to 7.00mm (.275") max.

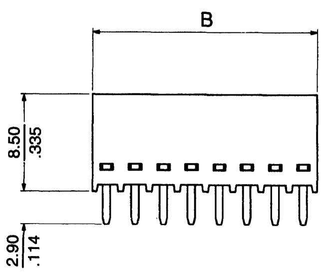


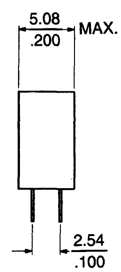
Not For Use With Molex C-Grid SL™ Components

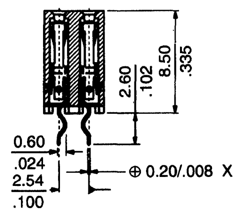












ORDERING INFORMATION AND DIMENSIONS

Circuits	Straight Tail Order No.			Kinked Tail Order No.			Dimension	
	Plating A	Plating E	Plating F	Plating A	Plating E	Plating F	A	B
10	90151-2110	90151-2210	90151-2310	90151-3110	90151-3210	90151-3310	10.16 (.400)	12.70 (.500)
14	90151-2114	90151-2214	90151-2314	90151-3114	90151-3214	90151-3314	15.24 (.600)	17.78 (.700)
16	90151-2116	90151-2216	90151-2316	90151-3116	90151-3216	90151-3316	17.78 (.700)	20.32 (.800)
20	90151-2120	90151-2220	90151-2320	90151-3120	90151-3220	90151-3320	22.86 (.900)	25.40 (1.000)
26	90151-2126	90151-2226	90151-2326	90151-3126	90151-3226	90151-3326	30.48 (1.200)	33.02 (1.300)
34	90151-2134	90151-2234	90151-2334	90151-3134	90151-3234	90151-3334	40.64 (1.600)	43.18 (1.700)
40	90151-2140	90151-2240	90151-2340	90151-3140	90151-3240	90151-3340	48.26 (1.900)	50.80 (2.000)
50	90151-2150	90151-2250	90151-2350	90151-3150	90151-3250	90151-3350	60.96 (2.400)	63.50 (2.500)
60	90151-2160	90151-2260	90151-2360	90151-3160	90151-3260	90151-3360	73.66 (2.900)	76.20 (3.000)
64	90151-2164	90151-2264	90151-2364	90151-3164	90151-3264	90151-3364	78.74 (3.100)	81.28 (3.200)

For other available circuit sizes contact Molex
Plating A: 4µm (160µ") Tin/Lead over Nickel
Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid III™ PC Board Connectors

90152

Dual Row Horizontal

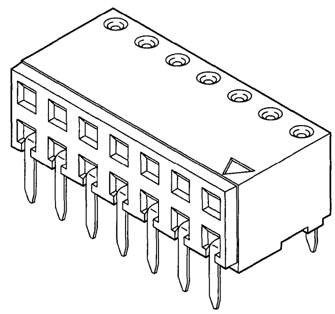
Features and Benefits
- Sizes 4 to 64 circuits
- Contact and plating orientation according to DIN 41651
- Stackable end-to-end
- Meets HE 13/14 specification

Reference Information
Product Specification: PS-99020-0001
Packaging: Tube
Mates With: 0.64mm (.025") square pins
Use With: 1.57mm (.062") thick PC boards
Designed In: Inches

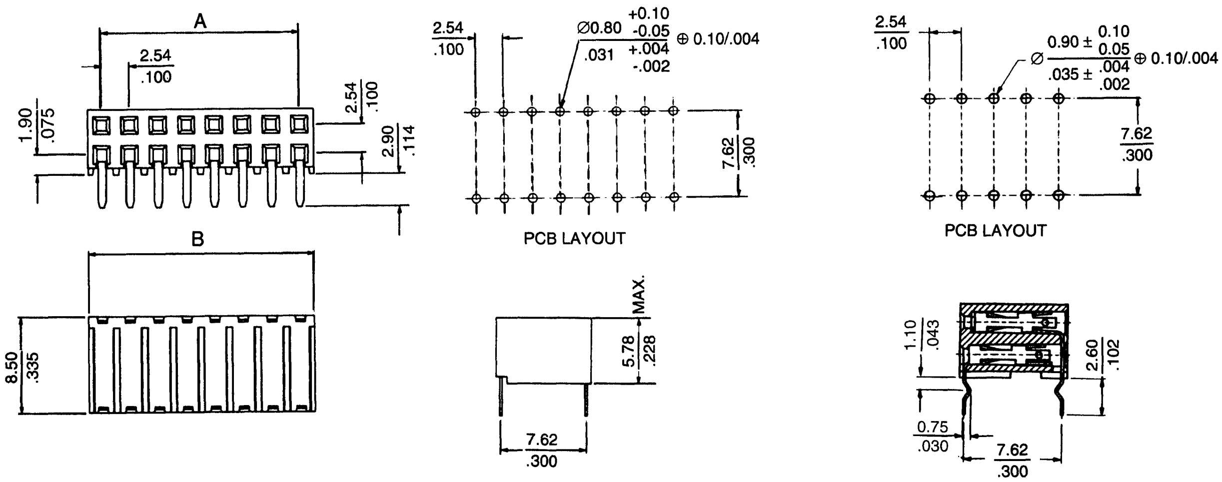
Electrical
Voltage: 350V
Current: 3.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 8.8N min.
Mating Force: 1N max. Gold and 3N max. Tin
Unmating Force: 0.2N min. Gold and 0.2N min. Tin
Normal Force: 1N

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -55 to +125°C
Recommended Mating Pin Length: 5.65mm (.222") min. to 7.00mm (.275") max.



Not For Use With Molex C-Grid SL™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Straight Tail			Kinked Tail			Dimension	
	Order No.			Order No.			A	B
	Plating A	Plating E	Plating F	Plating A	Plating E	Plating F		
10	90152-2110	90152-2210	90152-2310	90152-3110	90152-3210	90152-3310	10.16 (.400)	12.70 (.500)
14	90152-2114	90152-2214	90152-2314	90152-3114	90152-3214	90152-3314	15.24 (.600)	17.78 (.700)
16	90152-2116	90152-2216	90152-2316	90152-3116	90152-3216	90152-3316	17.78 (.700)	20.32 (.800)
20	90152-2120	90152-2220	90152-2320	90152-3120	90152-3220	90152-3320	22.86 (.900)	25.40 (1.000)
26	90152-2126	90152-2226	90152-2326	90152-3126	90152-3226	90152-3326	30.48 (1.200)	33.02 (1.300)
34	90152-2134	90152-2234	90152-2334	90152-3134	90152-3234	90152-3334	40.64 (1.600)	43.18 (1.700)
40	90152-2140	90152-2240	90152-2340	90152-3140	90152-3240	90152-3340	48.26 (1.900)	50.80 (2.000)
50	90152-2150	90152-2250	90152-2350	90152-3150	90152-3250	90152-3350	60.96 (2.400)	63.50 (2.500)
60	90152-2160	90152-2260	90152-2360	90152-3160	90152-3260	90152-3360	73.66 (2.900)	76.20 (3.000)
64	90152-2164	90152-2264	90152-2364	90152-3164	90152-3264	90152-3364	78.74 (3.100)	81.28 (3.200)

For other available circuit sizes contact Molex
Plating A: 4μm (160μ") Tin/Lead over Nickel
Plating E: 0.38μm (15μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel
Plating F: 0.76μm (30μ") selective Gold over Nickel and 4μm (160μ") Tin/Lead over Nickel

ORDERING INFORMATION *Preferred Version in the US*

molex®

Application Tooling
Crimp Tooling for C-Grid SL™

Crimp Tooling Molex US

Presses	
Description	**Order No.**
TM-44 Press without Mini-Mac (220V)	11-09-2074
TM-42 Press without Dies (110V)	69002-5001
TM-144 Press and Stripper without Mini-Mac (220V)	11-09-2073
TM-7 Press without Mini-Mac (110V)	11-05-0043
TM-7 Press without Mini-Mac (220V)	11-05-0046

Terminal Series No.	Order No.									Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	TM-40/42 Terminator Die*	Terminator Die* Spare Tooling	Mini-Mac	Mini-Mac Spare Tooling	TM-144†	TM-80		
70021	11-01-0209	11-03-0036	11-02-0022	11-40-2288	11-40-3288	11-18-2212	11-18-3205		11-09-2072	24-30 (0.20-0.05)	1.52 (.060) max.
70021	11-01-0208	11-03-0036	11-02-0022	11-40-2087	11-40-3087	11-18-2016	11-18-3016			22-24 (0.35-0.20)	1.63 (.064) max.
70058	11-01-0209	11-03-0036	11-02-0022	11-40-2283	11-40-3284	11-18-2211	11-18-3204		11-09-2079	24-30 (0.20-0.05)	1.52 (.060) max.
70058	11-01-0208	11-03-0036	11-02-0022	11-40-2090	11-40-3090	11-18-2019	11-18-3019	11-09-2102	11-09-2101	22-24 (0.35-0.20)	1.63 (.064) max.
71851	11-01-0209	11-03-0036	11-02-0022	11-40-2283	11-40-3284	11-18-2211	11-18-3204		11-09-2079	24-30 (0.20-0.05)	1.52 (.060) max.
71851	11-01-0208	11-03-0036	11-02-0022	11-40-2090	11-40-3090	11-18-2019	11-18-3019	11-09-2102	11-09-2101	22-24 (0.35-0.20)	1.63 (.064) max.

* For use with TM-40/42 or Base Unit
† Includes Mini-Mac

ORDERING INFORMATION *Preferred Version in Europe—Not Available in the US*

Crimp Tooling Molex Europe

Terminal Series No.	Order No.							Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Mini-Mac	Mini-Mac Spare Tooling	TM-144*	TM-80		
70021				69037-1149	69037-2149			24-30 (0.20-0.05)	1.52 (.060) max.
70021				69037-1150	69037-2150			22-24 (0.35-0.20)	1.63 (.064) max.
70058				69037-1146	69037-2146			24-30 (0.20-0.05)	1.52 (.060) max.
70058				69037-1148	69037-2148			22-24 (0.35-0.20)	1.63 (.064) max.
71851				69037-1146	69037-2146			24-30 (0.20-0.05)	1.52 (.060) max.
71851				69037-1148	69037-2148			22-24 (0.35-0.20)	1.63 (.064) max.

* Includes Mini-Mac

ORDERING INFORMATION *Preferred Version in Japan—Not Available in the US*

Crimp Tooling Molex Japan

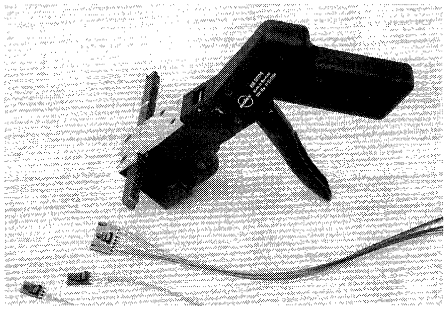
Presses	
Description	**Order No.**
Press for Crimp Die	M15
Press for Modular Crimp Die	M15A
Mini Press for Modular Crimp Die	57177-4000

Terminal Series No.	Order No.					Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Modular Crimp Die	Crimp Die		
70021-0004 70021-0006	57036-5000* 57037-5000†	57033-6000	57033-6000	57017-3000		24-28 (0.20-0.08)	1.52 (.060) max.
70021-0021 70021-0023	57036-5000‡	57033-6000	57033-6000	57017-3000		24-30 (0.20-0.05)	1.40 (.055) max.
70058-0004 70058-0006	57036-5000* 57037-5000†	57033-6000§ 57093-6000**	57033-6000	57014-3000		24-28 (0.20-0.08)	1.15 (.045) max.
70058-0022 70058-0024	57036-5000‡	57033-6000§ 57093-6000**	57033-6000	57014-3000		30-34 (0.05-0.02)	0.90 (.035) max.

* 24 to 26 AWG Insulation Diameter 1.60mm max.
† 24 to 30 AWG Insulation Diameter 1.60mm max.
‡ 22 to 24 AWG Insulation Diameter 1.60mm max.
§ Applies except for No. 51008 housing
** Applies only for No. 51008 housing

Application Tooling Insulation Displacement Technology Tooling For C-Grid SL™

Discrete Wire Terminator Handgun



FEATURES AND SPECIFICATIONS

Features

- Terminates C-Grid SL 70107, 70400 and 70475 product
- Full cycle ratchet
- Automatic indexing to next position after insertion of discrete wire
- Built-in release mechanism
- Does not break off carrier strip
- Does not insert terminals into connector
- Snaps onto standard pistol
- For low volume, prototype and field repair

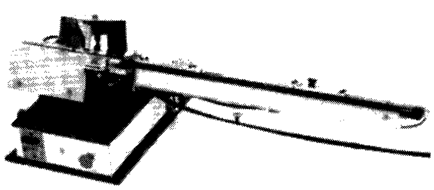
Specifications

Rate: Up to 300 terminations per hour, dependent on operator speed and application (terminal insertion and carrier break off is not included in rate)
Wire Diameter: Discrete wire only, 0.053" diameter max.

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Hand Tool Handle	11-21-5194	
Module for .100" Connectors	11-32-5759	70400, 70475
Module for .100" Connectors	62100-0300	70107

Semi-Automatic Ribbon Cable Terminators Hawk Series



FEATURES AND SPECIFICATIONS

Features

- Terminates C-Grid SL 70400 and 70475 product
- Connectors are fed from preloaded tubes or reels; no manual handling
- Automatically inserts terminals into connector
- Automatic carrier removal system
- Simple setting for different circuit sizes
- Electronic controller for machine operation
- Foot pedal operated

Specifications

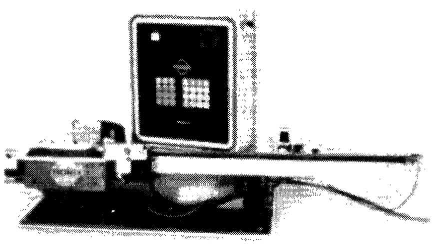
Size: Width—965mm (38")
Depth—585mm (23")
Height—686mm (27")
Weight: 47kg (103 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—2.0A at 120 or 1.0A at 220
Insulation Diameter: 0.80 to 1.35mm (.032 to .053")
Rate: Up to 550 assemblies per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Ribbon Cable Terminator (Tube Feed)	11-20-0908	70400, 70475
Ribbon Cable Terminator (Reel Feed)	11-20-0939	70400, 70475

Note: "H" version currently not available in tubes

Semi-Automatic Discrete Wire Terminators Hawk Series



FEATURES AND SPECIFICATIONS

Features

- Terminates C-Grid SL 70400 and 70475 product
- Connectors are fed from preloaded tubes; no manual handling
- Automatically inserts terminals into connector
- Automatic carrier removal system
- Simple setting for different circuit sizes
- Programmable setting for running voids
- Display prompting operator for wire color sequence
- Electronic controller for machine operation
- Foot pedal operated

Specifications

Size: Width—965mm (38")
Depth—457mm (18")
Height—432mm (17")
Weight: 47kg (103 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—2.0A at 120 or 1.0A at 220
Insulation Diameter: 0.80 to 1.35mm (.032 to .053")
Rate: Up to 1000 terminations per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Discrete Wire Terminator (Tube Feed)	11-20-1305	70400, 70475

Note: "H" version currently not available in tubes

Application Tooling Insulation Displacement Technology Tooling For C-Grid SL™

Semi-Automatic Discrete Wire Terminators Hawk Series

FEATURES AND SPECIFICATIONS

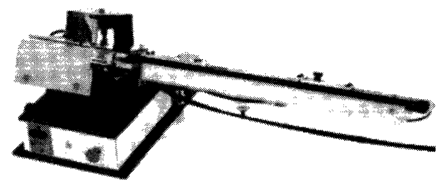
Features
- Terminates C-Grid SL 70400 and 70475 product
- Connectors are fed from preloaded tubes; no manual handling
- Automatically inserts terminals into connector
- Manual carrier removal system (secondary off machine)
- Simple setting for different circuit sizes
- Electronic controller for machine operation
- Foot pedal operated

Specifications
Size: Width—990mm (39")
Depth—508mm (20")
Height—356mm (14")
Weight: 47kg (103 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—2.0A at 120 or 1.0A at 220
Insulation Diameter: 0.80 to 1.35mm (.032 to .053")
Rate: Up to 800 terminations per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Discrete Wire Terminator (Tube Feed)	11-20-0949	70400, 70475

Note: "H" version currently not available in tubes, use reel

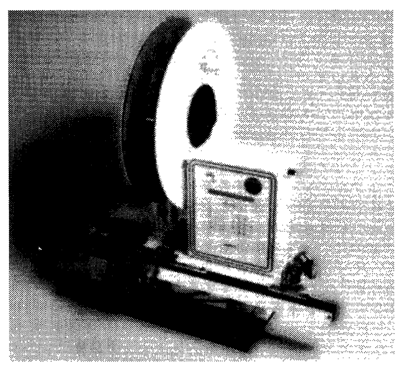


Semi-Automatic Discrete Wire Terminators

FEATURES AND SPECIFICATIONS

Features
- Terminates C-Grid SL 70400 and 70475 product
- Connectors are fed from welded film reels; no manual handling
- Automatically inserts terminals into connector
- Automatic carrier removal system
- Simple setting for different circuit sizes
- Programmable setting for running voids
- Display prompting operator for wire color sequence
- Electronic controller for machine operation
- Foot pedal operated

Specifications
Size: Width—965mm (38")
Depth—584mm (23")
Height—686mm (27")
Weight: 47kg (103 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—2.0A at 120 or 1.0A at 220
Insulation Diameter: 0.80 to 1.35mm (.032 to .053")
Rate: Up to 1000 terminations per hour, dependent on operator speed and application



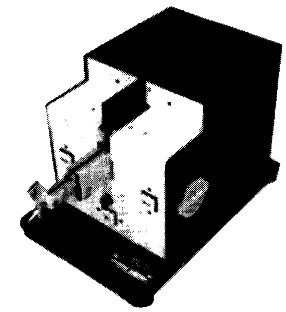
ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Discrete Wire Terminator (Reel Feed)	11-20-1331	70400, 70475

Note: "H" version currently not available in tubes

Application Tooling Insulation Displacement Technology Tooling For C-Grid SL™

Electric Terminator for Dual Row 70451 Connector



FEATURES AND SPECIFICATIONS

Features

- Semi-automatic, electric
- Voiding capabilities
- Terminates Version A through F, 70451 Series
- Terminates 2 wires at once, and automatically seats terminals to complete assembly

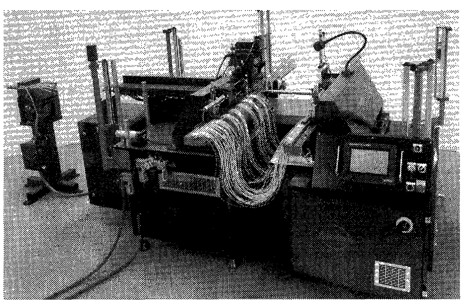
Specifications

Size: Width—254mm (10")
Depth—480mm (19")
Height—267mm (10.5")
Weight: 21.8kg (48 lb)
Electrical: 120V AC, 60 Hz
Rate: Up to 1400 terminations per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Connector
Electric Press	11-20-0917	70451 Series

62000-0000 Series Automatic Harness Assembly Machines



FEATURES AND SPECIFICATIONS

Features

- Terminates C-Grid SL 70400 and 70475 product
- Fully automatic mass terminating machines for high volume applications (minimum estimated annual usage of 10 million terminations)
- Double end having single ended harness capabilities without strip
- Full strip for discrete wire
- Strip and retain for cable
- Single ended harness capability with strip (38mm/1.5" max.) (harness length of 76mm/3" min. to 610mm/24" max.)
- Discrete wire with variable wire length capability (harness length of 152mm/6" min. to 2400mm/95" max.)
- Up to 64 terminations per cycle, dependent on circuit size
- Terminal insertion into connector
- Carrier break off

Specifications

Pneumatics: Pressure—5 BAR (80psig)
Consumption—142L per minute (5 CFM)
Electrical: Voltage—220V AC, 50 Hz or 240V AC, 60 Hz
Current—40.0A (dependent on wire feed options)
Rate: 300 cycles per hour average, dependent on harness length

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable	Contact factory	70400, 70475

Note: Due to the special nature of these machines contact factory for information related to specific harness requirements

Application Tooling Header Cutting Tools For C-Grid SL™

Hand Cutting Tool

FEATURES

- Manually operated
- Interchangeable nests included for various header types

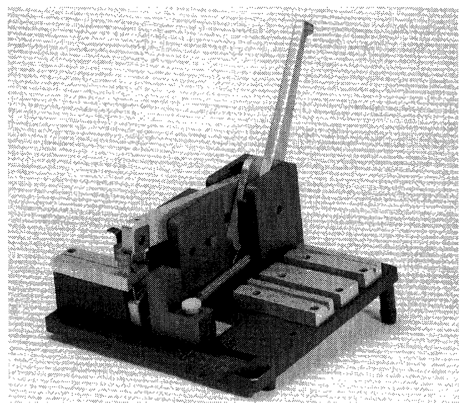
ORDERING INFORMATION

Description	Order No.	Header Series
Tool Assembly	69008-0350	8624, 42375, 42377, 70203, 70216, 70260, 70268, 70287, 70289, 70345, 70524
Replacement Blade—Upper	69008-0078	

Bench Cutting Tool

FEATURES

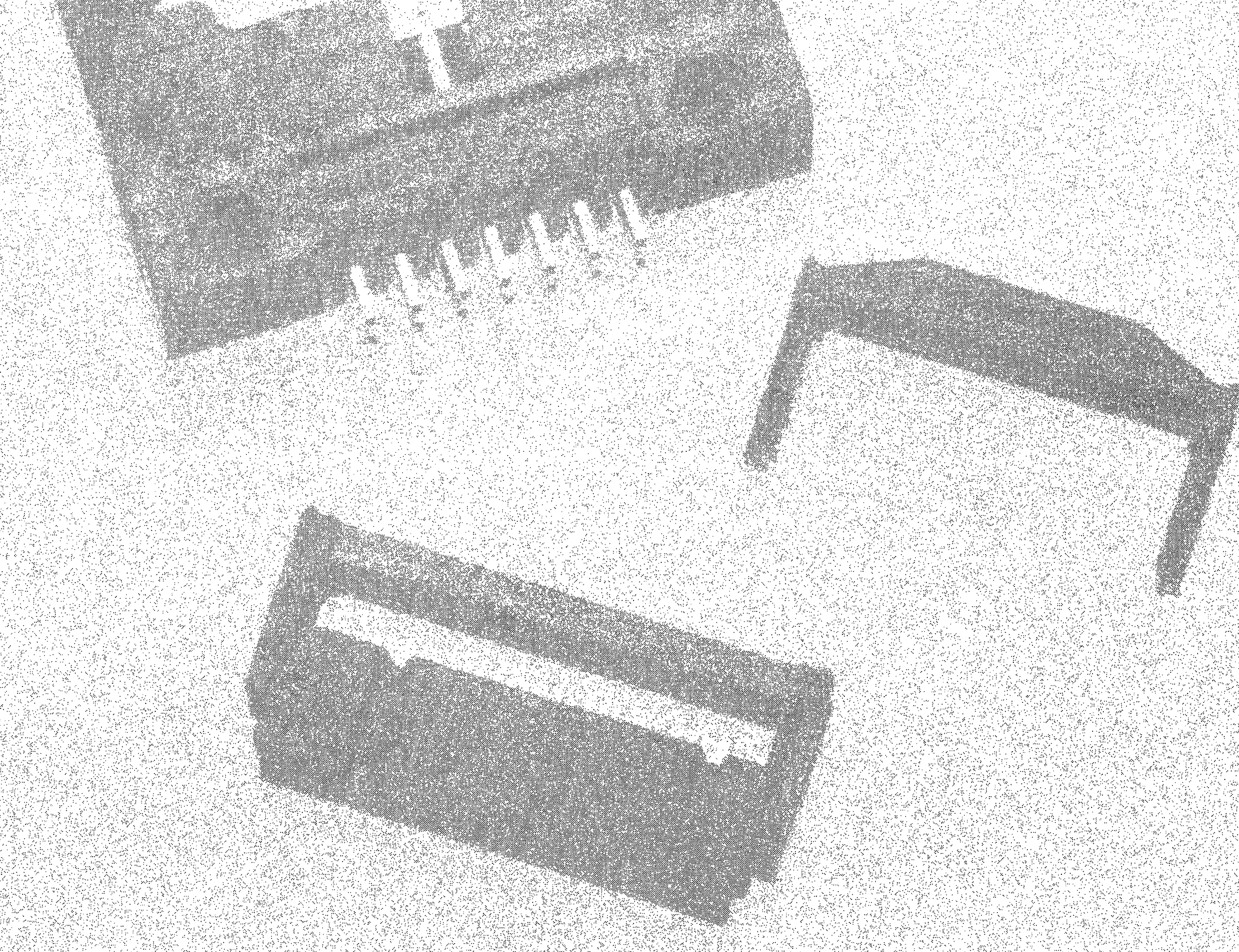
- Bench tool for 2.54mm (.100") pitch header cutting to length
- Incorporates a graduated slideway and stop for presetting of required header length; maximum length of header that can be cut is 40 position



ORDERING INFORMATION

Description	Order No.	Header Series
Tool Assembly	11-20-1230	8624, 42375, 42377, 70203, 70216, 70260, 70268, 70287, 70289, 70345, 70524
Replacement Blade—Upper	11-32-4306	
Replacement Blade—Lower	11-32-4307	

Ribbon Cable Connectors



FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ Ribbon Cable Connectors

70400/70475 Single Row Cable-to-PCB System

Features and Benefits
- Sizes 2 to 25 circuits
- Modular connectors for use with C-Grid single row shrouded headers and clips
- Terminals preloaded into housing
- Polarization and positive locking options

Reference Information
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: Single row headers
Use Molex Cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389
Designed In: Inches

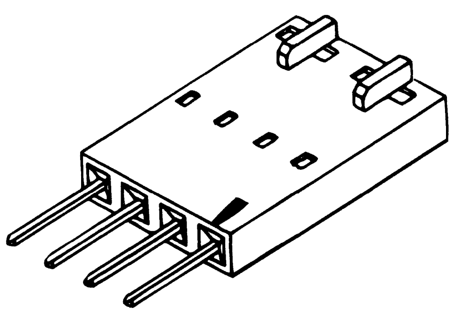
Electrical
Voltage: 250V
Current: 3.0A max.
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10K MΩ min.

Mechanical
Contact Insertion Force: 330g (0.7 lb) max.
Contact Retention to Housing: 1.8kg (4 lb)
Durability: 50 cycles Gold and 25 cycles Tin/Lead

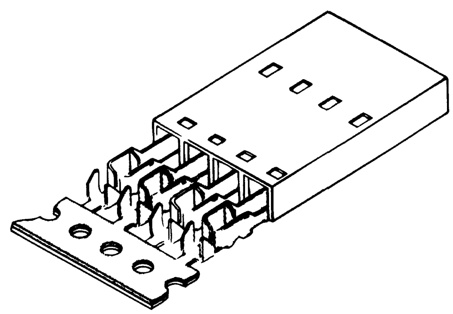
Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C

Please refer to section A of this catalog for more detailed information.

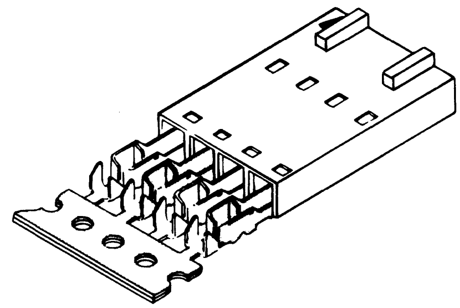
Version D—Male
70475



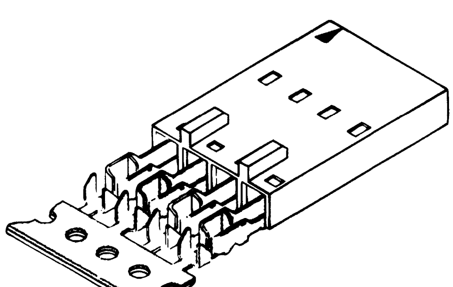
Version A—Female
70400



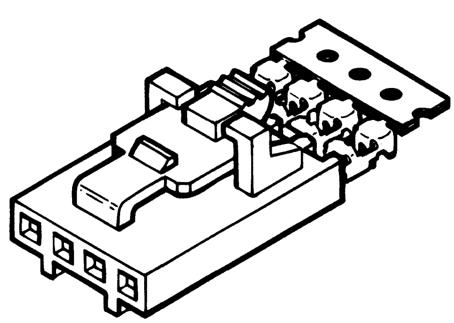
Version C—Female
70400



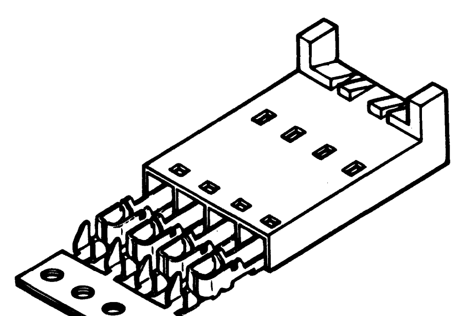
Version D—Female
70400



Version G—Female
70400



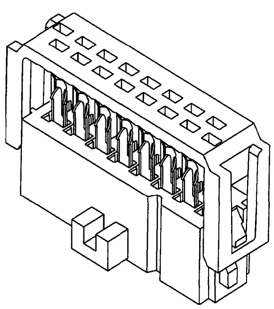
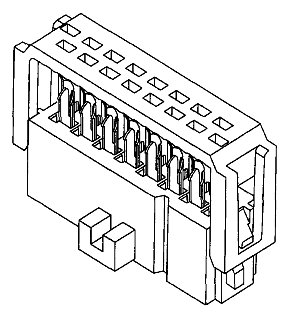
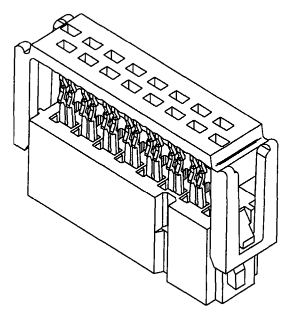
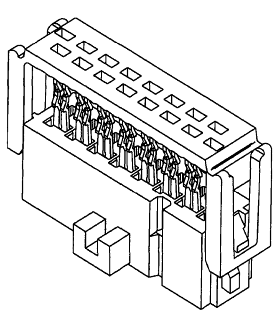
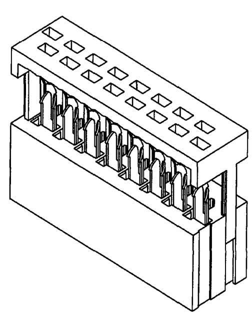
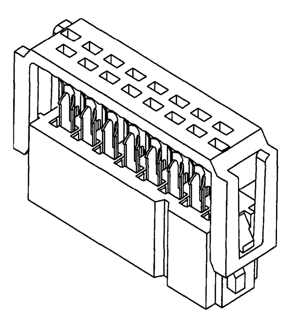
Version H—Female
70400



MX-50™ Ribbon Cable Connector System

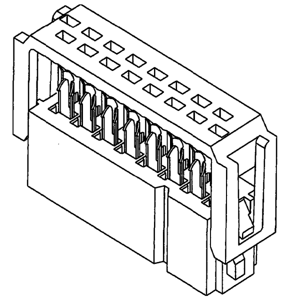
The Molex family of .050" ribbon cable insulation displacement connectors, mating connectors, accessories and application equipment is used worldwide in all types of applications from large computers and PBXs to peripherals and process monitoring systems. Molex connectors combined with options in packaging and application equipment team up to provide the lowest applied cost possible. But we haven't stopped innovating! If you don't see what you need in these catalog pages, call us. We may already have a new product to do just what you need. If not, we will be glad to discuss tooling your request.

And let's not forget Molex product quality. SPC is used in all phases of production to provide our customers with product quality second to none.

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch MX-50™ Ribbon Cable Connector
71247
MIL-C-83503 Type Polarization



Features and Benefits

- Designed to mate with industry-standard headers utilizing short latch/eject levers
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Chamfered pin lead-ins
- Optional strain relief
- Locking IDT section
- Various packaging options for ease of termination and handling

Reference Information

Product Specification: PS-40312
Packaging: Tube and tape
Tooling Information: See pages B-34 to B-37
UL File No.: E29179
CSA File No.: LR19980
Mates With: .025" square pins, mating length .220 to .310"
Use Molex Cable: 6800, 8863 and 40158
Designed In: Inches

Electrical

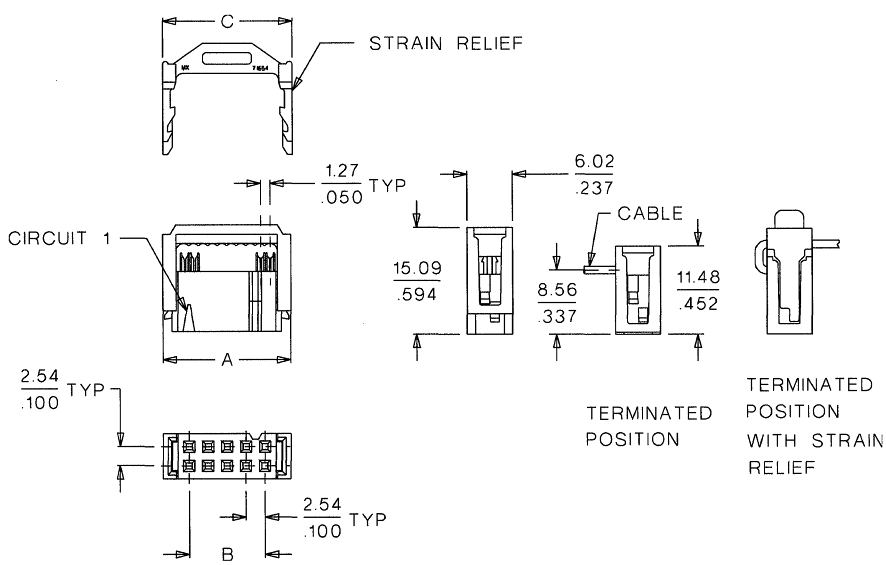
Voltage: 125V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 600V rms
Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Insertion Force: 8 oz per circuit max.
Durability: 50 cycles Gold and 25 cycles Tin/Lead

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Beryllium Copper Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded tinned and 28 AWG stranded tinned and topcoat
Insulation Range: 1.14mm (.045") diameter max.



Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin
40713-1
Order No. 15-04-0292

molex®

1.27mm (.050") Pitch MX-50™ Ribbon Cable Connector

71247 MIL-C-83503 Type Polarization

Circuits	Order No.		Plating No.	Dimension	
	With Strain Relief	Without Strain Relief		A	B
8	71247-0826	71247-0026	1	14.55 (.573)	7.62 (.300)
	71247-0851	71247-0051	2		
	71247-0800	71247-0001	3		
10	71247-0827	71247-0027	1	17.09 (.673)	10.16 (.400)
	71247-0852	71247-0052	2		
	71247-0801	71247-0002	3		
12	71247-0828	71247-0028	1	19.63 (.773)	12.70 (.500)
	71247-0853	71247-0053	2		
	71247-0802	71247-0003	3		
14	71247-0829	71247-0029	1	22.17 (.873)	15.24 (.600)
	71247-0854	71247-0054	2		
	71247-0803	71247-0004	3		
16	71247-0830	71247-0030	1	24.74 (.973)	17.78 (.700)
	71247-0855	71247-0055	2		
	71247-0804	71247-0005	3		
20	71247-0831	71247-0031	1	29.79 (1.173)	22.86 (.900)
	71247-0856	71247-0056	2		
	71247-0805	71247-0006	3		
22	71247-0832	71247-0032	1	32.33 (1.273)	25.40 (1.000)
	71247-0857	71247-0057	2		
	71247-0806	71247-0007	3		
24	71247-0833	71247-0033	1	34.87 (1.373)	27.94 (1.100)
	71247-0858	71247-0058	2		
	71247-0807	71247-0008	3		
26	71247-0834	71247-0034	1	37.41 (1.473)	30.48 (1.200)
	71247-0859	71247-0059	2		
	71247-0808	71247-0009	3		
28	71247-0835	71247-0035	1	39.95 (1.573)	33.02 (1.300)
	71247-0860	71247-0060	2		
	71247-0809	71247-0010	3		
30	71247-0836	71247-0036	1	42.49 (1.673)	35.56 (1.400)
	71247-0861	71247-0061	2		
	71247-0810	71247-0011	3		
34	71247-0837	71247-0037	1	47.57 (1.873)	40.64 (1.600)
	71247-0862	71247-0062	2		
	71247-0811	71247-0012	3		
36	71247-0838	71247-0038	1	50.11 (1.973)	43.18 (1.700)
	71247-0863	71247-0063	2		
	71247-0812	71247-0013	3		
40	71247-0839	71247-0039	1	55.19 (2.173)	48.26 (1.900)
	71247-0864	71247-0064	2		
	71247-0813	71247-0014	3		
44	71247-0840	71247-0040	1	60.27 (2.373)	53.34 (2.100)
	71247-0865	71247-0065	2		
	71247-0814	71247-0015	3		
50	71247-0841	71247-0041	1	67.89 (2.673)	60.96 (2.400)
	71247-0866	71247-0066	2		
	71247-0815	71247-0016	3		
60	71247-0842	71247-0042	1	80.59 (3.173)	73.66 (2.900)
	71247-0867	71247-0067	2		
	71247-0816	71247-0017	3		
62	71247-0843	71247-0043	1	83.13 (3.273)	76.20 (3.000)
	71247-0868	71247-0068	2		
	71247-0817	71247-0018	3		
64	71247-0844	71247-0044	1	85.67 (3.373)	78.74 (3.100)
	71247-0869	71247-0069	2		
	71247-0818	71247-0019	3		

Plating No. 1: 0.38μm (15μ") min. Gold in contact area, 1.91μm (75μ") min. Tin/Lead in termination area, both over 1.27μm (50μ") min. Nickel underplate

Plating No. 2: 0.76μm (30μ") min. Gold in contact area, 1.91μm (75μ") min. Tin/Lead in termination area, both over 1.27μm (50μ") min. Nickel underplate

Plating No. 3: 3.81μm (150μ") Tin/Lead over 1.27μm (50μ") Nickel underplate

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch MX-50™ Ribbon Cable Connector

71247 Center Polarization

Features and Benefits

- Designed to mate with industry-standard headers utilizing short latch/eject levers
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Chamfered pin lead-ins
- Optional strain relief
- Locking IDT section
- Various packaging options for ease of termination and handling

Reference Information

Product Specification: PS-40312
Packaging: Tube and tape
Tooling Information: See pages B-34 to B-37
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70246, 70247 and .025" square or round pin, mating length .220 to .310"
Use Molex Cable: 6800, 8863 and 40158
Designed In: Inches

Electrical

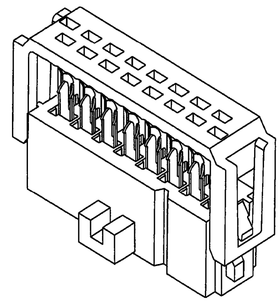
Voltage: 125V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 600V rms
Insulation Resistance: 5000 MΩ min.

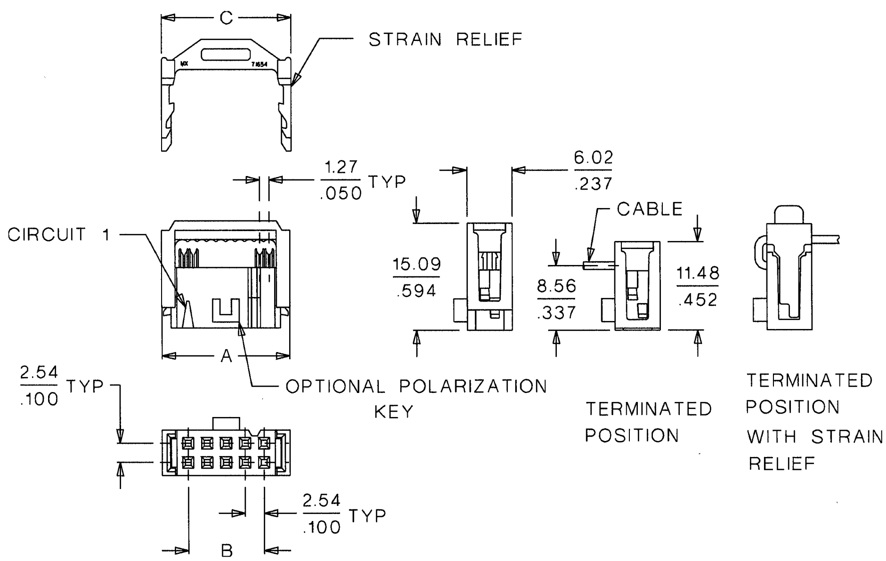
Mechanical

Contact Insertion Force: 8 oz per circuit max.
Durability: 50 cycles Gold and 25 cycles Tin/Lead

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Beryllium Copper Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded tinned and 28 AWG stranded tinned and topcoat
Insulation Range:1.14mm (.045") diameter max.





Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

molex® 1.27mm (.050") Pitch MX-50™ Ribbon Cable Connector

71247 Center Polarization

Circuits	Order No.		Plating No.	Dimension	
	With Strain Relief	Without Strain Relief		A	B
8	71247-1226	71247-0426	1	14.55 (.573)	7.62 (.300)
	71247-1251	71247-0451	2		
	71247-1200	71247-0400	3		
10	71247-1227	71247-0427	1	17.09 (.673)	10.16 (.400)
	71247-1252	71247-0452	2		
	71247-1201	71247-0401	3		
12	71247-1228	71247-0428	1	19.63 (.773)	12.70 (.500)
	71247-1253	71247-0453	2		
	71247-1202	71247-0402	3		
14	71247-1229	71247-0429	1	22.17 (.873)	15.24 (.600)
	71247-1254	71247-0454	2		
	71247-1203	71247-0403	3		
16	71247-1230	71247-0430	1	24.74 (.973)	17.78 (.700)
	71247-1255	71247-0455	2		
	71247-1204	71247-0404	3		
20	71247-1231	71247-0431	1	29.79 (1.173)	22.86 (.900)
	71247-1256	71247-0456	2		
	71247-1205	71247-0405	3		
22	71247-1232	71247-0432	1	32.33 (1.273)	25.40 (1.000)
	71247-1257	71247-0457	2		
	71247-1206	71247-0406	3		
24	71247-1233	71247-0433	1	34.87 (1.373)	27.94 (1.100)
	71247-1258	71247-0458	2		
	71247-1207	71247-0407	3		
26	71247-1234	71247-0434	1	37.41 (1.473)	30.48 (1.200)
	71247-1259	71247-0459	2		
	71247-1208	71247-0408	3		
28	71247-1235	71247-0435	1	39.95 (1.573)	33.02 (1.300)
	71247-1260	71247-0460	2		
	71247-1209	71247-0409	3		
30	71247-1236	71247-0436	1	42.49 (1.673)	35.56 (1.400)
	71247-1261	71247-0461	2		
	71247-1210	71247-0410	3		
34	71247-1237	71247-0437	1	47.57 (1.873)	40.64 (1.600)
	71247-1262	71247-0462	2		
	71247-1211	71247-0411	3		
36	71247-1238	71247-0438	1	50.11 (1.973)	43.18 (1.700)
	71247-1263	71247-0463	2		
	71247-1212	71247-0412	3		
40	71247-1239	71247-0439	1	55.19 (2.173)	48.26 (1.900)
	71247-1264	71247-0464	2		
	71247-1213	71247-0413	3		
44	71247-1240	71247-0440	1	60.27 (2.373)	53.34 (2.100)
	71247-1265	71247-0465	2		
	71247-1214	71247-0414	3		
50	71247-1241	71247-0441	1	67.89 (2.673)	60.96 (2.400)
	71247-1266	71247-0466	2		
	71247-1215	71247-0415	3		
60	71247-1242	71247-0442	1	80.59 (3.173)	73.66 (2.900)
	71247-1267	71247-0467	2		
	71247-1216	71247-0416	3		
62	71247-1243	71247-0443	1	83.13 (3.273)	76.20 (3.000)
	71247-1268	71247-0468	2		
	71247-1217	71247-0417	3		
64	71247-1244	71247-0444	1	85.67 (3.373)	78.74 (3.100)
	71247-1269	71247-0469	2		
	71247-1218	71247-0418	3		

Plating No. 1: 0.38µm (15µ") min. Gold in contact area, 1.91µm (75µ") min. Tin/Lead in termination area, both over 1.27µm (50µ") min. Nickel underplate

Plating No. 2: 0.76µm (30µ") min. Gold in contact area, 1.91µm (75µ") min. Tin/Lead in termination area, both over 1.27µm (50µ") min. Nickel underplate

Plating No. 3: 3.81µm (150µ") Tin/Lead over 1.27µm (50µ") Nickel underplate

FEATURES AND SPECIFICATIONS

molex®

1.27mm (.050") Pitch MX-50™ Ribbon Cable Connector

70625

MIL-C-83503 Type Polarization

Features and Benefits

- Designed to mate with industry-standard headers utilizing short latch/eject levers
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Chamfered pin lead-ins
- Low-cost Phosphor Bronze terminal
- Locking IDT section
- Various packaging options for ease of termination and handling

Reference Information

Product Specification: PS-70625
Packaging: Tube and tape
Tooling Information: See pages B-34 to B-37
UL File No.: E29179
CSA File No.: LR19980
Mates With: .025" square pin, mating length .220 to .310"
Designed In: Inches

Electrical

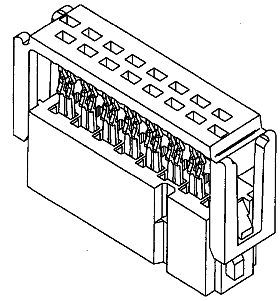
Voltage: 125V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 600V rms
Insulation Resistance: 5000 MΩ min.

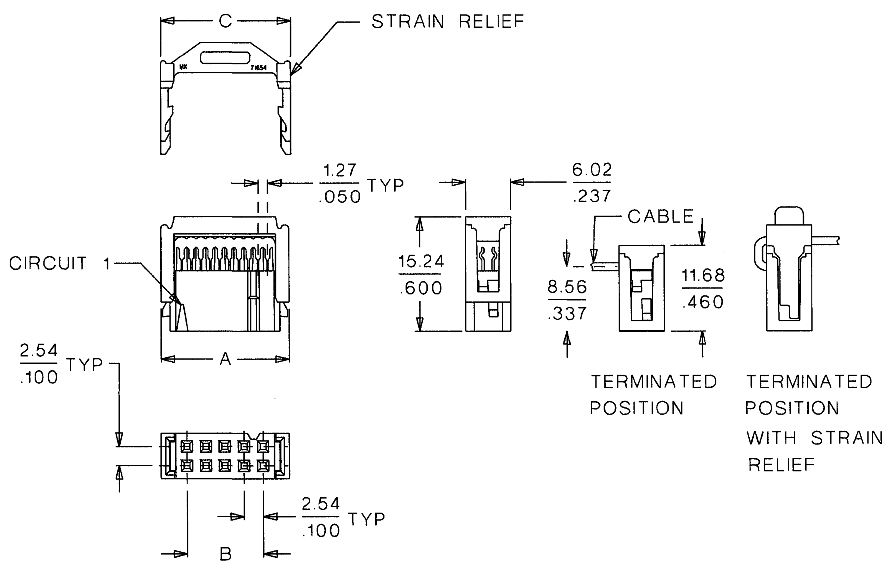
Mechanical

Contact Insertion Force: 8 oz per circuit max.
Durability: 50 cycles Gold and 25 cycles Tin/Lead

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded tinned and 28 AWG stranded tinned and topcoat
Insulation Range: 1.14mm (.045") diameter max.





ORDERING INFORMATION AND DIMENSIONS

	Order No.		
	15µ" Gold	30µ" Gold	150µ" Tin/Lead
With Strain Relief	15-49-4XX5	15-49-4XX6	15-49-4XX7
Without Strain Relief	15-49-6XX5	15-49-6XX6	15-49-6XX7
Replace "XX" with no. of circuits, 08-64			

Circuits	Dimension		
	A	B	C
8	14.55 (.573)	7.62 (.300)	14.81 (.583)
10	17.09 (.673)	10.16 (.400)	17.38 (.683)
12	19.63 (.773)	12.70 (.500)	19.89 (.783)
14	22.17 (.873)	15.24 (.600)	22.43 (.883)
16	24.74 (.973)	17.78 (.700)	24.97 (.983)
20	29.79 (1.173)	22.86 (.900)	30.05 (1.183)
22	32.33 (1.273)	25.40 (1.000)	32.59 (1.283)
24	34.87 (1.373)	27.94 (1.100)	35.13 (1.383)
26	37.41 (1.473)	30.48 (1.200)	37.67 (1.483)
28	39.95 (1.573)	33.02 (1.300)	40.21 (1.583)

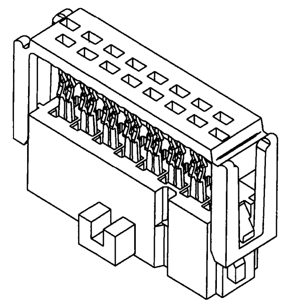
Circuits	Dimension		
	A	B	C
30	42.49 (1.673)	35.56 (1.400)	42.75 (1.683)
32	45.03 (1.773)	38.10 (1.500)	45.29 (1.783)
34	47.57 (1.873)	40.64 (1.600)	47.83 (1.883)
36	50.11 (1.973)	43.18 (1.700)	50.37 (1.983)
40	55.19 (2.173)	48.26 (1.900)	55.45 (2.183)
44	60.27 (2.373)	53.34 (2.100)	60.53 (2.383)
50	67.89 (2.673)	60.96 (2.400)	68.15 (2.683)
60	80.59 (3.173)	73.66 (2.900)	80.85 (3.183)
62	83.13 (3.273)	76.20 (3.000)	83.39 (3.283)
64	85.67 (3.373)	78.74 (3.100)	85.93 (3.383)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch MX-50™ Ribbon Cable Connector

70625

Center Polarization



Features and Benefits

- Designed to mate with industry-standard headers utilizing short latch/eject levers
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Chamfered pin lead-ins
- Low-cost Phosphor Bronze terminal
- Locking IDT section
- Various packaging options for ease of termination and handling

Reference Information

Product Specification: PS-70625
Packaging: Tube and tape
Tooling Information: See pages B-34 to B-37
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70246, 70247 and .025" square or round pin, mating length .220 to .310"
Designed In: Inches

Electrical

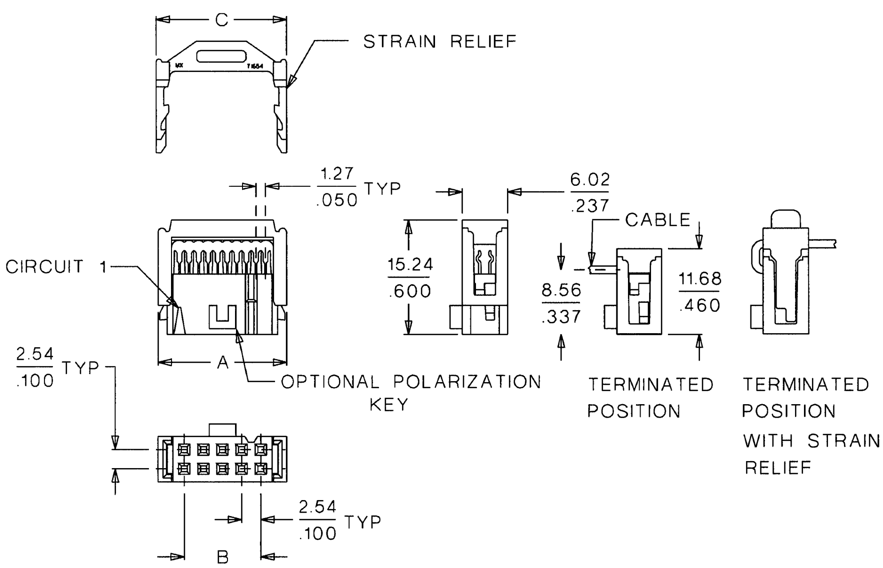
Voltage: 125V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 600V rms
Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Insertion Force: 8 oz per circuit max.
Durability: 50 cycles Gold and 25 cycles Tin/Lead

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded tinned and 28 AWG stranded tinned and topcoat
Insulation Range: 1.14mm (.045") diameter max.



ORDERING INFORMATION AND DIMENSIONS

	Order No.		
	15μ" Gold	30μ" Gold	150μ" Tin/Lead
With Strain Relief	15-49-4XX0	15-49-4XX1	15-49-4XX2
Without Strain Relief	15-49-6XX0	15-49-6XX1	15-49-6XX2
Replace "XX" with no. of circuits, 08-64			

Circuits	Dimension A	Dimension B	Dimension C
8	14.55 (.573)	7.62 (.300)	14.81 (.583)
10	17.09 (.673)	10.16 (.400)	17.38 (.683)
12	19.63 (.773)	12.70 (.500)	19.89 (.783)
14	22.17 (.873)	15.24 (.600)	22.43 (.883)
16	24.74 (.973)	17.78 (.700)	24.97 (.983)
20	29.79 (1.173)	22.86 (.900)	30.05 (1.183)
22	32.33 (1.273)	25.40 (1.000)	32.59 (1.283)
24	34.87 (1.373)	27.94 (1.100)	35.13 (1.383)
26	37.41 (1.473)	30.48 (1.200)	37.67 (1.483)
28	39.95 (1.573)	33.02 (1.300)	40.21 (1.583)

Circuits	Dimension A	Dimension B	Dimension C
30	42.49 (1.673)	35.56 (1.400)	42.75 (1.683)
32	45.03 (1.773)	38.10 (1.500)	45.29 (1.783)
34	47.57 (1.873)	40.64 (1.600)	47.83 (1.883)
36	50.11 (1.973)	43.18 (1.700)	50.37 (1.983)
40	55.19 (2.173)	48.26 (1.900)	55.45 (2.183)
44	60.27 (2.373)	53.34 (2.100)	60.53 (2.383)
50	67.89 (2.673)	60.96 (2.400)	68.15 (2.683)
60	80.59 (3.173)	73.66 (2.900)	80.85 (3.183)
62	83.13 (3.273)	76.20 (3.000)	83.39 (3.283)
64	85.67 (3.373)	78.74 (3.100)	85.93 (3.383)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch MX-50™ Slimline Ribbon Cable Connector

70121/71891 Feed-Through Version

Features and Benefits

- Scalloped upper housing for positive cable registration
- Chamfered, closed-entry pin windows provide lead-in for mating pin
- Feed-through preloaded upper housing for conventional daisy chaining
- Ideal for cable connection to back panel pin fields
- Locking IDT section for upper housing
- When stacking end-to-end only 2 pin circuits are lost, not 4, and though lost, they are not removed, but are enveloped by molded pockets in the housing

Reference Information

Product Specification: PS-70121
Packaging: Tube and tape
Tooling Information: See pages B-34 to B-37
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8624 and 70203
Use Molex Cable: 6800, 8863 and 40158
Designed In: Inches

Electrical

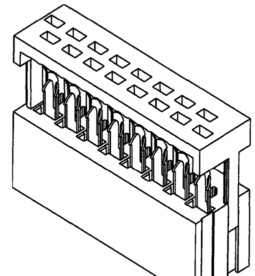
Voltage: 125V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 600V rms
Insulation Resistance: 5000 MΩ min.

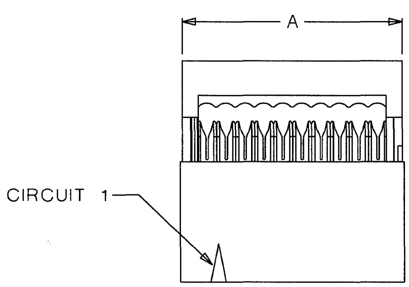
Mechanical

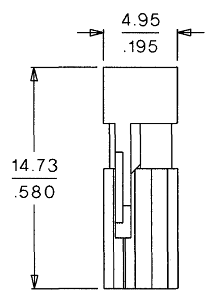
Contact Insertion Force: 8 oz per circuit max.
Durability: 50 cycles Gold and 25 cycles Tin/Lead

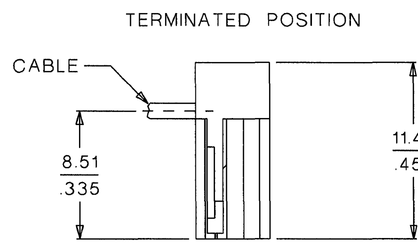
Physical

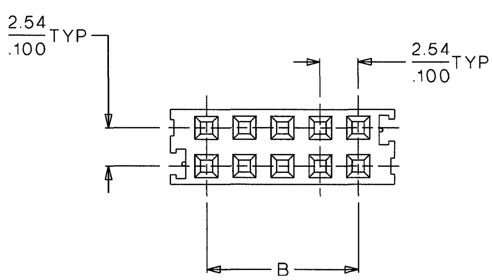
Housing: Black glass-filled polyester, UL 94V-0
Contact: Beryllium Copper Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded tinned and 28 AWG stranded tinned and topcoat
Insulation Range: 1.14mm (.045") diameter max.











Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Engineering No.	Order No.		
	15µ" Gold	30µ" Gold	150µ" Tin/Lead
70121*	• 15-47-3XX1	• 15-47-3XX2	• 15-47-3XX5
71891†	• 15-47-2XX7	• 15-47-2XX6	• 15-47-1XX9
Replace "XX" with no. of circuits, 06-64			

• US Standard Product, available through Molex franchised distributors
* 70121 Standard Slimline
† 71891 provides passive retention and vibration damping on .025" square pins
‡ The 10 circuit connector is available with center polarizing bump
Note: Tube packaged for AM60556, contact factory for part numbers packaged for automatic assembly

Circuits	Dimension	
	A	B
6	9.91 (.390)	5.08 (.200)
8	12.45 (.490)	7.62 (.300)
10‡	14.99 (.590)	10.16 (.400)
12	17.53 (.690)	12.70 (.500)
14	20.07 (.790)	15.24 (.600)
16	22.61 (.890)	17.78 (.700)
20	27.69 (1.090)	22.86 (.900)
24	32.77 (1.290)	27.94 (1.100)
26	35.31 (1.390)	30.48 (1.200)
30	40.39 (1.590)	35.56 (1.400)
34	45.47 (1.790)	40.64 (1.600)
36	48.01 (1.890)	43.18 (1.700)
40	53.09 (2.090)	48.26 (1.900)
50	65.97 (2.590)	60.96 (2.400)
60	78.49 (3.090)	73.66 (2.900)
64	83.57 (3.290)	78.74 (3.100)

FEATURES AND SPECIFICATIONS

molex®

1.27mm (.050") Pitch MX-50™ Slimline Ribbon Cable Connector

70121/71891 Feed-To Version

Features and Benefits

- Feed-to preloaded upper housing for dense packaging designs
- Ideal for cable connection to back panel pin fields
- Available with right- or left-hand cable stop and center polarization
- Locking IDT section for upper housing
- When stacking end-to-end only 2 pin circuits are lost, not 4, and though lost, they are not removed, but are enveloped by molded pockets in the housing
- MX-50 Slimline provides a feed-to option for side-to-side stackability and protection from shorting

Reference Information

Product Specification: PS-70121
Packaging: Tube and tape
Tooling Information: See pages B-34 to B-37
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8624 and 70203
Use Molex Cable: 6800, 8863 and 40158
Designed In: Inches

Electrical

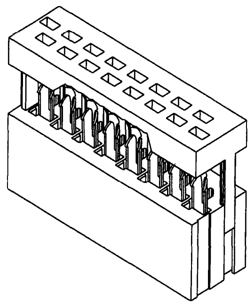
Voltage: 125V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 600V rms
Insulation Resistance: 5000 MΩ min.

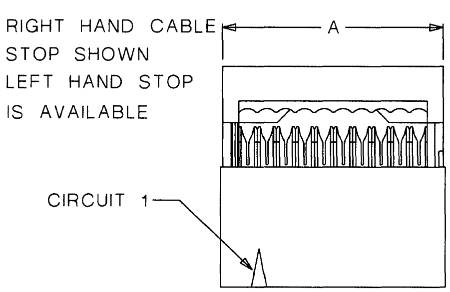
Mechanical

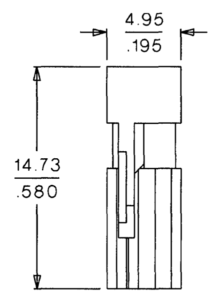
Contact Insertion Force: 8 oz per circuit max.
Durability: 50 cycles Gold and 25 cycles Tin/Lead

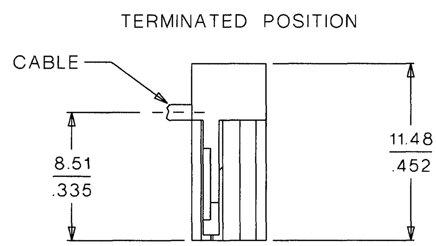
Physical

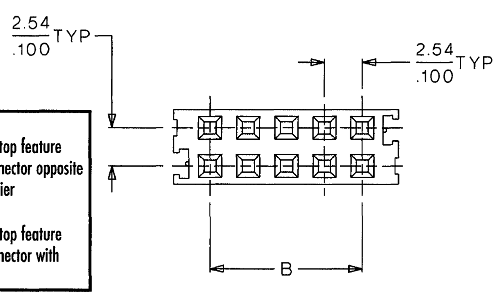
Housing: Black glass-filled polyester, UL 94V-0
Contact: Beryllium Copper Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded tinned and 28 AWG stranded tinned and topcoat
Insulation Range: 1.14mm (.045") diameter max.











RIGHT-HAND
Upper housing cable stop feature located on side of connector opposite from Circuit #1 identifier
LEFT-HAND
Upper housing cable stop feature located on side of connector with Circuit #1 identifier

Delivered on a carrier with 20 pieces per strip.

Actual Size

Universal Polarizing Pin 40713-1
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Engineering No.	Order No.		
	Plating Option	Right-Hand Cable Stop	Left-Hand Cable Stop
70121*	15μ" min. selective Gold	• 15-47-3XX3	• 15-99-5XX0
	30μ" min. selective Gold	• 15-47-3XX4	• 15-99-5XX1
	150μ" overall Tin/Lead	• 15-47-3XX6	• 15-99-5XX2
71891†	15μ" min. selective Gold	• 15-47-2XX8	• 15-99-3XX7
	30μ" min. selective Gold	• 15-47-2XX9	• 15-99-3XX9
	150μ" overall Tin/Lead	• 15-47-72XX	• 15-99-74XX
Replace "XX" with no. of circuits, 06-64			

• US Standard Product, available through Molex franchised distributors
* 70121 Standard Slimline
† 71891 provides passive retention and vibration damping on .025" square pins
‡ The 10 circuit connector is available with center polarizing bump
Note: Tube packaged for AM60556, contact factory for part numbers packaged for automatic assembly

Circuits	Dimension	
	A	B
6	9.91 (.390)	5.08 (.200)
8	12.45 (.490)	7.62 (.300)
10‡	14.99 (.590)	10.16 (.400)
12	17.53 (.690)	12.70 (.500)
14	20.07 (.790)	15.24 (.600)
16	22.61 (.890)	17.78 (.700)
20	27.69 (1.090)	22.86 (.900)
24	32.77 (1.290)	27.94 (1.100)
26	35.31 (1.390)	30.48 (1.200)
30	40.39 (1.590)	35.56 (1.400)
34	45.47 (1.790)	40.64 (1.600)
36	48.01 (1.890)	43.18 (1.700)
40	53.09 (2.090)	48.26 (1.900)
50	65.97 (2.590)	60.96 (2.400)
60	78.49 (3.090)	73.66 (2.900)
64	83.57 (3.290)	78.74 (3.100)

1.27mm (.050") Pitch QF 50™ Ribbon Cable Connector System

Molex offers one of the widest ranges of connectors for 1.27mm (.050") ribbon cable on the market today. The QF 50 family features a variety of products conforming to industry-standard styles, such as DIN 41651, MIL-C-83503 keying, HE-10, etc. There is a choice of receptacle styles addressed to specific market requirements and a variety of designer-friendly headers.

Receptacles

Built to the highest quality standards, 2 distinct styles are offered:

- 5320 series, incorporating a dual-contact beam independently acknowledged to out-perform others on the market
- 90635 series, a lower-cost single-contact beam product, offering all the technical performance of its dual-beam counterpart, while also offering MIL keying

Headers

Available in 3 styles:

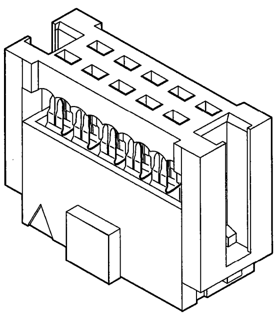
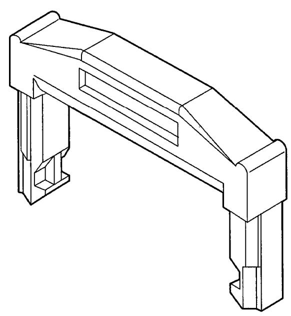
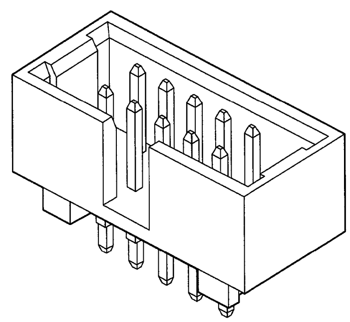
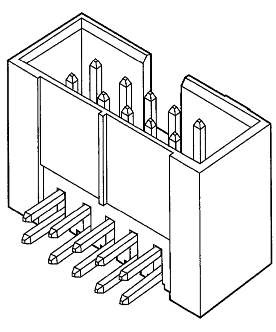
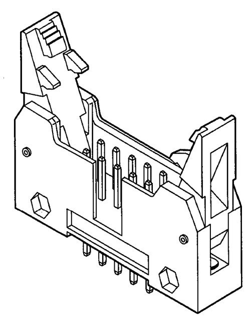
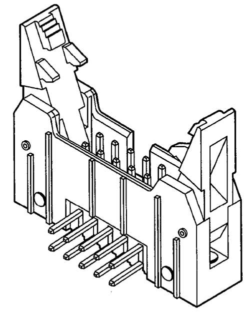
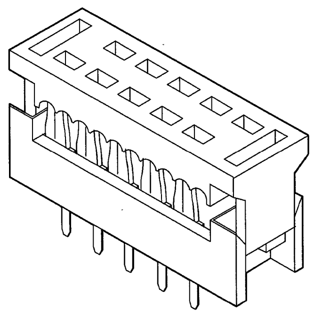
- Latch-eject style uniquely functioning with or without strain reliefs on receptacles and with ejectors that remain flush with the body, thus saving valuable PCB real estate
- Standard shrouded headers
- Low profile headers in industry-standard styles with various options, including variable board location/ retention features and SMT-compatible insulators

Application Tooling

Molex has developed a choice of equipment that allows you to tailor your application tooling according to your volumes— from simple hand tools to high-volume automatic termination. Various packaging styles are available as options to optimize your applied cost. Please see pages B-34 to B-37.

Cable

In line with the philosophy of offering our customers a complete interconnection solution, Molex also supplies the necessary cable to get you connected! Please refer to section H.

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Receptacle

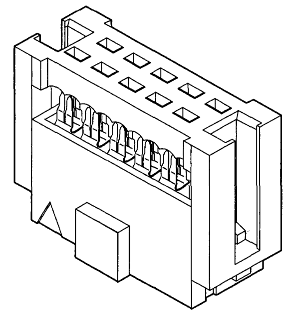
5320 Vertical, Dual Row Single Polarization

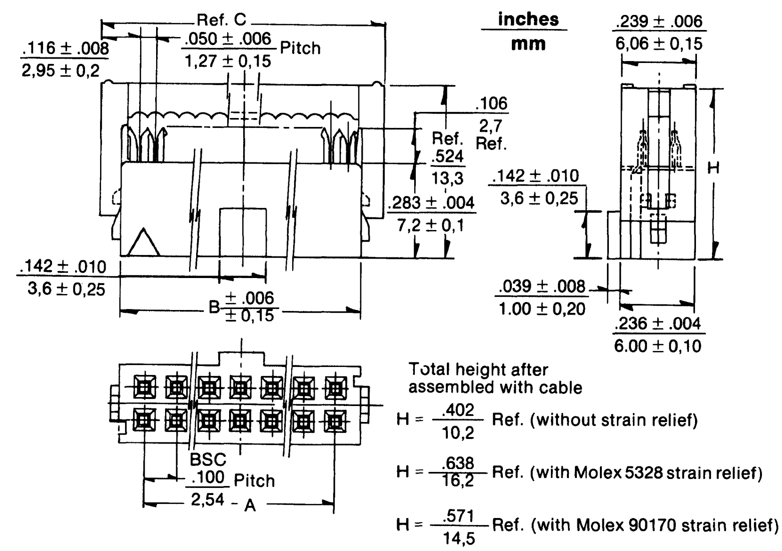
Features and Benefits
- Sizes 10 to 60 circuits
- Polarized

Reference Information
Packaging: Tray
Tooling Information: See pages B-34 to B-37
UL File No.: E29179-E
CSA File No.: LR37272-P21
Mates With: 5330, 5332, 5340 and 5342
Use With: 5328
Designed In: Millimeters

Electrical
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +105°C
Cable Accommodation: 26 AWG stranded and 28 AWG stranded and solid
Insulation Range: 1.14mm (.045") diameter max.





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating NAGS1	Plating NAT2	A	B	C
10	39-51-2100	39-52-1104	10.16 (.400)	13.96 (.550)	17.33 (.682)
14	39-51-2140	39-52-1144	15.24 (.600)	19.04 (.750)	22.41 (.882)
16	39-51-2160	39-52-1164	17.78 (.700)	21.58 (.850)	24.95 (.982)
20	39-51-2200	39-52-1204	22.86 (.900)	26.66 (1.050)	30.03 (1.182)
26	39-51-2260	39-52-1264	30.48 (1.200)	34.28 (1.350)	37.65 (1.482)
30	39-51-2300	39-52-1304	38.10 (1.500)	39.36 (1.550)	42.73 (1.682)
34	39-51-2340	39-52-1344	40.64 (1.600)	44.44 (1.750)	47.81 (1.882)
40	39-51-2400	39-52-1404	48.26 (1.900)	52.06 (2.050)	55.43 (2.182)
50	39-51-2500	39-52-1504	60.96 (2.400)	64.76 (2.550)	68.13 (2.682)
60	39-51-2600	39-52-1604	73.66 (2.900)	77.46 (3.050)	80.83 (3.182)

Plating NAGS1: 39µ" (1µm) min. Nickel underplate. Contact area: 4µ" (0.1µm) min. Gold. ID area: 1µm min. Tin.
Plating NAT2: 35µ" (0.9µm) min. Tin overall, over Nickel underplate

FEATURES AND SPECIFICATIONS

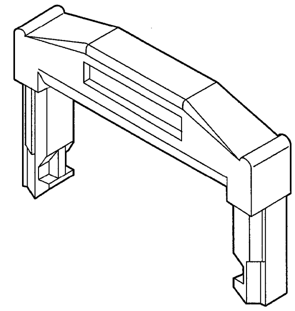
molex QF 50™ Strain Relief

5328

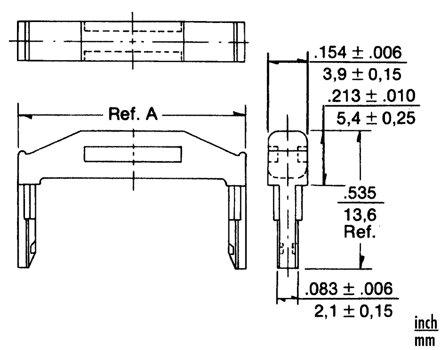
Features and Benefits
- Symmetrical

Reference Information
Packaging: Bag
UL File No.: E29179-E
Use With: 5320
Designed In: Millimeters

Physical
Housing: Black polyester, UL 94V-0



Preferred Version in Japan



ORDERING INFORMATION AND DIMENSIONS

Circuits*	Order No.	Dimension A
10	15-25-1103	17.33 (.682)
14	15-25-1143	22.41 (.882)
16	15-25-1163	24.95 (.982)
20	15-25-1203	30.03 (1.782)
26	15-25-1263	37.65 (1.482)
30	15-25-1303	42.73 (1.682)
34	15-25-1343	47.81 (1.882)
40	15-25-1403	55.43 (2.182)
50	15-25-1503	68.13 (2.682)
60	15-25-1603	80.83 (3.182)

* Number of circuits on mating connector

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch QF 50™ Receptacle

90635 Vertical, MIL/DIN Version

Features and Benefits

- Sizes 10 to 64 circuits
- Available with or without polarization
- Complies with industry-standard DIN 41651 and MIL-3-83503 keying
- Selective Gold plating option for contacts
- Available in various packaging styles

Reference Information

Product Specification: PS-99020-0015
Packaging: Tray (contact factory for reels)
Tooling Information: See pages B-34 to B-37
Mates With: 90571, 90572, 90663, 90708 and 90709
Designed In: Millimeters

Electrical

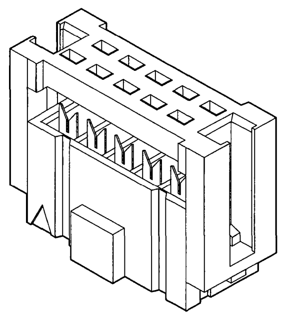
Voltage: 250V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

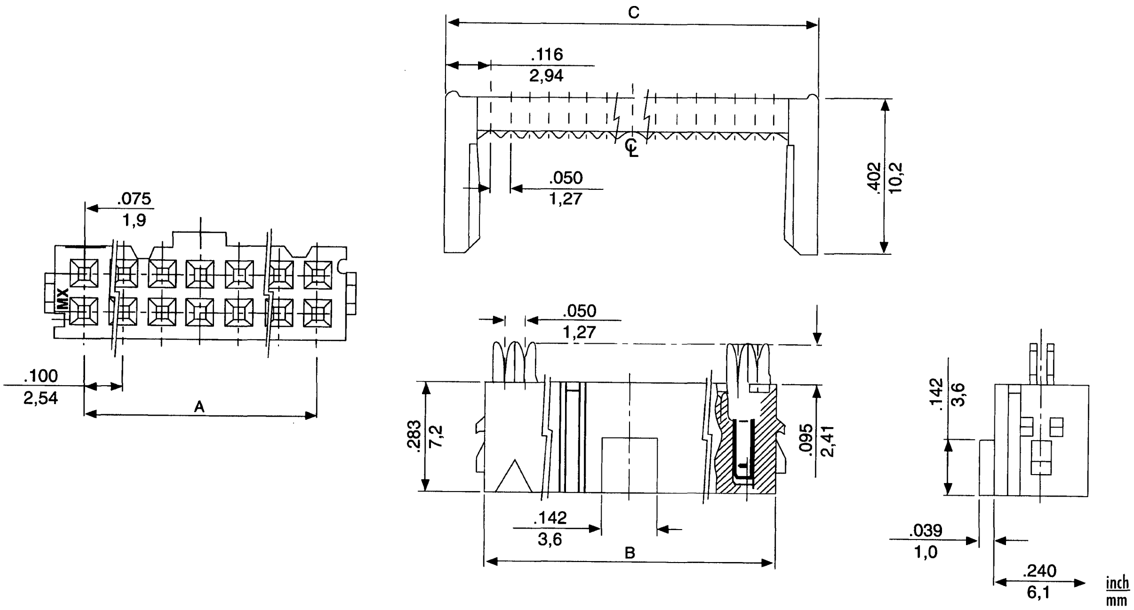
Mechanical

Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical

Housing: Glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -25 to +85°C
Cable Accommodation: 26 AWG stranded and 28 AWG stranded and solid





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.						Dimension		
	With Polarization			Without Polarization			A	B	C
	Plating 1	Plating 2	Plating 3	Plating 1	Plating 2	Plating 3			
10	90635-1101	90635-1102	90635-1103	90635-3101	90635-3102	90635-3103	10.16 (.400)	13.96 (.550)	17.30 (.681)
14	90635-1141	90635-1142	90635-1143	90635-3141	90635-3142	90635-3143	15.24 (.600)	19.04 (.750)	22.38 (.881)
16	90635-1161	90635-1162	90635-1163	90635-3161	90635-3162	90635-3163	17.78 (.700)	21.58 (.850)	24.92 (.981)
20	90635-1201	90635-1202	90635-1203	90635-3201	90635-3202	90635-3203	22.86 (.900)	26.66 (1.050)	30.00 (1.181)
24	90635-1241	90635-1242	90635-1243	90635-3241	90635-3242	90635-3243	27.94 (1.100)	31.74 (1.250)	35.08 (1.381)
26	90635-1261	90635-1262	90635-1263	90635-3261	90635-3262	90635-3263	30.48 (1.200)	34.28 (1.350)	37.62 (1.481)
30	90635-1301	90635-1302	90635-1303	90635-3301	90635-3302	90635-3303	35.56 (1.400)	39.36 (1.550)	42.70 (1.681)
34	90635-1341	90635-1342	90635-1343	90635-3341	90635-3342	90635-3343	40.64 (1.600)	44.44 (1.750)	47.78 (1.881)
40	90635-1401	90635-1402	90635-1403	90635-3401	90635-3402	90635-3403	48.26 (1.900)	52.06 (2.050)	55.40 (2.181)
50	90635-1501	90635-1502	90635-1503	90635-3501	90635-3502	90635-3503	60.96 (2.400)	64.76 (2.550)	68.10 (2.681)
60	90635-1601	90635-1602	90635-1603	90635-3601	90635-3602	90635-3603	73.66 (2.900)	77.46 (3.050)	80.80 (3.181)
64	90635-1641	90635-1642	90635-1643	90635-3641	90635-3642	90635-3643	78.74 (3.100)	82.54 (3.250)	85.88 (3.381)

Plating 1: Contact area: 4µ" Gold flash min. IDT area: 39µ" min. Tin/Lead over Nickel.
Plating 2: Contact area: 30µ" Gold min. IDT area: 39µ" min. Tin/Lead over Nickel.
Plating 3: Contact area: 15µ" Gold min. IDT area: 39µ" Tin/Lead over Nickel.

FEATURES AND SPECIFICATIONS

molex® **QF 50™ Strain Relief**

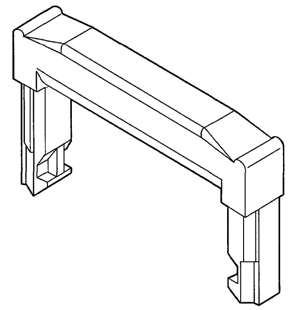
90170

DIN 41651, Standard Low Profile

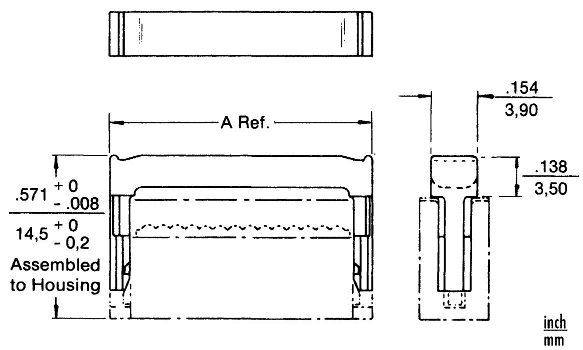
Features and Benefits
- Complies with industry-standard DIN 41651

Reference Information
Product Specification: PS-99020-0015
Packaging: Bag
Use With: 5320 and 90635
Designed In: Inches

Physical
Housing: Black glass-filled polyester, UL 94V-0



Preferred Version in Europe



ORDERING INFORMATION AND DIMENSIONS

Circuits*	Order No.	Dimension A
10	90170-0010	17.33 (.682)
14	90170-0014	22.41 (.882)
16	90170-0016	24.95 (.982)
20	90170-0020	30.03 (1.182)
26	90170-0026	37.65 (1.482)
30	90170-0030	42.73 (1.682)
34	90170-0034	47.81 (1.882)
40	90170-0040	55.43 (2.182)
50	90170-0050	68.13 (2.682)
60	90170-0060	80.83 (3.182)

* Number of circuits on mating connector

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Shrouded Header

90708

Vertical, Dual Row Low Profile, Extended Plating

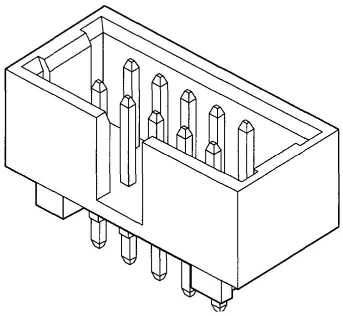
Features and Benefits
- Sizes 10 to 64 circuits
- Polarized
- Complies with industry-standard DIN 41651
- Selective Gold plating options for contacts
- Tin/Lead plated on solder tail

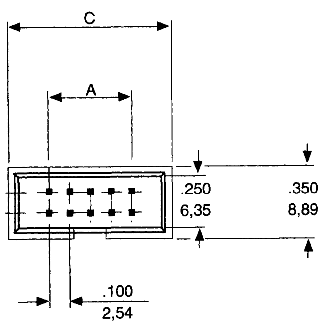
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

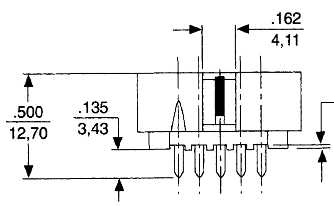
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

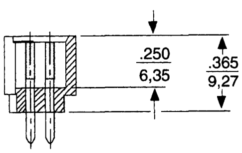
Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -25 to +85°C









ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating 1	Plating 2	A	B	C
10	90708-1001	90708-1002	10.16 (.400)	17.27 (.680)	20.32 (.800)
14	90708-1401	90708-1402	15.24 (.600)	22.35 (.880)	25.40 (1.000)
16	90708-1601	90708-1602	17.78 (.700)	24.89 (.980)	27.94 (1.100)
20	90708-2001	90708-2002	22.86 (.900)	29.97 (1.180)	33.02 (1.300)
26	90708-2601	90708-2602	30.48 (1.200)	37.59 (1.480)	40.64 (1.600)
30	90708-3001	90708-3002	35.56 (1.400)	42.67 (1.680)	45.72 (1.800)
34	90708-3401	90708-3402	40.64 (1.600)	47.75 (1.880)	50.80 (2.000)
40	90708-4001	90708-4002	48.26 (1.900)	55.37 (2.180)	58.42 (2.300)
50	90708-5001	90708-5002	60.96 (2.400)	68.07 (2.680)	71.12 (2.800)
60	90708-6001	90708-6002	73.66 (2.900)	80.77 (3.180)	83.82 (3.300)
64	90708-6401	90708-6402	78.74 (3.100)	85.85 (3.380)	88.90 (3.500)

Plating 1: 15μ" Gold in select area, 75μ" Tin/Lead over 50μ" Nickel overall
Plating 2: 30μ" Gold in select area, 75μ" Tin/Lead over 50μ" Nickel overall

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Shrouded Header

90709

Right Angle, Dual Row Low Profile, Extended Plating

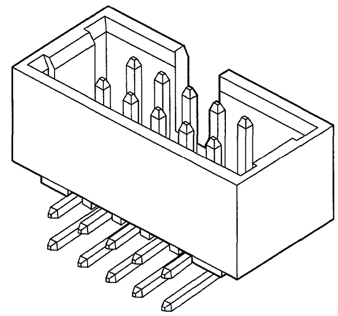
Features and Benefits
- Sizes 10 to 64 circuits
- Polarized
- Complies with industry-standard DIN 41615
- Selective Gold plating options for contacts
- Tin/Lead plated on solder tail

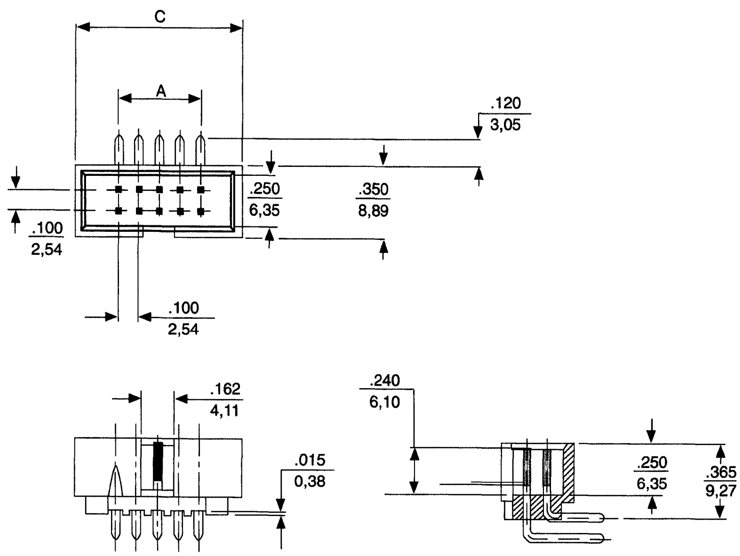
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 600V AC
Insulation Resistance: 1000 MΩ min.

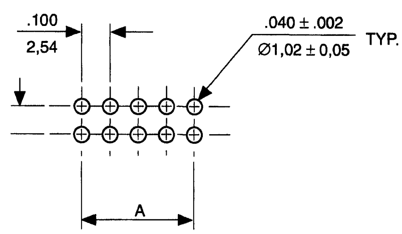
Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -25 to +85°C





PCB LAYOUT



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating 1	Plating 2	A	B	C
10	90709-1001	90709-1002	10.16 (.400)	17.27 (.680)	20.32 (.800)
14	90709-1401	90709-1402	15.24 (.600)	22.35 (.880)	25.40 (1.000)
16	90709-1601	90709-1602	17.78 (.700)	24.89 (.980)	27.94 (1.100)
20	90709-2001	90709-2002	22.86 (.900)	29.97 (1.180)	33.02 (1.300)
26	90709-2601	90709-2602	30.48 (1.200)	37.59 (1.480)	40.64 (1.600)
30	90709-3001	90709-3002	35.56 (1.400)	42.67 (1.680)	45.72 (1.800)
34	90709-3401	90709-3402	40.64 (1.600)	47.75 (1.880)	50.80 (2.000)
40	90709-4001	90709-4002	48.26 (1.900)	55.37 (2.180)	58.42 (2.300)
50	90709-5001	90709-5002	60.96 (2.400)	68.07 (2.680)	71.12 (2.800)
60	90709-6001	90709-6002	73.66 (2.900)	80.77 (3.180)	83.82 (3.300)
64	90709-6401	90709-6402	78.74 (3.100)	85.85 (3.380)	88.90 (3.500)

Plating 1: 15μ" Gold in select area, 75μ" Tin/Lead over 50μ" Nickel overall
Plating 2: 30μ" Gold in select area, 75μ" Tin/Lead over 50μ" Nickel overall

FEATURES AND SPECIFICATIONS

molex®

2.54mm (.100") Pitch QF 50™ Shrouded Header

5332

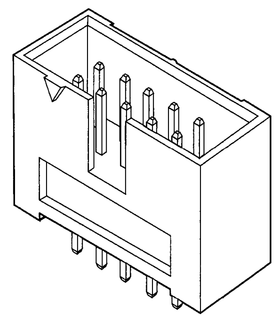
Vertical, Dual Row Single Polarization

Features and Benefits
- Sizes 10 to 60 circuits
- Selective Gold- and Tin-plated versions

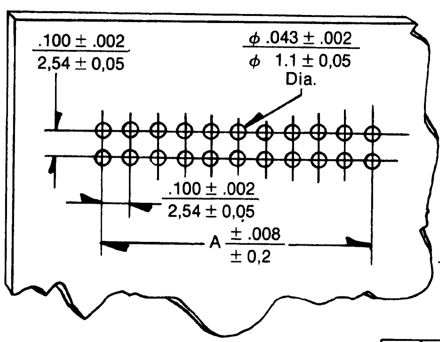
Reference Information
Packaging: Tray
Tooling Information: See pages B-34 to B-37
UL File No.: E29179-E
Mates With: 5320
Designed In: Millimeters

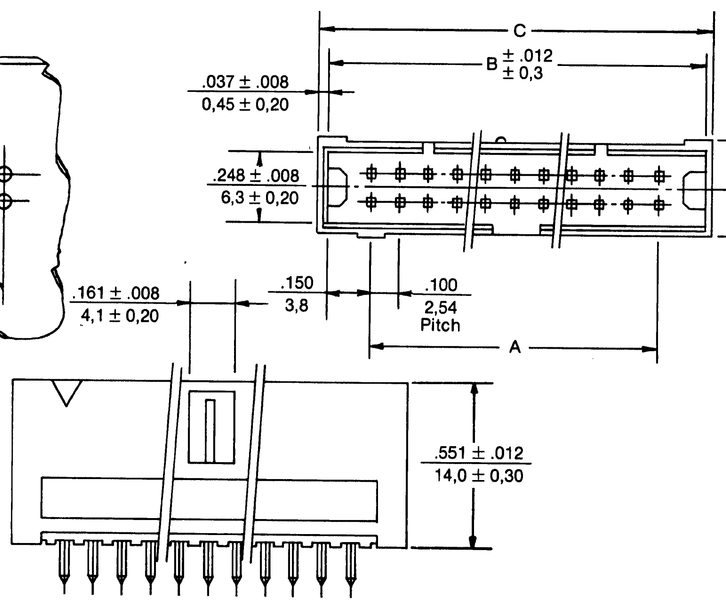
Electrical
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature: -40 to +105°C



Recommended PCB Hole Pattern





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating NGS1	Plating NT2	A	B	C
10	39-26-7105	39-28-5101	10.16 (.400)	17.78 (.700)	19.66 (.774)
14	39-26-7145	39-28-5141	15.24 (.600)	22.86 (.900)	24.74 (.974)
16	39-26-7165	39-28-5161	17.78 (.700)	25.40 (1.000)	27.28 (1.074)
20	39-26-7205	39-28-5201	22.86 (.900)	30.48 (1.200)	32.36 (1.274)
26	39-26-7265	39-28-5261	30.48 (1.200)	38.10 (1.500)	39.98 (1.574)
30	39-26-7305	39-28-5301	35.56 (1.400)	43.18 (1.700)	45.06 (1.774)
34	39-26-7345	39-28-5341	40.64 (1.600)	48.26 (1.900)	50.14 (1.974)
40	39-26-7405	39-28-5401	48.26 (1.900)	55.88 (2.200)	57.76 (2.274)
50	39-26-7505	39-28-5501	60.96 (2.400)	68.58 (2.700)	70.46 (2.774)
60	39-26-7605	39-28-5601	73.66 (2.900)	81.28 (3.200)	83.16 (3.274)

Plating NGS1: 39µ" (1µm) min. Nickel underplate. Contact area: 4µ" (0.1µm) min. Gold.
Solder area: 3µm min. Tin.
Plating NT2: 35µ" (0.9µm) min. Tin overall, over Nickel underplate

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch QF 50™ Shrouded Header**

5342

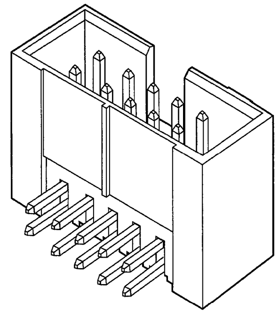
Right Angle, Dual Row Single Polarization

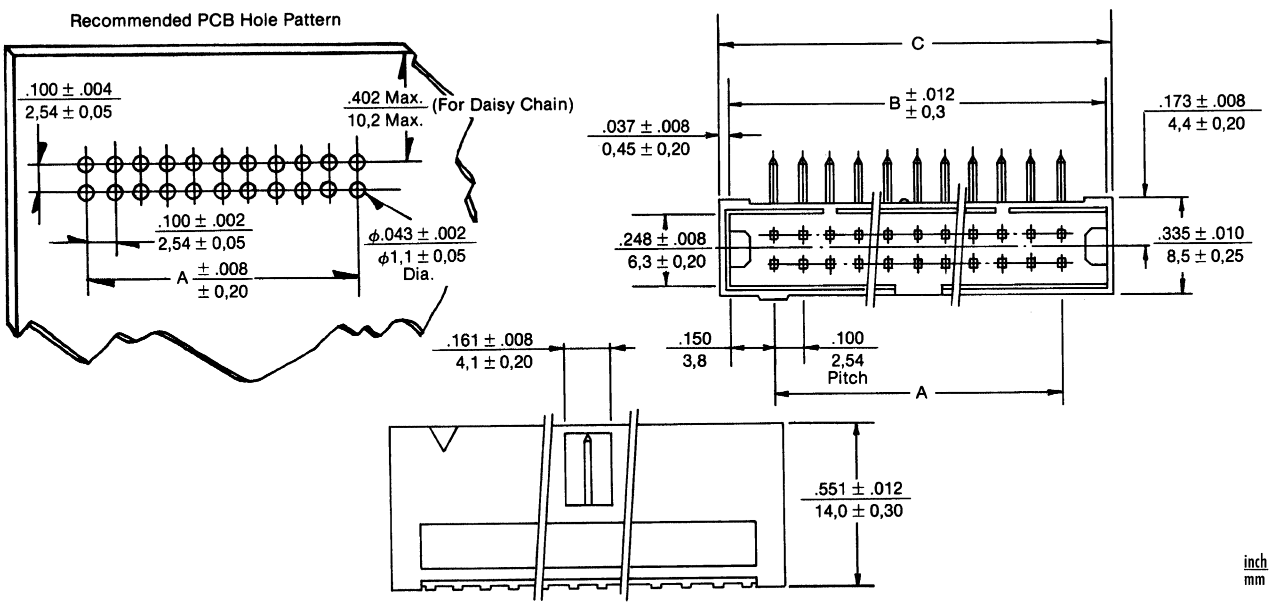
Features and Benefits
- Sizes 10 to 60 circuits
- Selective Gold- and Tin-plated versions

Reference Information
Packaging: Tray
Tooling Information: See pages B-34 to B-37
UL File No.: E29179-E
Mates With: 5320
Designed In: Millimeters

Electrical
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating NGS1	Plating NT2	A	B	C
10	39-26-7108	39-28-5104	10.16 (.400)	17.78 (.700)	19.66 (.774)
14	39-26-7148	39-28-5144	15.24 (.600)	22.86 (.900)	24.74 (.974)
16	39-26-7168	39-28-5164	17.78 (.700)	25.40 (1.000)	27.28 (1.074)
20	39-26-7208	39-28-5204	22.86 (.900)	30.48 (1.200)	32.36 (1.274)
26	39-26-7268	39-28-5264	30.48 (1.200)	38.10 (1.500)	39.98 (1.574)
30	39-26-7308	39-28-5304	35.56 (1.400)	43.18 (1.700)	45.06 (1.774)
34	39-26-7348	39-28-5344	40.64 (1.600)	48.26 (1.900)	50.14 (1.974)
40	39-26-7408	39-28-5404	48.26 (1.900)	55.88 (2.200)	57.76 (2.274)
50	39-26-7508	39-28-5504	60.96 (2.400)	68.58 (2.700)	70.46 (2.774)
60	39-26-7608	39-28-5604	73.66 (2.900)	81.28 (3.200)	83.16 (3.274)

Plating NGS1: 39μ" (1μm) min. Nickel underplate. Contact area: 4μ" (0.1μm) min. Gold.
Solder area: 3μm min. Tin.
Plating NT2: 35μ" (0.9μm) min. Tin overall, over Nickel underplate

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Shrouded Header

90571 Vertical, Dual Row Non-Eject

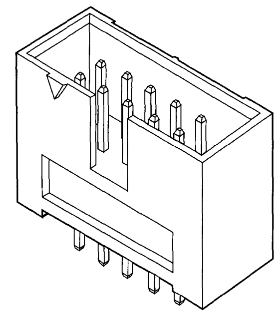
Features and Benefits
- Sizes 10 to 50 circuits
- Tin plated on solder tail
- Center polarization
- Selective Gold plating options for contacts
- Complies with industry-standard DIN 41651
- Eject levers allow end-to-end stacking with or without strain relief with no loss of board space

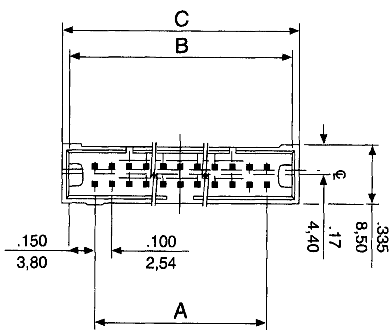
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

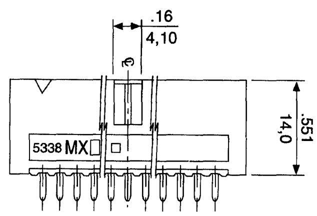
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

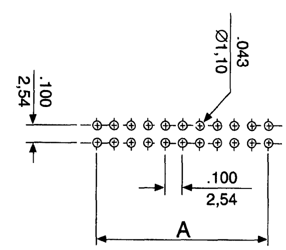
Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature: -25 to +85°C









PCB LAYOUT

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Plating 1	Plating 2	Plating 3	Plating 4	A	B	C
10	90571-2101	90571-2102	90571-2103	90571-2109	10.16 (.400)	17.76 (.700)	19.66 (.774)
14	90571-2141	90571-2142	90571-2143	90571-2149	15.24 (.600)	22.84 (.900)	24.74 (.974)
16	90571-2161	90571-2162	90571-2163	90571-2169	17.78 (.700)	25.38 (1.000)	27.28 (1.074)
20	90571-2201	90571-2202	90571-2203	90571-2209	22.86 (.900)	30.46 (1.200)	32.36 (1.274)
26	90571-2261	90571-2262	90571-2263	90571-2269	30.48 (1.200)	38.08 (1.500)	39.98 (1.574)
30	90571-2301	90571-2302	90571-2303	90571-2309	35.56 (1.400)	43.16 (1.700)	45.06 (1.774)
34	90571-2341	90571-2342	90571-2343	90571-2349	40.64 (1.600)	48.24 (1.900)	50.14 (1.974)
40	90571-2401	90571-2402	90571-2403	90571-2409	48.26 (1.900)	55.86 (2.200)	57.76 (2.274)
50	90571-2501	90571-2502	90571-2503	90571-2509	60.96 (2.400)	68.56 (2.700)	70.46 (2.774)

Plating 1: 4μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 2: 30μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 3: 10μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 4: 40μ" Nickel under 39μ" Tin

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Shrouded Header

90572

Right Angle, Dual Row Non-Eject

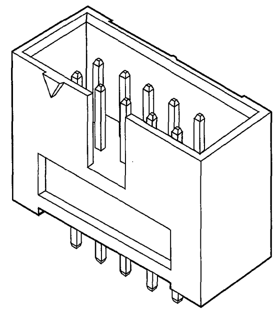
Features and Benefits
- Sizes 10 to 50 circuits
- Tin/Lead plated on solder tail
- Center polarization
- Selective Gold plating options for contacts
- Complies with industry-standard DIN 41651

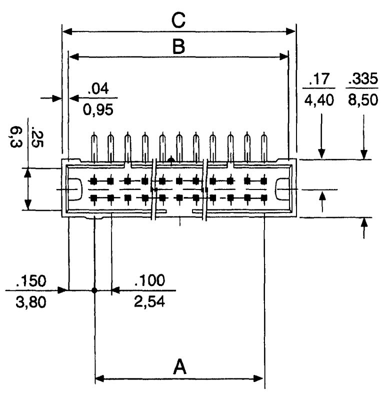
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

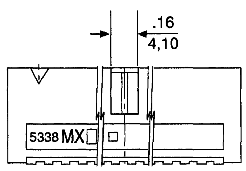
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

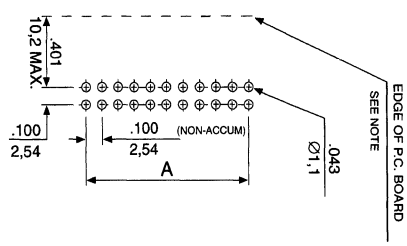
Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature: -25 to +85°C









P.C.B. LAYOUT
Note: 10,2mm max. to edge of PCB for daisy chain applications.

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Plating 1	Plating 2	Plating 3	Plating 4	A	B	C
10	90572-2101	90572-2102	90572-2103	90572-2109	10.16 (.400)	17.76 (.700)	19.66 (.774)
14	90572-2141	90572-2142	90572-2143	90572-2149	15.24 (.600)	22.84 (.900)	24.74 (.974)
16	90572-2161	90572-2162	90572-2163	90572-2169	17.78 (.700)	25.38 (1.000)	27.28 (1.074)
20	90572-2201	90572-2202	90572-2203	90572-2209	22.86 (.900)	30.46 (1.200)	32.36 (1.274)
26	90572-2261	90572-2262	90572-2263	90572-2269	30.48 (1.200)	38.08 (1.500)	39.98 (1.574)
30	90572-2301	90572-2302	90572-2303	90572-2309	35.56 (1.400)	43.16 (1.700)	45.06 (1.774)
34	90572-2341	90572-2342	90572-2343	90572-2349	40.64 (1.600)	48.24 (1.900)	50.14 (1.974)
40	90572-2401	90572-2402	90572-2403	90572-2409	48.26 (1.900)	55.86 (2.200)	57.76 (2.274)
50	90572-2501	90572-2502	90572-2503	90572-2509	60.96 (2.400)	68.56 (2.700)	70.46 (2.774)

Plating 1: 4μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 2: 30μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 3: 10μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 4: 40μ" Nickel under 39μ" Tin

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Shrouded Header

90663

Vertical, MIL Keying With Latch/Eject Levers

Features and Benefits

- Sizes 10 to 64 circuits
- Tin plated on solder tail
- Complies with industry-standard DIN 41651 and MIL-3-83503 keying
- Selective Gold plating options for contacts
- Eject levers allow end-to-end stacking with or without strain relief with no loss of board space
- Polarized

Reference Information

Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

Electrical

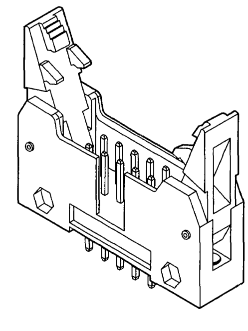
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

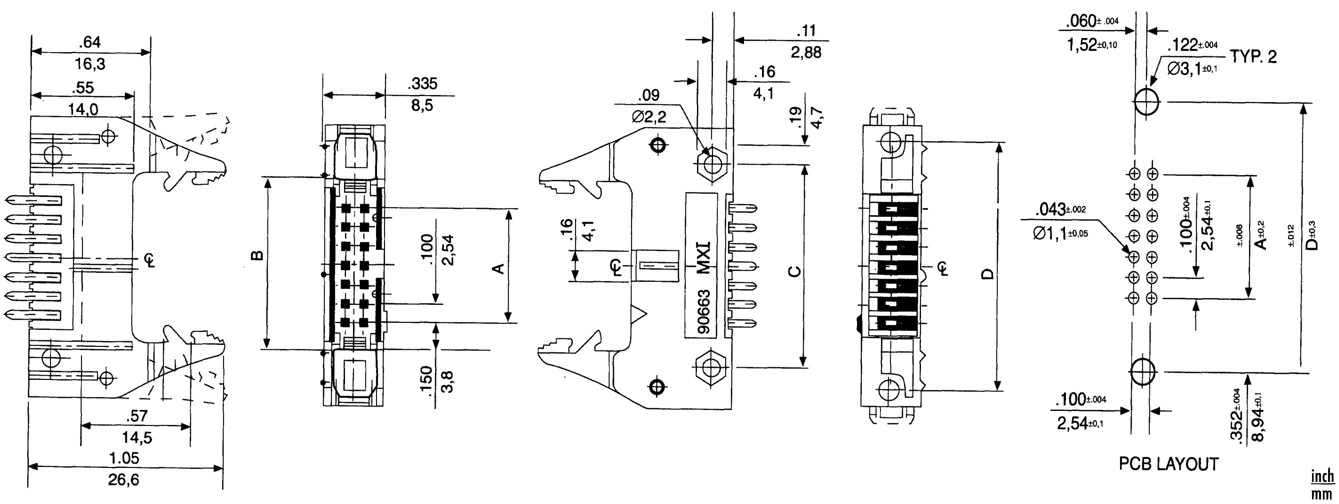
Mechanical

Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -25 to +85°C





PCB LAYOUT

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension			
	Plating 1	Plating 2	Plating 3	Plating 4	A	B	C	D
10	90663-1101	90663-1102	90663-1103	90663-1109	10.16 (.400)	17.76 (.700)	21.94 (.864)	28.04 (1.104)
14	90663-1141	90663-1142	90663-1143	90663-1149	15.24 (.600)	22.84 (.900)	27.02 (1.064)	33.12 (1.304)
16	90663-1161	90663-1162	90663-1163	90663-1169	17.78 (.700)	25.38 (1.000)	29.56 (1.164)	35.66 (1.404)
20	90663-1201	90663-1202	90663-1203	90663-1209	22.86 (.900)	30.46 (1.200)	34.64 (1.364)	40.74 (1.604)
26	90663-1261	90663-1262	90663-1263	90663-1269	30.48 (1.200)	38.08 (1.500)	42.26 (1.664)	48.36 (1.904)
30	90663-1301	90663-1302	90663-1303	90663-1309	35.56 (1.400)	43.16 (1.700)	47.34 (1.864)	53.44 (2.104)
34	90663-1341	90663-1342	90663-1343	90663-1349	40.64 (1.600)	48.24 (1.900)	52.42 (2.064)	58.52 (2.304)
40	90663-1401	90663-1402	90663-1403	90663-1409	48.26 (1.900)	55.86 (2.200)	60.04 (2.364)	66.14 (2.604)
50	90663-1501	90663-1502	90663-1503	90663-1509	60.96 (2.400)	68.56 (2.700)	72.74 (2.864)	78.84 (3.104)
60	90663-1601	90663-1602	90663-1603	90663-1609	73.66 (2.900)	81.26 (3.200)	85.44 (3.364)	91.54 (3.604)
64	90663-1641	90663-1642	90663-1643	90663-1649	78.74 (3.100)	86.34 (3.400)	90.52 (3.564)	96.62 (3.804)

Plating 1: 4µ" Gold in contact area, 118µ" Tin in solder area, 39µ" Nickel underplate
Plating 2: 30µ" Gold in contact area, 118µ" Tin in solder area, 39µ" Nickel underplate
Plating 3: 10µ" Gold in contact area, 118µ" Tin in solder area, 39µ" Nickel underplate
Plating 4: 40µ" Nickel under 39µ" Tin

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch QF 50™ Shrouded Header**

90663

Right Angle, MIL Keying With Latch/Eject Levers

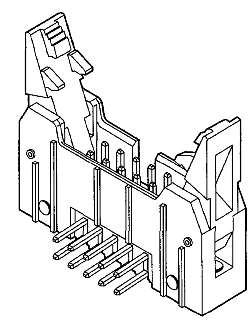
Features and Benefits
- Sizes 10 to 64 circuits
- Tin plated on solder tail
- Complies with industry-standard DIN 41651 and MIL-3 83503 keying
- Selective Gold plating options for contacts
- Eject levers allow end-to-end stacking with or without strain relief with no loss of board space
- Polarized

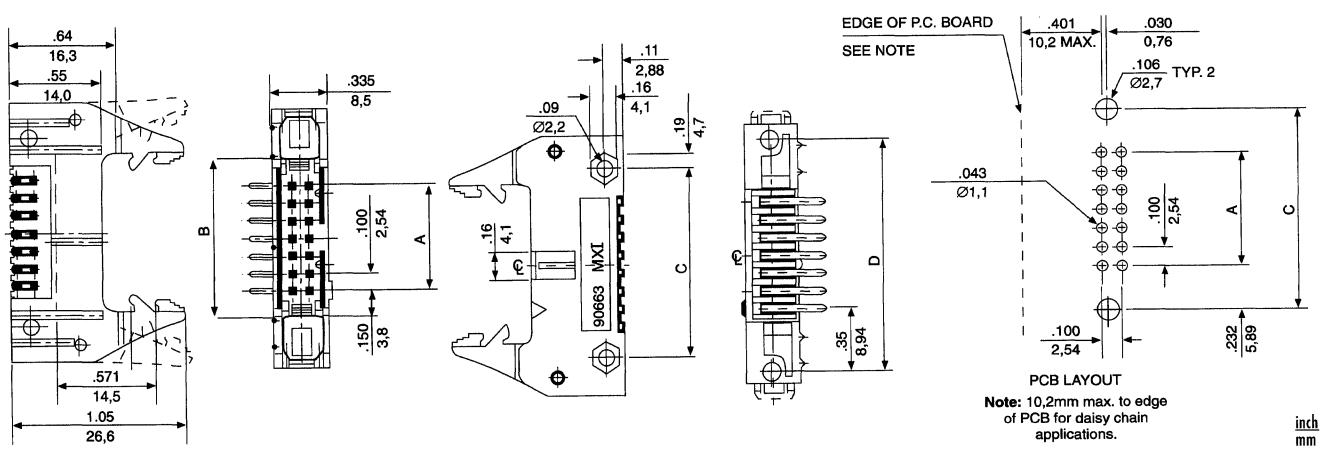
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -25 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension			
	Plating 1	Plating 2	Plating 3	Plating 4	A	B	C	D
10	90663-3101	90663-3102	90663-3103	90663-3109	10.16 (.400)	17.76 (.700)	21.94 (.864)	28.04 (1.104)
14	90663-3141	90663-3142	90663-3143	90663-3149	15.24 (.600)	22.84 (.900)	27.02 (1.064)	33.12 (1.304)
16	90663-3161	90663-3162	90663-3163	90663-3169	17.78 (.700)	25.38 (1.000)	29.56 (1.164)	35.66 (1.404)
20	90663-3201	90663-3202	90663-3203	90663-3209	22.86 (.900)	30.46 (1.200)	34.64 (1.364)	40.74 (1.604)
26	90663-3261	90663-3262	90663-3263	90663-3269	30.48 (1.200)	38.08 (1.500)	42.26 (1.664)	48.36 (1.904)
30	90663-3301	90663-3302	90663-3303	90663-3309	35.56 (1.400)	43.16 (1.700)	47.34 (1.864)	53.44 (2.104)
34	90663-3341	90663-3342	90663-3343	90663-3349	40.64 (1.600)	48.24 (1.900)	52.42 (2.064)	58.52 (2.304)
40	90663-3401	90663-3402	90663-3403	90663-3409	48.26 (1.900)	55.86 (2.200)	60.04 (2.364)	66.14 (2.604)
50	90663-3501	90663-3502	90663-3503	90663-3509	60.96 (2.400)	68.56 (2.700)	72.74 (2.864)	78.84 (3.104)
60	90663-3601	90663-3602	90663-3603	90663-3609	73.66 (2.900)	81.26 (3.200)	85.44 (3.364)	91.54 (3.604)
64	90663-3641	90663-3642	90663-3643	90663-3649	78.74 (3.100)	86.34 (3.400)	90.52 (3.564)	96.62 (3.804)

Plating 1: 4µ" Gold in contact area, 118µ" Tin in solder area, 39µ" Nickel underplate
Plating 2: 30µ" Gold in contact area, 118µ" Tin in solder area, 39µ" Nickel underplate
Plating 3: 10µ" Gold in contact area, 118µ" Tin in solder area, 39µ" Nickel underplate
Plating 4: 40µ" Nickel under 39µ" Tin

FEATURES AND SPECIFICATIONS

molex® 2.54mm (.100") Pitch QF 50™ Shrouded Header

5330 Vertical, Dual Row With Eject Levers

Features and Benefits

- Sizes 10 to 60 circuits
- Polarized
- Stackable side by side
- Latches connector with or without strain relief
- 2 selective Gold- and overall Tin-plated versions
- Lever spring pins—Stainless Steel

Reference Information

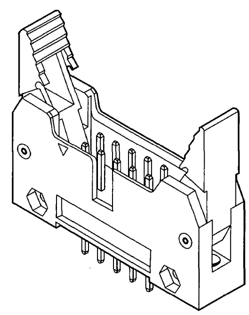
Packaging: Tray
Tooling Information: See pages B-34 to B-37
UL File No.: E29179-E
CSA File No.: LR37272-P21
Mates With: 5320
Designed In: Millimeters

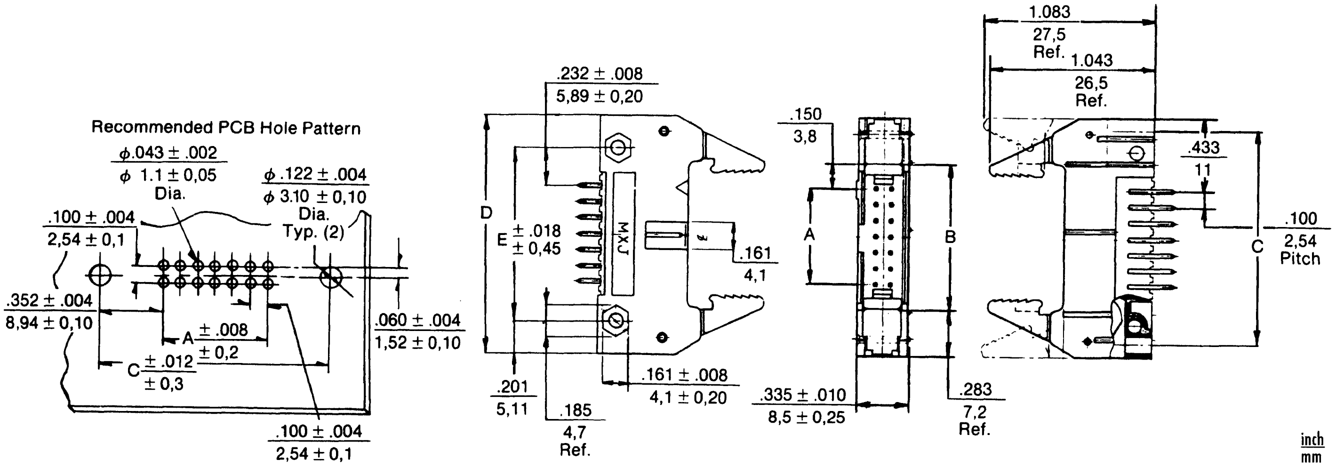
Electrical

Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Contact Pins: 0.635mm (.025") square
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Plating NBGS1	Plating NBT2	A	B	C	D	E
10	39-26-6106	39-28-5100	10.16 (.400)	17.76 (.700)	28.04 (1.104)	32.16 (1.266)	21.94 (.864)
14	39-26-6146	39-28-5140	15.24 (.600)	22.84 (.900)	33.12 (1.304)	37.24 (1.466)	27.02 (1.064)
16	39-26-6166	39-28-5160	17.78 (.700)	25.38 (1.000)	35.66 (1.404)	39.78 (1.566)	29.56 (1.164)
20	39-26-6206	39-28-5200	22.86 (.900)	30.46 (1.200)	40.74 (1.604)	44.86 (1.766)	34.64 (1.364)
26	39-26-6266	39-28-5260	30.48 (1.200)	38.08 (1.500)	48.36 (1.904)	52.48 (2.066)	42.26 (1.664)
30	39-26-6306	39-28-5300	35.56 (1.400)	43.16 (1.700)	53.44 (2.104)	57.56 (2.266)	47.34 (1.864)
34	39-26-6346	39-28-5340	40.64 (1.600)	48.24 (1.900)	58.52 (2.304)	62.64 (2.466)	52.42 (2.064)
40	39-26-6406	39-28-5400	48.26 (1.900)	55.86 (2.200)	66.14 (2.604)	70.26 (2.766)	60.04 (2.364)
50	39-26-6506	39-28-5500	60.96 (2.400)	68.56 (2.700)	78.84 (3.104)	82.96 (3.266)	72.74 (2.864)
60	39-26-6606	39-28-5600	73.66 (2.900)	81.26 (3.200)	91.54 (3.604)	95.66 (3.766)	85.44 (3.364)

Plating NBGS1: 39μ" (1μm) min. Nickel underplate. Contact area: 4μ" (0.1μm) min. Gold. Solder area: 3μm min. Tin.
Plating NBT2: 35μ" (0.9μm) min. Tin overall, over Nickel underplate

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Shrouded Header

5340

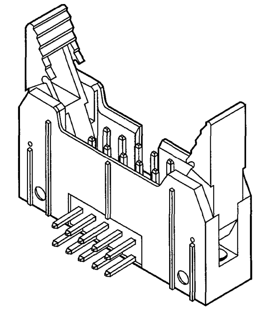
Right Angle, Dual Row With Eject Levers

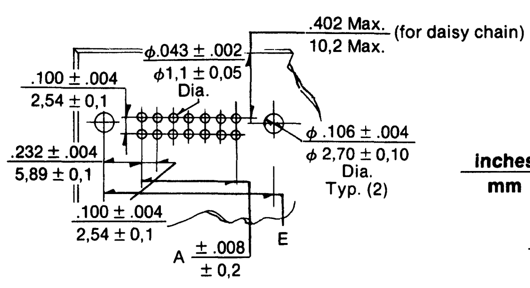
Features and Benefits
- Sizes 10 to 60 circuits
- Polarized
- Stackable side by side
- 2 selective Gold- and overall Tin-plated versions
- Lever spring pins—Stainless Steel

Reference
Packaging: Tray
Tooling Information: See pages B-34 to B-37
UL File No.: E29179-E
Mates With: 5320
Designed In: Millimeters

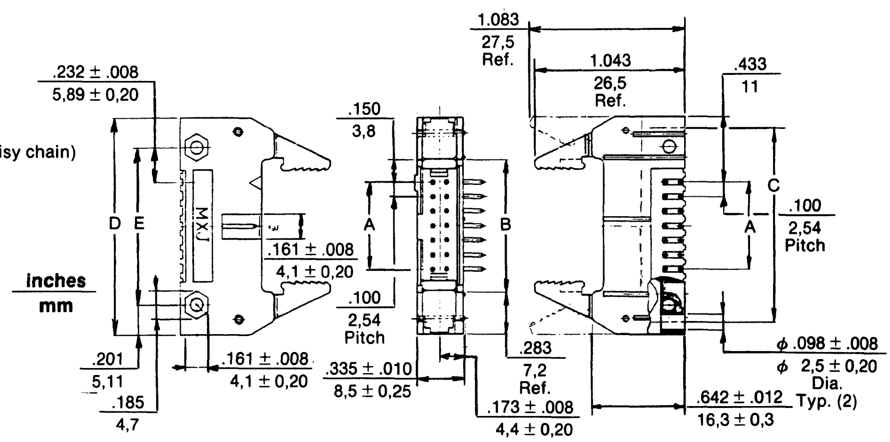
Electrical
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature -40 to +105°C





Recommended P.C.B. Hole Pattern



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Plating NBGS1	Plating NBT2	A	B	C	D	E
10	39-26-7102	39-28-5103	10.16 (.400)	17.76 (.700)	28.04 (1.104)	32.16 (1.266)	21.94 (.864)
14	39-26-7142	39-28-5143	15.24 (.600)	22.84 (.900)	33.12 (1.304)	37.24 (1.466)	27.02 (1.064)
16	39-26-7162	39-28-5163	17.78 (.700)	25.38 (1.000)	35.66 (1.404)	39.78 (1.566)	29.56 (1.164)
20	39-26-7202	39-28-5203	22.86 (.900)	30.46 (1.200)	40.74 (1.604)	44.86 (1.766)	34.64 (1.364)
26	39-26-7262	39-28-5263	30.48 (1.200)	38.08 (1.500)	48.36 (1.904)	52.48 (2.066)	42.26 (1.664)
30	39-26-7302	39-28-5303	35.56 (1.400)	43.16 (1.700)	53.44 (2.104)	57.56 (2.266)	47.34 (1.864)
34	39-26-7342	39-28-5343	40.64 (1.600)	48.24 (1.900)	58.52 (2.304)	62.64 (2.466)	52.42 (2.064)
40	39-26-7402	39-28-5403	48.26 (1.900)	55.86 (2.200)	66.14 (2.604)	70.26 (2.766)	60.04 (2.364)
50	39-26-7502	39-28-5503	60.96 (2.400)	68.56 (2.700)	78.84 (3.104)	82.96 (3.266)	72.74 (2.864)
60	39-26-7602	39-28-5603	73.66 (2.900)	81.26 (3.200)	91.54 (3.604)	95.66 (3.766)	85.44 (3.364)

Plating NBGS1: 39µ" (1µm) min. Nickel underplate. Contact area: 4µ" (0.1µm) min. Gold. Solder area: 3µm min. Tin.
Plating NBT2: 35µ" (0.9µm) min. Tin overall, over Nickel underplate

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Header

90571

Vertical, Dual Row With Latch/Eject Levers

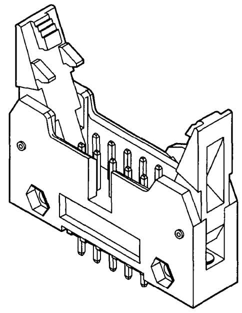
Features and Benefits
- Sizes 10 to 50 circuits
- Tin plated on solder tail
- Center polarization
- Selective Gold plating options for contacts
- Complies with industry-standard DIN 41651
- Eject levers allow end-to-end stacking with or without strain relief with no loss of board space

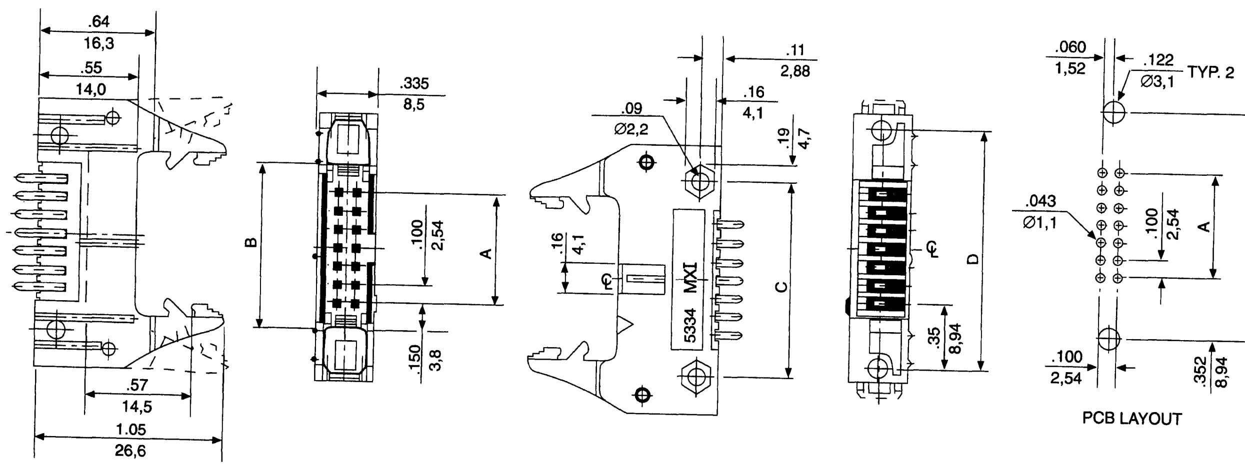
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature: -25 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Plating 1	Plating 2	Plating 3	Plating 4	A	B	C
10	90571-1101	90571-1102	90571-1103	90571-1109	10.16 (.400)	17.76 (.700)	19.66 (.774)
14	90571-1141	90571-1142	90571-1143	90571-1149	15.24 (.600)	22.84 (.900)	24.74 (.974)
16	90571-1161	90571-1162	90571-1163	90571-1169	17.78 (.700)	25.38 (1.000)	27.28 (1.074)
20	90571-1201	90571-1202	90571-1203	90571-1209	22.86 (.900)	30.46 (1.200)	32.36 (1.274)
26	90571-1261	90571-1262	90571-1263	90571-1269	30.48 (1.200)	38.08 (1.500)	39.98 (1.574)
30	90571-1301	90571-1302	90571-1303	90571-1309	35.56 (1.400)	43.16 (1.700)	45.06 (1.774)
34	90571-1341	90571-1342	90571-1343	90571-1349	40.64 (1.600)	48.24 (1.900)	50.14 (1.974)
40	90571-1401	90571-1402	90571-1403	90571-1409	48.26 (1.900)	55.86 (2.200)	57.76 (2.274)
50	90571-1501	90571-1502	90571-1503	90571-1509	60.96 (2.400)	68.56 (2.700)	70.46 (2.774)

Plating 1: 4μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 2: 30μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 3: 10μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 4: 40μ" Nickel under 39μ" Tin

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch QF 50™ Header

90572

Right Angle, Dual Row With Latch/Eject Levers

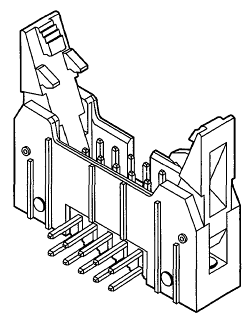
Features and Benefits
- Sizes 10 to 50 circuits
- Tin plated on solder tail
- Center polarization
- Selective Gold plating options for contacts
- Complies with industry-standard DIN 41651
- Eject levers allow end-to-end stacking with or without strain relief with no loss of board space

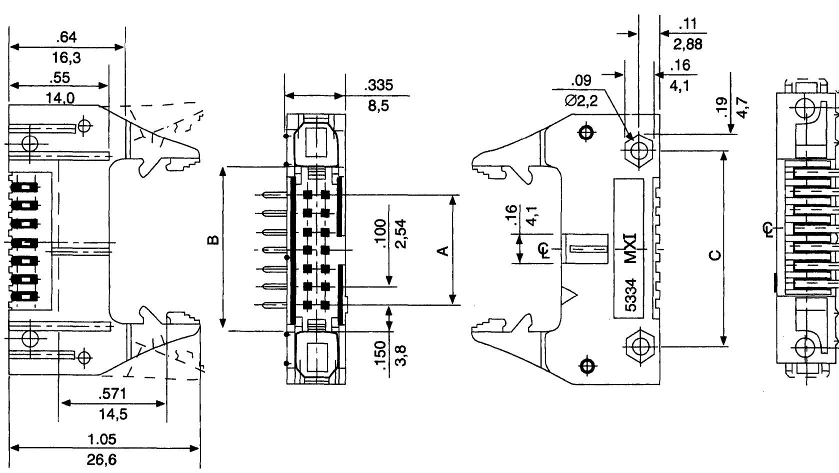
Reference Information
Product Specification: PS-99020-0015
Packaging: Tray
Tooling Information: See pages B-34 to B-37
Mates With: 90635
Designed In: Millimeters

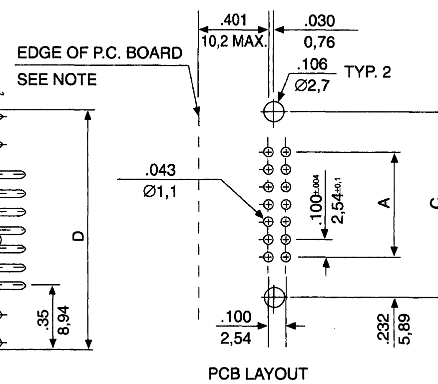
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Pin Retention Force: 1.5kg (3.3 lb)
Mating Force: 350g (0.77 lb) max. per circuit
Unmating Force: 50g (0.11 lb) min. per circuit
Durability: 300 cycles max.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Contact Pin: 0.635mm (.025") square
Plating: See Table
Temperature: -25 to +85°C







Note: 10,2mm max. to edge of PCB for daisy chain applications.

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	Plating 1	Plating 2	Plating 3	Plating 4	A	B	C
10	90572-1101	90572-1102	90572-1103	90572-1109	10.16 (.400)	17.76 (.700)	19.66 (.774)
14	90572-1141	90572-1142	90572-1143	90572-1149	15.24 (.600)	22.84 (.900)	24.74 (.974)
16	90572-1161	90572-1162	90572-1163	90572-1169	17.78 (.700)	25.38 (1.000)	27.28 (1.074)
20	90572-1201	90572-1202	90572-1203	90572-1209	22.86 (.900)	30.46 (1.200)	32.36 (1.274)
26	90572-1261	90572-1262	90572-1263	90572-1269	30.48 (1.200)	38.08 (1.500)	39.98 (1.574)
30	90572-1301	90572-1302	90572-1303	90572-1309	35.56 (1.400)	43.16 (1.700)	45.06 (1.774)
34	90572-1341	90572-1342	90572-1343	90572-1349	40.64 (1.600)	48.24 (1.900)	50.14 (1.974)
40	90572-1401	90572-1402	90572-1403	90572-1409	48.26 (1.900)	55.86 (2.200)	57.76 (2.274)
50	90572-1501	90572-1502	90572-1503	90572-1509	60.96 (2.400)	68.56 (2.700)	70.46 (2.774)

Plating 1: 4μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 2: 30μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 3: 10μ" Gold in contact area, 118μ" Tin in solder area, 39μ" Nickel underplate
Plating 4: 40μ" Nickel under 39μ" Tin

FEATURES AND SPECIFICATIONS

molex® 2.54mm (.100") Pitch QF 50™ Transition Connector

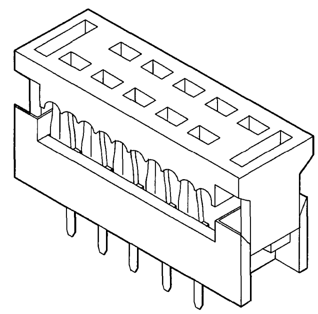
5360 Dual Row, Shrouded Header Eliminator Type

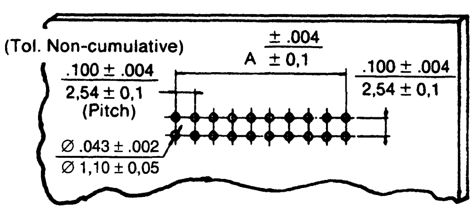
Features and Benefits
- Sizes 10 to 60 circuits
- 6.00mm (.236") wide; uses minimal board space
- Symmetrical upper housing
- U-contact terminal design
- Housings available with covers pre-assembled or loose

Reference Information
Packaging: Tray
Tooling Information: See pages B-34 to B-37
UL File No.: E29179-E
CSA File No.: LR37272-P21
Use Molex Cable: 6800 and 40158
Designed In: Millimeters

Electrical
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

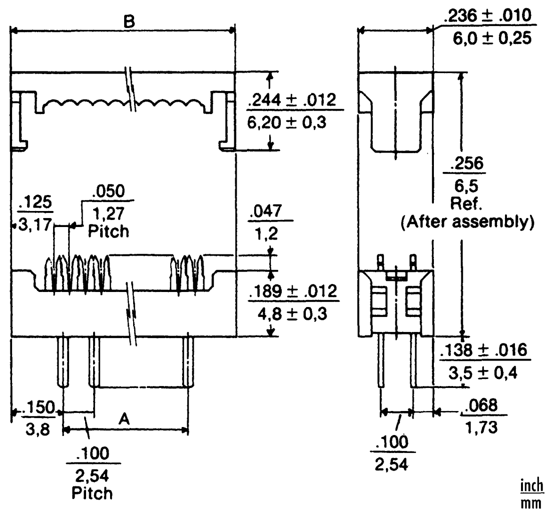
Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Cable Accommodation: 28 AWG stranded
Insulation Range: 1.14mm (.045") diameter max.





Recommended P.C. Board Hole Dim.

(Unloaded Version Shown)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Unloaded (Cover and Housing Separate)	Preloaded (Cover and Housing Pre-Assembled)	A	B
10	• 15-38-0103	• 15-38-0104	10.16 (.400)	17.76 (.699)
14	• 15-38-0143	• 15-38-0144	15.24 (.600)	22.84 (.899)
16	• 15-38-0163	• 15-38-0164	17.78 (.700)	25.38 (.999)
20	• 15-38-0203	• 15-38-0204	22.86 (.900)	30.46 (1.199)
26	• 15-38-0263	• 15-38-0264	30.48 (1.200)	38.08 (1.499)
30	• 15-38-0303	• 15-38-0304	35.56 (1.400)	43.16 (1.699)
34	• 15-38-0343	• 15-38-0344	40.64 (1.600)	48.24 (1.899)
40	• 15-38-0403	• 15-38-0404	48.26 (1.900)	55.86 (2.199)
50	• 15-38-0503	• 15-38-0504	60.96 (2.400)	68.56 (2.699)
60	• 15-38-0603	• 15-38-0604	73.66 (2.900)	81.26 (3.199)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Picoflex™ PF-50 Connector

90327

Low Profile, IDT

Features and Benefits

- 1-piece housing assures precise positioning of cable
- Molded-in polarization
- 4 points of contact with ribbon cable
- Preloaded contacts
- Accepts 28 or 26 AWG (7 strand) ribbon cable
- Tape option for high-speed termination, contact factory for part numbers

Reference Information

Product Specification: PS-99020-0011
Packaging: Loose (tape optional)
Tooling Information: See pages B-38 and B-39
UL File No.: E29179
CSA File No.: LR19980-181
Mates With: 90325 and 90800
Use Molex Cable: 6800, 8863 and 40158
Designed In: Millimeters

Electrical

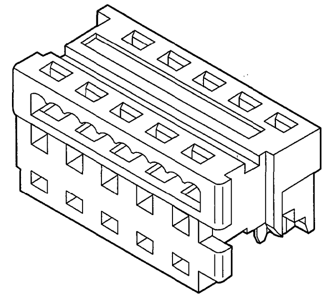
Voltage: 250V
Current: 1.2A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 750V rms
Insulation Resistance: 1000 MΩ min.

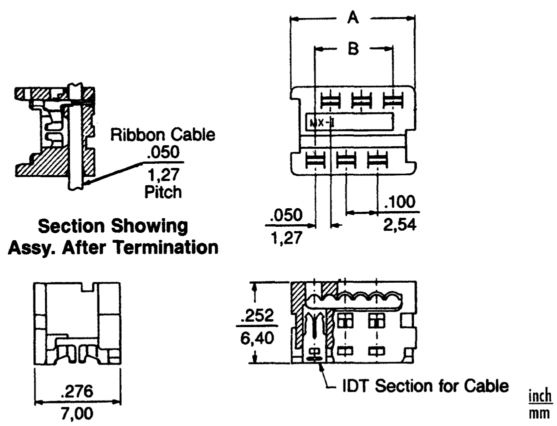
Mechanical

Mating Force: 1.7N Tin/Lead and 1.1N Gold
Unmating Force: 0.25N Tin/Lead and 0.25N Gold
Durability: 30 cycles max. Tin/Lead and 100 cycles max. Gold

Physical

Housing: White polyester, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -25 to +105°C
Cable Accommodation: 26 and 28 AWG stranded
Insulation Range: 95mm (24.14") diameter max.





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Plating 1	Plating 2	A	B
4	90327-0304	90327-3304	7.59 (.299)	3.81 (.150)
6	90327-0306	90327-3306	10.13 (.399)	6.35 (.250)
8	90327-0308	90327-3308	12.67 (.499)	8.89 (.350)
10	90327-0310	90327-3310	15.21 (.599)	11.43 (.450)
12	90327-0312	90327-3312	17.75 (.699)	13.97 (.550)
14	90327-0314	90327-3314	20.29 (.799)	16.51 (.650)
16	90327-0316	90327-3316	22.83 (.899)	19.05 (.750)
18	90327-0318	90327-3318	25.37 (.999)	21.59 (.850)
20	90327-0320	90327-3320	27.91 (1.099)	24.13 (.950)
26	90327-0326	90327-3326	35.53 (1.399)	31.75 (1.250)

Plating 1: 120μ" (3μm) Tin
Plating 2: 30μ" (0.76μm) Gold

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Picoflex™ PF-50 Header

90325 Low Profile

Features and Benefits

- Polarizing end walls and pegs
- Stamped contacts with in-line, flat blades
- 2 points of contact with female terminal
- Rigid, staggered solder tails
- Friction lock
- Tube option packaging for robotic delivery, contact factory for part numbers

Reference Information

Product Specification: PS-99020-0011
Packaging: Loose or tube
Tooling Information: See pages B-38 and B-39
UL File No.: E29179
CSA File No.: LR19980-181
Mates With: 90327
Designed In: Millimeters

Electrical

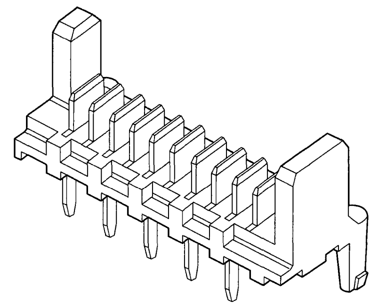
Voltage: 250V
Current: 1.2A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 750V rms
Insulation Resistance: 1000 MΩ min.

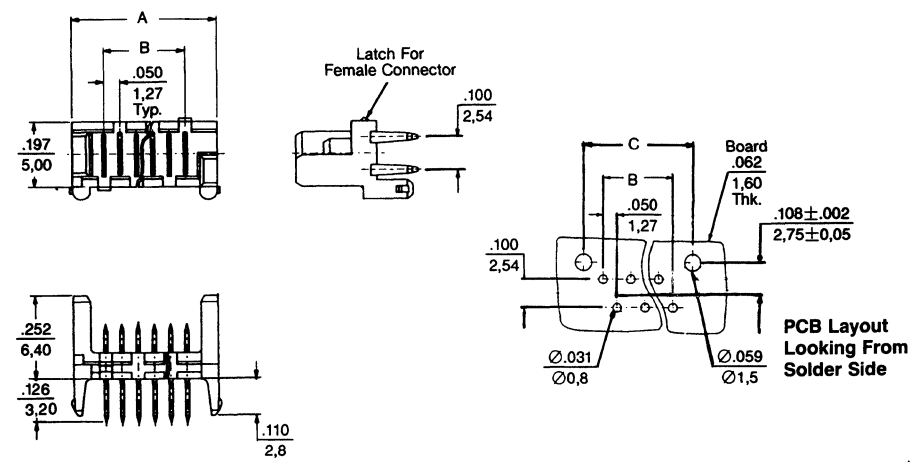
Mechanical

Contact Retention to Housing: 7N
Mating Force: 1.7N Tin/Lead and 1.1N Gold
Unmating Force: 0.25N Tin/Lead and 0.25N Gold
Durability: 30 cycles max. Tin/Lead and 100 cycles max. Gold

Physical

Housing: Black polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -25 to +105°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating 1	Plating 2	A	B	C
4	90325-0004	90325-3004	8.86 (.349)	3.81 (.150)	7.41 (.292)
6	90325-0006	90325-3006	11.40 (.449)	6.35 (.250)	9.95 (.392)
8	90325-0008	90325-3008	13.94 (.549)	8.89 (.350)	12.49 (.492)
10	90325-0010	90325-3010	16.48 (.649)	11.43 (.450)	15.03 (.592)
12	90325-0012	90325-3012	19.02 (.749)	13.97 (.550)	17.57 (.692)
14	90325-0014	90325-3014	21.56 (.849)	16.51 (.650)	20.11 (.792)
16	90325-0016	90325-3016	24.10 (.949)	19.05 (.750)	22.65 (.892)
18	90325-0018	90325-3018	26.64 (1.049)	21.59 (.850)	25.19 (.992)
20	90325-0020	90325-3020	29.18 (1.149)	24.13 (.950)	27.73 (1.092)
26	90325-0026	90325-3026	36.80 (1.448)	31.75 (1.249)	35.35 (1.391)

Plating 1: 120µ" (3µm) Tin
Plating 2: 30µ" (0.76µm) Gold

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Picoflex™ PF-50 Connector

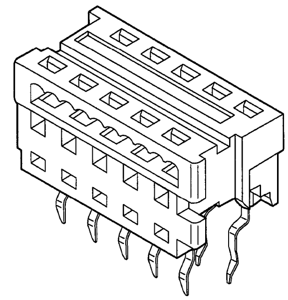
90584 Low Profile, IDT, Board-In

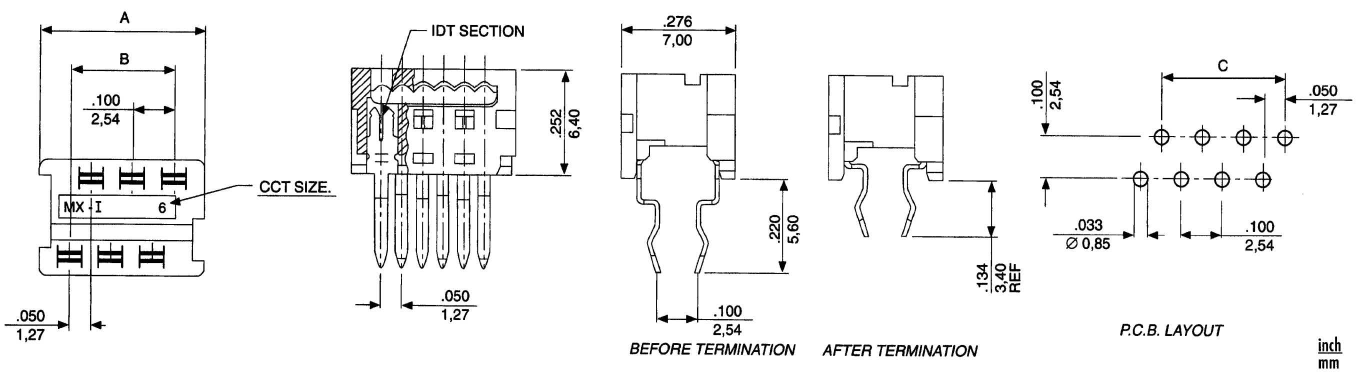
Features and Benefits
- For permanent board connections
- Kinked solder tails for board retention during solder process
- Fits same board layout pattern as male header
- Height from board when soldered and terminated only 6.40mm (.252")
- 2 points of contact in IDT section

Reference Information
Product Specification: PS-99020-0011
Packaging: Tube (2 options)
Tooling Information: See pages B-38 and B-39
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 1.2A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 750V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: White polyester, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: Tin/Lead over Nickel
Temperature: -25 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Individual Tube	Stacked Tube	A	B	C
4	90584-1304	90584-2304	7.59 (.299)	3.81 (.150)	2.54 (.100)
6	90584-1306	90584-2306	10.13 (.399)	6.35 (.250)	5.08 (.200)
8	90584-1308	90584-2308	12.67 (.499)	8.89 (.350)	7.62 (.300)
10	90584-1310	90584-2310	15.21 (.599)	11.43 (.450)	10.16 (.400)
12	90584-1312	90584-2312	17.75 (.699)	13.97 (.550)	12.70 (.500)
14	90584-1314	90584-2314	20.29 (.799)	16.51 (.650)	15.24 (.600)
16	90584-1316	90584-2316	22.83 (.899)	19.05 (.750)	17.78 (.700)
18	90584-1318	90584-2318	25.37 (.999)	21.59 (.850)	20.32 (.800)
20	90584-1320	90584-2320	27.91 (1.099)	24.13 (.950)	22.86 (.900)
26	90584-1326	90584-2326	35.53 (1.399)	31.75 (1.250)	30.48 (1.200)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Polarizing end walls
- Stamped contacts
- 2 points of contact
- Kinked solder tails
- Friction lock

Reference Information
Packaging: Tube
Tooling Information: See pages B-38 and B-39
Mates With: 90327
Designed In: Millimeters

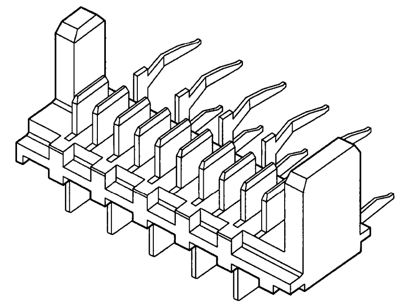
Electrical
Voltage: 250V
Current: 1.2A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 750V
Insulation Resistance: 1000 MΩ min.

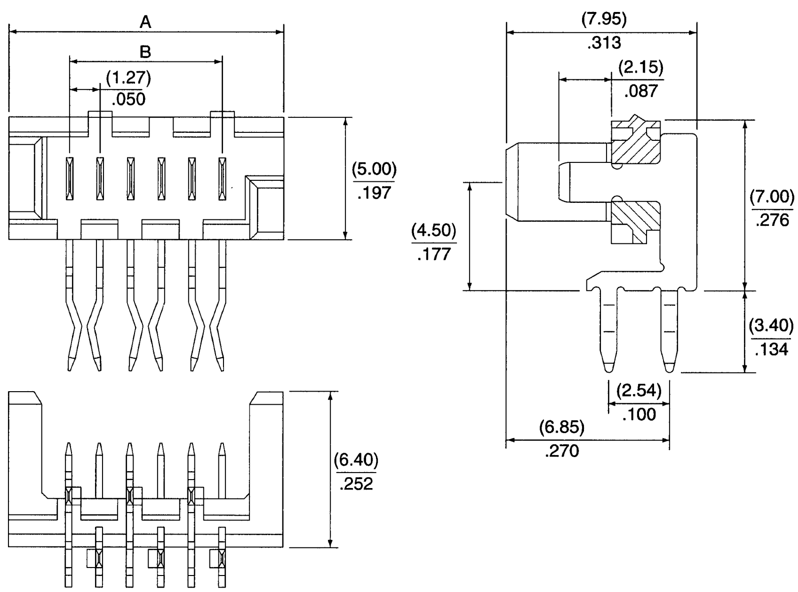
Mechanical
Contact Retention to Housing: 7N
Mating Force: 1.7N Tin/Lead
Unmating Force: 0.25N Tin/Lead
Durability: 30 cycles max. Tin/Lead

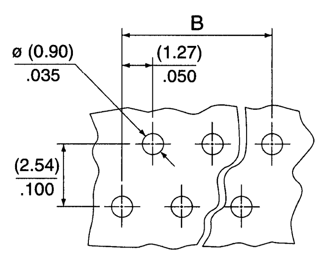
Physical
Housing: Black polyester, UL 94V-0
Contact: Brass
Plating: 5µm Tin/Lead
Temperature: -25 to +105°C

molex® 1.27mm (.050") Pitch Picoflex™ PF-50 Header

90800 Right Angle, Low Profile







RECOMMENDED P.C.B. LAYOUT
PCB THICKNESS (1.60±0.20)/0.63±.008

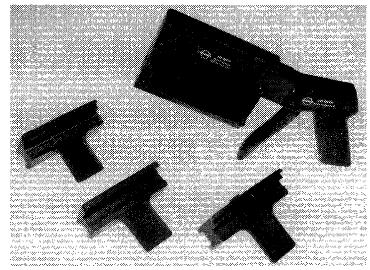
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	90800-0004	8.86 (.349)	3.81 (.150)
6	90800-0006	11.40 (.449)	6.35 (.250)
8	90800-0008	13.94 (.549)	8.89 (.350)
10	90800-0010	16.48 (.649)	11.43 (.450)
12	90800-0012	19.02 (.749)	13.97 (.550)
14	90800-0014	21.56 (.849)	16.51 (.650)
16	90800-0016	24.10 (.949)	19.05 (.750)
18	90800-0018	26.64 (1.049)	21.59 (.850)
20	90800-0020	29.18 (1.149)	24.13 (.950)
26	90800-0026	36.80 (1.449)	31.75 (1.250)

molex®

Application Tooling Ribbon Cable Connectors

Ribbon Cable Terminator Handgun



FEATURES

- For low volume, prototype and field repair
- Snap-on modular die for terminating 1.27mm (.050") center ribbon cable to MX-50™ connectors 71247, 70625, 70121 and 71007

ORDERING INFORMATION

Description	Order No.	Notes
Pistol	11-21-5194	Required for all modules
Power Adapter and Table Clamp	11-31-3337	Required for all modules

Description	Order No.	Use with Connector
Module	11-31-4652	MX-50 71247, 70625 and QF 50™ 5320
Module	11-31-3339	MX-50 70121/71891
Module	11-31-3340	Cable Shear

Low Force Basic Arbor Press and Interchangeable Tool Kits

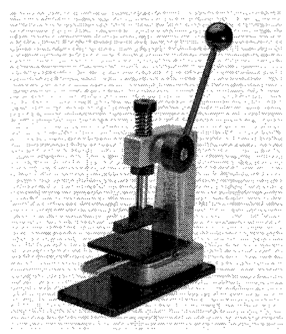
FEATURES AND SPECIFICATIONS

Features

- Lightweight, portable, reliable, low cost assembly
- Cable shearing capabilities
- Interchangeable tooling which is compatible with most competitive presses
- Feed-to or feed-through

Specifications

Size: Width—203mm (8")
Depth—305mm (12")
Height—360mm (14")
Weight: 6.9kg (15 lb)
Rate: Up to 110 assemblies per hour, dependent on operator speed



ORDERING INFORMATION

Description	Order No.	Tool Change Kit Order No.	Use with Connector
Manual Press Only	• 11-21-0679		All .050" Pitch Molex connectors
Universal Adapter Plate Assembly*	11-31-2176	11-31-2181	71247, 70625, 70121 and 71891
Universal Adapter Plate Assembly*	11-31-2176	11-31-2187	5360 QF 50
Universal Adapter Plate Assembly*	11-31-2176	• 11-31-2335	5320 QF 50

Accessories	
Description	**Order No.**
Cable Shear Module	• 11-10-0081
Replacement Blade for Cable Shear	11-21-1102
Replacement Cutting Plate for Cable Shear	• 11-21-1103

• US Standard Product, available through Molex franchised distributors

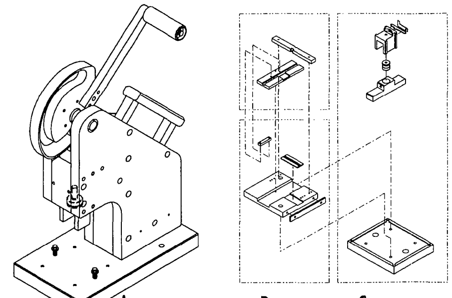
* If customer already owns Universal Adapter Plate Assembly (11-31-2176), all that is required for each above connector is the appropriate Tool Change Kit

Customer Application Note: If application requires terminating the 71007, 70121, 71247, 70625 or 5320 connector above 60 circuits, the customer is advised to check the arbor press platen length. However, if the customer already has an arbor press, it is possible the platen length is 3.250". The platen is a black aluminum "T"-shaped piece located at the bottom end of the arbor press ram. If the customer expects to terminate 64 circuit connectors, the extended platen (3.750") may be ordered using the following number: Order No. 11-10-1055.

Note: For more information reference section W

Application Tooling Ribbon Cable Connectors

High Force Basic Arbor Press and Interchangeable Tool Kits



FEATURES

- Modular interchangeable tooling
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle
- Lightweight and portable

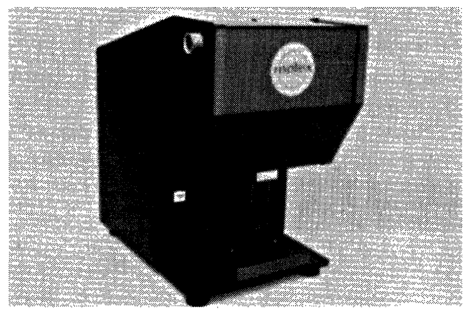
ORDERING INFORMATION

Basic Press and Tooling Order No.	Press Tool Kits Order No.*	Tool Change Kits Order No.†	Terminates Connector
11-20-1166	11-21-9650	11-31-2181	71247, 70625 MX-50™ and 70121 Slimline
11-20-1168	11-21-9652	11-31-2187	5360 QF 50™
11-20-1169	11-21-9653	11-31-2335	5320 QF 50

Description	Order No.	Reference
Basic Manual Press	11-31-6356	A
Ribbon Cable Tooling Adapter	11-20-0947	B
Basic Press with Tooling Adapter	11-20-1170	A, B
Universal Adapter Plate	11-31-2176	C

* Press tool kits are all that is required if customer already has the basic press
† Tool change kits are required to change from one product line to another

Electric Press and Interchangeable Tool Kits



FEATURES

- Modular interchangeable tooling
- Quick tooling changeovers
- Prevents operator fatigue

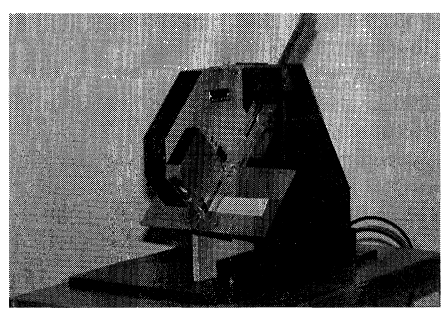
ORDERING INFORMATION

Basic Press and Tooling Order No.	Press Tool Kits Order No.*	Tool Change Kits Order No.†	Terminates Connector
11-20-1159	11-21-9650	11-31-2181	71247, 70625 MX-50 and 70121 Slimline
11-20-1161	11-21-9652	11-31-2187	5360 QF 50
11-20-1162	11-21-9653	11-31-2335	5320 QF 50

Description	Order No.
Electric Press (120V)	11-31-9369
Ribbon Cable Tooling Adapter	11-20-0947
Basic Press with Tooling Adapter	11-20-1171
Universal Adapter Plate	11-31-2176
Electric Press (220V)	11-31-9243

* Press tool kits are all that is required if customer already has the basic press
† Tool change kits are required to change from one product line to another

Semi-Automatic Terminator



FEATURES AND SPECIFICATIONS

Features

- Pneumatic only—no electrical source required
- Tube fed
- Feed-to or feed-through from either side
- Assembles all circuit sizes
- 39mm (1.5") min. cable length
- Inexpensive drop in tool modules for the 71007 Edge Card; 70121 Slimline, 40312 MX-50 and 5360 Transition connectors

Specifications

Size: Width—457mm (18")
Length—508mm (20")
Height—457mm (18")
Weight: 27.3kg (60 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—7L per minute (0.26 CFM)
Rate: Up to 550 single-ended assemblies per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Terminates Connector
Base Machine Only	11-20-0899	Requires Tool Module
MX-50 Connector Tool Module	11-31-4361	71247, 70625 Standard MX-50
Slimline Connector Tool Module	11-31-4236	70121/71891 MX-50 Slimline
Transition Connector Tool Module	11-31-7695	5360 QF 50™ Transition Connector
International .050" Connector	11-21-9521	5320 QF 50 Connector
Combine Base Machine and Tool Module	11-20-0985	71247, 70625 Standard MX-50
Combine Base Machine and Tool Module	11-20-0974	70121/71891 MX-50 Slimline
Combine Base Machine and Tool Module	11-20-0975	5360 QF 50 Transition Connector
Combine Base Machine and Tool Module	11-20-1215	5320 QF 50 Connector

* Press tool kits are all that is required if customer already has the basic press
† Tool change kits are required to change from one product line to another
Note: For more information reference section W

FEATURES AND SPECIFICATIONS

Application Tooling Ribbon Cable Connectors

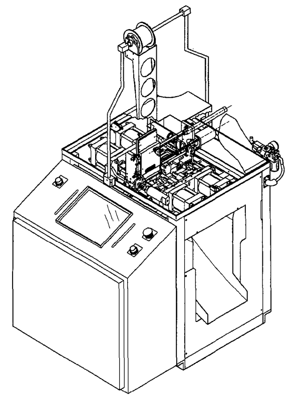
Osprey Series Harness Assembly Machine

Features

- Fully automatic mass terminator for high volume applications
- Single end style—25.40mm (1") min. length
- Double end style—18mm (.700") min. length between connectors
- Daisy chain style—Up to 16 connector positions stored in job memory—2 connector types and up to 2 orientations per harness set-up
- 50 circuit maximum, 10 circuit min.
- Accommodates 26 and 28 AWG cable
- Tests for electrical shorts
- Touch screen operator interface
- Self-diagnostic

Specifications

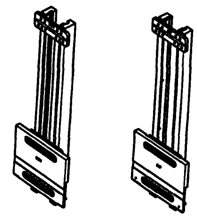
Size: Width—1700mm (66")
Depth—800mm (32.4")
Height—1524mm (60")
Weight: 95kg (210 lb)
Pneumatics: Pressure—7 BAR (110psig)
Consumption—70L per minute (2.4 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—6.0A at 120V or 3.0A at 220V
Cable Length: 3000mm max.
Rate: Up to 630 assemblies per hour, dependent on wire length and application



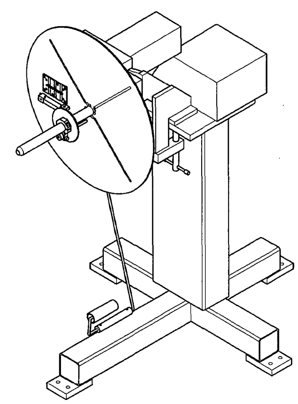
Osprey Harness Assembly Machine

ORDERING INFORMATION

Description	Order No.	Terminates Connector
Base Machine	11-20-1291	
Tool Kit	Consult factory for specific ordering information (Kit is designed for connector type and circuit size)	71247, 70625 MX-50™
Tool Kit		70121/71891 MX-50 Slimline
Tool Kit		5360 QF 50™
Tool Kit		5320 QF 50
Optional dereeler for reels of 100 to 500′	11-39-0058	



Osprey Tooling



Osprey Dereeler

FEATURES AND SPECIFICATIONS

Not Available in the US

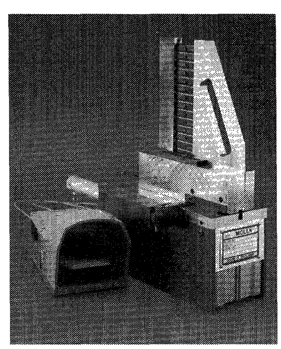
PB15 Pneumatic Terminator

Features

- Automatic connector reloading
- Magazine feed with connector orientation
- Timer to ensure complete termination
- Cable guide
- Quick adjustment between circuit sizes
- Foot pedal operation
- Automatic tape feed

Specifications

Weight: 28kg
Pneumatics: 6 BAR (90psig)
Air Consumption: 14L per minute (0.5 CFM)



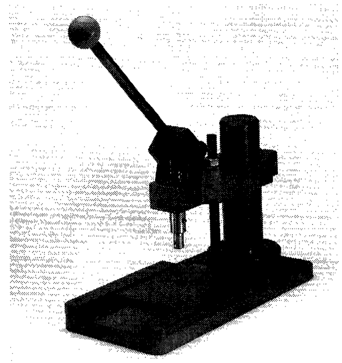
ORDERING INFORMATION

Description	Order No.	Connector
PB15 Magazine	69127-1050	90635, 40312
PB15 Tape	69127-1100	90635, 40312

Application Tooling Ribbon Cable Connectors

Modular Euro Arbor Press

Preferred Version in Europe—Not Available in the US



FEATURES AND SPECIFICATIONS

Features
- Lightweight, portable, reliable assembly
- Cable shearing capabilities
- Feed-to or feed-through

Specifications
Size: Width—153mm (6")
Depth—305mm (12")
Height—457mm (18")
Weight: 7.8kg (17.2 lb)
Rate: Up to 110 assemblies per hour, dependent on operator speed and cable length

ORDERING INFORMATION

Description	Order No.	Type	For Use With
Manual Press	69020-0660	Manual Press Modular System	All equipment listed below
Cable Shear Module	69020-0900	Cable Preparation	To shear ribbon scale of all sizes
Assembly Module	69020-0680	Termination Tooling	Connectors 5320, 5321, 5323, 47000, 7789, 71247 and 70625
Assembly Module	69020-0710		Connectors 5350, 5370 and 5380 QF 50

Preferred Version in the Far East—Not Available in the US

J 5930 Series Press and Cutter

FEATURES AND SPECIFICATIONS

Features
- Manually operated, ratchet type
- QF 50™

Specifications
Weight: Bench—7.80kg (17.2 lb)
Space: 153 by 305mm (6 by 12")
Height: 457mm (18")

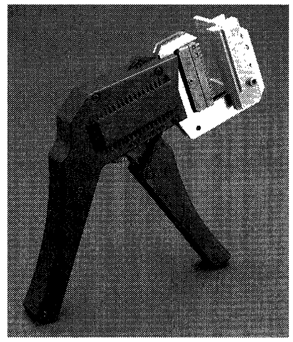
ORDERING INFORMATION

Description	Order No.	Type	For Use With
Press Frame	11-26-0075	Press	All equipment listed in press section
Base Assembly	11-26-0081		Press Frame
Kit QF Female	11-26-0082		Connector 5320
Kit QF 2.54mm (.100") Grid	11-26-0083		Connector 5360
Press Frame	11-26-0075	Cutter	All equipment listed in cutter section
Cutter	11-26-0078		Press Frame

FEATURES

- For low volume, prototype and field repair
- Parallel action hand tool with precision location nest and termination blades
- Can terminate feed-to or feed-through applications

Picoflex™ Hand Tool



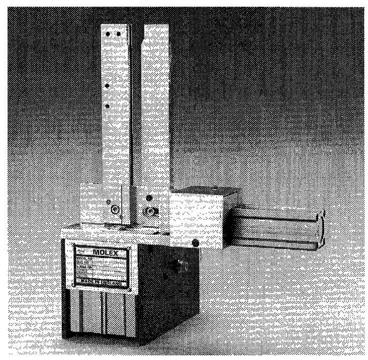
ORDERING INFORMATION

Description	Order No.	Connector
Picoflex Hand Tool for 4 to 26 circuits	69008-0910	90527, 90584

FEATURES

- For Picoflex 90327 connector (4 to 26 circuits)
- Fully pneumatic
- Cable triggers termination
- Production rate: 520 per hour
- Magazine feed
- Cable guidance
- Quick adjustment for different circuit sizes

PB14 Pneumatic Terminator



ORDERING INFORMATION

Description	Order No.	Connector
PB14 Terminator for 4 to 26 circuits	69127-1001	90327

FEATURES AND SPECIFICATIONS

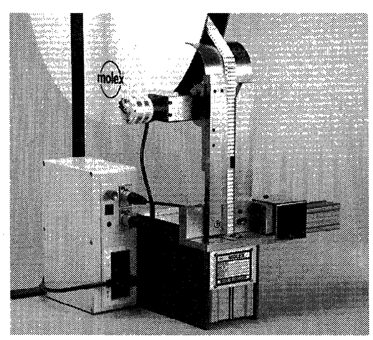
Features

- Automatic tape feed which increases the production capabilities of the PB14 terminator
- Cable entry triggers termination
- Quick adjustment between circuit sizes
- Sensor automatically keeps magazine track full allowing the operator to concentrate on production
- Hand or bowl feed versions also available

Specifications

Rate: Up to 2100 connectors per hour, dependent on operator speed and cable length

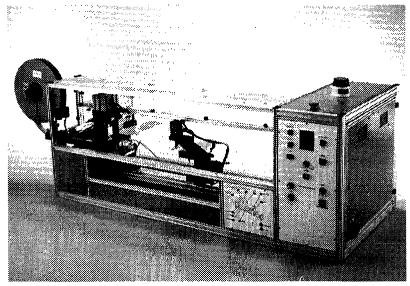
PB14T Tape Feed Terminator



ORDERING INFORMATION

Description	Order No.	Connector
PB14T Terminator (220V) for 4 to 26 circuits	69127-1004	90327
PB14T Terminator (120V) for 4 to 26 circuits	69127-1024	90327

Picoflex Desktop (PDT) Machine



FEATURES AND SPECIFICATIONS

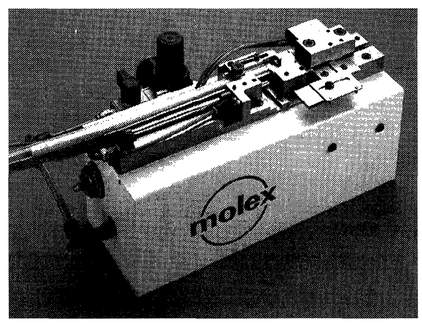
Features
- Medium volume, with fully automatic means of termination
- Pneumatically acutated
- Continuity testing built in
- Wire straightener
- PLC control
- Harness collection tray

Specifications
Weight: 140kg (308 lb)
Electrical: 240V, 50 Hz single phase
Pneumatics: Pressure—6 BAR (90psig)
Consumption—6L per minute (0.22 CFM)
Rate: Up to 360 harnesses per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Connector
Picoflex Desktop Machine	Contact factory	90327, 90584

PB16 Tube Feed Pneumatic Terminator



FEATURES
- For Picoflex 90584
- Fully pneumatic
- Automatic connector reloading
- Tube feed with connector orientation
- Timer to ensure complete termination
- Cable entry triggers termination

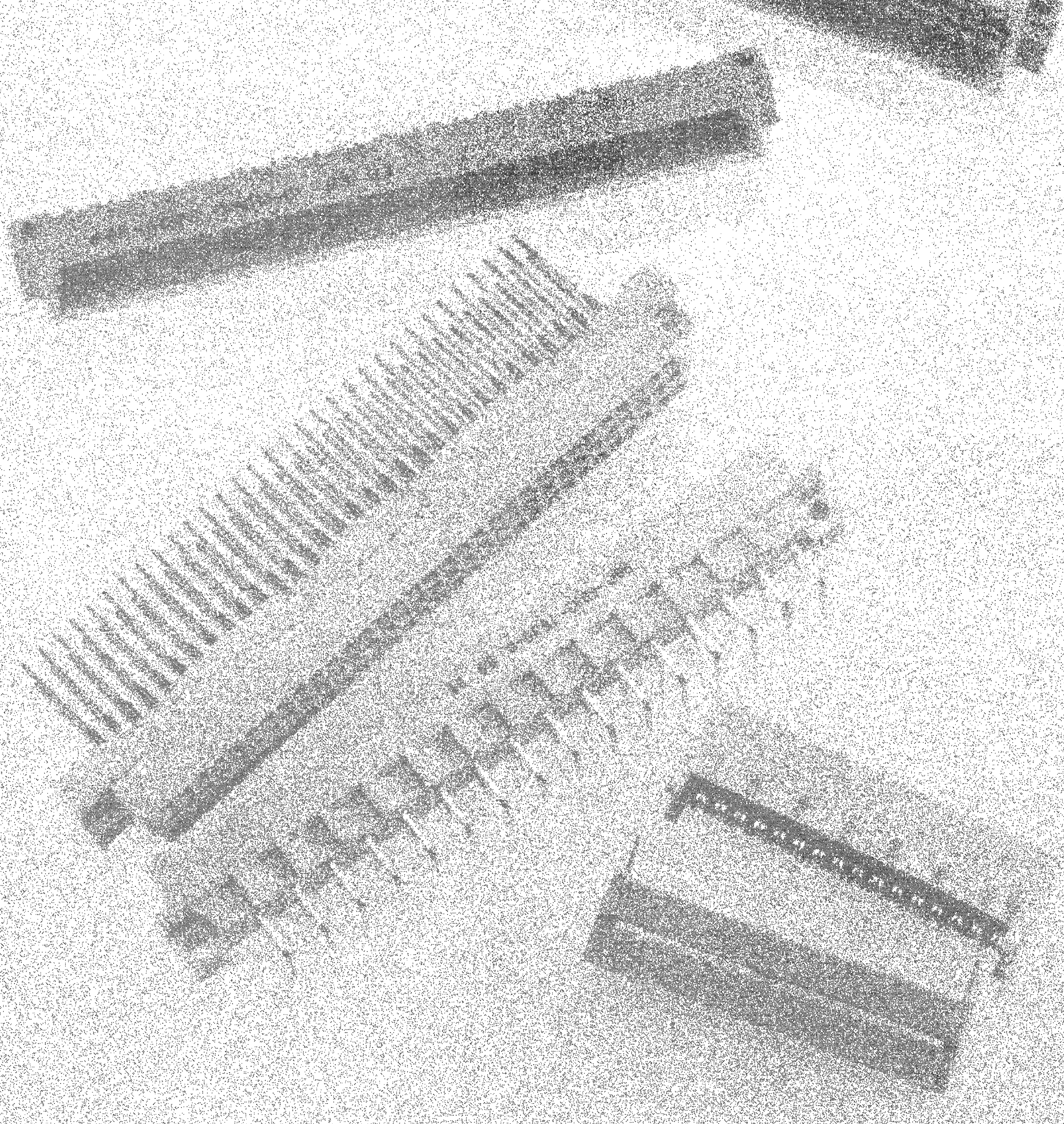
ORDERING INFORMATION

Description	Order No.	Connector
PB16 Terminator	69127-1010	90584

molex

DIN 41612

C



DIN 41612 Introduction

Molex's 5XXXX series of DIN 41612 connectors include industry standard dual and triple row receptacles and headers in basic B and C configurations and various other circuit sizes from 16 to 96.

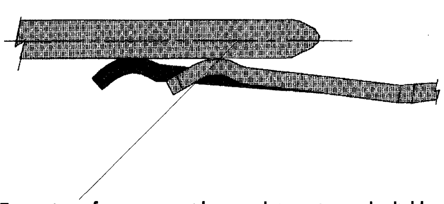
Receptacles feature a dual beam contact on a single side, offering low insertion force and reliable connection.

Headers may be ordered in edge mount style or in face mount versions. Triple row headers and receptacles are available fully loaded or can be ordered with the middle row void.

All versions of the 5XXXX DIN 41612 connectors are available in glass-filled polyester material with 4 plating options: 0.76, 0.5, 0.3 and 0.1µm Gold.

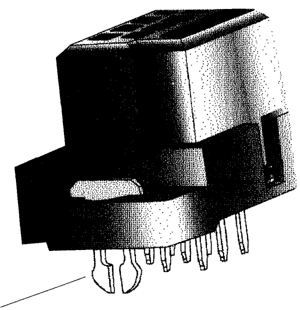
An optional metal hold-down provides secure PCB retention.

Contact Features



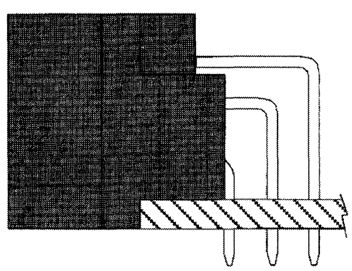
Two points of contact provide smooth insertion and reliable connection.

PCB Retention Peg

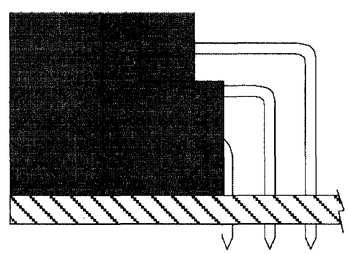


Optional metal hold-down provides secure retention during wave soldering.

Board Mounting Options



Edge-Mount Type

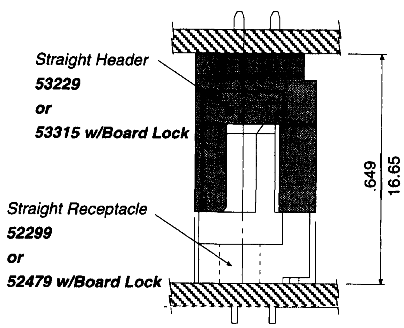


Face-Mount Type

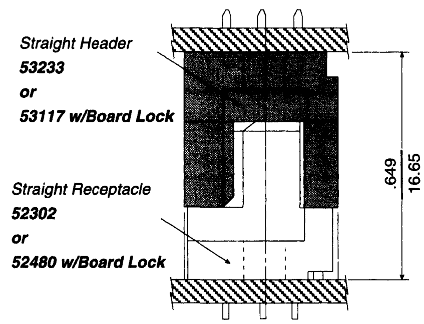
DIN 41612 Mating Options

Stacking

Dual Row

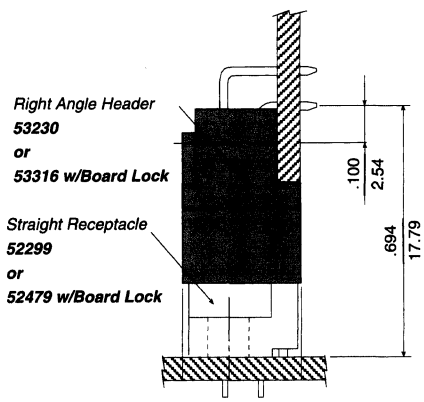


Triple Row

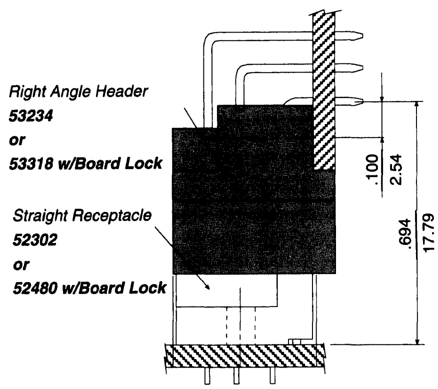


Right Angle Edge Mount

Standard Edge-Mount Type

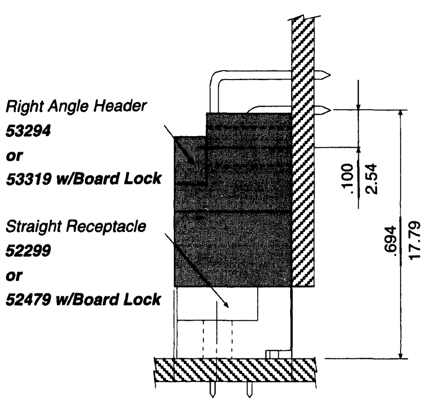


Standard Edge-Mount Type

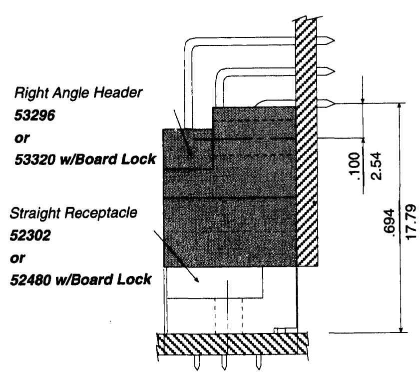


Right Angle Face Mount

Face-Mount Type



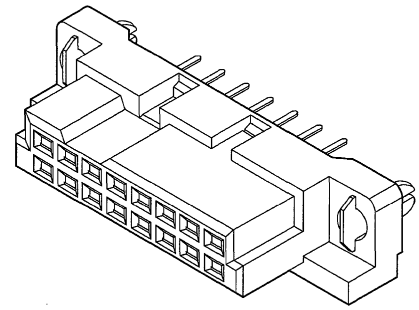
Face-Mount Type



FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch DIN 41612 Receptacle

52299/52479 Straight



Features and Benefits

- Sizes 16 to 64 circuits

Reference Information

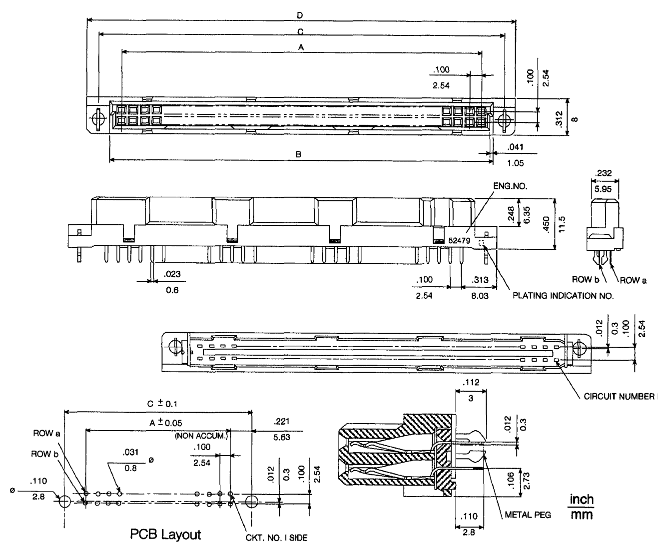
Product Specification: PS-52299/PS-52479
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53229, 53230, 53294, 53315, 53316 and 53319
Designed In: Millimeters

Electrical

Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical

Housing: Glass-filled PBT, UL 94V-0
Contact: Phosphor Bronze
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Without Metal Peg	With Metal Peg	A	B	C	D
16	52299-016X	52479-016X	17.78 (.700)	23.94 (.943)	29.04 (1.143)	33.84 (1.332)
20	52299-020X	52479-020X	22.86 (.900)	29.02 (1.143)	34.12 (1.343)	38.92 (1.532)
32	52299-032X	52479-032X	38.10 (1.500)	44.26 (1.743)	49.36 (1.943)	54.16 (2.132)
44	52299-044X	52479-044X	53.34 (2.100)	59.50 (2.343)	64.60 (2.543)	69.40 (2.732)
50	52299-050X	52479-050X	60.96 (2.400)	67.12 (2.643)	72.22 (2.843)	77.02 (3.032)
64	52299-064X	52479-064X	78.74 (3.100)	84.90 (3.343)	90.00 (3.543)	94.80 (3.732)
Replace X with plating no., 0-3						

Plating No. 0: 0.1μm Gold with Nickel underplate overall and Tin/Lead in solder area
Plating No. 1: 0.3μm Gold with Nickel underplate overall and Tin/Lead in solder area
Plating No. 2: 0.5μm Gold with Nickel underplate overall and Tin/Lead in solder area
Plating No. 3: 0.76μm Gold with Nickel underplate overall and Tin/Lead in solder area

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch DIN 41612 Header

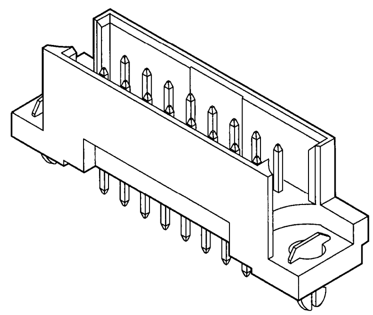
53229/53315 Straight

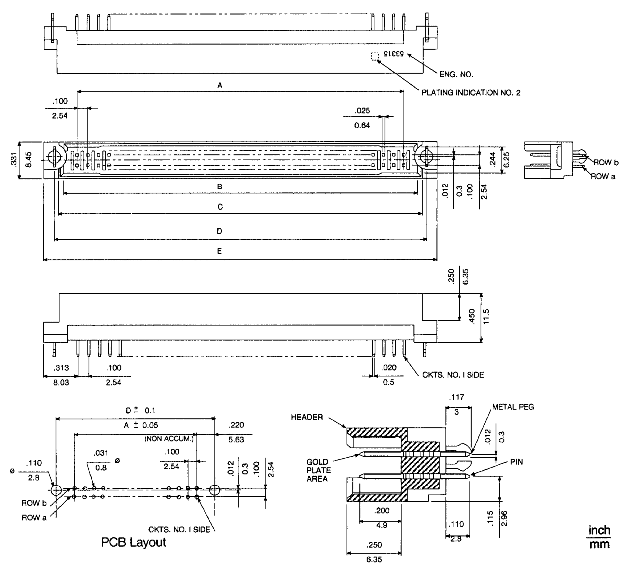
Features and Benefits
- Sizes 16 to 64 circuits

Reference Information
Product Specification: PS-53229/PS-53315
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 52299 and 52479
Designed In: Millimeters

Electrical
Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Without Metal Peg	With Metal Peg	A	B	C	D	E
16	53229-016X	53315-016X	17.78 (.700)	24.34 (.960)	26.84 (1.057)	29.04 (1.143)	33.84 (1.332)
20	53229-020X	53315-020X	22.86 (.900)	29.42 (1.158)	31.92 (1.257)	34.12 (1.343)	38.92 (1.532)
32	53229-032X	53315-032X	38.10 (1.500)	44.66 (1.758)	47.16 (1.857)	49.36 (1.943)	54.16 (2.132)
44	53229-044X	53315-044X	53.34 (2.100)	59.90 (2.358)	62.40 (2.457)	64.60 (2.543)	69.40 (2.732)
50	53229-050X	53315-050X	60.96 (2.400)	67.52 (2.658)	70.02 (2.757)	72.22 (2.843)	77.02 (3.032)
64	53299-064X	53315-064X	78.74 (3.100)	85.30 (3.358)	87.80 (3.457)	90.00 (3.543)	94.80 (3.732)
Replace X with plating no., 0-3							

Plating No. 0: 0.1µm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3µm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5µm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76µm Gold over Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch DIN 41612 Header

53230/53316 Right Angle

Features and Benefits

- Sizes 16 to 64 circuits

Reference Information

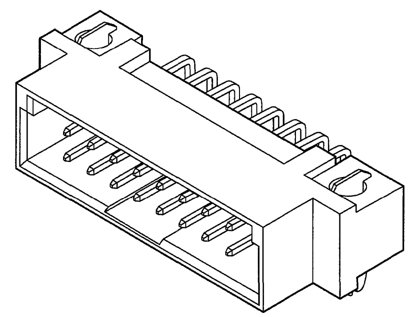
Product Specification: PS-53230/PS-53316
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 52299 and 52479
Designed In: Millimeters

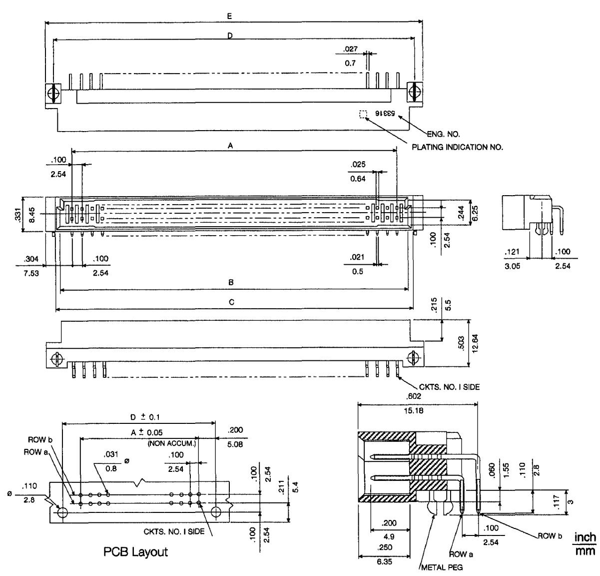
Electrical

Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical

Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Without Metal Peg	With Metal Peg	A	B	C	D	E
16	53230-016X	53316-016X	17.78 (.700)	24.34 (.958)	26.54 (1.045)	27.94 (1.100)	32.84 (1.293)
20	53230-020X	53316-020X	22.86 (.900)	29.42 (1.158)	31.62 (1.245)	33.02 (1.300)	37.92 (1.493)
32	53230-032X	53316-032X	38.10 (1.500)	44.66 (1.758)	46.86 (1.845)	48.26 (1.900)	53.16 (2.093)
44	53230-044X	53316-044X	53.34 (2.100)	59.90 (2.358)	62.10 (2.445)	63.50 (2.500)	68.40 (2.693)
50	53230-050X	53316-050X	60.96 (2.400)	67.52 (2.658)	69.72 (2.745)	71.12 (2.800)	76.02 (2.993)
64	53299-064X	53315-064X	78.74 (3.100)	85.30 (3.358)	87.80 (3.457)	90.00 (3.543)	94.80 (3.732)
Replace X with plating no., 0-3							

Plating No. 0: 0.1μm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3μm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5μm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76μm Gold over Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch DIN 41612 Header**

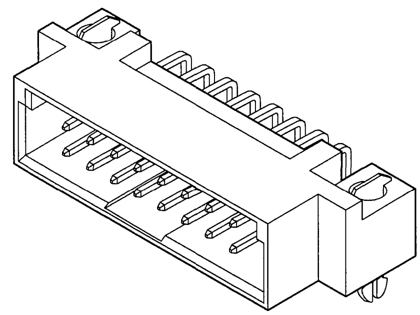
53294/53319 Right Angle

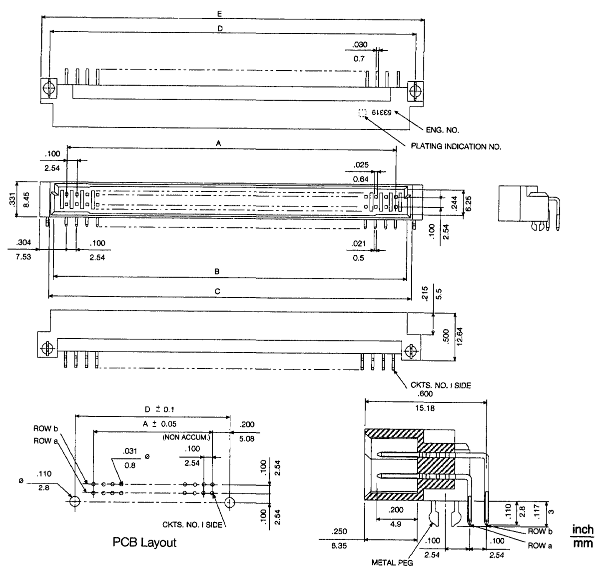
Features and Benefits
- Sizes 16 to 64 circuits
- Face mount for wave soldering applications

Reference Information
Product Specification: PS-53294/PS-53319
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 52299 and 52479
Designed In: Millimeters

Electrical
Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Without Metal Peg	With Metal Peg	A	B	C	D	E
16	53294-016X	53319-016X	17.78 (.700)	24.34 (.960)	26.54 (1.045)	27.94 (1.096)	32.84 (1.300)
20	53294-020X	53319-020X	22.86 (.900)	29.42 (1.158)	31.62 (1.245)	33.02 (1.300)	37.92 (1.493)
32	53294-032X	53319-032X	38.10 (1.500)	44.66 (1.758)	46.86 (1.845)	48.26 (1.900)	53.16 (2.093)
44	53294-044X	53319-044X	53.34 (2.100)	59.90 (2.358)	62.10 (2.445)	63.50 (2.500)	68.40 (2.693)
50	53294-050X	53319-050X	60.96 (2.400)	67.52 (2.658)	69.72 (2.745)	71.12 (2.800)	76.02 (2.993)
64	53294-064X	53319-064X	78.74 (3.100)	85.30 (3.558)	87.50 (3.445)	88.90 (3.500)	93.80 (3.693)
Replace X with plating no., 0-3							

Plating No. 0: 0.1µm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3µm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5µm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76µm Gold over Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch DIN 41612 Receptacle

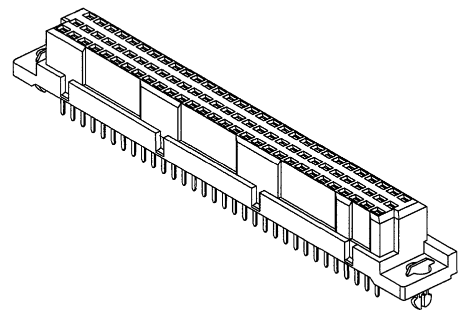
52302/52480 Triple Row Straight

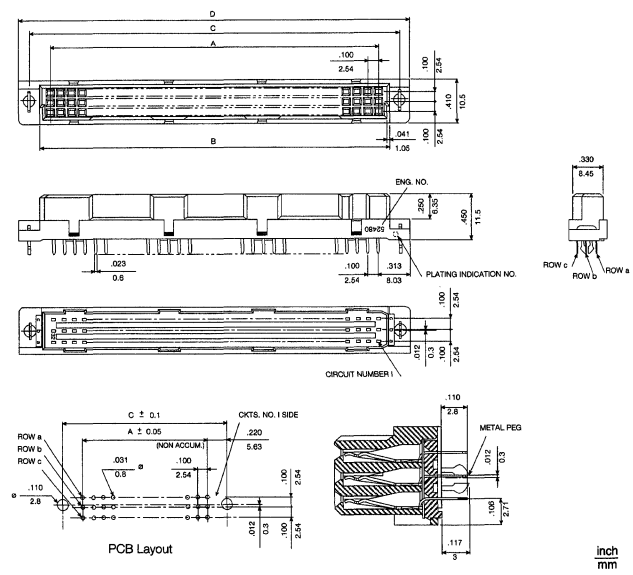
Features and Benefits
- Sizes 48 and 96 circuits

Reference Information
Product Specification: PS-52302/PS-52480
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53233, 53234, 53296, 53317, 53318 and 53320
Designed In: Millimeters

Electrical
Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Phosphor Bronze
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Without Metal Peg	With Metal Peg	A	B	C	D
48	52302-048X	52480-048X	38.10 (1.500)	44.26 (1.743)	49.36 (1.943)	54.16 (2.132)
96	52302-096X	52480-096X	78.74 (3.100)	84.90 (3.345)	90.00 (3.543)	94.80 (3.732)
Replace X with plating no., 0-3						

Plating No. 0: 0.1μm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3μm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5μm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76μm Gold over Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch DIN 41612 Header

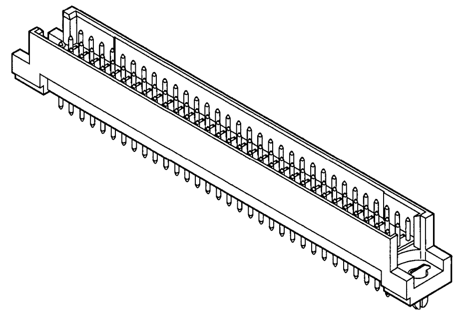
53233/53317 Triple Row Straight

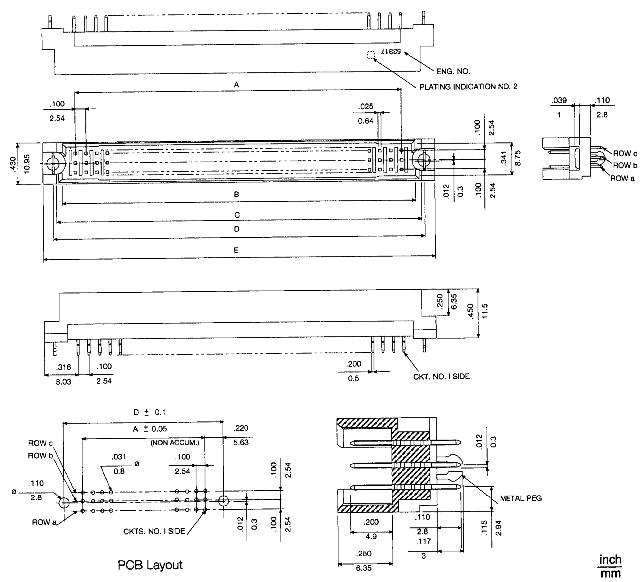
Features and Benefits
- Sizes 48 and 96 circuits

Reference Information
Product Specification: PS-53233/PS-53317
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 52302 and 52480
Designed In: Millimeters

Electrical
Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Without Metal Peg	With Metal Peg	A	B	C	D	E
48	53233-048X	53317-048X	38.10 (1.500)	44.66 (1.758)	47.16 (1.857)	49.36 (1.943)	54.16 (2.132)
96	53233-096X	53317-096X	78.74 (3.100)	85.30 (3.358)	87.80 (3.457)	90.00 (3.543)	94.80 (3.732)
Replace X with plating no., 0-3							

Plating No. 0: 0.1µm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3µm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5µm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76µm Gold over Tin/Lead over Nickel

FEATURES AND SPECIFICATIONS

molex® **2.54mm (.100") Pitch DIN 41612 Header**

53234/53318 Triple Row Right Angle

Features and Benefits

- Sizes 48 and 96 circuits

Reference Information

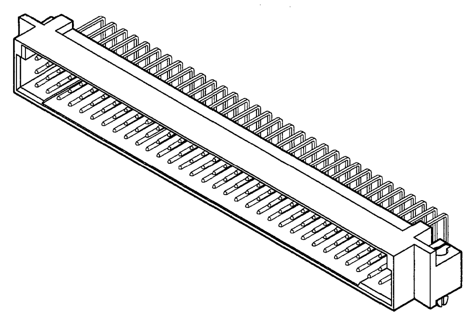
Product Specification: PS-53234/PS-53318
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 52302 and 52480
Designed In: Millimeters

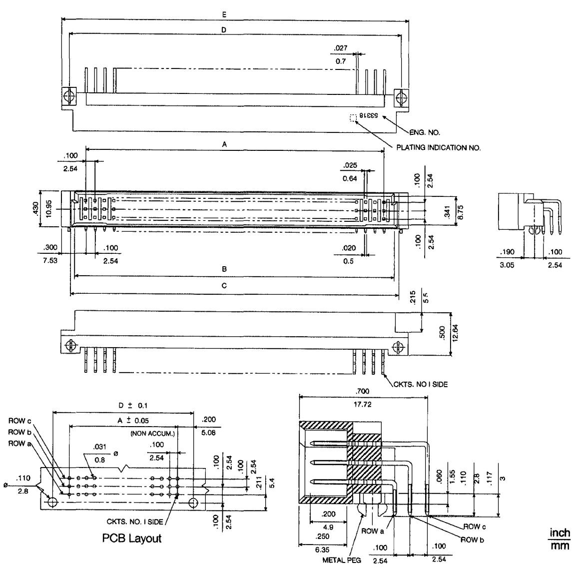
Electrical

Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical

Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Without Metal Peg	With Metal Peg	A	B	C	D	E
48	53234-048X	53318-048X	38.10 (1.500)	44.66 (1.758)	46.86 (1.845)	48.26 (1.900)	53.16 (2.093)
96	53234-096X	53318-096X	78.74 (3.100)	85.30 (3.358)	87.50 (3.445)	88.90 (3.500)	93.80 (3.693)
Replace X with plating no., 0-3							

Plating No. 0: 0.1µm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3µm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5µm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76µm Gold over Tin/Lead over Nickel

2.54mm (.100") Pitch DIN 41612 Header

53296/53320 Right Angle

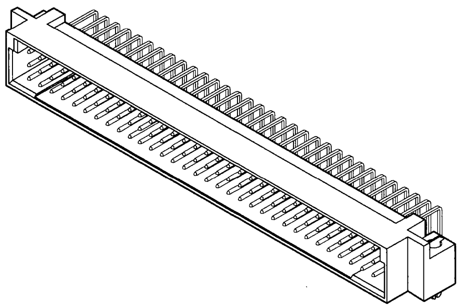
FEATURES AND SPECIFICATIONS

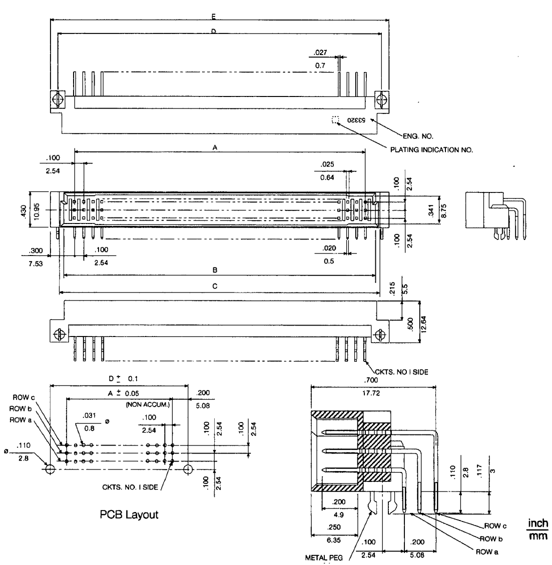
Features and Benefits
- Sizes 48 and 96 circuits
- Face mount for wave soldering applications

Reference Information
Product Specification: PS-53296/PS-53320
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 52302 and 52480
Designed In: Millimeters

Electrical
Voltage: 300V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 10^6 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Metal Peg: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





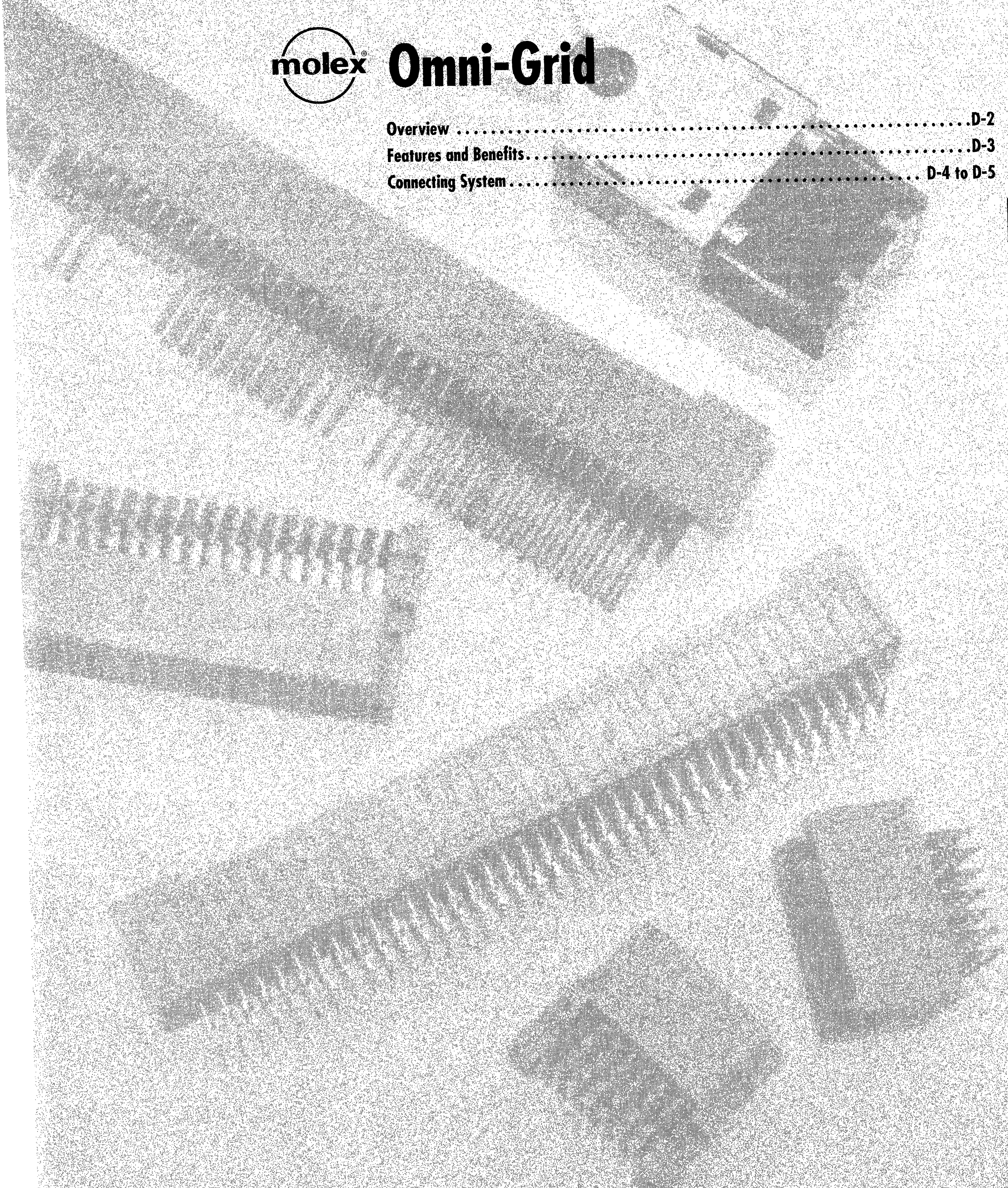
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Without Metal Peg	With Metal Peg	A	B	C	D	E
48	53296-048X	53320-048X	38.10 (1.500)	44.66 (1.758)	46.86 (1.845)	48.26 (1.900)	53.16 (2.093)
96	53296-096X	53320-096X	78.74 (3.100)	85.30 (3.358)	87.50 (3.445)	88.90 (3.500)	93.80 (3.693)
Replace X with plating no., 0-3							

Plating No. 0: 0.1μm Gold over Tin/Lead over Nickel
Plating No. 1: 0.3μm Gold over Tin/Lead over Nickel
Plating No. 2: 0.5μm Gold over Tin/Lead over Nickel
Plating No. 3: 0.76μm Gold over Tin/Lead over Nickel

Omni-Grid

D



The trend to standardize packaging systems for electronics into true metric was caused by the disruption of the existing systems, where metric PCBs (160 by 100mm) were packed into 19" racks and composed of connectors spaced 1/10 of an inch from each other.

In order to find a true metric system, an IEC (IEC Publ. 102-4-100) standard for packaging was proposed, which is based on the existing DIN 43356 "metric design standard multimodule 2.5mm." This metric design standard defines a subunit (SU) of 25mm (.98425"), which is described in all 3 dimensions "omnidirectional" like a cube with 25mm width. The subunit can be divided into 10 increments of 2.5mm. A multiple of these increments constitutes the board spacing with a minimum spacing of 15mm.

The 3D grid is conceived so that it is possible to have a pin every 2.5mm in X and Y direction on the backplane. Connectors can therefore mate in the X direction or in the Y direction on the same backplane. This allows for maximum utilization of system volume and for very high pin count between the module and backplane.

One of the first connectors designed for this metric packaging standard is the OmniGrid 2.5 connector system. This standard was developed in 1986 according to the DIN 41642 standard in Germany and has now become the IEC 1076-4-100 specification titled "Detail specification for modular 2-part connectors for printed boards and backplanes, grid of 2.5mm (0.098") according to IEC 917." This specification highlights the wide acceptance of this connector as an industry standard.

The IEC 1076-4-100 has been accepted as the Telecom Bus standard by the IEEE. OmniGrid 2.5 is a true metric connector system and uses the minimum PCB spacing of 15mm for a rugged and reliable interconnection system.

Molex's OmniGrid 2.5mm connector family is a 5-row backplane connector system with female contacts on the module and pins on the backplane. Both the female and backplane pins are press-fitted into the board, not requiring solder. It is important to note that high pin counts are achieved without any compromises in technology.

The backplane is fitted with 0.6mm square C-pins utilizing the compliant press fit technology proven in billions of pins used in previous generation DIN 41612 connectors.

The female contact is a dual beam, low insertion force contact with versions available to meet the Bellcore requirement for 100g minimum normal force after life. This capability provides the high reliability needed to achieve system level Mean Time Between Failure (MTBF) requirements.

The female contact uses a V-press fit technology so that this connector can also be applied without soldering, making the OmniGrid 2.5mm connector the perfect high pin count connector for surface mount boards. It also shortens electrical length and enables board to board spacing as low as 15mm. A 10 SU long connector offers 475 circuits on a 265mm high PCB edge.

The rear I/O cable connectors are available in 1, 2 and 4 SU plugs with up to 164 signal paths and can be plugged omnidirectionally (vertically or horizontally) in order to connect one peripheral cable on up to 8 PCBs. First-Make-Last-Break (2 levels) and Last-Make-First-Break male contacts are available as well as 4 different rear tail lengths for press fit only, rear I/O only or wire wrap and rear I/O wiring applications.

Last, but not least, Molex's highly automated production equipment enables the customer to tailor his product to the actual needs as pseudo-coax arrangements or selectively loaded connectors depending on his application.

For more information on this product, please contact Molex.

FEATURES	BENEFITS	
Metric connector system	■ IEC 917 compliance ■ Meets post 1992 European Standards	■ Next generation standard
International standard IEC 1076-4-100	■ Excellent documentation ■ Available around the world	■ Multi-sourced
Supported by metric packaging standards IEEE 1301 and 1301.3	■ Card cage and connector tolerances well understood and documented	
Modular construction	■ Signal, power, coax in SU sizes of 1, 2, 4, 9 and 10	
Complete connector system	■ Board-to-board ■ Cable-to-board—IDT/CTW ■ Shielded components	■ Can qualify the system, then pick and choose components from the family for different applications ■ Future proof—adapts to future system needs
Z axis assembly only	■ No nuts or bolts ■ Reduced assembly time	■ Reduced assembly cost ■ Fully automatable
Low profile	■ Stackable on 15mm centers (approx. 0.600")	
Rated for 2.7A (half loaded) resp. 1A (fully loaded)	■ May not need power pins	■ Enhanced system cooling
Short electrical length	■ Up to 800 MHz performance	■ Allows short risetimes
Minimal skew	■ Faster speeds	■ Shorter access time
System in production since 1986	■ Mature product ■ Very low risk	■ SPC implemented
Available from multiple sources	■ Assures competitiveness ■ Reduces risk	■ Increases innovation

BACKPLANE MALE CONNECTORS

Continuous backplane grid

- Efficient utilization of pins
- Integral shield/ground
- Orthogonal boards

0.6mm (0.025") square pins

- Strong
- Wire wrappable
- Rear plug capability
- Stiff
- High conductivity

Compliant C-pin

- No risk
- Well known
- Qualified at most major accounts
- Billions of pins already made

PCB FEMALE CONNECTORS

5 rows, 2.5mm pitch

- 50 circuits per SU (approximately 1") card height
- Pseudo-coax configurations
- 425 on double Eurocard
- 475 on 10 SU connector for 12 SU card

Connector applied last

- Panelized line cards
- Pogo pin test
- Connector not in way (solder paste application or wave soldering)
- Easy repair/rework of board
- For SMT boards

Press fit right angle receptacle

- Easy to assemble
- Reduced cost
- Increased yield
- Not exposed to solder process —no distortion—less expensive plastic—more precision

No heat stake pegs

- No heat stake step in process
- No control problem
- Board thickness not a problem

100g normal force

- Meets Bellcore requirements
- Reliable electrical performance
- Cuts through dust and films

LIF contacts

- Can plug large pin count connectors

CABLE CONNECTORS

Cable connector has metal back shells

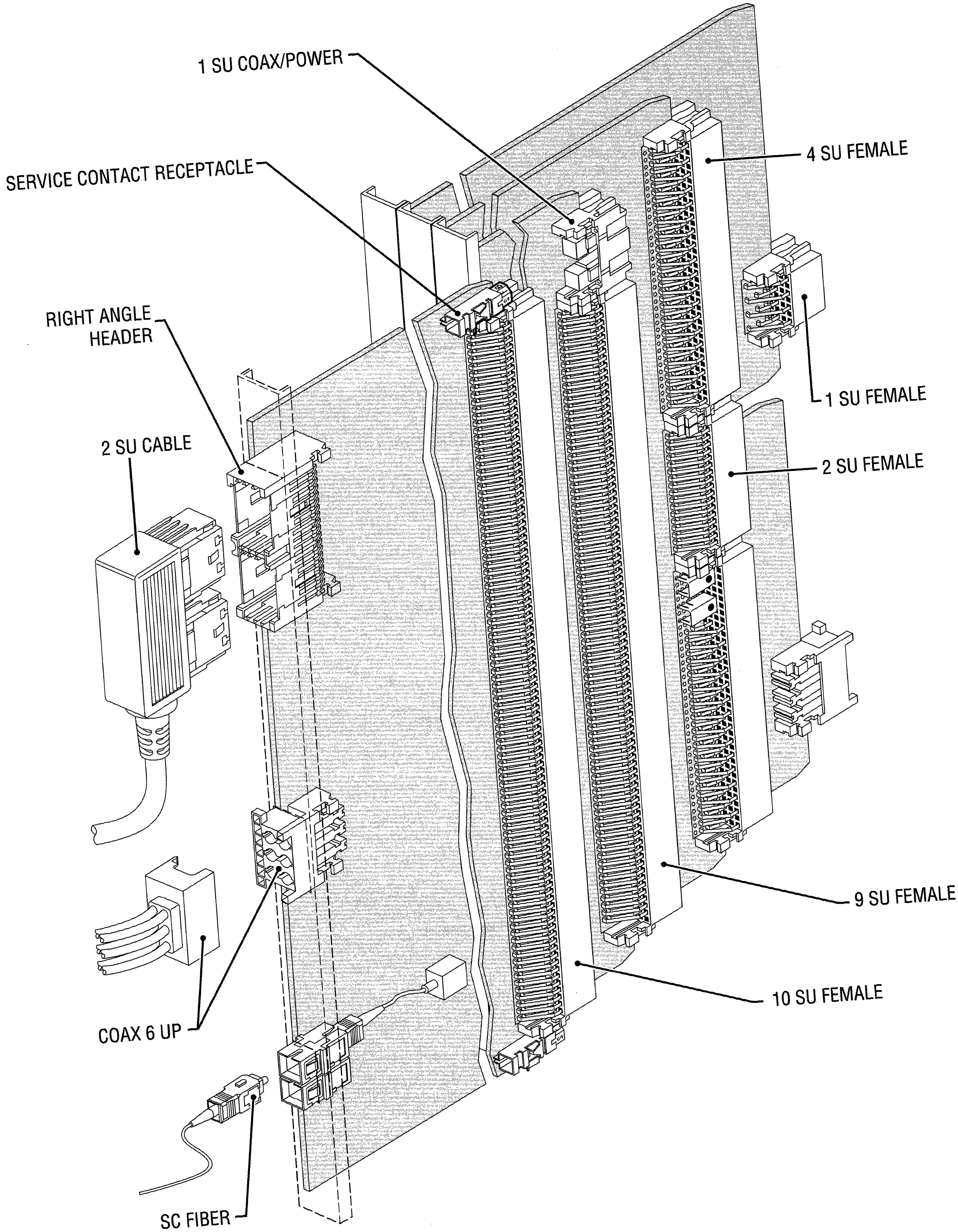
- Sturdy construction withstands rough handling
- Can be grounded to cable

Cable connector coding

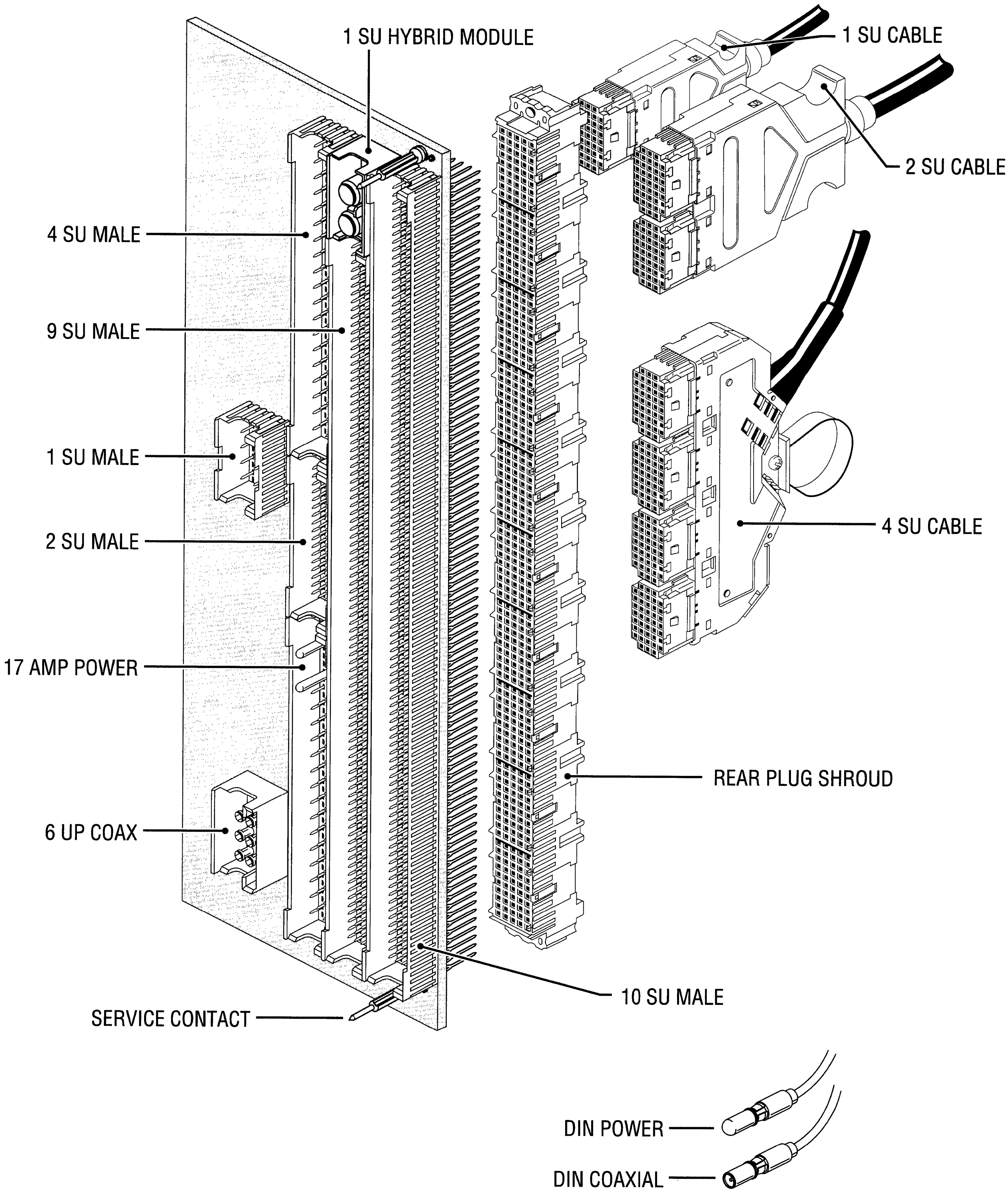
- Can assure specific cable goes into specific slot

Cable connector removal tabs

- Encourages proper removal


1 SU COAX/POWER
SERVICE CONTACT RECEPTACLE
4 SU FEMALE
RIGHT ANGLE HEADER
1 SU FEMALE
2 SU CABLE
2 SU FEMALE
9 SU FEMALE
10 SU FEMALE
COAX 6 UP
SC FIBER

The Unlimited Connecting System



Sockets and Edge Connectors

E

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Dual In-Line Memory Module Socket

71243

Vertical with Dual Ejecting Latches

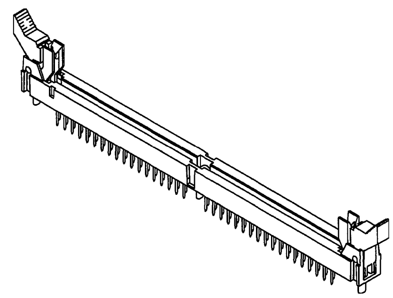
Features and Benefits
- Colored and keyed latch indicates pin no. 1
- Accepts JEDEC MO-167 type modules for 100% industry compatibility
- Dual ejector latches for easy module removal
- Module pre-alignment feature prevents mismating
- Palladium Nickel with Gold flash plating for improved reliability
- Added contact wipe for improved reliability

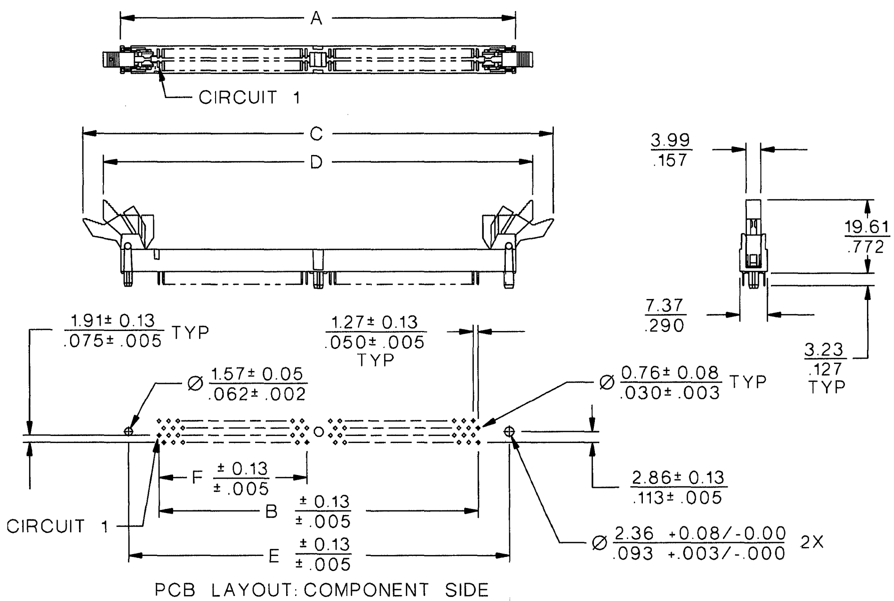
Reference Information
Product Specification: PS-71243
Packaging: Tray
Mates With: JEDEC MO-167 modules
Designed In: Inches

Electrical
Voltage: 100V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 750V AC
Insulation Resistance: 100 MΩ min.

Mechanical
Mating Force: 5 oz per pair
Durability: 25 cycles min.

Physical
Housing and Latch: High temperature resistant thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: Selective Palladium Nickel with Gold flash with Tin/Lead on solder tails
Temperature: -40 to +85°C



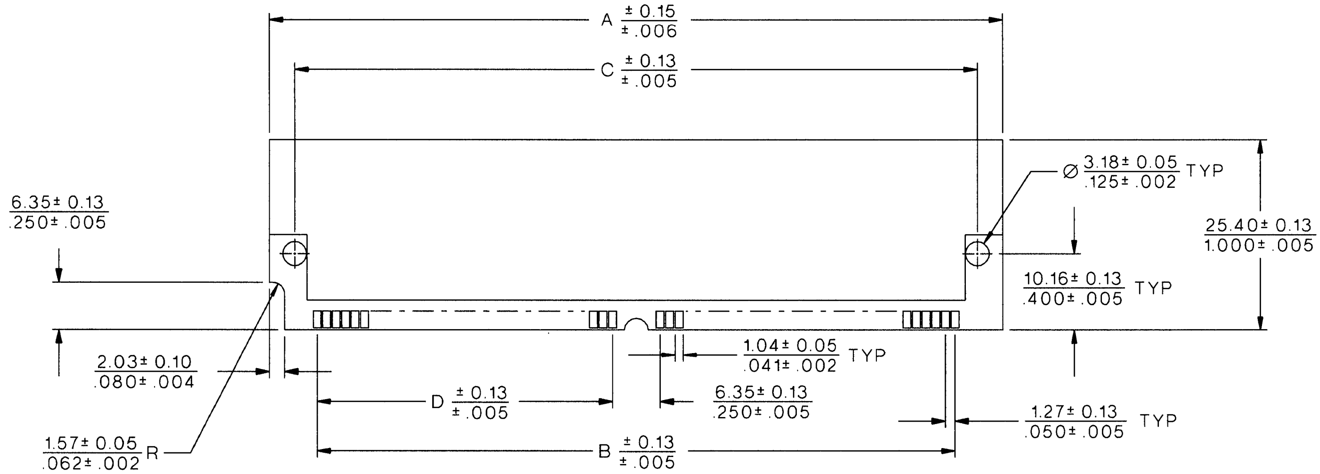


ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension					
		A	B	C	D	E	F
128	71243-0001	105.41 (4.150)	85.09 (3.350)	125.42 (4.938)	114.56 (4.510)	101.60 (4.000)	39.37 (1.550)
136	71243-0007	110.49 (4.350)	90.17 (3.550)	130.50 (5.138)	119.64 (4.710)	106.68 (4.200)	41.91 (1.650)
144	71243-0002	115.57 (4.550)	95.25 (3.750)	135.58 (5.338)	128.72 (4.910)	111.76 (4.400)	44.45 (1.750)
160	71243-0008	125.73 (4.950)	105.41 (4.150)	145.74 (5.738)	134.88 (5.310)	121.92 (4.800)	49.53 (1.950)
200	71243-0003	151.13 (5.950)	130.81 (5.150)	171.14 (6.738)	160.28 (6.310)	147.32 (5.800)	62.63 (2.450)

1.27mm (.050") Pitch Dual In-Line Memory Module Socket Modules

71243



MODULE LAYOUT

RECOMMENDED PCB THICKNESS: 1.27± 0.10/.050± .004

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
128	71243-0001	97.79 (3.850)	85.09 (3.350)	91.03 (3.584)	39.37 (1.550)
136	71243-0007	102.87 (4.050)	90.17 (3.550)	96.11 (3.784)	41.91 (1.650)
144	71243-0002	107.95 (4.250)	95.25 (3.750)	101.19 (3.984)	44.45 (1.750)
160	71243-0008	118.11 (4.650)	105.41 (4.150)	111.35 (4.384)	49.53 (1.950)
200	71243-0003	143.51 (5.650)	130.81 (5.150)	136.75 (5.384)	62.63 (2.450)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Dual In-Line Memory Module Video Ram Socket

71251

Vertical with Multiple Keys and Dual Ejecting Latches

Features and Benefits

- Accepts JEDEC MO-172 modules for 100% industry compatibility
- Dual ejector latches for easy module removal
- Latches include feature to minimize micro motion
- Palladium Nickel with Gold flash plating for improved reliability
- Added contact wipe for improved reliability
- Optional voltage and function keying

Reference Information

Product Specification: PS-71243
Packaging: Tray
Mates With: JEDEC MO-172 modules
Designed In: Inches

Electrical

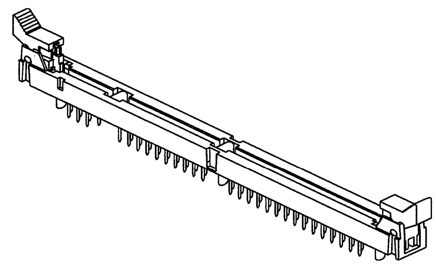
Voltage: 100V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 750V AC
Insulation Resistance: 100 MΩ min.

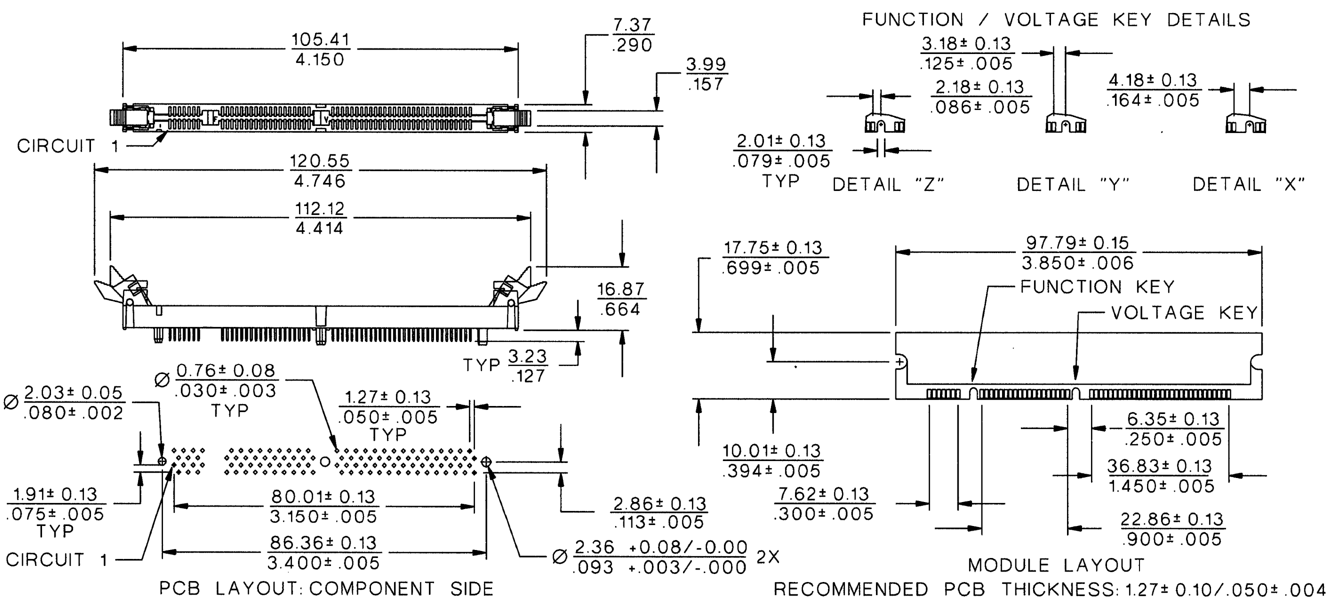
Mechanical

Mating Force: 5 oz per pair
Durability: 25 cycles min.

Physical

Housing and Latch: High temperature resistant thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: Selective Palladium Nickel with Gold flash with Tin/Lead on solder tails
Temperature: -40 to +85°C





ORDERING INFORMATION

Circuits	Order No.	Description	Function Key	Voltage Key
112	71251-2004	VRAM 5.0V	Detail X	Detail Z

1.27mm (.050") Pitch Dual In-Line Memory Module 8-Byte DRAM Socket

71251

FEATURES AND SPECIFICATIONS

Features and Benefits

- Accepts JEDEC MO-161 modules for 100% industry compatibility
- Dual ejector latches for easy module removal
- Latches include feature to minimize micro motion
- Palladium Nickel with Gold flash plating for improved reliability
- Added contact wipe for improved reliability
- Optional voltage and function keying

Reference Information

Product Specification: PS-71243
Packaging: Tray
Mates With: JEDEC MO-161 modules
Designed In: Inches

Electrical

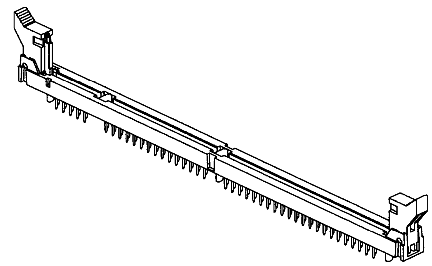
Voltage: 100V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 750V AC
Insulation Resistance: 100 MΩ min.

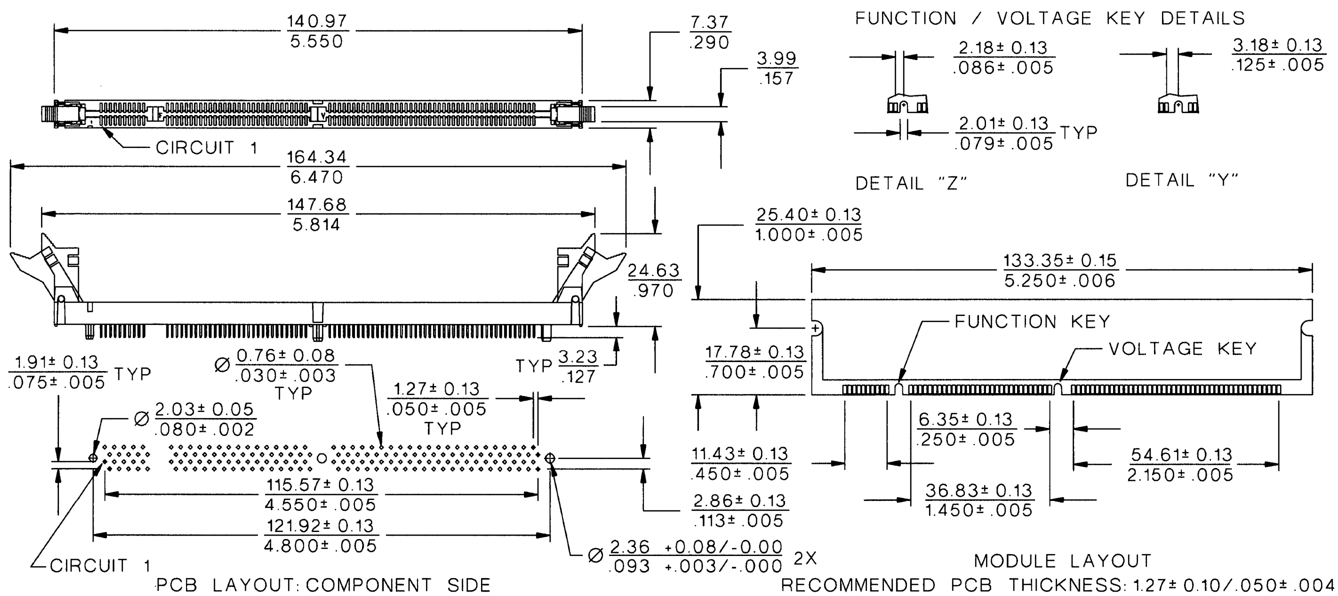
Mechanical

Mating Force: 5 oz per pair
Durability: 25 cycles min.

Physical

Housing and Latch: High temperature resistant thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: Selective Palladium Nickel with Gold flash with Tin/Lead on solder tails
Temperature: -40 to +85°C





ORDERING INFORMATION

Circuits	Order No.	Description	Function Key	Voltage Key
168	71251-0001	DRAM 3.3V	Detail Y	Detail Y
168	71251-0004	DRAM 5.0V	Detail Y	Detail Z
168	71251-0016	SDRAM 3.3V	Detail Z	Detail Y
168	71251-0017	SDRAM 5.0V	Detail Z	Detail Z
168	71251-0012	Unbuffered 3.3V	Detail X	Detail Y
168	71251-0013	Unbuffered 5.0V	Detail X	Detail Z

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Dual In-Line Memory Module 8-Byte SDRAM Socket

71251

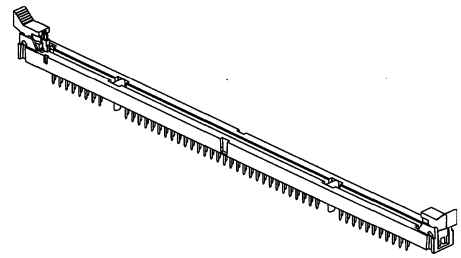
Features and Benefits
- Accepts JEDEC MO-172 modules for 100% industry compatibility
- Dual ejector latches for easy module removal
- Latches include feature to minimize micro motion
- Palladium Nickel with Gold flash plating for improved reliability
- Added contact wipe for improved reliability
- Optional voltage and function keying

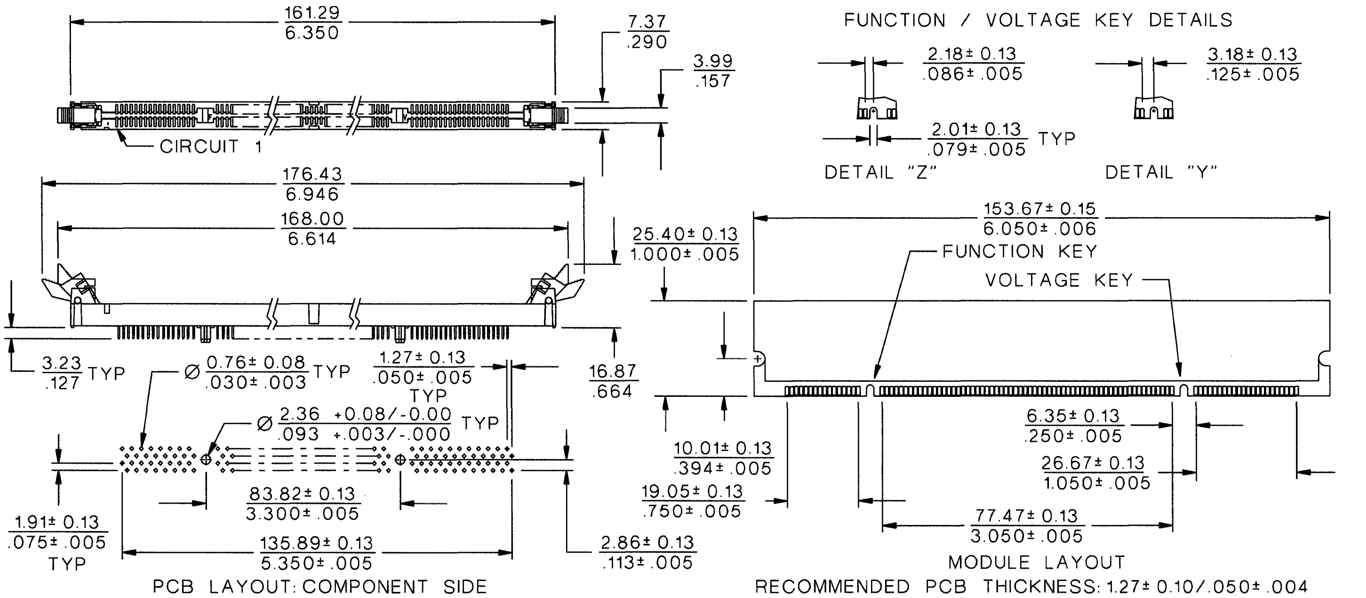
Reference Information
Product Specification: PS-71243
Packaging: Tray
Mates With: JEDEC MO-172 modules
Designed In: Inches

Electrical
Voltage: 100V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 750V AC
Insulation Resistance: 100 MΩ min.

Mechanical
Mating Force: 5 oz per pair
Durability: 25 cycles min.

Physical
Housing and Latch: High temperature resistant thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: Selective Palladium Nickel with Gold flash with Tin/Lead on solder tails
Temperature: -40 to +85°C





ORDERING INFORMATION

Circuits	Order No.	Description	Function Key	Voltage Key
200	71251-3001	LVTTL 3.3V	Detail Y	Detail Y

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Small Outline Dual In-Line Memory Module Socket

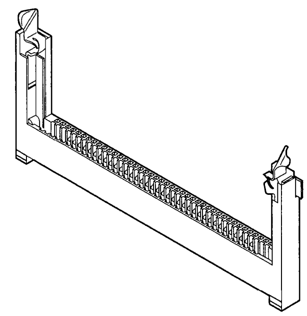
52826/52842 Right Angle

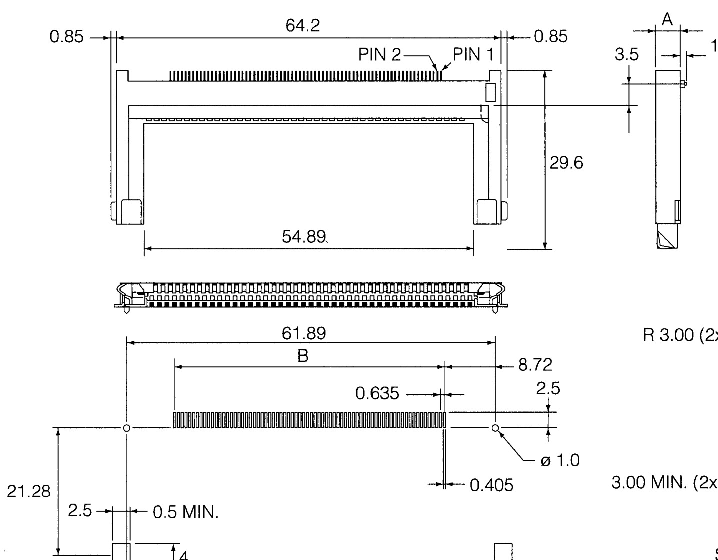
Features and Benefits
- Accepts JEDEC MO-160 modules
- Profile height is 4.0 or 5.5mm
- Rugged metal latch prevents breakage

Reference Information
Packaging: Tray
Mates With: JEDEC MO-160 modules
Designed In: Millimeters

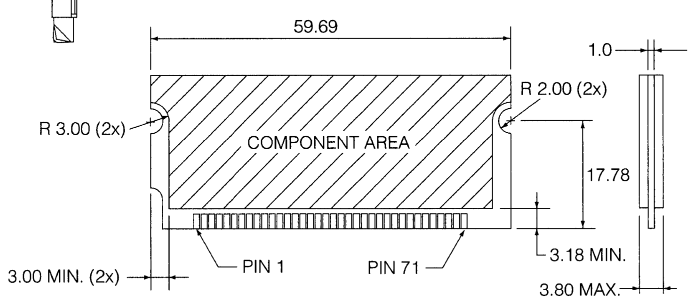
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled LCP
Contact: Copper Alloy
Plating: Selective Gold
Temperature: -40 to +100°C





RECOMMENDED FOOT PATTERN



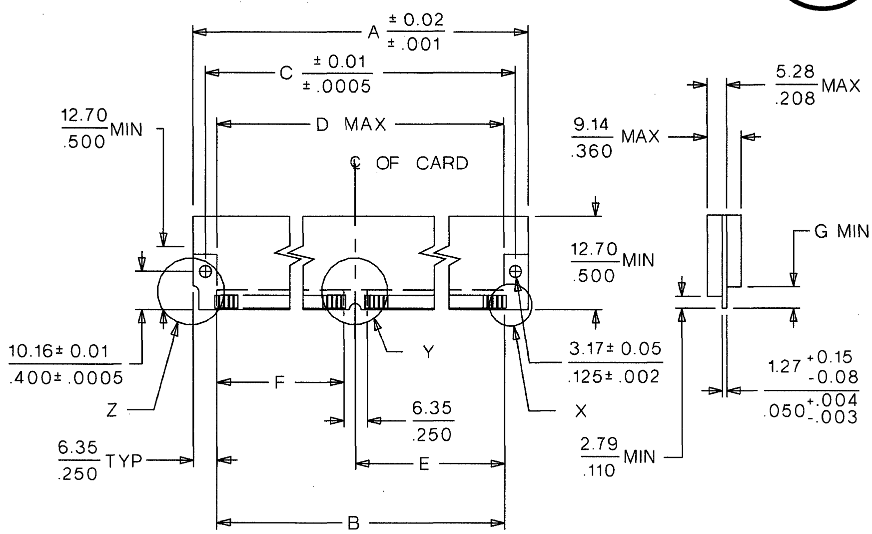
APPLICABLE MODULE OUTLINE
SEE JEDEC MO-160 FOR OPTIONAL MODULE HEIGHTS, VOLTAGE KEYING AND COMPLETE DIMENSIONS

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Description	Dimension	
			A	B
72	52826-7210	Lowest profile	4.00 (.157)	45.08 (1.774)
72	52842-7210	Allows for additional DRAMs on main board under module	5.50 (.216)	45.08 (1.774)
84	52826-8410	Lowest profile	4.00 (.157)	52.07 (2.049)
84	52842-8410	Allows for additional DRAMs on main board under module	5.50 (.216)	52.07 (2.049)

1.27mm (.050") Pitch SIMM Module Dimensions

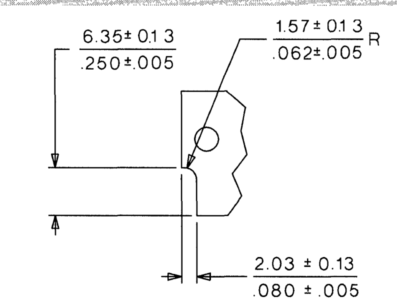
MO-116



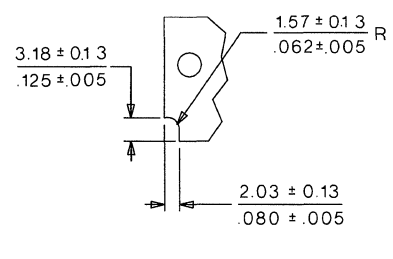
DIMENSIONS

Circuits	Dimension									
							Vertical	40°	22.5°	Right Angle
	A	B	C	D	E	F	G	G	G	G
40	2.650	2.150	2.384	2.120	1.075	.950	.110	.150	.225	.110
56	3.450	2.950	3.184	2.920	1.475	1.350	.110	.150	.225	.110
64	3.850	3.350	3.584	3.320	1.675	1.550	.110	.150	.225	.110
68	4.050	3.550	3.784	3.520	1.775	1.650	.110	.150	.225	.110
72	4.250	3.750	3.984	3.720	1.875	1.750	.110	.150	.225	.110
80	4.650	4.150	4.384	4.120	2.075	1.950	.110	.150	.225	.110
84	4.850	4.350	4.584	4.320	2.175	2.050	.110	.150	.225	.110
100	4.650	5.150	5.384	5.120	2.575	2.450	.110	.150	.225	.110

DETAIL Z

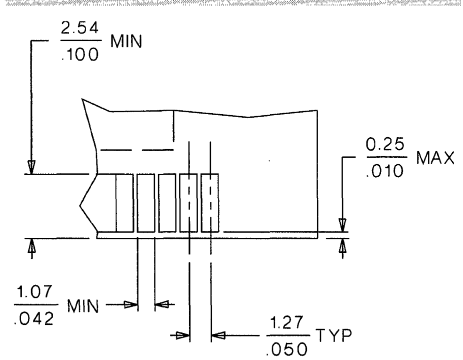


STANDARD END KEY

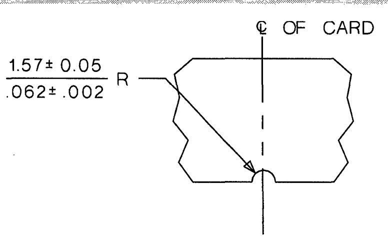


LOW END KEY

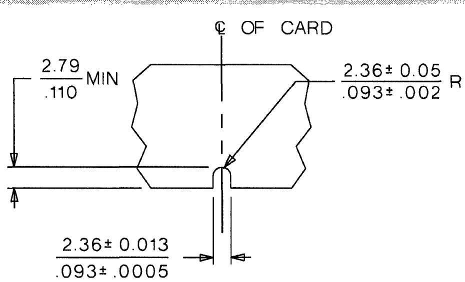
DETAIL X



DETAIL Y



STANDARD CENTER KEY



HIGH CENTER KEY

NOTES

1. Copper contact pads are to be overplated with .000050" min. Nickel followed with .000200" min. Tin/Lead reflow or .000075" min. Nickel followed with .000030" min. Gold
2. Contact pads are required on both component and circuit sides of the module, paired contacts should be electrically shunted
3. Maximum allowable warpage = .010" bow

Single-sided leadless SIMM module configuration requirements (in additon to notes 1 to 3):

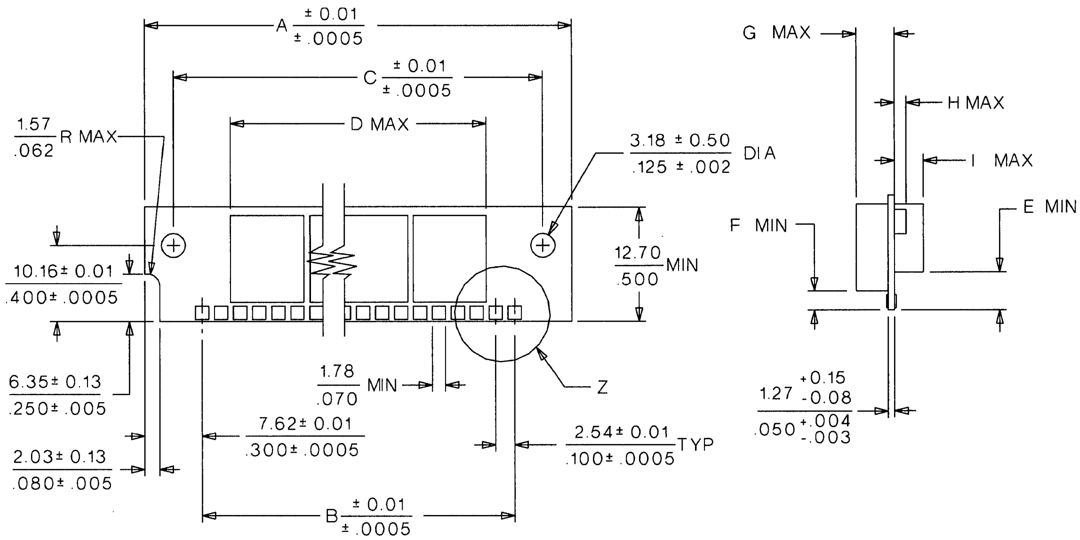
4. For SIMM modules thicker than .150" and/or taller than .500", contact factory for 22.5° socket spacing
5. For SIMM modules thicker than .150" and/or taller than 2.00", contact factory for 40° socket spacing

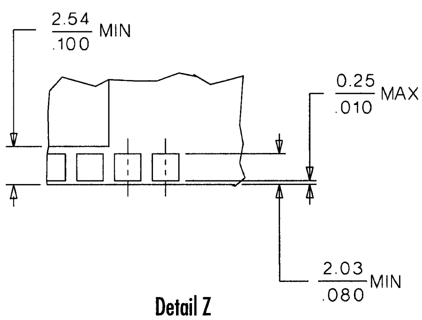
Double-sided leadless SIMM module configuration requirements (in addition to notes 1 to 3):

6. For SIMM modules thicker than .290" and/or taller than .500", contact factory for 40 and 22.5° socket spacing

2.54mm (.100") Pitch SIMM Module Dimensions

MO-64





Detail Z

DIMENSIONS

Circuits	Dimension												
					Vertical		25°		Right Angle				
	A	B	C	D	E	F	E	F	E	F	G*	H†	I‡
30	3.500	2.900	3.234	3.050	.150	.100	.200	.100	.150	.100	.200	.060	.150

* See note 4

† See note 5

‡ See note 6

NOTES

Single-sided leadless SIMM module configuration requirements:

1. Copper contact pads are to be overplated with .000050" min. Nickel followed with .000200" min. Tin/Lead reflow or .000075" min. Nickel followed with .000030" min. Gold
2. Contact pads are required on both component and circuit sides of the module, paired contacts should be electrically shunted
3. Maximum allowable warpage = .010" bow

Double-sided leadless SIMM module configuration requirements (in addition to notes 1 to 3):

4. Two modules mounted vertically on .300" centers must have the IC packages staggered on their facing surfaces in order to achieve an interleaf condition
5. No interleaving is necessary on .300" centers for components not in excess of .060"
6. Low profile modules are to be mounted using single row sockets and spaced on .800" centers min.
7. Contact factory for design characteristics on right angle (parallel mounting) product

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78962

Left Polarization, Vertical Single Row, Metal Latch

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

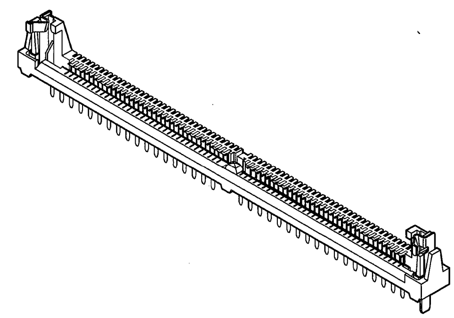
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

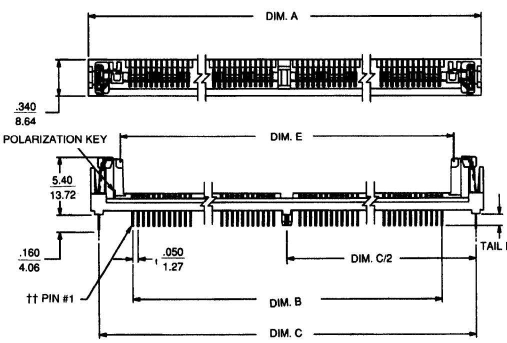
Mechanical

Normal Force: 150g average
Durability: 25 cycles

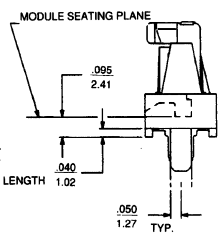
Physical

Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

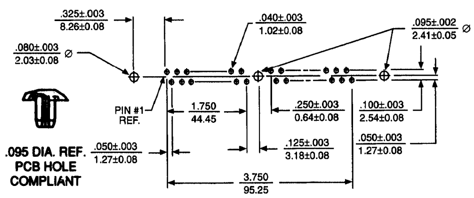




† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
40	15-82-1103	15-82-0798		15-82-1156	.110	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
40					.125	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
64	• 15-82-1104		• 15-82-0739		.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
64					.125	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	• 15-82-1105				.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
68			15-82-1144		.125	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0775		• 15-82-0762		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
72	15-82-1106		15-82-1132		.125	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
80	• 15-82-1117		• 15-82-0780		.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
80	15-82-0778		15-82-1115		.125	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
100	15-82-1150				.110	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)
100					.125	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78962

Right Polarization, Vertical Single Row, Metal Latch

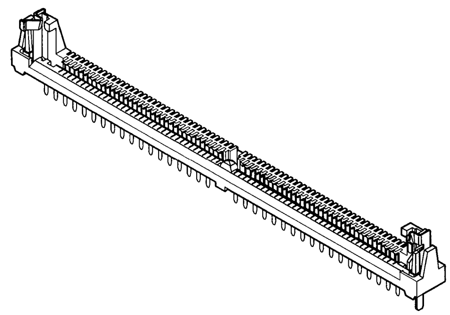
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

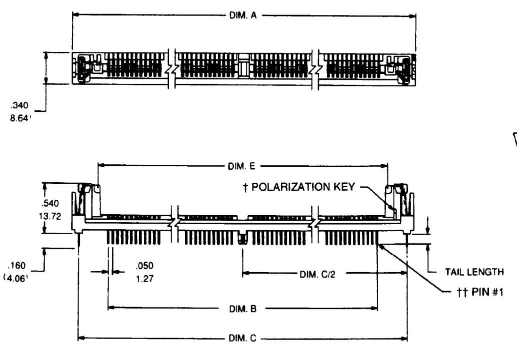
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

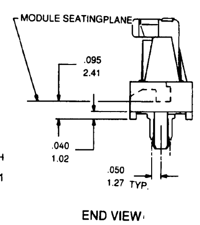
Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



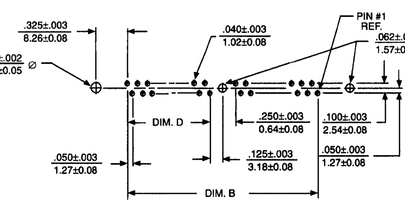


† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW

.062 DIA. REF. PCB HOLE CENTER POST



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
40	15-82-1181	15-82-0782	15-82-1175	15-82-0793	.110	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
40		15-82-1112			.125	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
64	• 15-82-1176	15-82-1146	• 15-82-0791	15-82-1145	.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
64		15-82-1125			.125	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	• 15-82-1178	15-82-1177	• 15-87-1180	15-82-1179	.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
68		15-82-1123			.125	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0777	15-82-0772	• 15-82-0788	15-82-1182	.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
72	15-82-1149		15-82-0784	15-82-0794	.125	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
80	• 15-82-1183		• 15-82-1184		.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
80	15-82-0770		15-82-0771		.125	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
100					.110	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)
100	15-82-0783		15-82-1100		.125	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78962

Left Polarization, Vertical Single Row, Plastic Latch

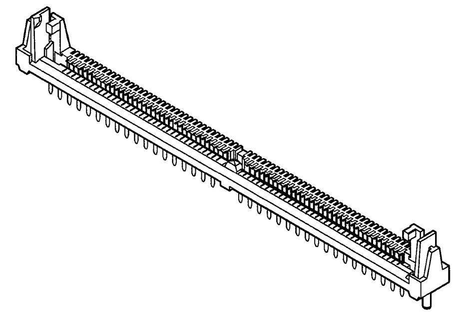
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

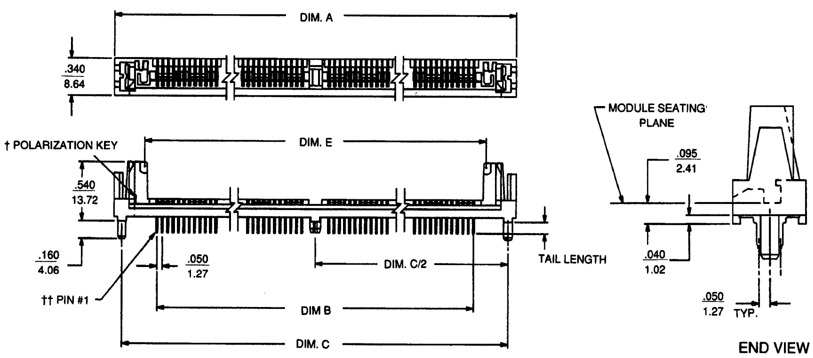
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

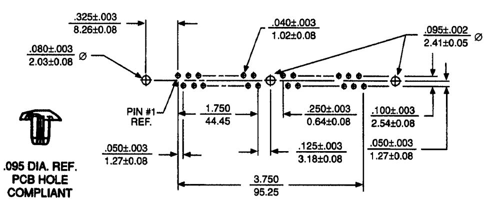
Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
40		15-82-0749		15-82-0795	.110	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
40					.125	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
64	• 15-82-0799		• 15-82-0739		.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
64					.125	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	• 15-82-0754				.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
68					.125	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0741		• 15-82-0742		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
72	15-82-1110				.125	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
80	• 15-82-0744		• 15-82-0740		.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
80	15-82-0758		15-82-0748	15-82-0766	.125	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
100		15-82-0746			.110	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)
100					.125	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78962

Right Polarization, Vertical Single Row, Plastic Latch

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

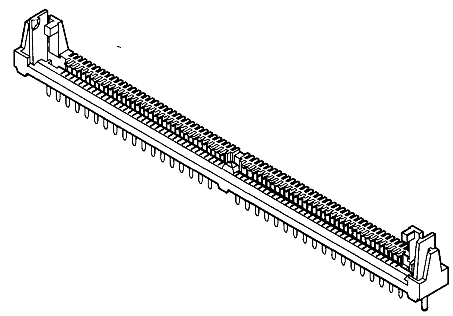
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

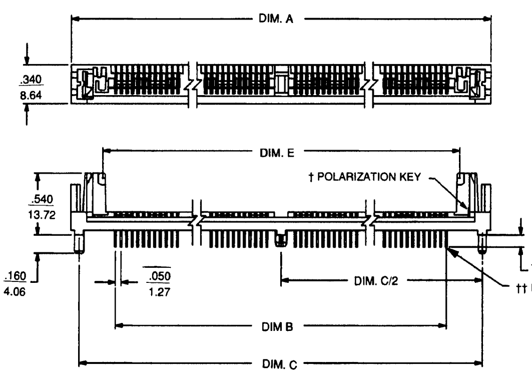
Mechanical

Normal Force: 150g average
Durability: 25 cycles

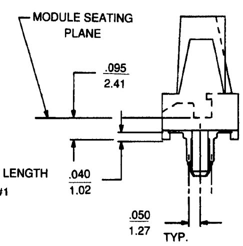
Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

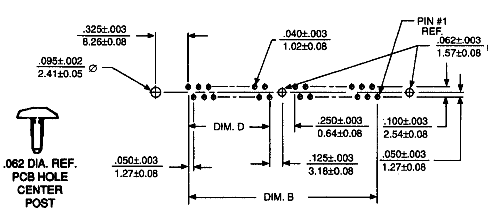




† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
38					.110	72.40 (2.850)	52.10 (2.050)	68.60 (2.700)	22.86 (.900)	58.01 (2.280)
38					.125	72.40 (2.850)	52.10 (2.050)	68.60 (2.700)	22.86 (.900)	58.01 (2.280)
40		15-82-0796		15-82-0773	.110	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
40					.125	74.90 (2.950)	54.60 (2.150)	71.10 (2.800)	24.13 (.950)	60.55 (2.380)
64		15-82-1174	• 15-82-0769	15-82-1173	.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
64					.125	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68					.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
68					.125	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0743		• 15-82-0789		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
72					.125	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
80			• 15-82-0767		.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
80	15-82-0751		15-82-0760		.125	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
100					.110	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)
100	15-82-0750				.125	151.10 (5.950)	130.80 (5.150)	147.30 (5.800)	62.23 (2.450)	136.80 (5.380)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 10.16mm (.050 x .400") Pitch SIMM Classic SIMM Socket

78954
Left Polarization, Vertical Dual-Row, Metal Latch

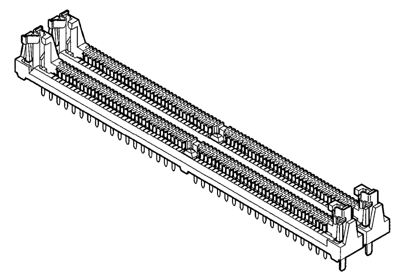
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

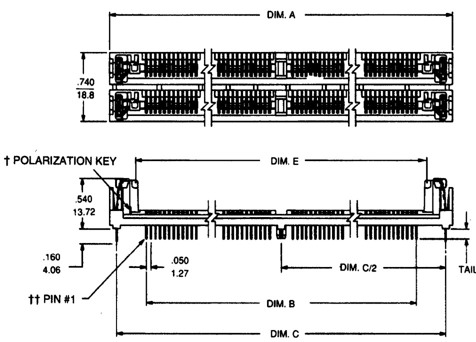
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

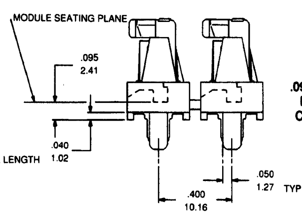
Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



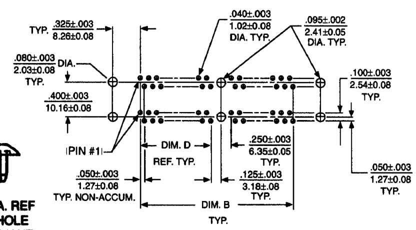


† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW

.095 DIA. REF PCB HOLE COMPLIANT



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
64					.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68					.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0715	15-82-1721	• 15-82-0710		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)

• US Standard Product, available through Molex franchised distributors

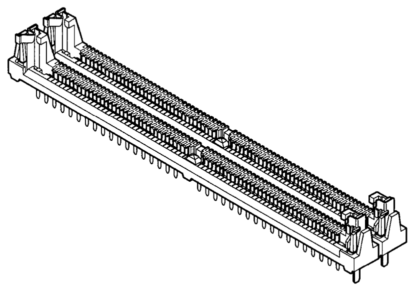
Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 10.16mm (.050 x .400") Pitch SIMM Classic SIMM Socket

78954
Right Polarization, Vertical Dual Row, Metal Latch



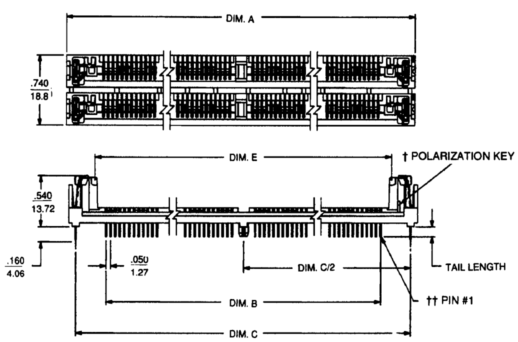
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

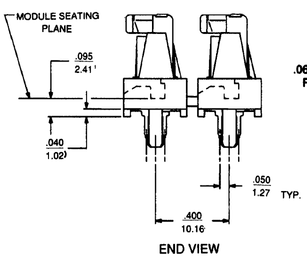
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

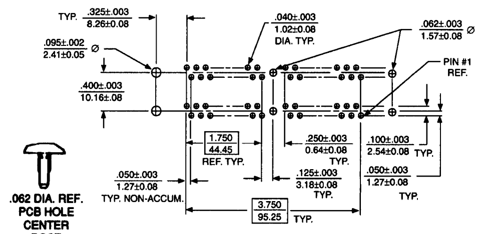
Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
64	15-82-1724	15-82-1723		15-82-1722	.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	15-82-1727	15-82-1726		15-82-1725	.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0716	15-82-0717		15-82-1728	.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 10.16mm (.050 x .400") Pitch SIMM Classic SIMM Socket

78954

Left Polarization, Vertical Dual Row, Plastic Latch

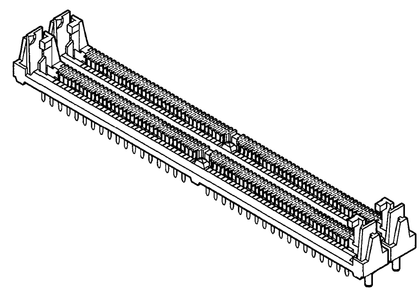
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

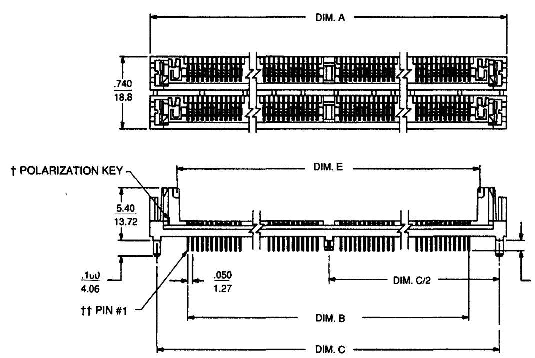
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

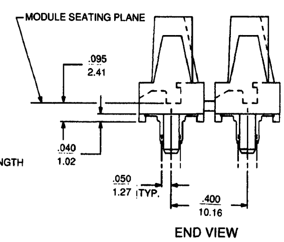
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

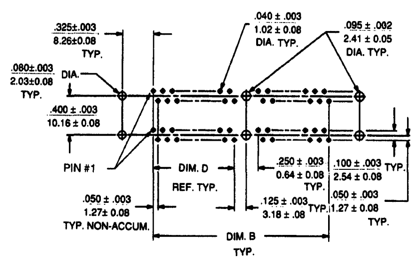
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
64	15-82-0713				.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	15-82-0709				.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0701		• 15-82-0702		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 10.16mm (.050 x .400") Pitch SIMM Classic SIMM Socket

78954 Right Polarization, Vertical Dual Row, Plastic Latch

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

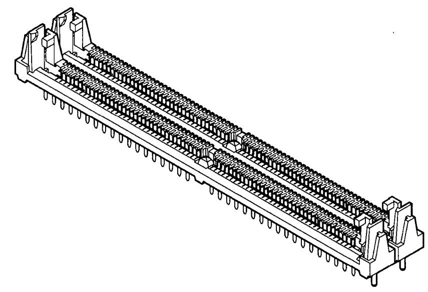
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

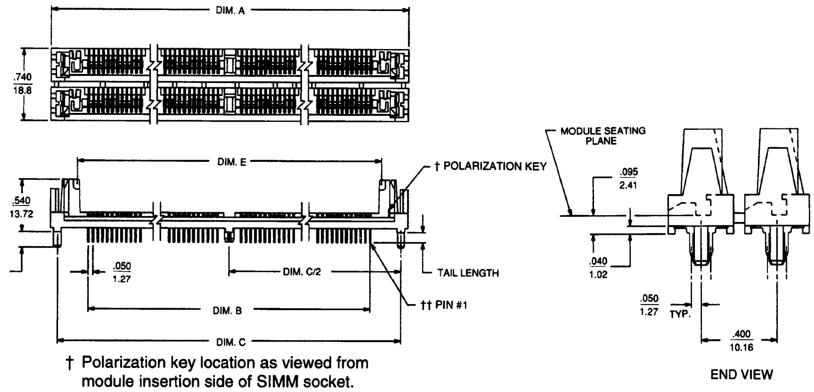
Mechanical

Normal Force: 150g average
Durability: 25 cycles

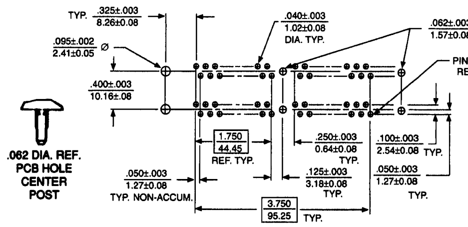
Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
64					.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68					.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0703				.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78964

Left Polarization Low Profile (22.5°) Single Row, Metal Latch

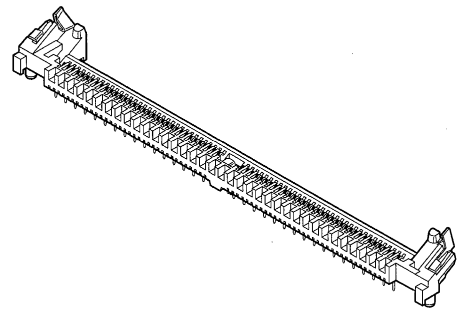
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

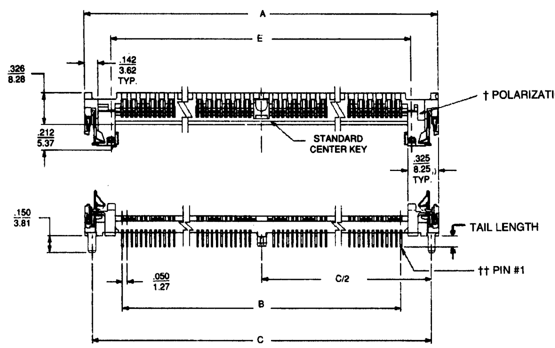
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

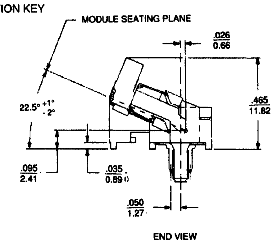
Mechanical
Normal Force: 150g average
Durability: 25 cycles

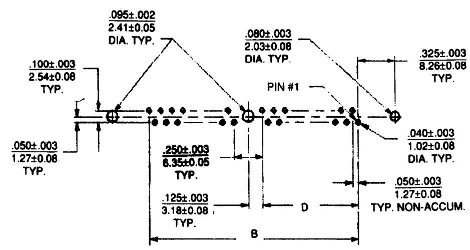
Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

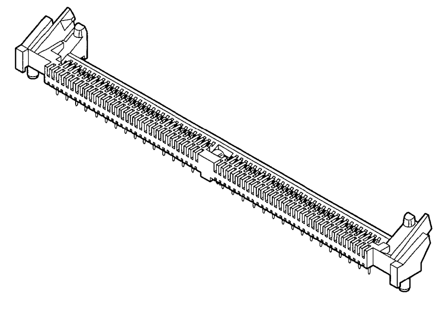
Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
40		15-82-0653		15-82-0654	.110	74.93 (2.950)	54.61 (2.150)	71.12 (2.800)	24.13 (.950)	60.55 (2.380)
56			15-82-0658		.110	95.30 (3.750)	74.90 (2.950)	91.40 (3.600)	34.29 (1.350)	80.87 (3.180)
64	• 15-82-0667		15-82-0659		.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
64					.125	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	• 15-82-0693	15-82-0689	15-82-1007		.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0678		• 15-82-0675		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
72	15-82-0679		15-82-0692		.125	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
80	• 15-82-0685		• 15-82-0683		.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
80	15-82-0684				.125	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)

• US Standard Product, available through Molex franchised distributors
Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel
Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78964 Left Polarization Low Profile (22.5°) Single Row, Plastic Latch



Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

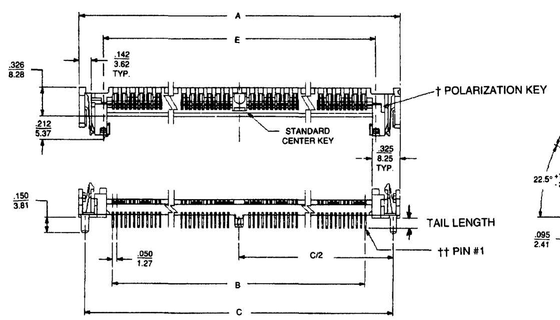
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical

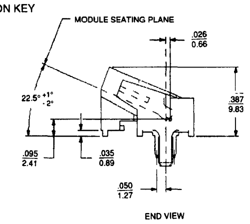
Normal Force: 150g average
Durability: 25 cycles

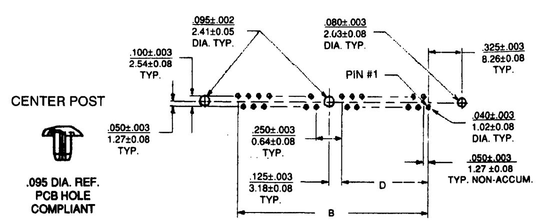
Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
40		15-82-0650		15-82-0651	.110	74.93 (2.950)	54.61 (2.150)	71.12 (2.800)	24.13 (.950)	60.55 (2.380)
56			15-82-0656		.110	95.30 (3.750)	74.90 (2.950)	91.40 (3.600)	34.29 (1.350)	80.87 (3.180)
64	• 15-82-0664		• 15-82-0661		.110	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
64					.125	105.40 (4.150)	85.10 (3.350)	101.60 (4.000)	39.37 (1.550)	91.03 (3.580)
68	• 15-82-0668				.110	110.50 (4.350)	90.20 (3.550)	106.70 (4.200)	41.91 (1.650)	96.11 (3.780)
72	• 15-82-0671		• 15-82-0672		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
72	15-82-0670				.125	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)
80	• 15-82-0680		• 15-82-0681		.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)
80					.125	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

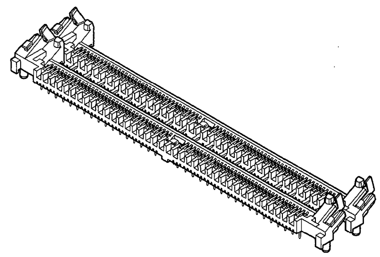
Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 12.70mm (.050 x .500") Pitch SIMM Classic SIMM Socket

78955

Left Polarization Low Profile (22.5°) Dual Row, Metal Latch



Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

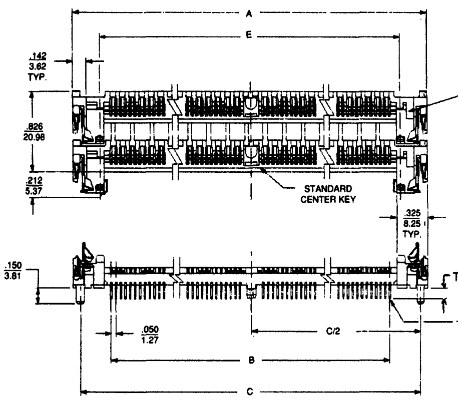
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical

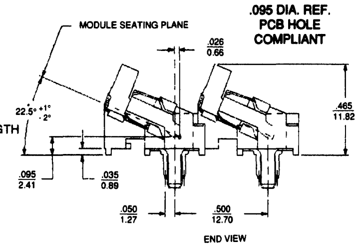
Normal Force: 150g average
Durability: 25 cycles

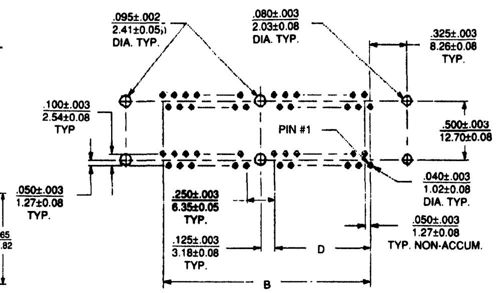
Physical

Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
72	• 15-82-0726		• 15-82-0727		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

molex®

1.27 x 12.70mm (.050 x .500") Pitch SIMM Classic SIMM Socket

78955 Left Polarization Low Profile (22.5°) Dual Row, Plastic Latch

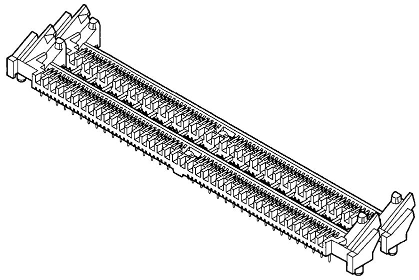
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

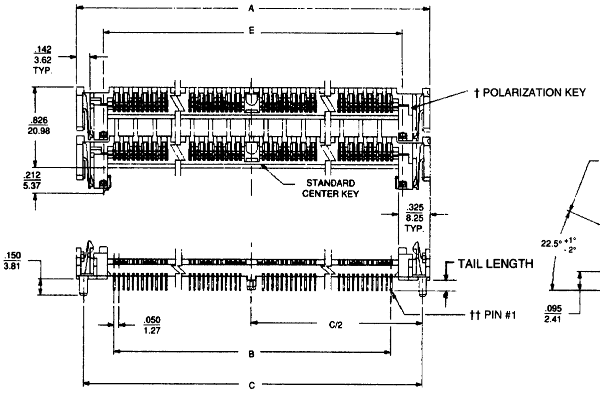
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

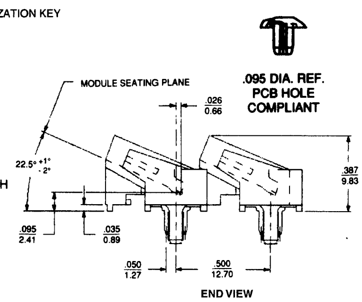
Mechanical
Normal Force: 150g average
Durability: 25 cycles

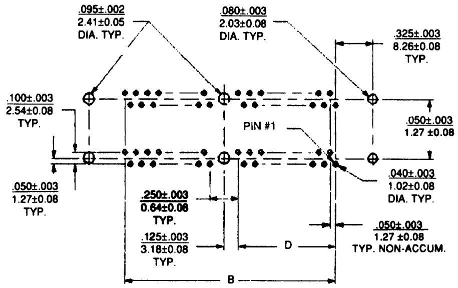
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Tail Length (in.)	Dimension				
	With Center Post	Without Center Post	With Center Post	Without Center Post		A	B	C	D	E
72	• 15-82-0721		• 15-82-0722		.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)

• US Standard Product, available through Molex franchised distributors
Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel
Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78976

Left Polarization Low Profile (40°) Single Row, Metal Latch

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

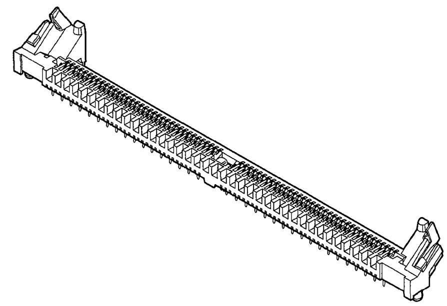
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

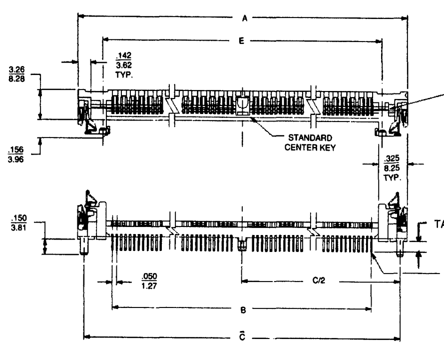
Mechanical

Normal Force: 150g average
Durability: 25 cycles

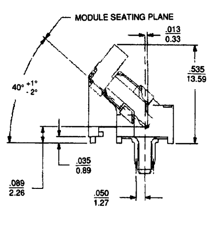
Physical

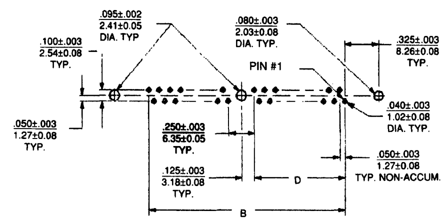
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate	Order No. Gold Plate	Polarizing Key (in.)	Tail Length (in.)	Dimension					Housing Color
	With Center Post	With Center Post			A	B	C	D	E	
72	15-82-0619	15-82-0628	Low (.125)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Gray
72	15-82-0649	15-82-0627	High (.250)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Black
72	15-82-0603		Low (.125)	.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Gray
72	15-82-0607	15-82-0613	High (.250)	.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Black
80			High (.250)	.090	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)	Black
80	15-82-0622	15-82-0623	Low (.125)	.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)	Gray

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

Call Molex for information on nonlisted order numbers

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78976 Left Polarization Low Profile (40°) Single Row, Plastic Latch

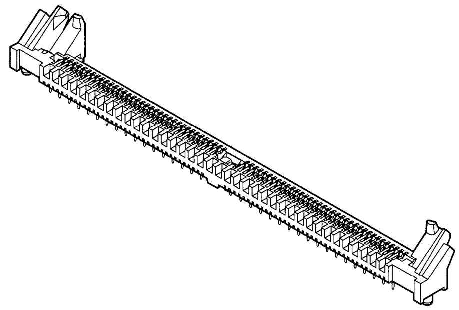
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

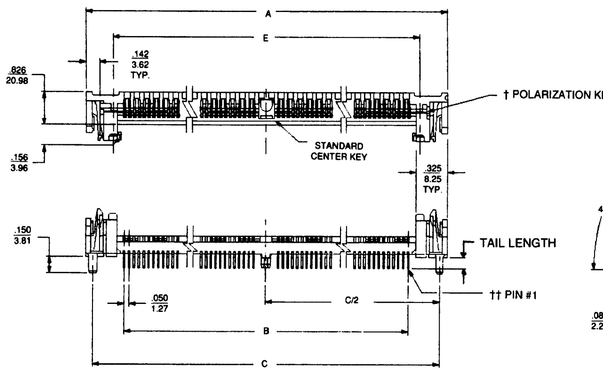
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

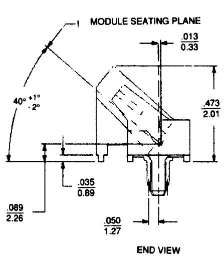
Mechanical
Normal Force: 150g average
Durability: 25 cycles

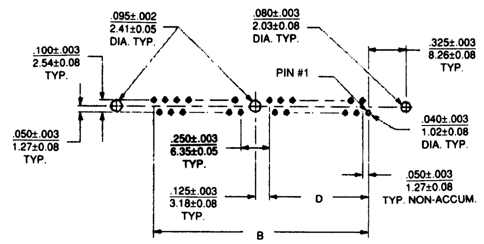
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate	Order No. Gold Plate	Polarizing Key (in.)	Tail Length (in.)	Dimension					Housing Color
	With Center Post	With Center Post			A	B	C	D	E	
72	15-82-0618	15-82-0630	Low (.125)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Gray
72	15-82-0610	15-82-0629	High (.250)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Black
72			Low (.125)	.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Gray
72			High (.250)	.110	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Black
80			High (.250)	.090	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)	Black
80	15-82-0625	15-82-0624	Low (.125)	.110	125.70 (4.950)	105.40 (4.150)	121.90 (4.800)	49.53 (1.950)	111.40 (4.380)	Gray

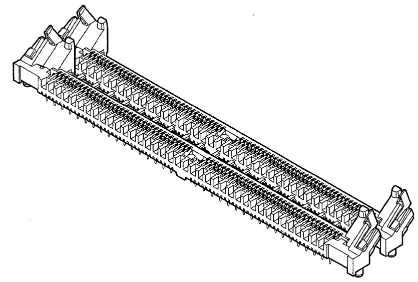
Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel
Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 12.70mm (.050 x .500") Pitch SIMM Classic SIMM Socket

78977

Left Polarization Low Profile (40°) Dual Row, Metal Latch



Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

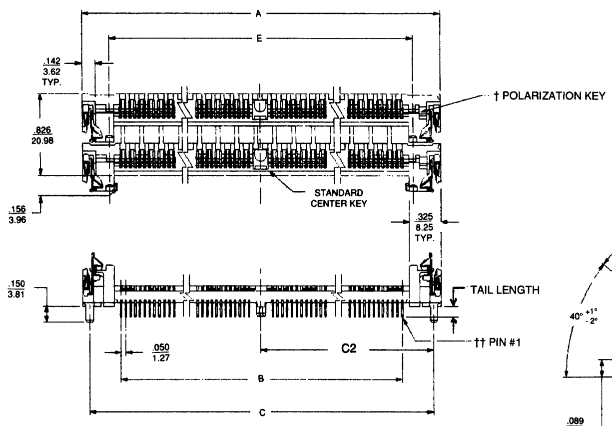
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical

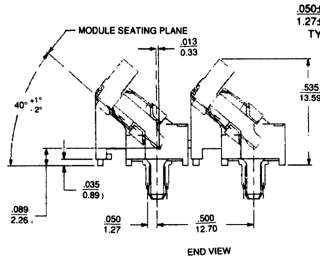
Normal Force: 150g average
Durability: 25 cycles

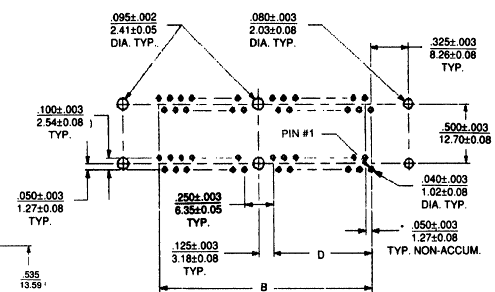
Physical

Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Polarizing Key (in.)	Tail Length (in.)	Dimension					Housing Color
	With Center Post	Without Center Post	With Center Post	Without Center Post			A	B	C	D	E	
72	15-82-0637		15-82-0633		Low (.125)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Gray
72	15-82-0648		15-82-0632		High (.250)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Black

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel
Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27 x 12.70mm (.050 x .500") Pitch SIMM Classic SIMM Socket

78977 Left Polarization Low Profile (40°) Dual Row, Plastic Latch

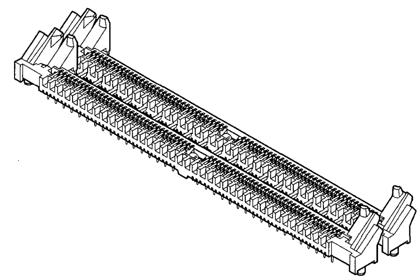
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

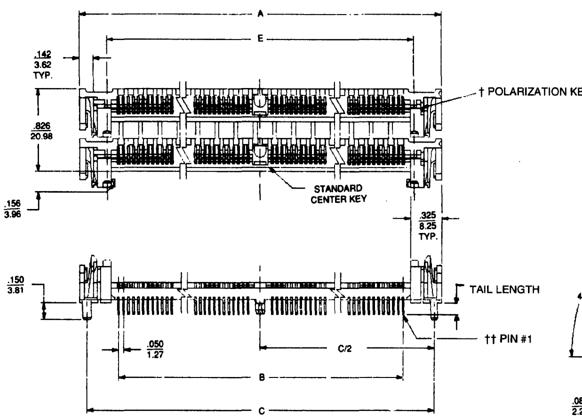
Reference Information
Product Specification: PS-78954
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

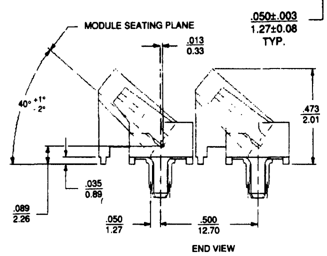
Mechanical
Normal Force: 150g average
Durability: 25 cycles

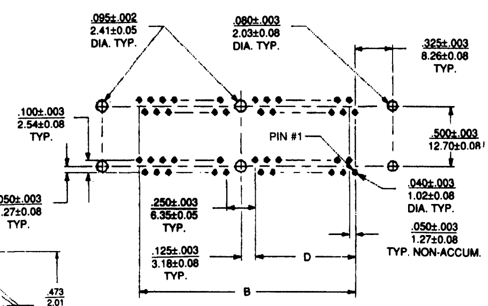
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.





Recommended Socket P.C. Board Layout
(No center hole needed for parts without center post)

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin Plate		Order No. Gold Plate		Polarizing Key (in.)	Tail Length (in.)	Dimension					Housing Color
	With Center Post	Without Center Post	With Center Post	Without Center Post			A	B	C	D	E	
72	15-82-0639		15-82-0631		Low (.125)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Gray
72			15-82-0635		High (.250)	.090	115.60 (4.550)	95.30 (3.750)	111.80 (4.400)	44.45 (1.750)	101.20 (3.980)	Black

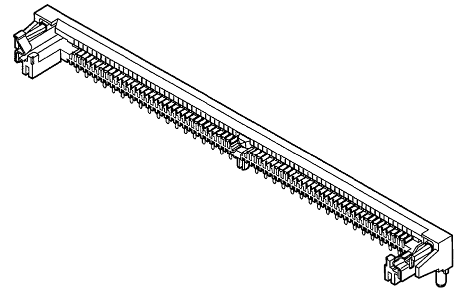
Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel
Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78968

Left Polarization, Right Angle Single Row, Metal Latch



Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78968
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

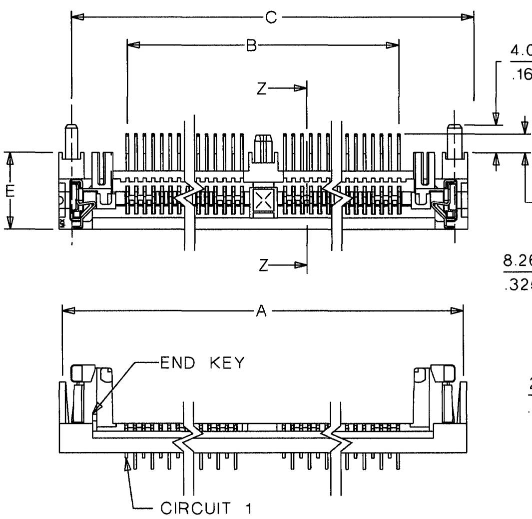
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical

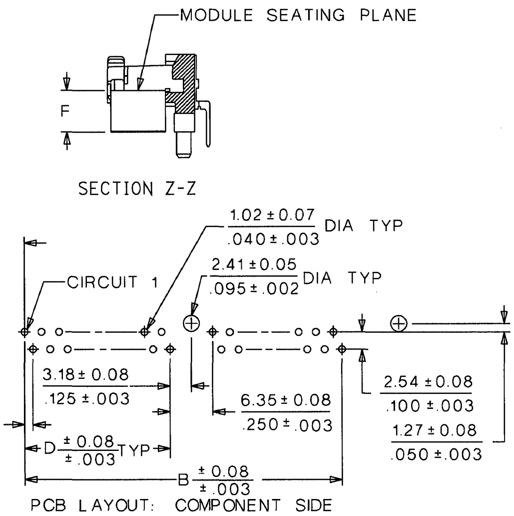
Normal Force: 150g average
Durability: 25 cycles

Physical

Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



Polarization key location as viewed from module insertion side of SIMM socket
Circuit 1, polarization key and small post are located at the same end, whether right or left



For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

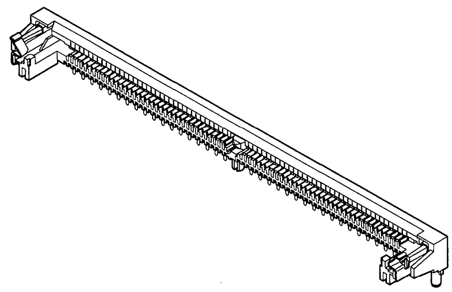
Circuits	Order No.								Dimension			
	.160		.190		.250		.290		A	B	C	D
	F = 4.06mm (.160")		F = 4.83mm (.190")		F = 6.35mm (.250")		F = 7.37mm (.290")					
	E = 9.09mm (.358")		E = 9.86mm (.388")		E = 11.38mm (.448")		E = 12.40mm (.488")					
	Tin	Gold	Tin	Gold	Tin	Gold	Tin	Gold				
40	15-82-1383	15-82-1390	15-82-1463	15-82-1470	15-82-1542	15-82-1549	15-82-1624	15-82-1631	74.93 (2.950)	54.61 (2.150)	71.12 (2.800)	24.13 (.950)
64	15-82-1384	15-82-1391	15-82-1464	15-82-1471	15-82-1543	15-82-1550	15-82-1625	15-82-1632	105.41 (4.150)	85.09 (3.350)	101.60 (4.000)	39.37 (1.550)
68	15-82-1385	15-82-1392	15-82-1465	15-82-1472	15-82-1544	15-82-1551	15-82-1626	15-82-1633	110.49 (4.350)	90.17 (3.550)	106.68 (4.200)	41.91 (1.650)
72	15-82-1386	15-82-1393	15-82-1466	15-82-1473	15-82-1538	15-82-0312	15-82-1620	15-82-1627	115.57 (4.550)	95.25 (3.750)	111.76 (4.400)	44.45 (1.750)
80	15-82-1387	15-82-1394	15-82-1467	15-82-1474	15-82-1546	15-82-1552	15-82-1628	15-82-1635	125.73 (4.950)	105.41 (4.150)	121.92 (4.800)	49.53 (1.950)
84	15-82-1388	15-82-1395	15-82-1468	15-82-1475	15-82-1547	15-82-1553	15-82-1629	15-82-1636	130.81 (5.150)	109.22 (4.350)	127.00 (5.000)	52.07 (2.050)
100	15-82-1389	15-82-1396	15-82-1469	15-82-1476	15-82-1548	15-82-0311	15-82-1623	15-82-1630	151.13 (5.950)	130.81 (5.150)	147.32 (5.800)	62.23 (2.450)

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78968 Right Polarization Right Angle, Single Row Metal Latch



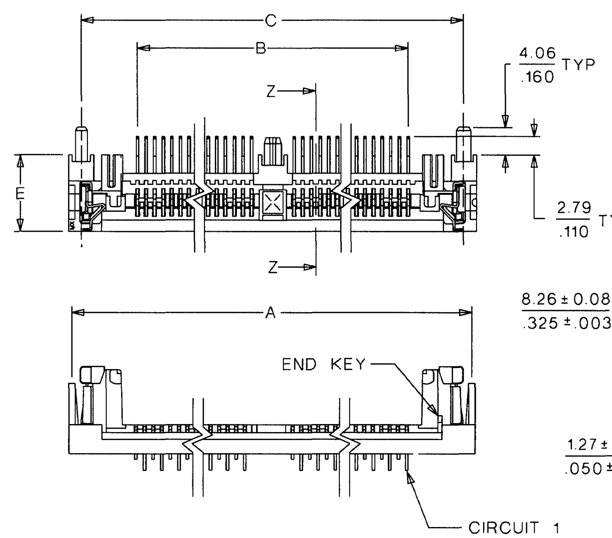
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

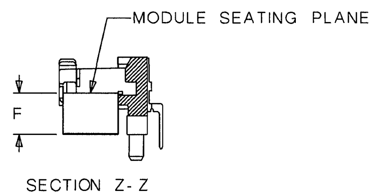
Reference Information
Product Specification: PS-78968
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

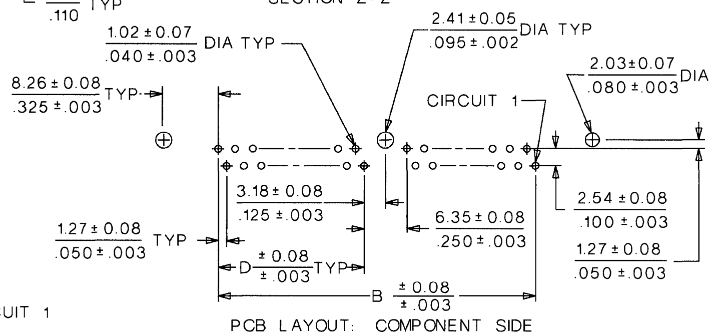
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







Polarization key location as viewed from module insertion side of SIMM socket
Circuit 1, polarization key and small post are located at the same end, whether right or left

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.								Dimension			
	.160		.190		.250		.290		A	B	C	D
	F = 4.06mm (.160")		F = 4.83mm (.190")		F = 6.35mm (.250")		F = 7.37mm (.290")					
	E = 9.09mm (.358")		E = 9.86mm (.388")		E = 11.38mm (.448")		E = 12.40mm (.488")					
	Tin	Gold	Tin	Gold	Tin	Gold	Tin	Gold				
40	15-82-1397	15-82-1404	15-82-1477	15-82-1484	15-82-1555	15-82-1562	15-82-1638	15-82-1645	74.93 (2.950)	54.61 (2.150)	71.12 (2.800)	24.13 (.950)
64	15-82-1398	15-82-1405	15-82-1478	15-82-1485	15-82-1556	15-82-1563	15-82-1639	15-82-1646	105.41 (4.150)	85.09 (3.350)	101.60 (4.000)	39.37 (1.550)
68	15-82-1399	15-82-1406	15-82-1479	15-82-1486	15-82-1557	15-82-1564	15-82-1640	15-82-1647	110.49 (4.350)	90.17 (3.550)	106.68 (4.200)	41.91 (1.650)
72	15-82-1400	15-82-1407	15-82-1480	15-82-1487	15-82-1545	15-82-1558	15-82-1634	15-82-1641	115.57 (4.550)	95.25 (3.750)	111.76 (4.400)	44.45 (1.750)
80	15-82-1401	15-82-1408	15-82-1481	15-82-1488	15-82-1559	15-82-1566	15-82-1642	15-82-1649	125.73 (4.950)	105.41 (4.150)	121.92 (4.800)	49.53 (1.950)
84	15-82-1402	15-82-1409	15-82-1482	15-82-1489	15-82-1560	15-82-0333	15-82-1643	15-82-1650	130.81 (5.150)	109.22 (4.350)	127.00 (5.000)	52.07 (2.050)
100	15-82-1403	15-82-1410	15-82-1483	15-82-1490	15-82-1554	15-82-1561	15-82-1637	15-82-1644	151.13 (5.950)	130.81 (5.150)	147.32 (5.800)	62.23 (2.450)

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78968

Left Polarization, Right Angle Single Row, Plastic Latch

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78968
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

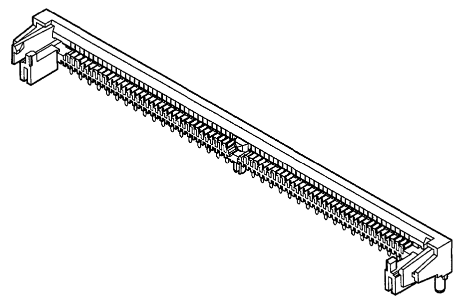
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

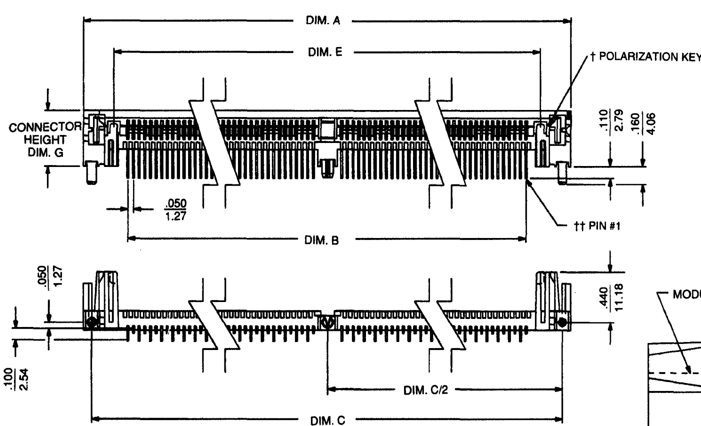
Mechanical

Normal Force: 150g average
Durability: 25 cycles

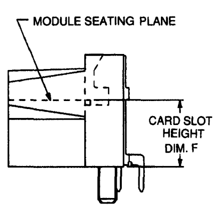
Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

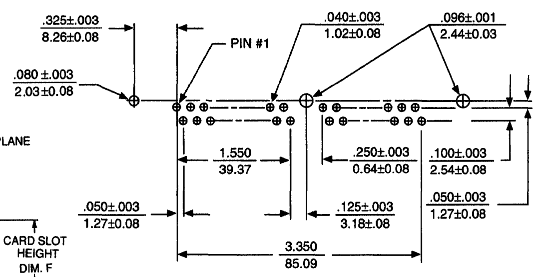




† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end, whether right or left.



END VIEW



Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.								Dimension			
	.160		.190		.250		.290		A	B	C	D
	F = 4.06mm (.160")		F = 4.83mm (.190")		F = 6.35mm (.250")		F = 7.37mm (.290")					
	E = 9.09mm (.358")		E = 9.86mm (.388")		E = 11.38mm (.448")		E = 12.40mm (.488")					
	Tin	Gold	Tin	Gold	Tin	Gold	Tin	Gold				
40	15-82-1342	15-82-1349	15-82-1425	15-82-1429	15-82-1505	15-82-1510	15-82-1582	15-82-1589	74.93 (2.950)	54.61 (2.150)	71.12 (2.800)	24.13 (.950)
64	15-82-1343	15-82-1350	15-82-1426	15-82-1430	15-82-1506	15-82-1511	15-82-1570	15-82-1576	105.41 (4.150)	85.09 (3.350)	101.60 (4.000)	39.37 (1.550)
68	15-82-1344	15-82-1351	15-82-0318	15-82-1431	15-82-0317	15-82-1512	15-82-1571	15-82-1591	110.49 (4.350)	90.17 (3.550)	106.68 (4.200)	41.91 (1.650)
72	15-82-1345	15-82-0319	15-82-0323	15-82-0322	15-82-0374	15-82-0375	15-82-0324	15-82-1585	115.57 (4.550)	95.25 (3.750)	111.76 (4.400)	44.45 (1.750)
80	15-82-1346	15-82-1352	15-82-0330	15-82-1432	15-82-0327	15-82-1513	15-82-0331	15-82-1593	125.73 (4.950)	105.41 (4.150)	121.92 (4.800)	49.53 (1.950)
84	15-82-1347	15-82-1353	15-82-1427	15-82-1433	15-82-1508	15-82-1514	15-82-1587	15-82-1594	130.81 (5.150)	109.22 (4.350)	127.00 (5.000)	52.07 (2.050)
100	15-82-1348	15-82-1354	15-82-1428	15-82-1434	15-82-1509	15-82-1515	15-82-1588	15-82-1595	151.13 (5.950)	130.81 (5.150)	147.32 (5.800)	62.23 (2.450)

Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

FEATURES AND SPECIFICATIONS

molex

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78968

Right Polarization Right Angle, Single Row Plastic Latch

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78968
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

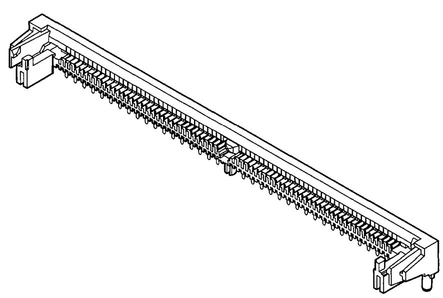
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

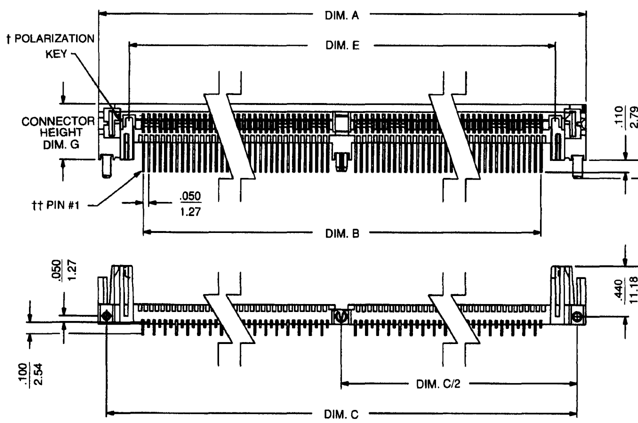
Mechanical

Normal Force: 150g average
Durability: 25 cycles

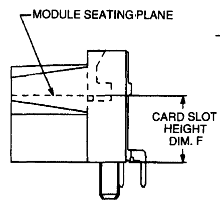
Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

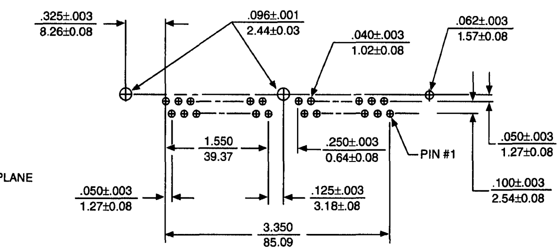




† Polarization key location as viewed from module insertion side of SIMM socket.
†† Circuit 1, polarization key and small post are located at the same end,whether right or left.



END VIEW



Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.								Dimension			
	.160		.190		.250		.290		A	B	C	D
	F = 4.06mm (.160")		F = 4.83mm (.190")		F = 6.35mm (.250")		F = 7.37mm (.290")					
	E = 9.09mm (.358")		E = 9.86mm (.388")		E = 11.38mm (.448")		E = 12.40mm (.488")					
	Tin	Gold	Tin	Gold	Tin	Gold	Tin	Gold				
40	15-82-1355	15-82-1362	15-82-1435	15-82-1442	15-82-1516	15-82-1523	15-82-1596	15-82-1603	74.93 (2.950)	54.61 (2.150)	71.12 (2.800)	24.13 (.950)
64	15-82-1356	15-82-1363	15-82-1436	15-82-1443	15-82-1517	15-82-0314	15-82-1597	15-82-1604	105.41 (4.150)	85.09 (3.350)	101.60 (4.000)	39.37 (1.550)
68	15-82-1357	15-82-1364	15-82-1437	15-82-1444	15-82-1518	15-82-1524	15-82-1598	15-82-1605	110.49 (4.350)	90.17 (3.550)	106.68 (4.200)	41.91 (1.650)
72	15-82-1358	15-82-1365	15-82-1438	15-82-1445	15-82-1519	15-82-0320	15-82-1592	15-82-1599	115.57 (4.550)	95.25 (3.750)	111.76 (4.400)	44.45 (1.750)
80	15-82-1359	15-82-1366	15-82-1439	15-82-1446	15-82-1520	15-82-1525	15-82-1600	15-82-1607	125.73 (4.950)	105.41 (4.150)	121.92 (4.800)	49.53 (1.950)
84	15-82-1360	15-82-1367	15-82-1440	15-82-1447	15-82-1521	15-82-1526	15-82-1601	15-82-1608	130.81 (5.150)	109.22 (4.350)	127.00 (5.000)	52.07 (2.050)
100	15-82-1361	15-82-1368	15-82-1441	15-82-1448	15-82-1522	15-82-1527	15-82-1602	15-82-1609	151.13 (5.950)	130.81 (5.150)	147.32 (5.800)	62.23 (2.450)

Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78968

Left Polarization, Right Angle Single Row, Metal Latch, SMT

FEATURES AND SPECIFICATIONS

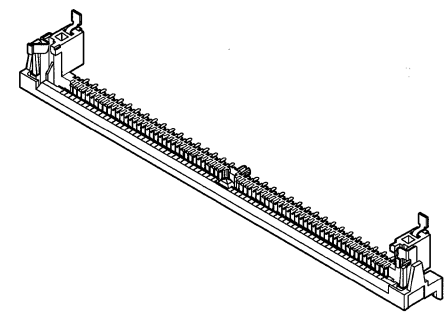
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

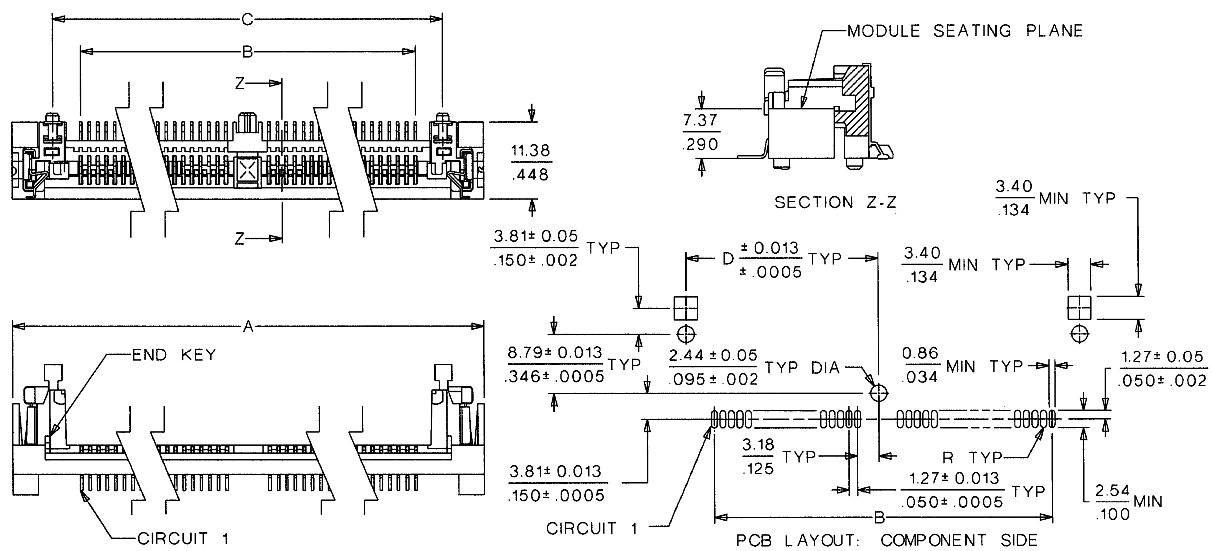
Reference Information
Product Specification: PS-78968
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





Polarization key location as viewed from module insertion side of SIMM socket
Circuit 1, polarization key and small post are located at the same end, whether right or left

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Tin	Gold	A	B	C	D
40	15-82-1652	15-82-1659	74.93 (2.950)	54.61 (2.150)	62.84 (2.474)	31.42 (1.237)
64	15-82-1653	15-82-1660	105.41 (4.150)	85.09 (3.350)	93.32 (3.674)	46.65 (1.837)
68	15-82-1654	15-82-1661	110.49 (4.350)	90.17 (3.550)	98.40 (3.874)	49.20 (1.937)
72	15-82-1655	15-82-0328	115.57 (4.550)	95.25 (3.750)	103.48 (4.074)	51.74 (2.037)
80	15-82-1656	15-82-1663	105.41 (4.150)	105.41 (4.150)	113.64 (4.474)	56.82 (2.237)
84	15-82-1657	15-82-1664	130.81 (5.150)	109.22 (4.350)	118.72 (4.674)	59.36 (2.337)
100	15-82-1658	15-82-1665	151.13 (5.950)	130.81 (5.150)	139.04 (5.474)	69.52 (2.737)

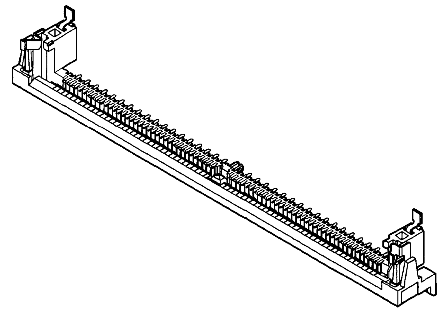
Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SIMM Classic SIMM Socket

78968

Right Polarization, Right Angle, Single Row Metal Latch, SMT



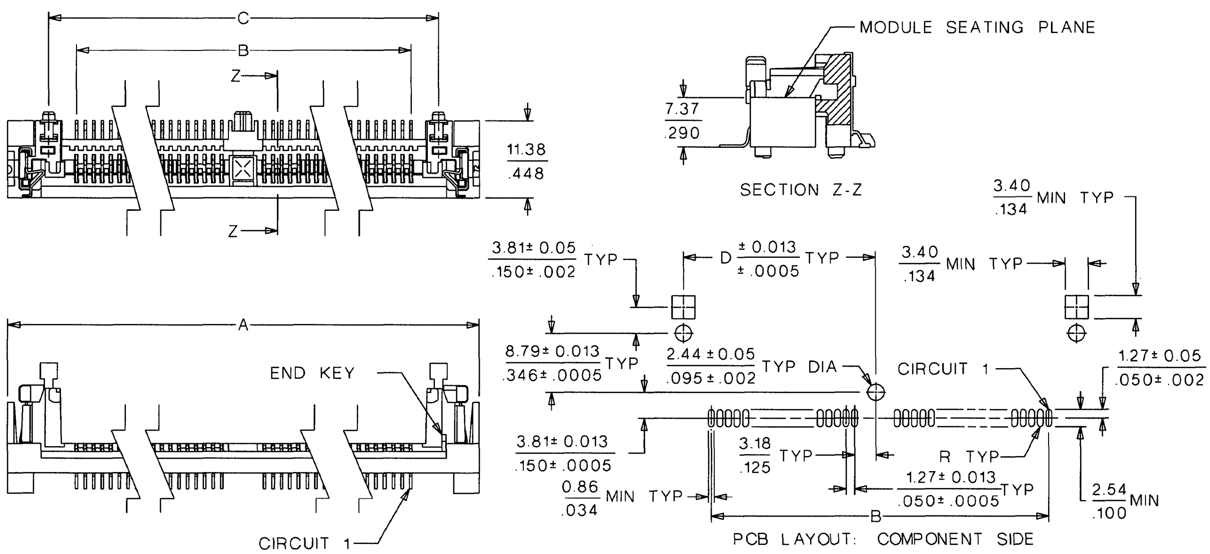
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information
Product Specification: PS-78968
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C



Polarization key location as viewed from module insertion side of SIMM socket
Circuit 1, polarization key and small post are located at the same end, whether right or left

For corresponding JEDEC standard MO-116 board dimensions and module PCB layout see page E-8

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Tin	Gold	A	B	C	D
40	15-82-1666	15-82-1673	74.93 (2.950)	54.61 (2.150)	62.84 (2.474)	31.42 (1.237)
64	15-82-1667	15-82-1674	105.41 (4.150)	85.09 (3.350)	93.32 (3.674)	46.65 (1.837)
68	15-82-1668	15-82-1675	110.49 (4.350)	90.17 (3.550)	98.40 (3.874)	49.20 (1.937)
72	15-82-1662	15-82-1669	115.57 (4.550)	95.25 (3.750)	103.48 (4.074)	51.74 (2.037)
80	15-82-1670	15-82-1677	125.73 (4.950)	105.41 (4.150)	113.64 (4.474)	56.82 (2.237)
84	15-82-1671	15-82-1678	130.81 (5.150)	109.22 (4.350)	118.72 (4.674)	59.36 (2.337)
100	15-82-1672	15-82-1679	151.13 (5.950)	130.81 (5.150)	139.04 (5.474)	69.52 (2.737)

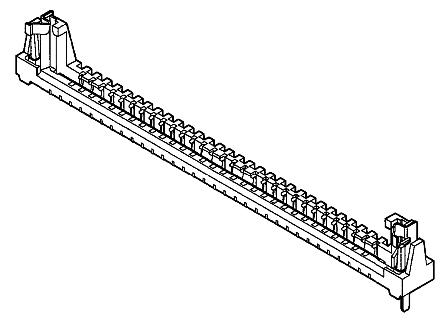
Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch SIMM Classic SIMM Socket

78957

Vertical, Single Row Metal Latch



Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

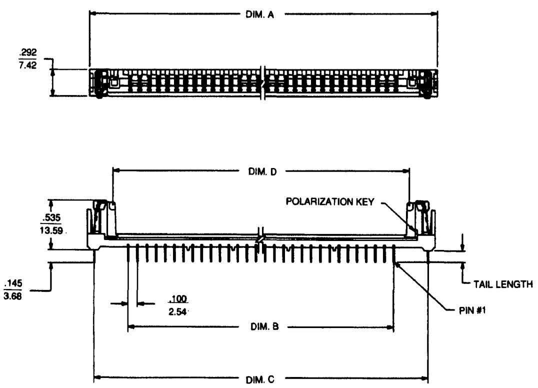
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

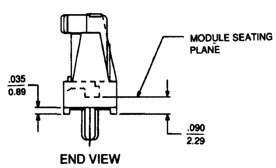
Mechanical

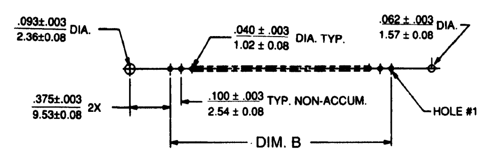
Normal Force: 150g average
Durability: 25 cycles

Physical

Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3053	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3043	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3163	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

molex®

2.54mm (.100") Pitch SIMM Classic SIMM Socket

78957

Vertical, Single Row Plastic Latch

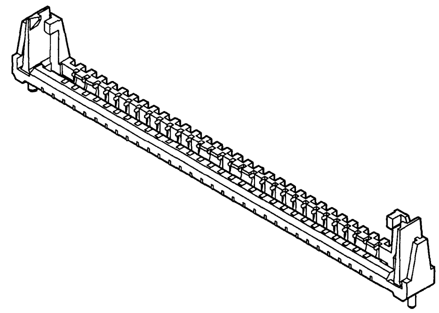
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

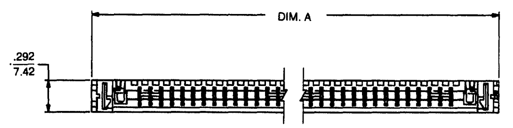
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

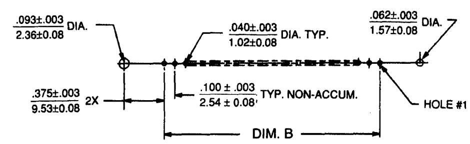
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

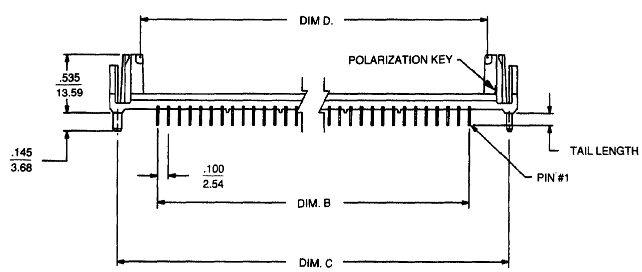
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

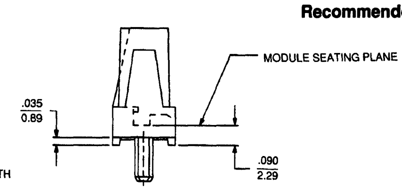






Recommended Socket P.C. Board Layout





END VIEW

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3083	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3023	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3033	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ"min. Nickel

FEATURES AND SPECIFICATIONS

molex 2.54 x 7.62mm (.100 x .300") Pitch

SIMM Classic SIMM Socket

78961

Vertical, Dual Row Metal Latch

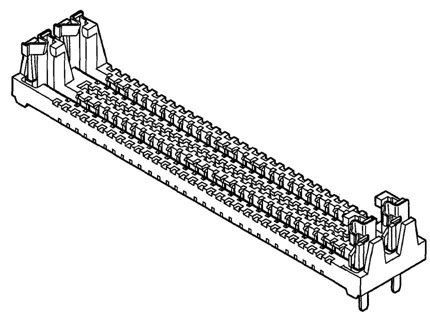
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

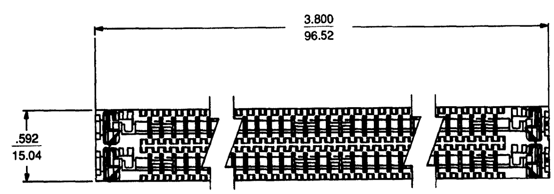
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

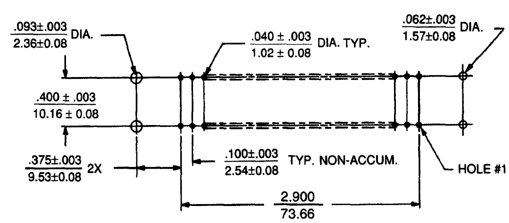
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

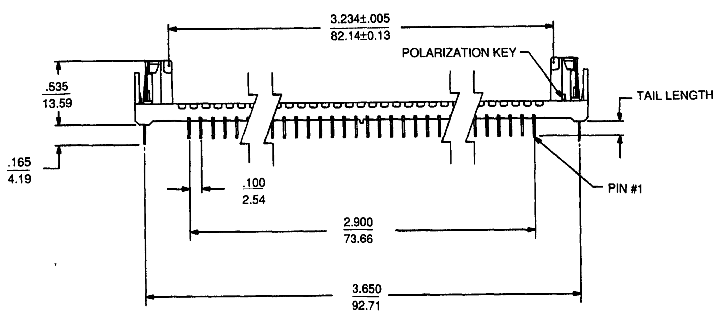
Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

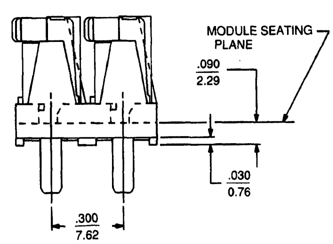






Recommended Socket P.C. Board Layout





END VIEW

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION

Circuits	Order No.	Plating	Tail Length
30	• 15-46-3814	Tin	2.79 (.110)
30	• 15-46-3904	Gold	2.79 (.110)
30	15-46-3944	Tin	3.18 (.125)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54 x 7.62mm (.100 x .300") Pitch SIMM Classic SIMM Socket

78961

Vertical, Dual Row Plastic Latch

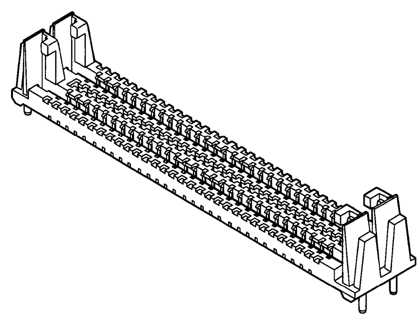
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

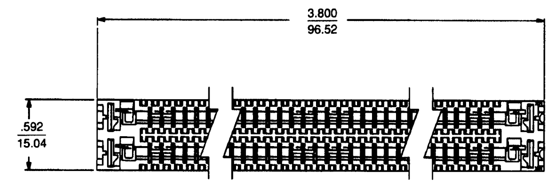
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

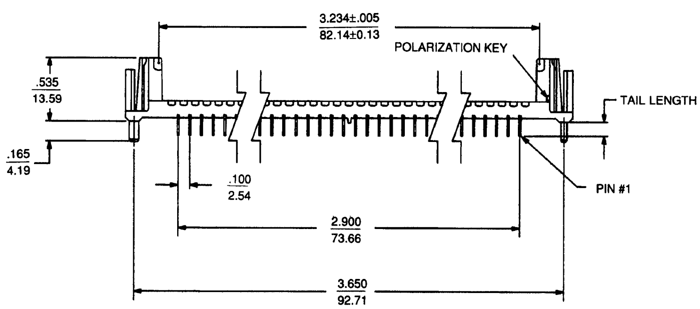
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

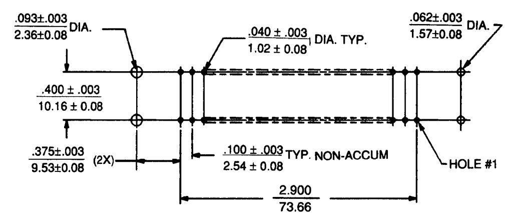
Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

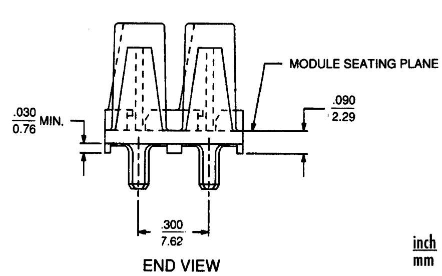








Recommended Socket P.C. Board Layout



For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION

Circuits	Order No.	Plating	Tail Length
30	• 15-46-3854	Tin	2.79 (.110)
30	• 15-46-3914	Gold	2.79 (.110)
30	15-46-3834	Tin	3.18 (.125)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54 x 10.16mm (.100 x .400") Pitch SIMM Classic SIMM Socket

78956 Vertical, Dual Row Metal Latch

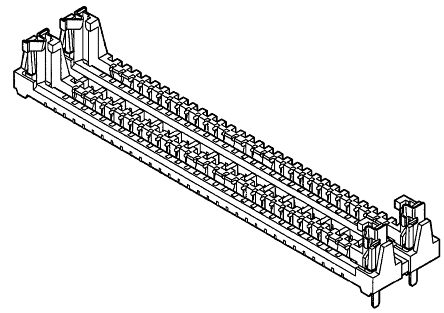
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

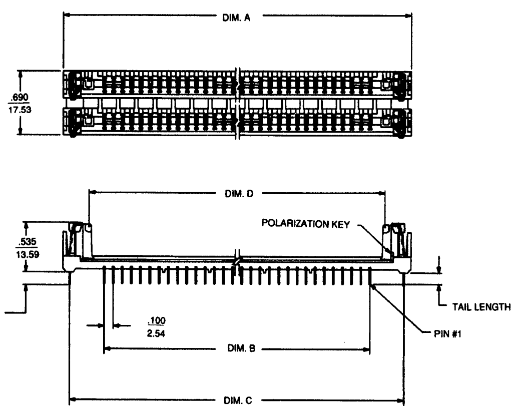
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

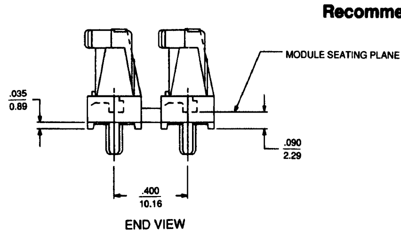
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

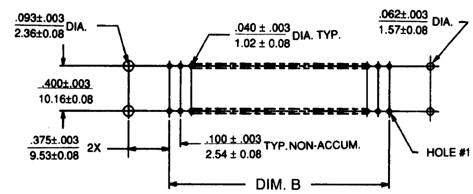
Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C









Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3553	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3543	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3623	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54 x 10.16mm (.100 x .400") Pitch SIMM Classic SIMM Socket

78956 Vertical, Dual Row Plastic Latch

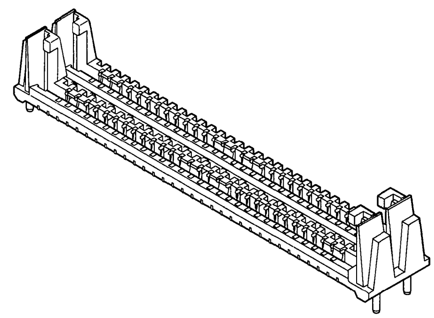
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

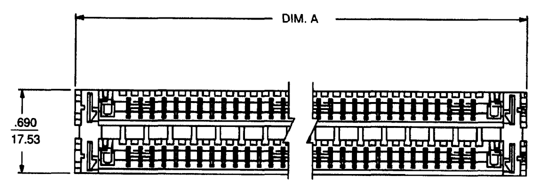
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

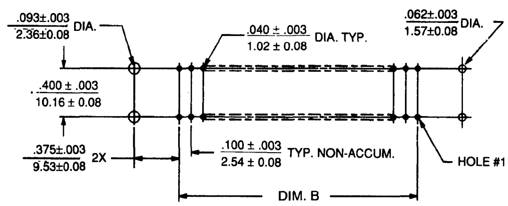
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

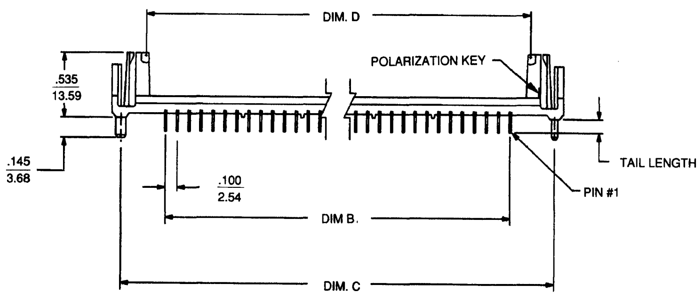
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C

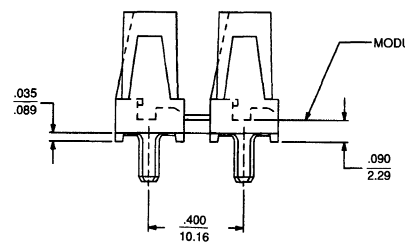






Recommended Socket P.C. Board Layout





END VIEW

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3603	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3523	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3533	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

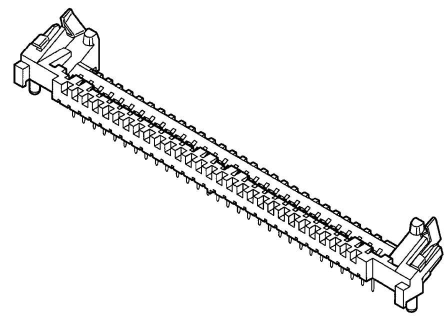
Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch SIMM Classic SIMM Socket

78917

Low Profile (25°) Single Row, Metal Latch



Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

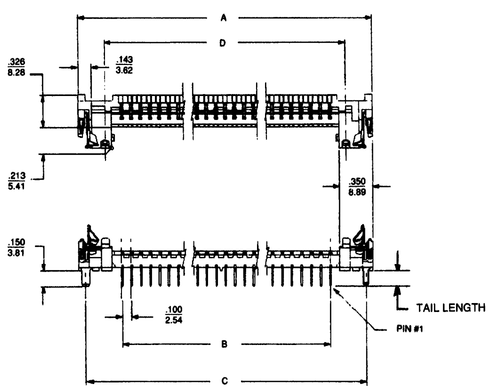
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

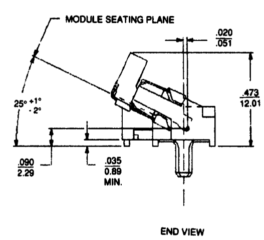
Mechanical

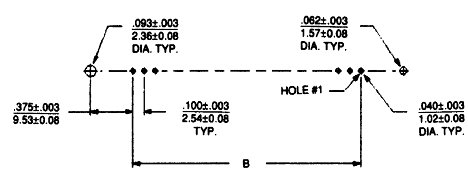
Normal Force: 150g average
Durability: 25 cycles

Physical

Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3104	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30		Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3044	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

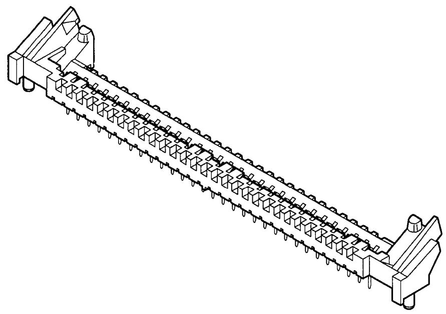
Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ"min. Nickel

Call Molex for information on nonlisted order numbers

2.54mm (.100") Pitch SIMM Classic SIMM Socket

78917

Low Profile (25°) Single Row, Plastic Latch



FEATURES AND SPECIFICATIONS

Features and Benefits

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

Reference Information

Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical

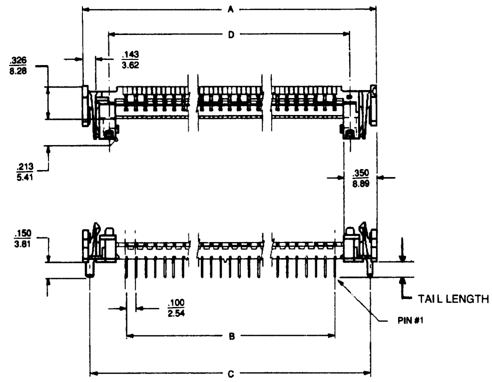
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

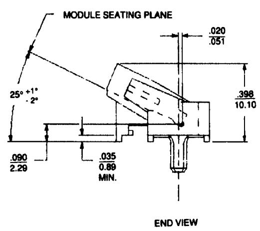
Mechanical

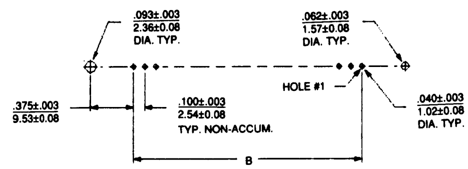
Normal Force: 150g average
Durability: 25 cycles

Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension A	Dimension B	Dimension C	Dimension D
30	• 15-46-3054	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3024	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3034	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54mm x 12.70mm (.100 x .500") Pitch SIMM Classic SIMM Socket

78916

Low Profile (25°), Dual Row Metal Latch

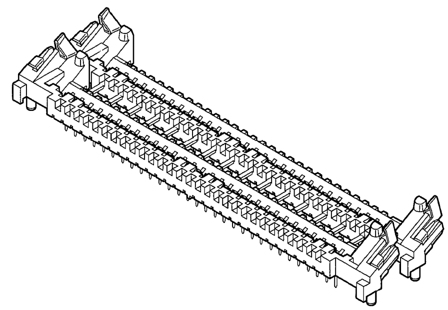
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

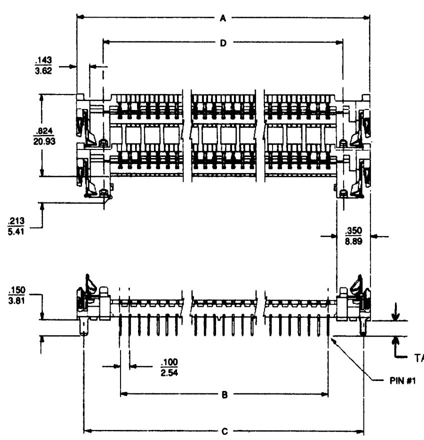
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

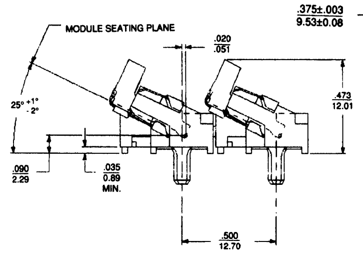
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

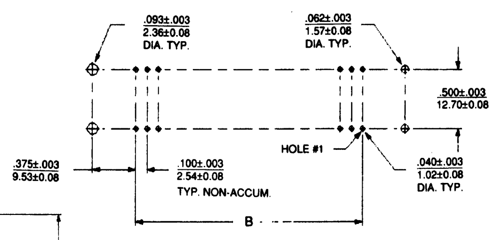
Physical
Housing: Black LCP, UL 94V-0
Latch: Stainless Steel
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







END VIEW



Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3564	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3534	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3544	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54 x 12.70mm (.100 x .500") Pitch SIMM Classic SIMM Socket

78916

Low Profile (25°), Dual Row Plastic Latch

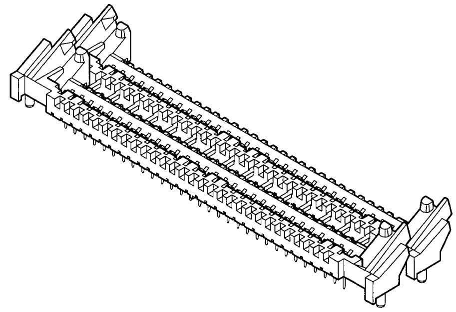
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

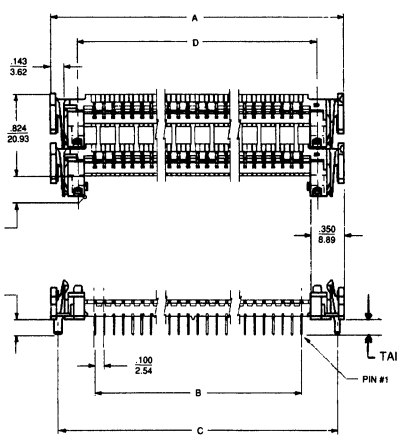
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

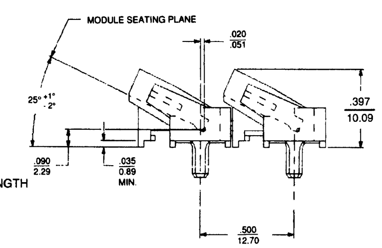
Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

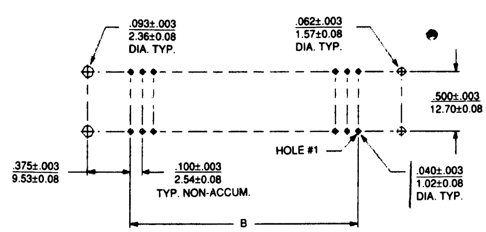
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C







END VIEW



Recommended Socket P.C. Board Layout

inch
mm

For corresponding JEDEC standard MO-64 board dimensions see page E-9

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Tail Length	Dimension			
				A	B	C	D
30	• 15-46-3574	Tin	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	• 15-46-3524	Gold	2.79 (.110)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)
30	15-46-3554	Tin	3.18 (.125)	96.52 (3.800)	73.66 (2.900)	92.71 (3.650)	82.14 (3.230)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 200µ" min. Tin/Lead over 50µ" min. Nickel overall or post plate 30µ" min. Gold on contact area and 150µ" min. Tin/Lead on solder tails, all over 75µ" min. Nickel

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch SIMM Classic SIMM Socket

78906

Right Angle, Single Row Plastic Latch

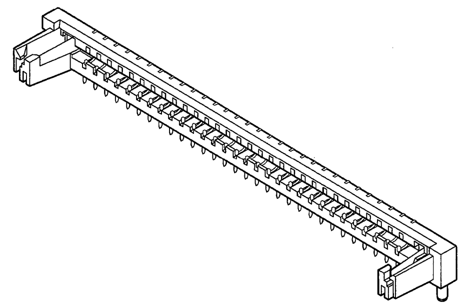
Features and Benefits
- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions

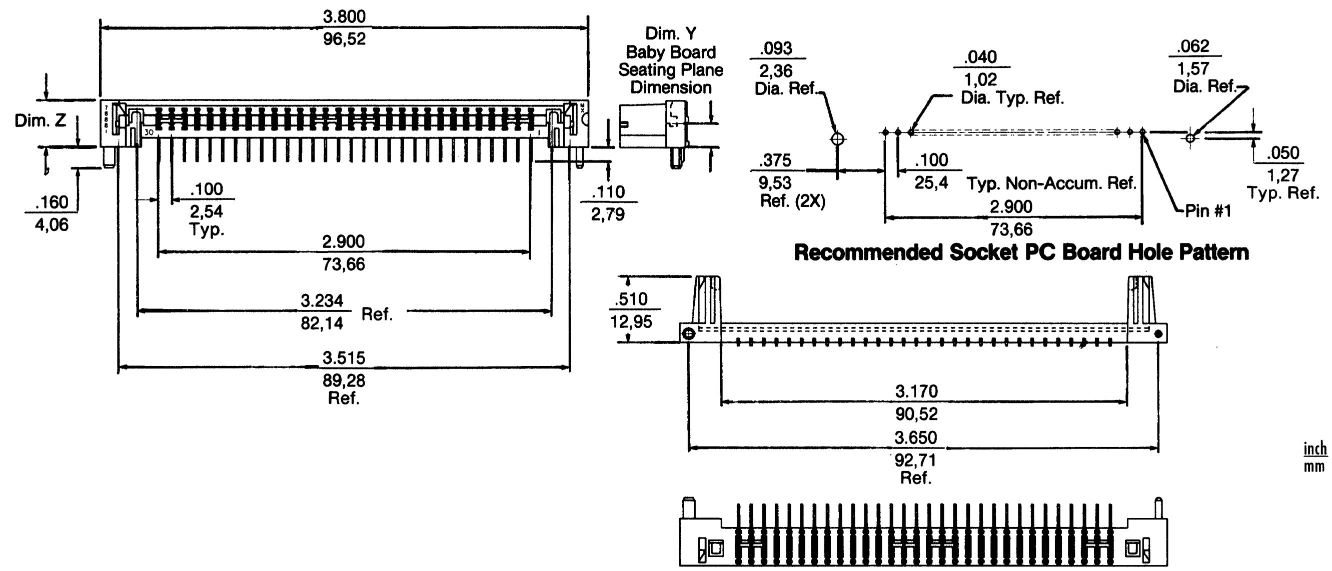
Reference Information
Product Specification: PS-78956
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: JEDEC modules
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.
Capacitance: 2.5 picofards max.

Mechanical
Normal Force: 150g average
Durability: 25 cycles

Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: See Table
Temperature: -40 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Plating	Dimension		Polarization
	Single-Sided Module Applications	Dual-Sided Module Applications		Y	Z	
30	15-46-0451		Tin	3.68 (.145)	8.00 (.315)	Standard*
30	15-46-0452		Gold	3.68 (.145)	8.00 (.315)	Standard*
30	15-46-0454		Tin	3.68 (.145)	8.00 (.315)	Reversed†
30		15-46-0450	Tin	4.83 (.190)	9.14 (.360)	Standard*
30		15-46-0462	Gold	4.83 (.190)	9.14 (.360)	Standard*
30		15-46-0455	Tin	7.37 (.290)	11.68 (.460)	Standard*

Plating: Post plate 200μ" min. Tin/Lead over 50μ" min. Nickel overall or post plate 30μ" min. Gold on contact area and 150μ" min. Tin/Lead on solder tails, all over 75μ" min. Nickel

* Top of board applications

† Bottom of board applications

Call Molex for information on nonlisted order numbers

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Transistor Sockets

4025

Crimp Type

Features and Benefits
- 4025 series centers in-line

Reference Information
Packaging: Bulk
Use With: 2759 crimp-type double cantilever terminals
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50,000 MΩ min.

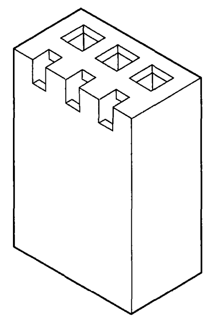
Mechanical
Contact Insertion Force: 681g (1.51 lb) max.
Contact Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force:

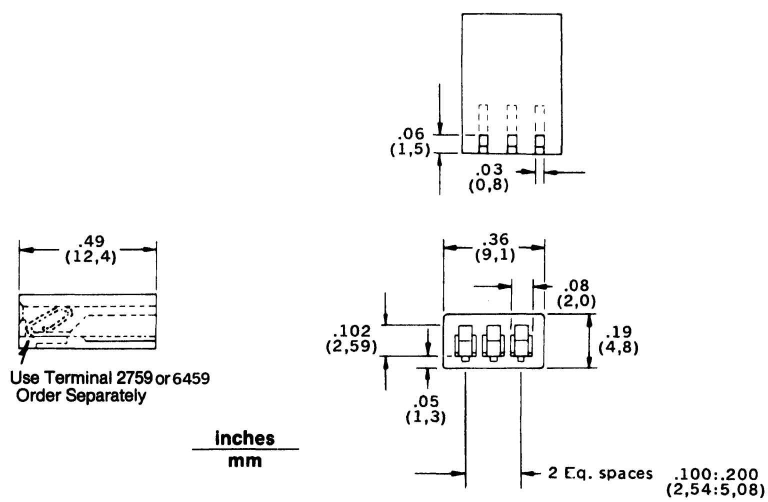
AWG	22	24	26	28	30
Pull Out (lb)	10	8	6	4	3

Mating Force: 199g (7.0 oz)
Unmating Force: 57g (2.0 oz)
Normal Force: 300g average
Durability: 25 cycles

Physical
Housing: Polyester, UL 94V-0
Temperature: -40 to +75 °C

These sockets allow the use of transistors when a PC board is not set up to use a direct solder socket. The double cantilever terminal allows linear movement in the socket and maintains consistent contact reliability.





ORDERING INFORMATION

Order No.
10-17-2032

FEATURES AND SPECIFICATIONS

molex® Transistor Sockets

Features and Benefits
- 4038 and 2512 on 2.54mm (.100") pitch
- 2169 on 3.96mm (.156") pitch
- 2512 features PC solder tails

Reference Information
Packaging: Bulk
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50,000 MΩ min.

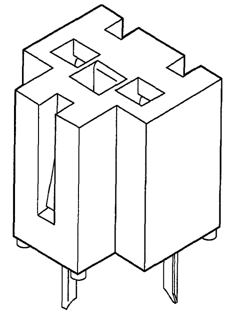
Mechanical
Contact Insertion Force: 681g (1.51 lb) max.
Contact Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force:

AWG	22	24	26	28	30
Pull Out (lb)	10	8	6	4	3

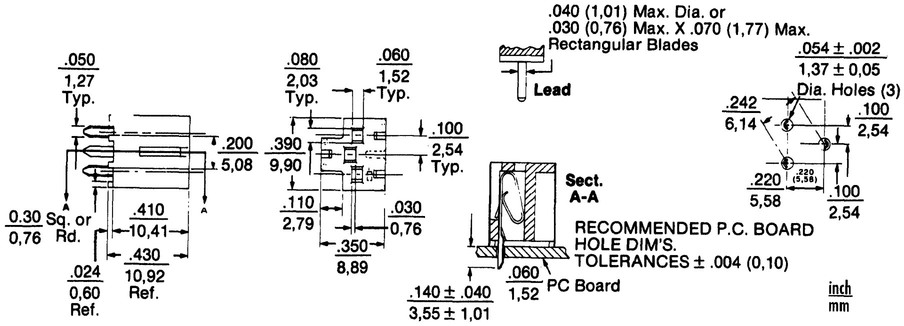
Mating Force: 199g (7.0 oz)
Unmating Force: 57g (2.0 oz)
Normal Force: 300g average
Durability: 25 cycles

Physical
Housing: 2512 and 2169—Nylon, UL 94V-2
4038—Polyester, UL 94V-0
Contact: Brass
Plating: See Tables
Temperature: -40 to +75°C

These 3-circuit transistor sockets are preassembled and ready for soldering to a PC board. The proven double cantilever design eliminates circuit failure due to thermal expansion and/or mechanical tolerances. Linear movement of the transistor leads in the socket does not affect contact reliability.



ORDERING INFORMATION

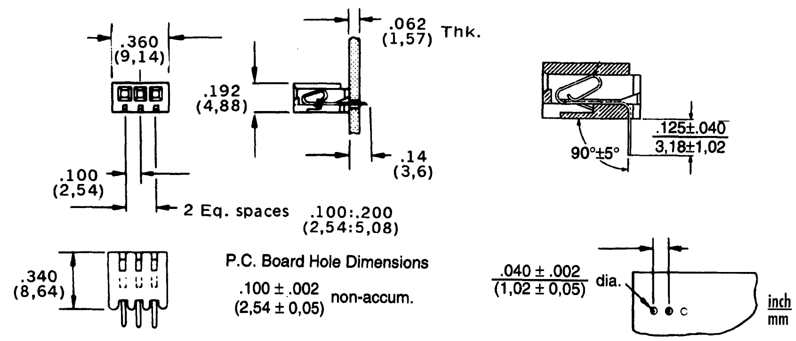


2.54mm (.100") Pitch
2512
Staggered Row

Tin-Plated Brass Order No.
09-48-3031
09-48-3032*

*Terminal design different to reduce mating force; contact factory for drawing

ORDERING INFORMATION

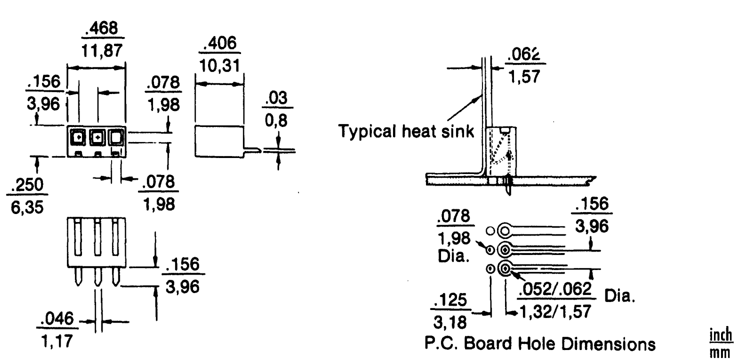


2.54mm (.100") Pitch
4038
In-Line

Tin-Plated Brass Order No.	Version
10-18-2031	Straight
10-18-2032	Right Angle

Phosphor Bronze available, contact factory

ORDERING INFORMATION



3.96mm (.156") Pitch
2169
With Heat Sink Slots

Tin-Plated Brass Order No.	Gold-Plated Brass Order No.
09-52-3030	09-62-3030

1.50mm (.059") Pitch Terminal

50020

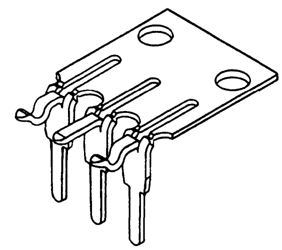
FEATURES AND SPECIFICATIONS

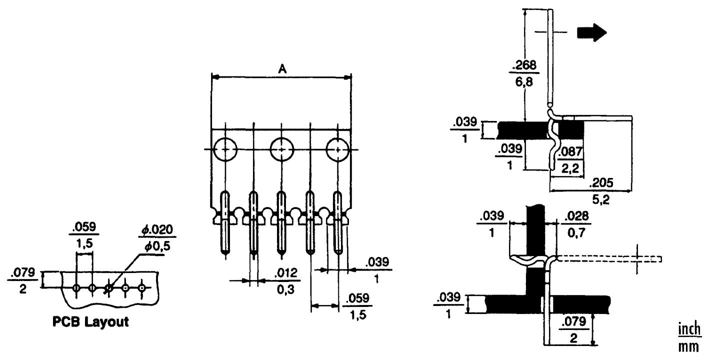
Features and Benefits
- Sizes 4 to 20 circuits
- Substitue for hybrid IC

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A

Physical
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
4	50020-8104	6.00 (.236)
5	50020-8105	7.50 (.295)
6	50020-8106	9.00 (.354)
7	50020-8107	10.50 (.413)
8	50020-8108	12.00 (.472)
9	50020-8109	13.50 (.531)

Circuits	Order No.	Dimension A
10	50020-8110	15.00 (.591)
11	50020-8111	16.50 (.650)
12	50020-8112	18.00 (.709)
13	50020-8113	19.50 (.769)
14	50020-8114	21.00 (.827)
15	50020-8115	22.50 (.886)

Circuits	Order No.	Dimension A
16	50020-8116	24.00 (.945)
17	50020-8117	25.50 (1.004)
18	50020-8118	27.00 (1.063)
19	50020-8119	28.50 (1.122)
20	50020-8120	30.00 (1.181)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Terminal

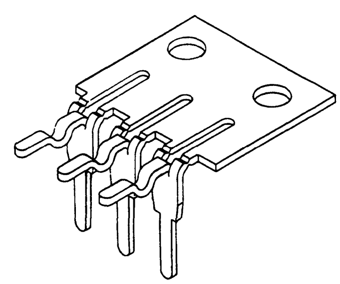
50002

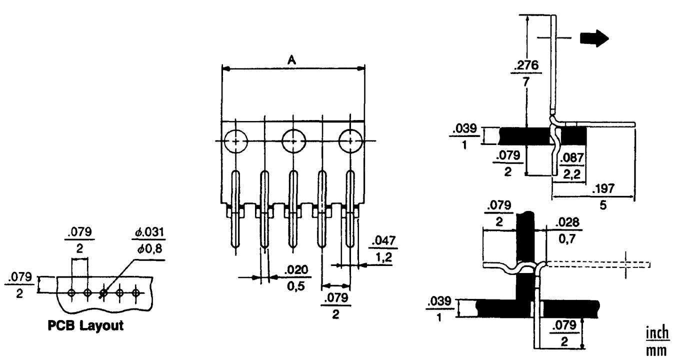
Features and Benefits
- Sizes 3 to 15 circuits
- Substitute for hybrid IC

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A

Physical
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

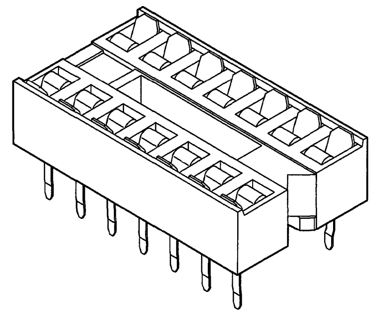
Circuits	Order No.	Dimension A
3	50002-8103	6.00 (.236)
4	50002-8104	8.00 (.315)
5	50002-8105	10.00 (.394)
6	50002-8106	12.00 (.472)
7	50002-8107	14.00 (.551)

Circuits	Order No.	Dimension A
8	50002-8108	16.00 (.630)
9	50002-8109	18.00 (.709)
10	50002-8110	20.00 (.788)
11	50002-8111	22.00 (.866)
12	50002-8112	24.00 (.945)

Circuits	Order No.	Dimension A
13	50002-8113	26.00 (1.024)
14	50002-8114	28.00 (1.102)
15	50002-8115	30.00 (1.181)

7.62 x 2.54mm (.300 x .100") Pitch Dual In-Line IC Socket

42000
Low Profile, Style 1



FEATURES AND SPECIFICATIONS

Features and Benefits
- Easy IC insertion—large target area, takes a variety of leads
- Stackable side-by-side and end-to-end on 2.54mm (.100") grid spacing
- Visible polarization
- Closed-bottom sockets have a 0.50mm (.020") standoff at base to facilitate post-soldering board cleaning operations
- 2 points of contact, high reliability connection with low insertion force
- Compatible with major brand auto-insertion machines

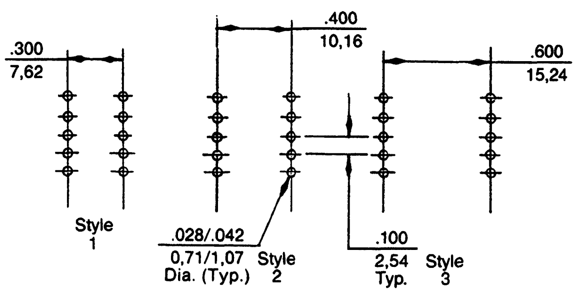
Reference Information
Product Specification: PS-42000
Packaging: Tube
UL File No.: E29179
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A at 20°C
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 5000 MΩ min.

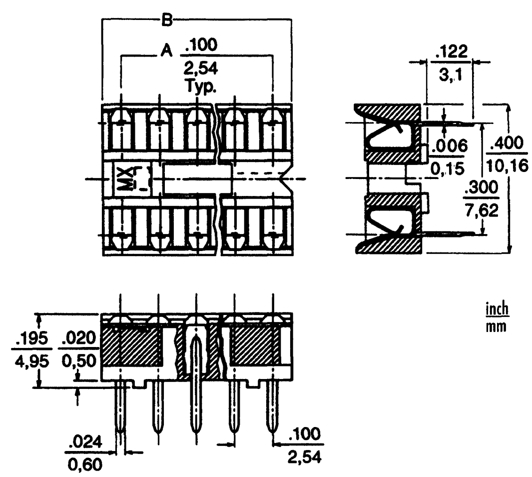
Mechanical
Contact Retention to Housing: 400g min.
Mating Force: 340g max.
Unmating Force: 25g per circuit min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Pretinned
Temperature: -40 to +105°C

Recommended PC Board Specification (All Styles)
Board Thickness .062 ± .008 (1,57±0,2)



STYLE 1
.300" (7,62mm) x .100" (2,54mm)



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
6	42000-0610	5.08 (.200)	7.62 (.300)
8	42000-0810	7.62 (.300)	10.16 (.400)
14	42000-1410	15.24 (.600)	17.78 (.700)
16	42000-1610	17.78 (.700)	20.32 (.800)
18	42000-1810	20.32 (.800)	22.86 (.900)
20	42000-2010	22.86 (.900)	25.40 (1.000)

FEATURES AND SPECIFICATIONS

10.16 x 2.54mm (.400 x .100") Pitch Dual In-Line IC Socket

42000

Low Profile, Style 2

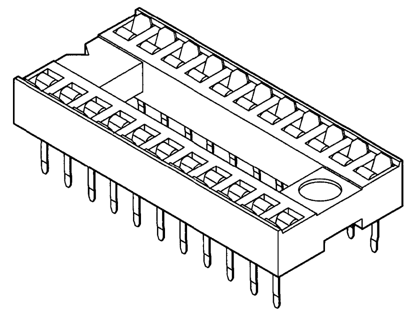
Features and Benefits
- Easy IC insertion—large target area, takes a variety of leads
- Stackable side-by-side and end-to-end on 2.54mm (.100") grid spacing
- Visible polarization
- Closed-bottom sockets have a 0.50mm (.020") standoff at base to facilitate post-soldering board cleaning operations
- 2 points of contact, high reliability connection with low insertion force
- Compatible with major brand auto-insertion machines

Reference Information
Product Specification: PS-42000
Packaging: Tube
UL File No.: E29179
Designed In: Inches

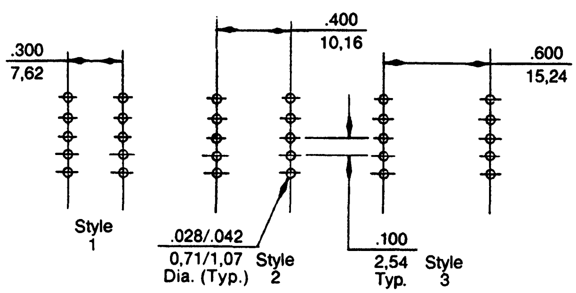
Electrical
Voltage: 250V
Current: 1.0A at 20°C
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 400g min.
Mating Force: 340g max.
Unmating Force: 25g per circuit min.

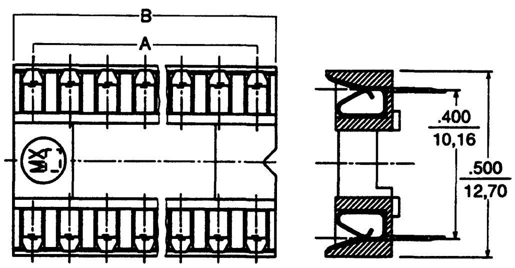
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Pretinned
Temperature: -40 to +105°C



Recommended PC Board Specification (All Styles)
Board Thickness .062 ± .008 (1,57±0,2)



STYLE 2
.400" (10,16mm) x .100" (2,54mm)
Available in 22 circuit version only



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
22	42000-2220	25.40 (1.000)	27.94 (1.100)

FEATURES AND SPECIFICATIONS

molex®

15.24 x 2.54mm (.600 x .100") Pitch Dual In-Line IC Socket

42000
Low Profile, Style 3

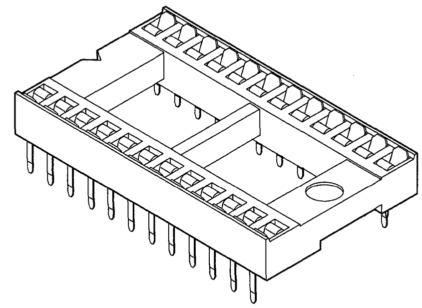
Features and Benefits
- Easy IC insertion—large target area, takes a variety of leads
- Stackable side-by-side and end-to-end on 2.54mm (.100") grid spacing
- Visible polarization
- Closed-bottom sockets have a 0.50mm (.020") standoff at base to facilitate post-soldering board cleaning operations
- 2 points of contact, high reliability connection with low insertion force
- Compatible with major brand auto-insertion machines

Reference Information
Product Specification: PS-42000
Packaging: Tube
UL File No.: E29179
Designed In: Inches

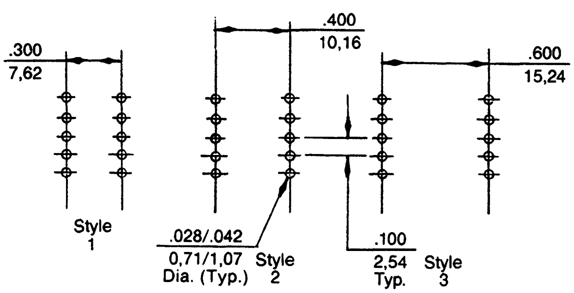
Electrical
Voltage: 250V
Current: 1.0A at 20°C
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 400g min.
Mating Force: 340g max.
Unmating Force: 25g per circuit min.

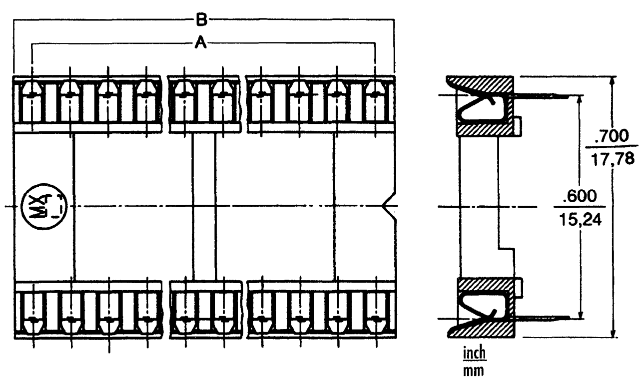
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Pretinned
Temperature: -40 to +105°C



Recommended PC Board Specification (All Styles)
Board Thickness .062 ± .008 (1,57±0,2)



STYLE 3
.600" (15,24mm) x .100" (2,54mm)



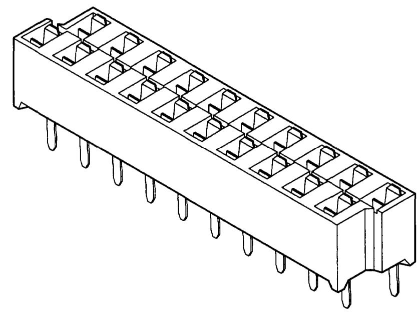
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
24	42000-2430	27.94 (1.100)	30.48 (1.200)
28	42000-2830	33.02 (1.300)	35.56 (1.400)
32	42000-3230	38.10 (1.500)	40.64 (1.600)
40	42000-4030	48.26 (1.900)	50.80 (2.000)

2.54 x 2.54mm (.100 x .100") Pitch Zig-Zag In-Line Package IC Socket

90510

1.27mm (.050") Offset For ZIP IC Modules



FEATURES AND SPECIFICATIONS

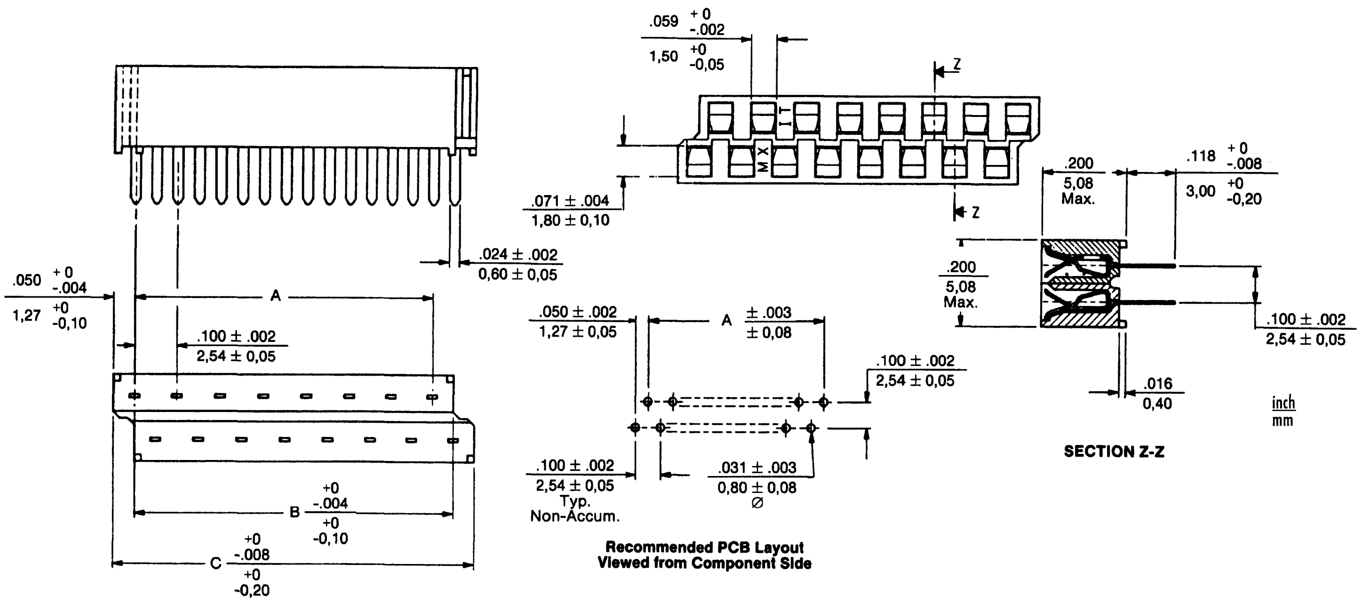
Features and Benefits
- Uses half the board space of conventional DIP sockets
- Side-to-side and end-to-end stackable
- Dual-beam contacts
- Large target areas enable easy IC insertion

Reference Information
Product Specification: PS-90510
Packaging: Tube
UL File No.: E29179
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A at 20°C
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 400g min.
Mating Force: 250g per circuit max.
Unmating Force: 20g per circuit min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Pretinned
Temperature: -40 to +105°C
Recommended PCB Thickness: 1.57mm (.062")



ORDERING INFORMATION AND DIMENSIONS

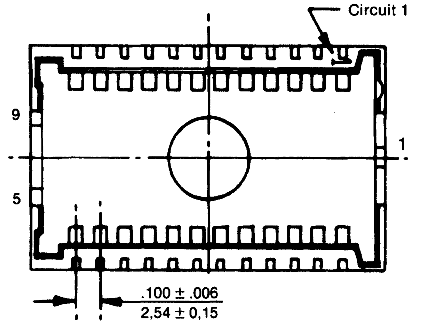
Circuits*	Order No.	Dimension A	Dimension B	Dimension C
16	90510-0016	17.78 (.700)	19.05 (.750)	21.59 (.850)
20	90510-0020	22.86 (.900)	24.13 (.950)	26.67 (1.050)
24	90510-0024	27.94 (1.100)	29.21 (1.150)	31.75 (1.250)
28	90510-0028	33.02 (1.300)	34.29 (1.350)	36.83 (1.450)
40	90510-0040	48.26 (1.900)	49.53 (1.950)	52.07 (2.050)

* Contact factory for circuit sizes 18, 22 and 26

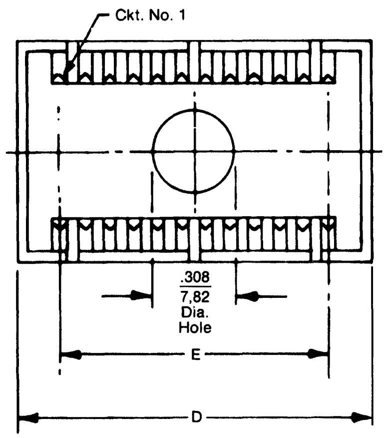
molex®

2.54 x 15.24mm (.100 x .600") Pitch Modular IC Socket System

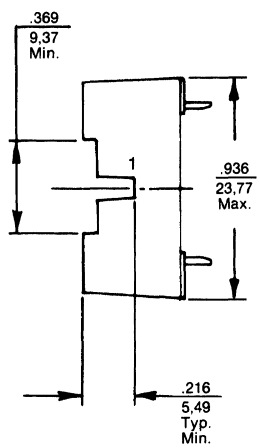
78804/78805/78807 Socket



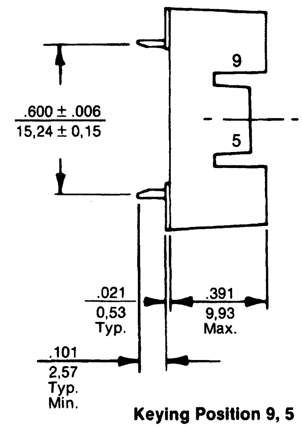
Top View



Bottom View



Keying Position 1



Keying Position 9, 5

inch
mm

DIMENSIONS

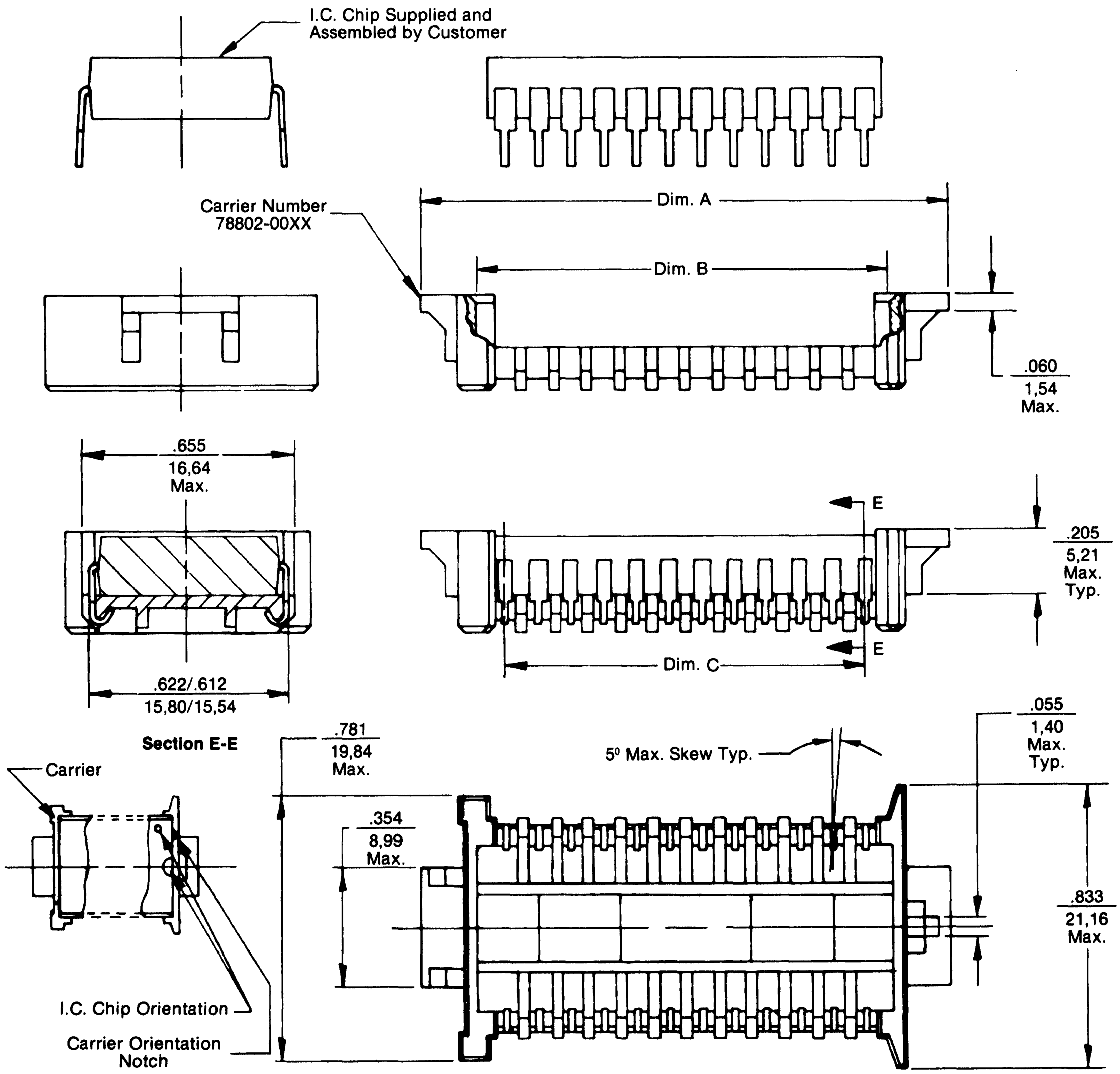
Circuits	Dimension	
	D	E
24	37.21 (1.465)	27.94 (1.100)
28	42.30 (1.665)	33.02 (1.300)
32	42.74 (1.860)	38.16 (1.500)

Note: Dimensions given across pitch are symmetrical about those centerlines within half the total tolerance
See page E-52 for ordering information

2.54 x 15.24mm (.100 x .600") Pitch Modular IC Socket System

78802

Carrier



DIMENSIONS

Circuits	Dimension		
	A	B	C
24	41.58 (1.637)	32.39 (1.275)	27.94 (1.100)
28	46.66 (1.837)	37.47 (1.475)	33.02 (1.300)
32	51.74 (2.037)	42.55 (1.675)	38.10 (1.500)

Application Tooling	
AM 60161	Manually operated bench tool, crimps 2 sides of chip to carrier at once

Refer to Application Tooling section of this catalog for further information, customer IC packages require setup of tooling by Molex

Note: Carrier dimensions reflect Molex approved standards for IC packages using standard lead frame construction, contact factory for socket system using side brazed IC version

See page E-52 for ordering information

FEATURES AND SPECIFICATIONS

2.54 x 15.24mm (.100 x .600") Pitch Modular IC Socket System

78802/78804/78805/ 78807

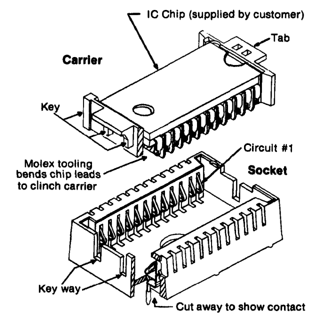
Socket and Carrier Ordering Information

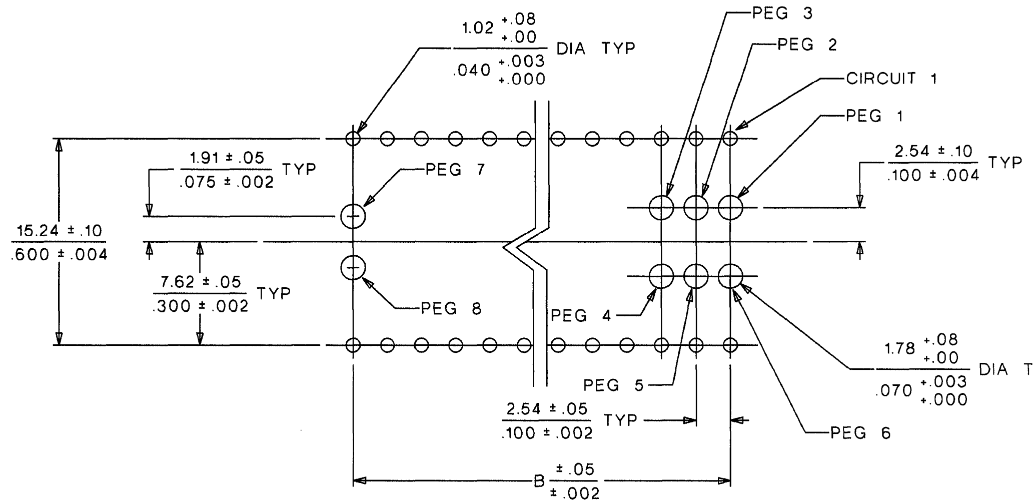
Features and Benefits

- Cost-effective method for interchanging PROM devices by nontechnical personnel
- Prevents damage to PROM device through a fully shrouded carrier
- Finger tabs for fast and easy insertion/withdrawal
- Carrier is keyed and color coded to socket except universal (purple) carrier that fits any similiar circuit count socket
- Sockets available with pegs in multiple locations for polarization to PCB
- Socket contacts solder to a 1.57mm (.062") thick PC board
- Double cantilever terminal

Physical

Housing: Glass-filled polyester, UL 94V-0
Contact: Beryllium Copper
Plating: .000200" min. Tin/Lead in contact area, .000075"min. Tin/Lead in PC tail area over .000050"min. Nickel overall





PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION

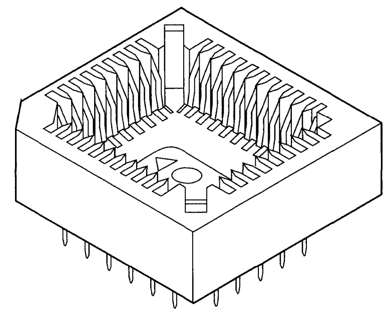
Carrier and Corresponding Socket								
Carrier				Socket				
Circuits	Order No.	Color	Keys	Circuits	Order No.	Color	Keys	PCB Peg Position
24	50-39-5248	Black	1, 5, 9	24	15-29-9242	Black	1, 5, 9	No peg
28 (24)*	50-57-5285	Black	1, 5, 9	28	15-41-3281	Black	1, 5, 9	6
28 (24)*	50-57-5285	Black	1, 5, 9	28	15-29-9282	Black	1, 5, 9	No peg
28	50-39-5288	Black	1, 5, 9	28	15-41-3281	Black	1, 5, 9	6
28	50-65-2282	Yellow	2, 4	28	15-41-3283	Yellow	2, 4	2
28	50-65-2283	Gray	2, 8	28	15-41-3284	Gray	2, 8	3
28	50-65-2284	Dark Green	0, 2	28	15-41-3285	Dark Green	0, 2	6
28	50-65-2285	Natural	1, 5	28	15-41-3286	Natural	1, 5	5
28	50-65-2286	Light Blue	1, 7	28	15-41-3287	Light Blue	1, 7	4
28	50-65-2287	Orange	1, 3	28	15-41-3288	Orange	1, 3	7
28	50-65-2288	Dark Blue	1, 9	28	15-41-3289	Dark Blue	1, 9	8
28	50-57-5284	Purple	No keys	28	‡			
32 (28)†	50-65-2289	Black	1, 5, 9	32	15-41-3322	Black	1, 5, 9	1
32 (28)†	50-65-2289	Black	1, 5, 9	32	15-41-3329	Black	1, 5, 9	No peg
32	50-57-5283	Black	1, 5, 9	32	15-41-3322	Black	1, 5, 9	1
32	50-57-5283	Black	1, 5, 9	32	15-41-3329	Black	1, 5, 9	No peg
32	50-65-3329	Red	2, 6	32	15-41-3327	Red	2, 6	1
32	50-65-3330	Yellow	2, 4	32	15-41-3320	Yellow	2, 4	2
32	50-65-3331	Gray	2, 8	32	15-41-3325	Gray	2, 8	3
32	50-65-3332	Dark Green	2, 0	32	15-41-3326	Dark Green	2, 0	6
32	50-65-3321	Natural	1, 5	32	15-41-3321	Natural	1, 5	5
32	50-65-3334	Light Blue	1, 7	32	15-41-3324	Light Blue	1, 7	4
32	50-65-3335	Orange	1, 3	32	15-41-3328	Orange	1, 3	7
32	50-65-3346	Purple	No keys	32	§			

* 28-circuit system designed for 24-circuit device
† 32-circuit system designed for 28-circuit device
‡ Any 28-circuit socket
§ Any 32-circuit socket

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch PLCC Socket

87246



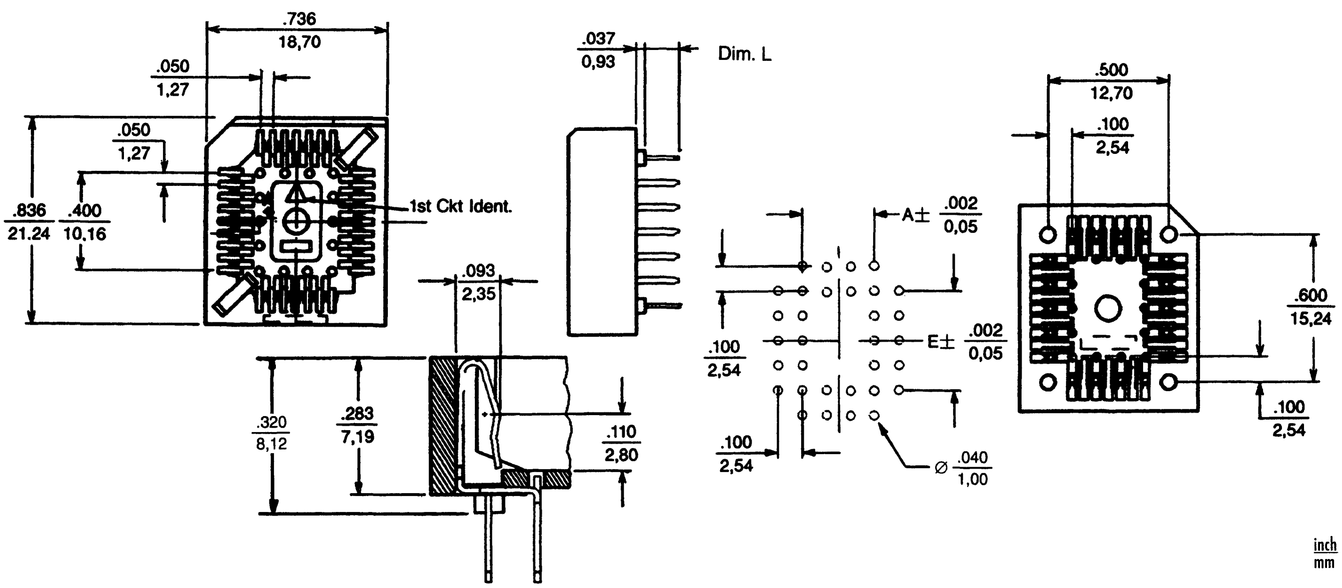
Features and Benefits
- Accepts JEDEC Type A rectangular chips
- Raised inner platform with molded stops reduces stress on J-leads
- High normal force
- Locating peg available
- Black color housing standard, brown color housing available, contact factory

Reference Information
Product Specification: PS-87246
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Retention to Housing: 10 oz min.
Mating Force: 16 lb max.
Normal Force: 2 lb min.

Physical
Housing: Black PPS
Contact: Phosphor Bronze
Plating: Tin
Temperature: -55 to +105°C



ORDERING INFORMATION

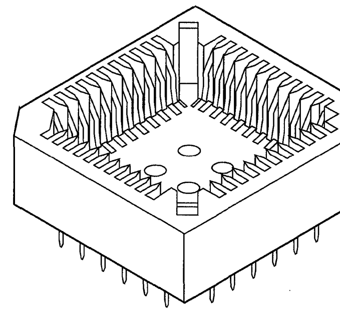
Circuits	Order No.		Tail Length and Peg Option
	Plating No. 1	Plating No. 2	
32	• 87246-3201	87246-3202	.142" Without Peg
32	• 87246-3221	87246-3222	.125" Without Peg
32	87246-3231	87246-3232	.142" With Peg
32	87246-3251	87246-3252	.125" With Peg

• US Standard Product, available through Molex franchised distributors
Plating No. 1: Pre-plate 3.81μm (150μ") min. Tin
Plating No. 2: Post-plate 3.81μm (150μ") min. Tin

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch PLCC Socket

87124



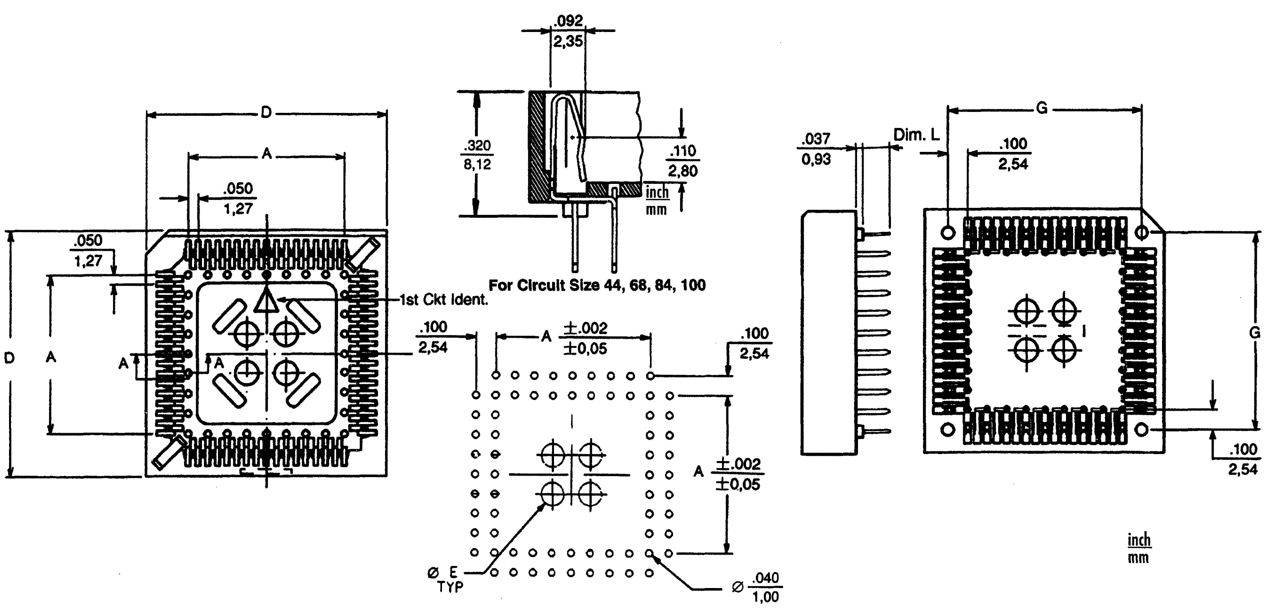
Features and Benefits
- Sizes 44, 68, 84 and 100 circuits
- Accepts JEDEC Type A square chips
- Raised inner platform with molded stops reduces stress on J-leads
- High normal force
- Locating peg available
- Black color housing standard, brown color housing available, contact factory

Reference Information
Product Specification: PS-87124
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 600V
Insulation Resistance: 10,000 MΩ min.

Mechanical
Contact Retention to Housing: 10 oz min.
Mating Force: 44 circuits—26 lb max.
68 circuits—33 lb max.
84 circuits—54 lb max.
100 circuits—63 lb max.
Unmating Force: 44 circuits—2 lb min.
68 circuits—4 lb min.
84 circuits—6 lb min.
100 circuits—8 lb min.

Physical
Housing: Black PPS
Contact: Phosphor Bronze
Plating: Tin
Temperature: -55 to +105°C



ORDERING INFORMATION AND DIMENSIONS

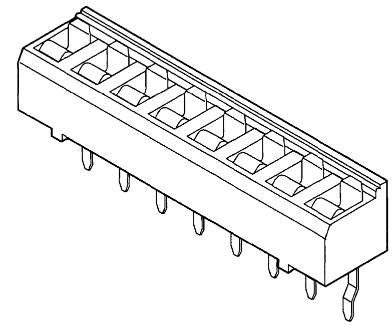
Circuits	Order No.		Tail Length and Peg Option	Dimension		
	Plating No. 1	Plating No. 2		A	D	G
44	• 87124-4401	87124-4402	.142" Without Peg	12.70 (.500)	23.76 (.935)	17.78 (.700)
44	• 87124-4421	87124-4422	.125" Without Peg	12.70 (.500)	23.76 (.935)	17.78 (.700)
44	87124-4431	87124-4432	.142" With Peg	12.70 (.500)	23.76 (.935)	17.78 (.700)
68	• 87124-6801	87124-6802	.142" Without Peg	20.32 (.800)	31.40 (1.236)	25.40 (1.000)
68	• 87124-6821	87124-6822	.125" Without Peg	20.32 (.800)	31.40 (1.236)	25.40 (1.000)
68	87124-6831	87124-6832	.142" With Peg	20.32 (.800)	31.40 (1.236)	25.40 (1.000)
84	• 87124-8401	87124-8402	.142" Without Peg	25.40 (1.000)	36.48 (1.436)	30.48 (1.200)
84	• 87124-8421	87124-8422	.125" Without Peg	25.40 (1.000)	36.48 (1.436)	30.48 (1.200)
84	87124-8431	87124-8432	.142" With Peg	25.40 (1.000)	36.48 (1.436)	30.48 (1.200)
100	87124-1001	87124-1002	.142" Without Peg	30.48 (1.200)	41.56 (1.636)	35.56 (1.400)
100	87124-1021	87124-1022	.125" Without Peg	30.48 (1.200)	41.56 (1.636)	35.56 (1.400)
100	87124-1031	87124-1032	.142" With Peg	30.48 (1.200)	41.56 (1.636)	35.56 (1.400)

• US Standard Product, available through Molex franchised distributors
Plating No. 1: Pre-plate 3.81μm (150μ") min. Tin
Plating No. 2: Post-plate 3.81μm (150μ") min. Tin

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Single In-Line IC Socket

94100 Low Profile



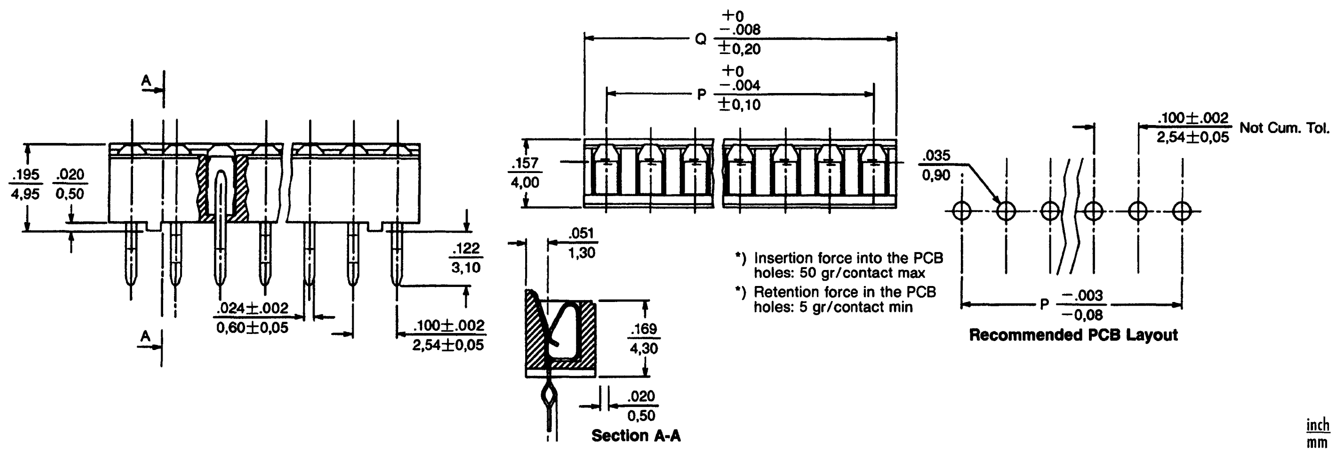
Features and Benefits
- Dual beam contact
- Large target entry area for IC leads
- Closed bottom
- PC tail retention

Reference Information
Product Specification: PS-94100
Packaging: Tube
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A at 20°C
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 400g min.
Mating Force: 340g max.
Unmating Force: 25g per circuit min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Pretinned
Temperature: -40 to +105°C



inch / mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		P	Q
7	94100-0107	15.24 (.600)	17.78 (.700)
8	94100-0108	17.78 (.700)	20.32 (.800)
12	94100-0112	27.94 (1.100)	30.48 (1.200)
14	94100-0114	33.02 (1.300)	35.56 (1.400)
16	94100-0116	38.10 (1.500)	40.64 (1.600)
20	94100-0120	48.26 (1.900)	50.80 (2.000)
35	94100-0235*	86.36 (3.400)	88.90 (3.500)

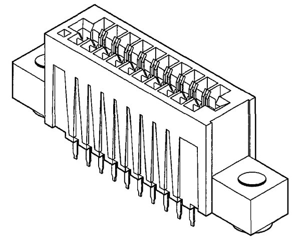
* Not kinked version

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Double-Sided Edge Connector

71006

PC Tail Connector Flanged Version



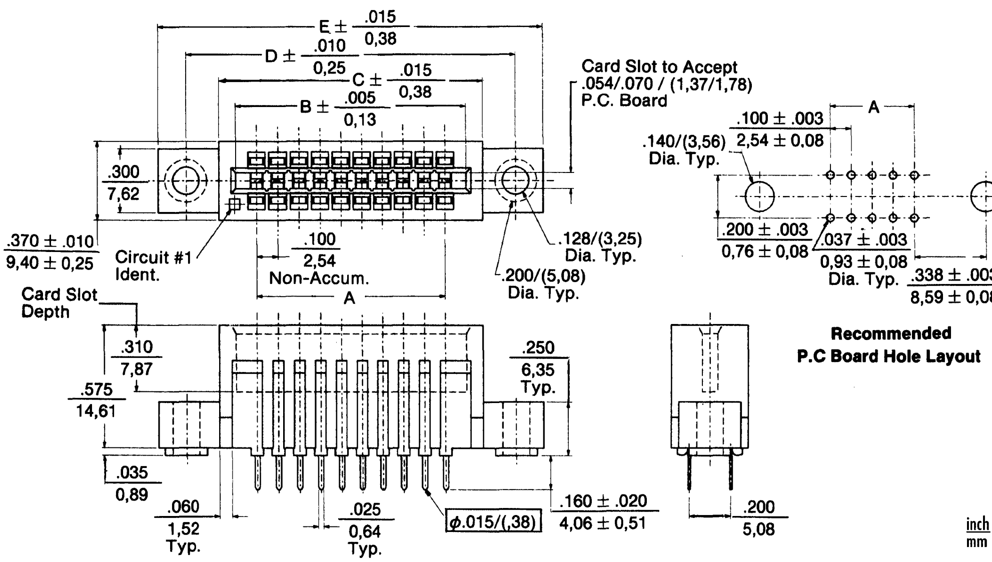
Features and Benefits
- Industry standard dimensions, drop in cost saving replacement
- PC tail only
- Robotically insertable
- Also available with .125" PC tails, contact factory
- Bifurcated, cantilevered beam Phosphor Bronze terminal

Reference Information
Product Specification: PS-71006
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 1500V rms
Insulation Resistance: 1 MΩ min.

Mechanical
Normal Force: 85g min.
Durability: 100 cycles

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 15μ" Gold over 50μ" Nickel



ORDERING INFORMATION AND DIMENSIONS

Flanged Version

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
10/20	15-46-1102	18/36	15-46-1182	27/54	15-46-1272	35/70	15-46-1352
11/22	15-46-1112	19/38	15-46-1192	28/56	15-46-1282	36/72	15-46-1362
12/24	15-46-1122	20/40	15-46-1202	29/58	15-46-1292	37/74	15-46-1372
13/26	15-46-1132	21/42	15-46-1212	30/60	15-46-1302	38/76	15-46-1382
14/28	15-46-1142	22/44	15-46-1222	31/62	15-46-1312	39/78	15-46-1392
15/30	15-46-1152	23/46	15-46-1232	32/64	15-46-1322	40/80	15-46-1402
16/32	15-46-1162	24/48	15-46-1242	33/66	15-46-1332		
17/34	15-46-1172	26/52	15-46-1262	34/68	15-46-1342		

Circuits	Dimension				
	A	B	C	D	E
10/20	22.86 (.900)	27.94 (1.100)	32.00 (1.260)	40.01 (1.575)	46.61 (1.835)
11/22	25.40 (1.000)	30.48 (1.200)	34.54 (1.360)	42.55 (1.675)	49.15 (1.935)
12/24	27.94 (1.100)	33.02 (1.300)	37.08 (1.460)	45.09 (1.775)	51.69 (2.035)
13/26	30.48 (1.200)	35.56 (1.400)	39.62 (1.560)	47.63 (1.875)	54.23 (2.135)
14/28	33.02 (1.300)	38.10 (1.500)	42.16 (1.660)	50.17 (1.975)	56.77 (2.235)
15/30	35.56 (1.400)	40.64 (1.600)	44.70 (1.760)	52.71 (2.075)	59.31 (2.335)
16/32	38.10 (1.500)	43.18 (1.700)	47.24 (1.860)	55.25 (2.175)	61.85 (2.435)
17/34	40.64 (1.600)	45.72 (1.800)	49.78 (1.960)	57.79 (2.275)	64.39 (2.535)
18/36	43.18 (1.700)	48.26 (1.900)	52.32 (2.060)	60.33 (2.375)	66.93 (2.635)
19/38	45.72 (1.800)	50.80 (2.000)	54.86 (2.160)	62.87 (2.475)	69.47 (2.735)
20/40	48.26 (1.900)	53.34 (2.100)	57.40 (2.260)	65.41 (2.575)	72.00 (2.835)
21/42	50.80 (2.000)	55.88 (2.200)	59.94 (2.360)	67.95 (2.675)	74.55 (2.935)
22/44	53.34 (2.100)	58.42 (2.300)	62.48 (2.460)	70.49 (2.775)	77.09 (3.035)
23/46	55.88 (2.200)	60.96 (2.400)	65.02 (2.560)	73.03 (2.875)	79.63 (3.135)
24/48	58.42 (2.300)	63.50 (2.500)	67.56 (2.660)	75.57 (2.975)	82.17 (3.235)
25/50	60.96 (2.400)	66.04 (2.600)	70.10 (2.760)	78.11 (3.075)	84.71 (3.335)

Circuits	Dimension				
	A	B	C	D	E
26/52	63.50 (2.500)	68.58 (2.700)	72.64 (2.860)	80.65 (3.175)	87.25 (3.435)
27/54	66.04 (2.600)	71.12 (2.800)	75.18 (2.960)	83.19 (3.275)	89.79 (3.535)
28/56	68.58 (2.700)	73.66 (2.900)	77.72 (3.060)	85.73 (3.375)	92.33 (3.635)
29/58	71.12 (2.800)	76.20 (3.000)	80.26 (3.160)	88.27 (3.475)	94.87 (3.735)
30/60	73.66 (2.900)	78.74 (3.100)	82.80 (3.260)	90.81 (3.575)	97.41 (3.835)
31/62	76.20 (3.000)	81.28 (3.200)	85.34 (3.360)	93.35 (3.675)	99.95 (3.935)
32/64	78.74 (3.100)	83.82 (3.300)	87.88 (3.460)	95.89 (3.775)	102.49 (4.035)
33/66	81.28 (3.200)	86.36 (3.400)	90.42 (3.560)	98.43 (3.875)	105.03 (4.135)
34/68	83.82 (3.300)	88.90 (3.500)	92.96 (3.660)	100.97 (3.975)	107.57 (4.235)
35/70	86.36 (3.400)	91.44 (3.600)	95.50 (3.760)	103.51 (4.075)	110.11 (4.335)
36/72	88.90 (3.500)	93.98 (3.700)	98.04 (3.860)	106.05 (4.175)	112.65 (4.435)
37/74	91.44 (3.600)	96.52 (3.800)	100.58 (3.960)	108.59 (4.275)	115.19 (4.535)
38/76	93.98 (3.700)	99.06 (3.900)	103.12 (4.060)	111.13 (4.375)	117.73 (4.635)
39/78	96.52 (3.800)	101.60 (4.000)	105.66 (4.160)	113.67 (4.475)	120.27 (4.735)
40/80	99.06 (3.900)	104.14 (4.100)	108.20 (4.260)	116.21 (4.575)	122.82 (4.835)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Double-Sided Edge Connector

71006

PC Tail Connector Nonflanged Version

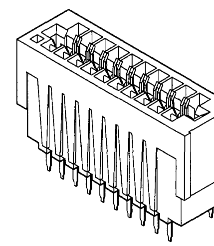
Features and Benefits
- Industry standard dimensions—drop in cost saving replacement
- PC tail only
- Robotically insertable
- Also available with .125" PC tails
- Bifurcated, cantilevered beam Phosphor Bronze terminal

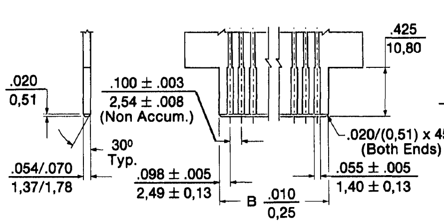
Reference Information
Product Specification: PS-71006
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 1500V rms
Insulation Resistance: 1 MΩ min.

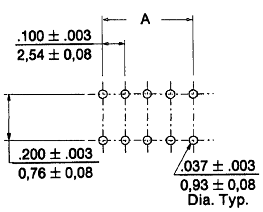
Mechanical
Normal Force: 85g min.
Durability: 100 cycles

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 15μ" Gold over 50μ" Nickel

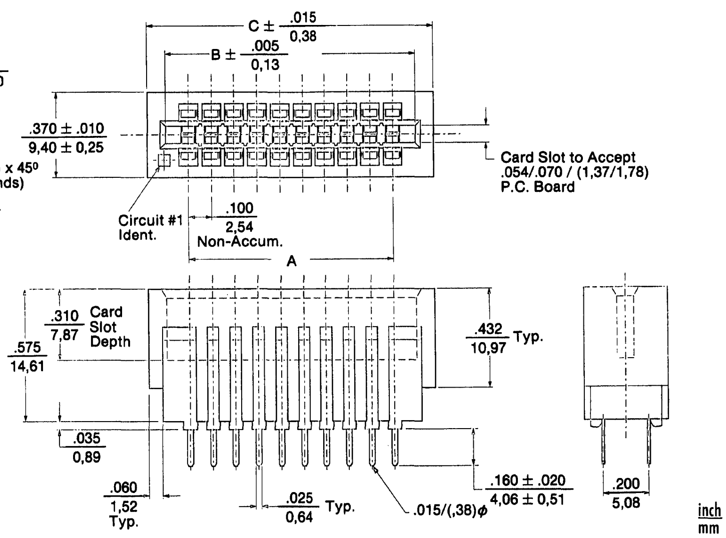




Recommended P.C. Board Dim.'s



Recommended P.C Board Hole Layout



ORDERING INFORMATION AND DIMENSIONS

Nonflanged Version							
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
10/20	15-46-1101	18/36	15-46-1181	26/52	15-46-1261	34/68	15-46-1341
11/22	15-46-1111	19/38	15-46-1191	27/54	15-46-1271	35/70	15-46-1351
12/24	15-46-1121	20/40	15-46-1201	28/56	15-46-1281	36/72	15-46-1361
13/26	15-46-1131	21/42	15-46-1211	29/58	15-46-1291	37/74	15-46-1371
14/28	15-46-1141	22/44	15-46-1221	30/60	15-46-1301	38/76	15-46-1381
15/30	15-46-1151	23/46	15-46-1231	31/62	15-46-1311	39/78	15-46-1391
16/32	15-46-1161	24/48	15-46-1241	32/64	15-46-1321	40/80	15-46-1401
17/34	15-46-1171	25/50	15-46-1251	33/66	15-46-1331		

Circuits	Dimension				
	A	B	C	D	E
10/20	22.86 (.900)	27.94 (1.100)	32.00 (1.260)	40.01 (1.575)	46.61 (1.835)
11/22	25.40 (1.000)	30.48 (1.200)	34.54 (1.360)	42.55 (1.675)	49.15 (1.935)
12/24	27.94 (1.100)	33.02 (1.300)	37.08 (1.460)	45.09 (1.775)	51.69 (2.035)
13/26	30.48 (1.200)	35.56 (1.400)	39.62 (1.560)	47.63 (1.875)	54.23 (2.135)
14/28	33.02 (1.300)	38.10 (1.500)	42.16 (1.660)	50.17 (1.975)	56.77 (2.235)
15/30	35.56 (1.400)	40.64 (1.600)	44.70 (1.760)	52.71 (2.075)	59.31 (2.335)
16/32	38.10 (1.500)	43.18 (1.700)	47.24 (1.860)	55.25 (2.175)	61.85 (2.435)
17/34	40.64 (1.600)	45.72 (1.800)	49.78 (1.960)	57.79 (2.275)	64.39 (2.535)
18/36	43.18 (1.700)	48.26 (1.900)	52.32 (2.060)	60.33 (2.375)	66.93 (2.635)
19/38	45.72 (1.800)	50.80 (2.000)	54.86 (2.160)	62.87 (2.475)	69.47 (2.735)
20/40	48.26 (1.900)	53.34 (2.100)	57.40 (2.260)	65.41 (2.575)	72.00 (2.835)
21/42	50.80 (2.000)	55.88 (2.200)	59.94 (2.360)	67.95 (2.675)	74.55 (2.935)
22/44	53.34 (2.100)	58.42 (2.300)	62.48 (2.460)	70.49 (2.775)	77.09 (3.035)
23/46	55.88 (2.200)	60.96 (2.400)	65.02 (2.560)	73.03 (2.875)	79.63 (3.135)
24/48	58.42 (2.300)	63.50 (2.500)	67.56 (2.660)	75.57 (2.975)	82.17 (3.235)
25/50	60.96 (2.400)	66.04 (2.600)	70.10 (2.760)	78.11 (3.075)	84.71 (3.335)

Circuits	Dimension				
	A	B	C	D	E
26/52	63.50 (2.500)	68.58 (2.700)	72.64 (2.860)	80.65 (3.175)	87.25 (3.435)
27/54	66.04 (2.600)	71.12 (2.800)	75.18 (2.960)	83.19 (3.275)	89.79 (3.535)
28/56	68.58 (2.700)	73.66 (2.900)	77.72 (3.060)	85.73 (3.375)	92.33 (3.635)
29/58	71.12 (2.800)	76.20 (3.000)	80.26 (3.160)	88.27 (3.475)	94.87 (3.735)
30/60	73.66 (2.900)	78.74 (3.100)	82.80 (3.260)	90.81 (3.575)	97.41 (3.835)
31/62	76.20 (3.000)	81.28 (3.200)	85.34 (3.360)	93.35 (3.675)	99.95 (3.935)
32/64	78.74 (3.100)	83.82 (3.300)	87.88 (3.460)	95.89 (3.775)	102.49 (4.035)
33/66	81.28 (3.200)	86.36 (3.400)	90.42 (3.560)	98.43 (3.875)	105.03 (4.135)
34/68	83.82 (3.300)	88.90 (3.500)	92.96 (3.660)	100.97 (3.975)	107.57 (4.235)
35/70	86.36 (3.400)	91.44 (3.600)	95.50 (3.760)	103.51 (4.075)	110.11 (4.335)
36/72	88.90 (3.500)	93.98 (3.700)	98.04 (3.860)	106.05 (4.175)	112.65 (4.435)
37/74	91.44 (3.600)	96.52 (3.800)	100.58 (3.960)	108.59 (4.275)	115.19 (4.535)
38/76	93.98 (3.700)	99.06 (3.900)	103.12 (4.060)	111.13 (4.375)	117.73 (4.635)
39/78	96.52 (3.800)	101.60 (4.000)	105.66 (4.160)	113.67 (4.475)	120.27 (4.735)
40/80	99.06 (3.900)	104.14 (4.100)	108.20 (4.260)	116.21 (4.575)	122.82 (4.835)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Double-Sided Edge Connector

87087

PC Tail Connector Low Insertion Force

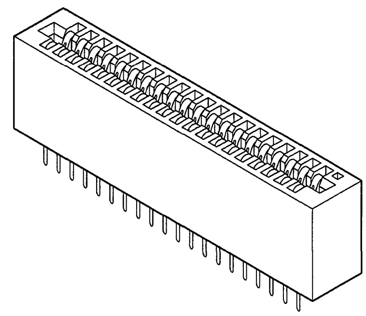
Features and Benefits
- 2.54mm (.100") contact spacing
- 5.08mm (.200") row-to-row spacing
- Bifurcated terminal

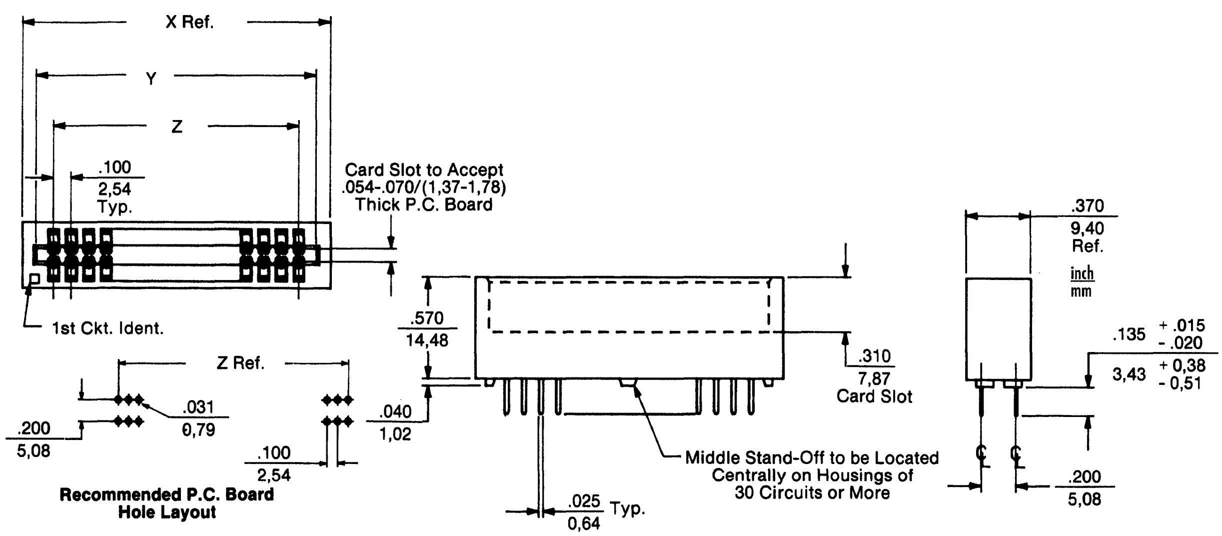
Reference Information
Product Specification: PS-71015/87087
Packaging: Tray
UL File No.: E29179 (N)
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 200 MΩ min.

Mechanical
Mating Force: 205g (7.2 oz) max. per contact pair
Unmating Force: 39g (1.4 oz) min. per contact pair
Normal Force: 113g (4 oz) min.
Durability: 2500 cycles

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Select Gold in contact area over 50µ" Nickel; Tin/Lead in solder area
Temperature: -40 to +120°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Dimension X	Dimension Y	Dimension Z
20/40	57.40 (2.260)	53.34 (2.100)	48.26 (1.900)
25/50	70.10 (2.760)	66.04 (2.600)	60.96 (2.400)

87087- XX - XX
A B

A	
00	15µ" min. Gold in contact area
12	20µ" min. Gold in contact area
03	30µ" min. Gold in contact area

B
Replace XX with no. of circuits, 20 or 25

Example: For 18/36 size with 20µ" min. Gold in contact area, order no. is 87087-1218. Contact factory for other plating options. For versions with kinked tails for PC board retention, see 71015 series.

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Double-Sided Edge Connector

87087

PC Tail Connector, Dual Slot 98-Circuit Version

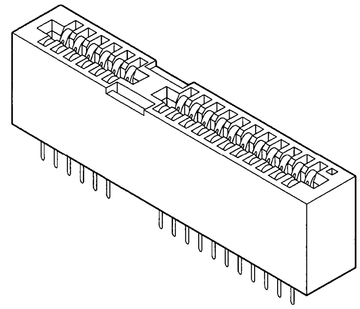
Features and Benefits
- 2.54mm (.100") contact spacing; 5.08mm (.200") row-to-row spacings
- Bifurcated terminal
- Industry-standard dimensions
- Dual slots (36 and 62 positions)
- Board retention option available

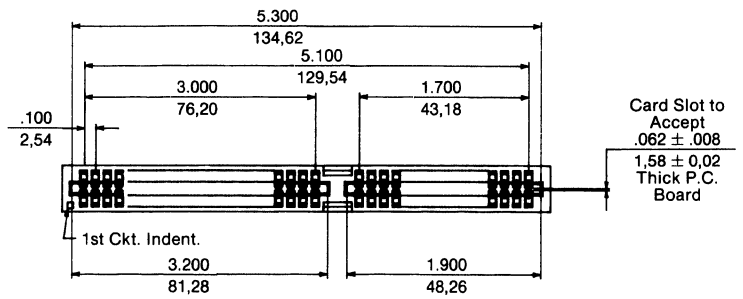
Reference Information
Product Specification: PS-71015/87087
Packaging: Tray
UL File No.: E29179(N)
Designed In: Inches

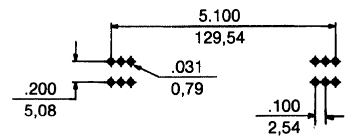
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 200 MΩ min.

Mechanical
Mating Force: 205g (7.2 oz) max. per contact pair
Unmating Force: 39g (1.4 oz) min.per contact pair
Normal Force: 113g (4 oz) min.
Durability: 2500 cycles

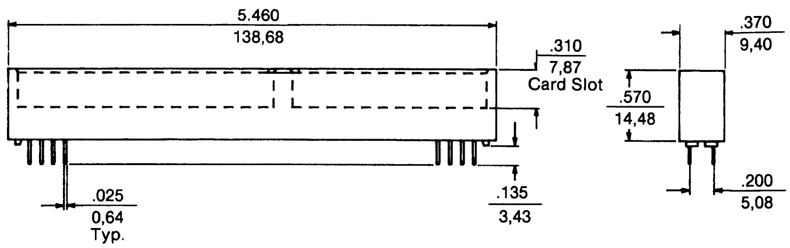
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Select Gold in contact area, over 50μ" Nickel; Tin/Lead in solder area
Temperature: -40 to +120°C







Recommended PC Board Layout



inch
mm

ORDERING INFORMATION

Contact Factory

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Double-Sided Edge Connector Housing

4338

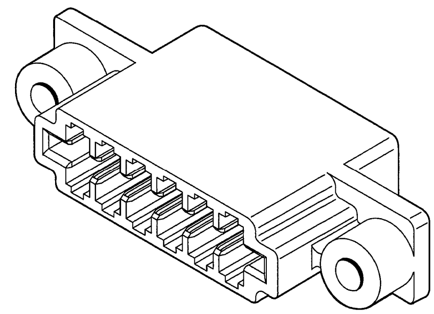
Crimp Housing

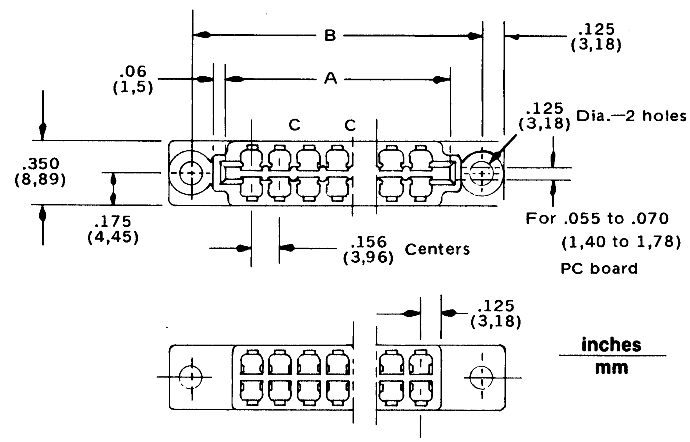
Features and Benefits
- Optional mounting flanges
- Optional polarizing keys
- Housing accommodates terminals for 18 to 30 AWG

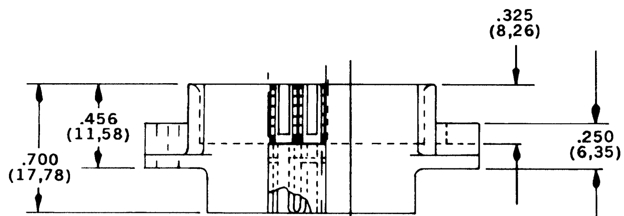
Reference Information
UL File No.: E29179
CSA File No.: LR19980
Use With: 4366, 4573 and 4574 terminals
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50,000 MΩ min.

Physical
Housing: Polyester, UL 94V-0
Temperature: -40 to +75°C
Recommended PCB Thickness: 1.57mm (.062")







Section C-C

ORDERING INFORMATION AND DIMENSIONS

Dual Circuits	Order No. With Mounting Flange	Order No. Without Mounting Flange	Dimension A	Dimension B
6	• 09-50-6065	09-50-5065	28.07 (1.105)	38.89 (1.531)
8	• 09-50-6085	09-50-5085	35.94 (1.415)	44.88 (1.767)
10	• 09-50-6105	09-50-5105	43.92 (1.729)	54.76 (2.156)
12	• 09-50-6125	09-50-5125	51.84 (2.041)	62.61 (2.465)
15	• 09-50-6155	09-50-5155	63.75 (2.510)	74.63 (2.938)
18	• 09-50-6185	09-50-5185	75.06 (2.955)	86.51 (3.406)
22	• 09-50-6225	09-50-5225	91.69 (3.610)	102.59 (4.039)
24	• 09-50-6245	09-50-5245	99.62 (3.922)	110.49 (4.350)
25	• 09-50-6255	09-50-5255	103.58 (4.078)	114.38 (4.503)
28	• 09-50-6285	09-50-5285	115.54 (4.549)	126.21 (4.969)

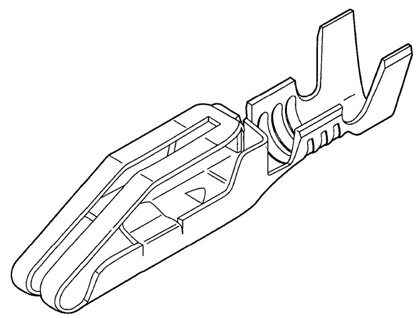
Optional Polarizing Keys	Order No.
6532 intercontact	15-04-0233
43072 on contact	15-05-1004

• US Standard Product, available through Molex franchised distributors

Double-Sided Edge Connector Terminals

4366/4573/4574

PC Crimp and Solder Eyelet



FEATURES AND SPECIFICATIONS

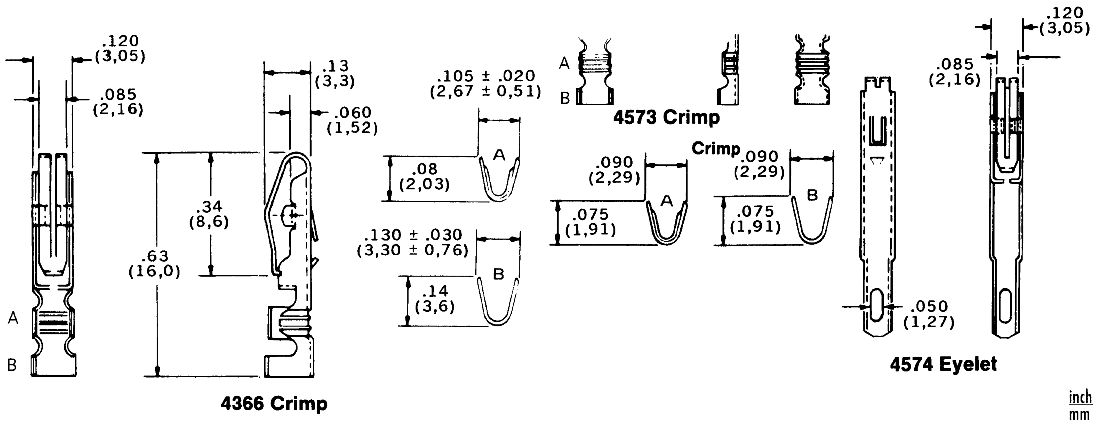
Features and Benefits
- Solder loop version available
- Anti-fishhooking feature prevents terminals from snagging
- Wire barrier prevents stripped wire from entering the contact area
- Coined outside edges prevent excess scoring of the solder pad surfaces
- Patented bifurcated contact area
- Anti-overstress feature

Reference Information
Packaging: Loose/Chain
Use With: 4338 and 4802 housings
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50,000 MΩ min.

Mechanical
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 20 lb for 18 AWG (less for smaller wire)
Durability: 25 cycles

Physical
Contact: Brass
Plating: See Table
Temperature: -40 to +75°C



ORDERING INFORMATION AND DIMENSIONS

Crimp Wire Size	Maximum Insulation Diameter	Engineering No.	Order No.		Plating
			Chain Form	Loose Form	
18-20	2.79 (.110)	4366	• 08-03-0303	• 08-03-0304	Tin
		4366*	• 08-05-0301	• 08-05-0302	Gold
22-26	1.65 (.065)	4573	• 08-03-0305	• 08-03-0306	Tin
		4573*	• 08-05-0303	• 08-05-0304	Gold
PC Tail Solder Loop		4574†	08-01-0201	• 08-01-0202	Tin

• US Standard Product, available through Molex franchised distributors
* 0.00038mm (.000015") min. selective Gold plating over 0.0008mm (.00003") min. overall Nickel plate
† Tab loop will accommodate a maximum of two 16 AWG solid wires or two 18 AWG stranded wires
For optimum crimp condition, stranded, prefused or Tin-coated wires are recommended

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Single-Sided Edge Connector

2184

PC Tail Edge Connector

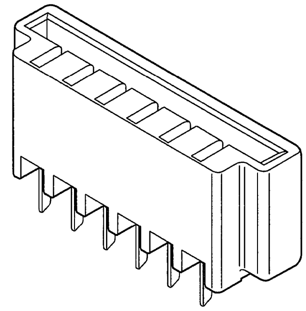
Features and Benefits
- Optional ribs provide polarization
- Top-entry or right-angle versions available
- Housing pre-assembled with terminals
- Available in natural or black colors
- Single-beam Phosphor Bronze contacts available for low-force applications

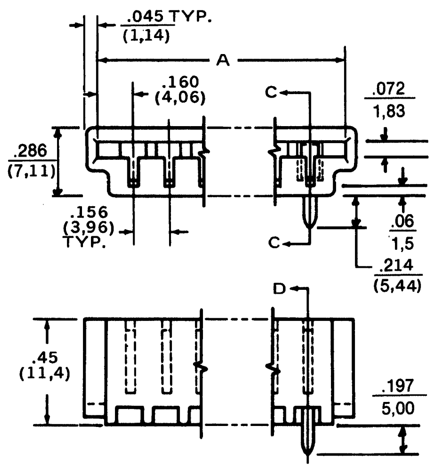
Reference Information
Packaging: Bulk
UL File No.: E29179
Mates With: Molex KK® 3.96mm (.156") center headers or 1.14mm (.045") staked pins
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50,000 MΩ min.

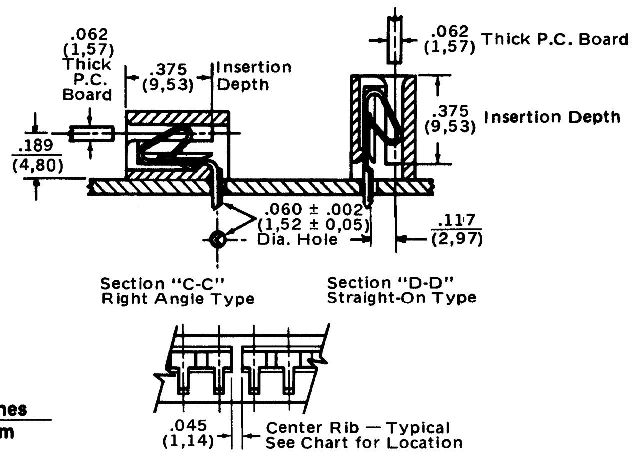
Mechanical
Contact Retention to Housing: 8 lb min.
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-2
Contact: Brass
Plating: Tin or Gold
Temperature: -40 to +75°C
Recommended PCB Thickness: 1.57mm (.062")





Inches
mm



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		Center Rib Location
	Straight		Right Angle		A	B	
	Tin	Gold	Tin	Gold			
6	09-03-1062	09-04-1062	09-03-1061	09-04-1061	27.94 (1.100)	39.01 (1.536)	
9	09-03-1092	09-04-1092	09-03-1091	09-04-1091	39.83 (1.568)	50.90 (2.004)	Between circuits 5 and 6
10	09-03-1102	09-04-1102	09-03-1101	09-04-1101	43.79 (1.724)	54.86 (2.160)	(2) Between circuits 4 and 5 / 7 and 8

Note: For additional information and PC board layout see sales drawing

FEATURES AND SPECIFICATIONS

Features and Benefits
- Optional mounting flanges
- Optional polarizing key 2011 (on contact)
- Optional patented bifurcated terminals
- Housing accommodates terminals for 18 to 30 AWG

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Use With: 1797 and 4295 terminals
Designed In: Inches

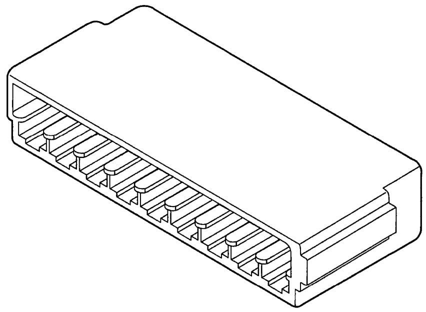
Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50,000 MΩ min.

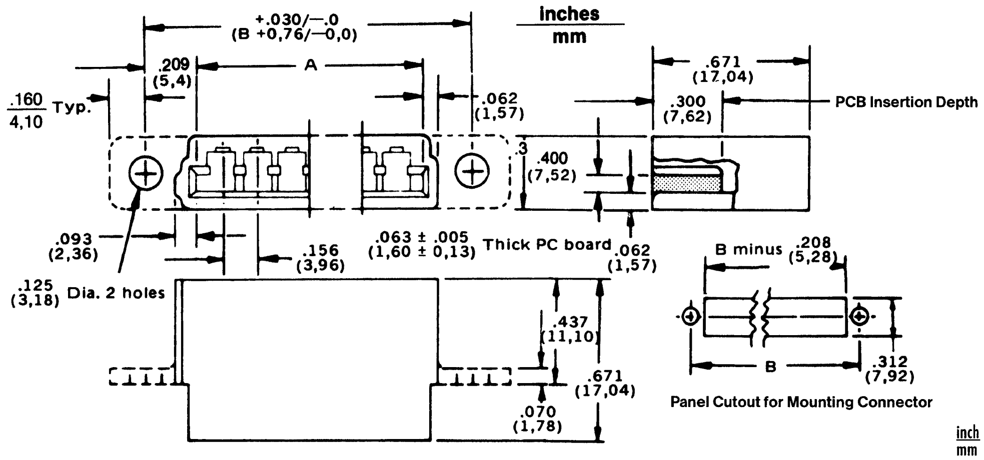
Physical
Housing: Nylon, UL 94V-2
Recommended PCB Thickness: 1.57mm (.062")

3.96mm (.156") Pitch Single-Sided Edge Connector Housing

1796

International Single-Sided PC Edge Connector Housing for Crimp Terminals





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Without Flange	With Flange	A	B
6	09-01-1061	09-01-2061	24.54 (.966)	35.96 (1.392)
9	09-01-1091	09-01-2091	36.42 (1.434)	47.24 (1.860)
12	09-01-1121	09-01-2121	48.31 (1.902)	59.13 (2.328)
15	09-01-1151	09-01-2151	60.20 (2.370)	71.02 (2.796)
18	09-01-1181	09-01-2181	72.09 (2.838)	82.91 (3.264)
21	09-01-1211	09-01-2211	83.97 (3.306)	94.79 (3.732)
22	09-01-1221	09-01-2221	87.94 (3.462)	98.76 (3.888)
24	09-01-1241	09-01-2241	95.86 (3.774)	106.68 (4.200)

FEATURES AND SPECIFICATIONS

Single-Sided Edge Connector Crimp Terminals

1797/4295

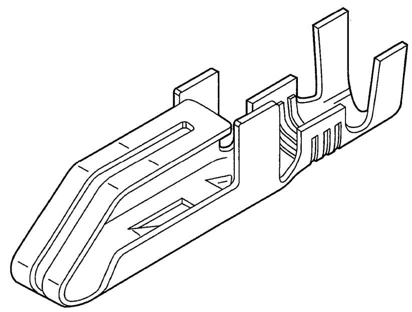
Features and Benefits
- Crimp wire sizes 18 to 30 AWG
- Patented bifurcated contact
- Available in various plating options

Reference Information
Packaging: Loose/Chain
Use With: 1796 housing
Designed In: Inches

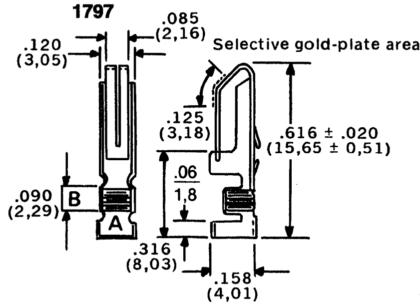
Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50 MΩ min.

Mechanical
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 20 lb for 18 AWG (less for smaller wire)
Durability: 25 cycles

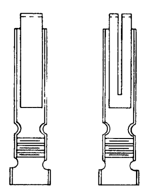
Physical
Contact: See Table
Plating: See Table



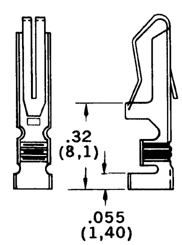
1797



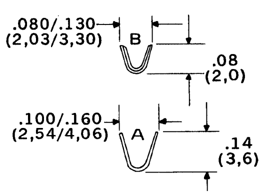
"Non-Bifurcated vs Bifurcated"



4295



inches
mm



Conductor Crimp Area

1797, 1917, 2012, 4295

Insulation Crimp Area

ORDERING INFORMATION AND DIMENSIONS

Crimp Wire Size	Order No.		Engineering No.	Plating No.	Insulation Diameter
	Chain Form	Loose Form			
18-20	08-01-0101	08-01-0102	1797-AA	1	1.52/3.05 (.060/.110)
	08-05-0103	08-05-0104	1797-AA	2	
	08-06-0101	08-06-0102	1797-AA	3	
	08-03-0101	08-03-0102	1797-BA	4	
	08-07-0101	08-07-0102	1797-BA	5	
	08-01-0112	08-01-0113	4295*	1	
22-30	08-01-0105	08-01-0106	1797-AB	1	1.02/2.29 (.040/.090)
	08-05-0105		1797-AB	2	
	08-06-0105	08-06-0106	1797-AB	3	

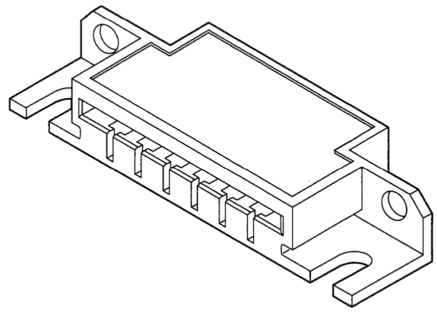
Plating No. 1: Tin plated
Plating No. 2: 0.0008mm (.00003") min. selective Gold plate over 0.0008mm (.00003") min. Nickel-plated Brass
Plating No. 3: 0.0005mm (.00002") min. Gold plate over 0.0008mm (.00003") min. Nickel-plated Brass
Plating No. 4: Tin-plated Phosphor Bronze
Plating No. 5: 0.0005mm (.00002") min. Gold plate over 0.0008mm (.00003") min. Nickel-plated Phosphor Bronze
* Nonbifurcated

FEATURES AND SPECIFICATIONS

molex® **3.96mm (.156") Pitch Single-Sided Edge Connector Housing**

2574

Polarized Edge Connector Housing for Crimp Terminals



Features and Benefits

- Optional mounting flanges
- Polarization provided by structural ribs
- Uses optional bifurcated terminals
- IDC version (7241 product)
- Housing accommodates terminals for 18 to 26 AWG

Reference Information

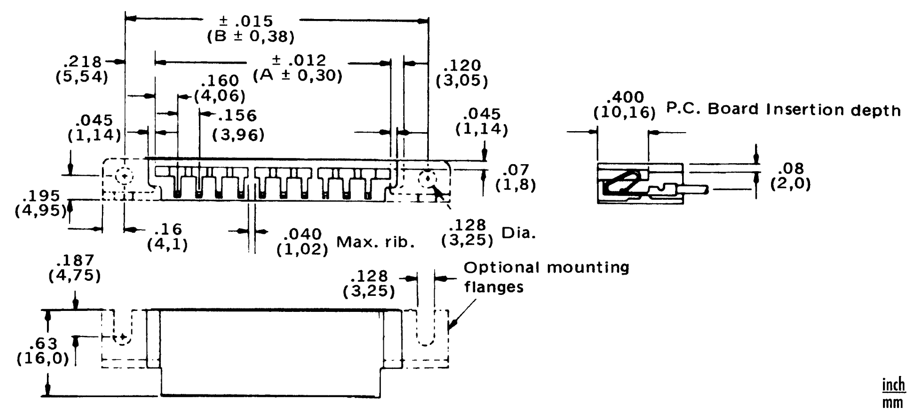
Packaging: Bulk
UL File No.: E29179
Use With: 2478, 2578 or bifurcated 2878 terminals
Designed In: Inches

Electrical

Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50,000 MΩ min.

Physical

Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C
Recommended PCB Thickness: 1.57mm (.062")



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		Center Ribs Between Circuits
	Without Flange	With Flange	A	B	
3	09-01-6031	09-01-7031	16.05 (.632)	29.00 (1.140)	
4	09-01-6041		20.02 (.788)	31.09 (1.224)	
5	09-01-6051	09-01-7051	23.98 (.944)	35.05 (1.380)	
6		09-01-7064	27.94 (1.100)	39.01 (1.536)	
6	09-01-6061	09-01-7061	27.94 (1.100)	39.01 (1.586)	2 and 3
7	09-01-6071	09-01-7071	31.90 (1.256)	42.98 (1.692)	3 and 4
8		09-01-7081	35.86 (1.412)	46.94 (1.848)	
8	09-01-6085		35.86 (1.412)	46.94 (1.848)	2 and 3
8	09-01-6086		35.86 (1.412)	46.94 (1.848)	3 and 4
8	09-01-6083	09-01-7083	35.86 (1.412)	46.94 (1.848)	5 and 6
9	09-01-6095	09-01-7095	39.83 (1.568)	50.90 (2.004)	2 and 3
9	09-01-6094	09-01-7094	39.83 (1.568)	50.90 (2.004)	5 and 6
9	09-01-6091	09-01-7091	39.83 (1.568)	50.90 (2.004)	3 and 4 / 5 and 6
10	09-01-6101	09-01-7101	43.79 (1.724)	54.86 (2.160)	4 and 5 / 7 and 8
12	09-01-6121		51.71 (2.036)	62.79 (2.472)	5 and 6 / 8 and 9
15	09-01-6151	09-01-7151	63.60 (2.504)	74.68 (2.940)	4 and 5 / 7 and 8 / 11 and 12
16	09-01-6161	09-01-7161	67.56 (2.660)	78.64 (3.096)	4 and 5 / 7 and 8 / 11 and 12
17	09-01-6171	09-01-7171	71.53 (2.816)	82.60 (3.252)	5 and 6 / 10 and 11 / 14 and 15
18	09-01-6181	09-01-7181	75.49 (2.972)	86.56 (3.408)	5 and 6 / 10 and 11
19	09-01-6191	09-01-7191	79.45 (3.128)	90.53 (3.564)	4 and 5 / 7 and 8 / 11 and 12 / 15 and 16
21	09-01-6211	09-01-7211	87.38 (3.440)	94.85 (3.876)	5 and 6 / 10 and 11 / 15 and 16
22	09-01-6224	09-01-7224	91.34 (3.596)	102.41 (4.032)	5 and 6 / 11 and 12 / 16 and 17
24	09-01-6241	09-01-7241	99.26 (3.908)	110.34 (4.344)	4 and 5 / 8 and 9 / 12 and 13 /16 and 17 / 20 and 21

Note: Use KK® terminal 2578 for 22 to 26 AWG wire, or 2478 and 2878 (bifurcated) for 18 to 24 AWG with 2.79mm (.110") diameter maximum insulation

FEATURES AND SPECIFICATIONS

Features and Benefits
- Polarization provided by structural ribs
- Optional bifurcated terminals
- Optional probe hole
- Housing accommodates terminals for 18 to 26 AWG

Reference Information
Packaging: Bulk
UL File No.: E29179
Use With: 2478, 2578 or bifurcated 2878 terminals
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50 MΩ min.

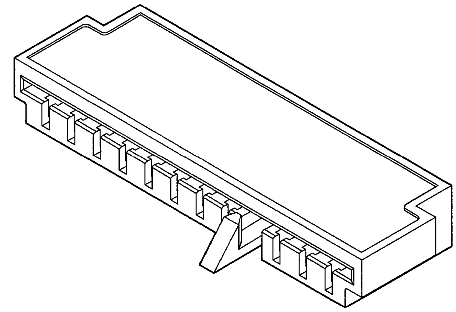
Physical
Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C
Recommended PCB Thickness: 1.57mm (.062")

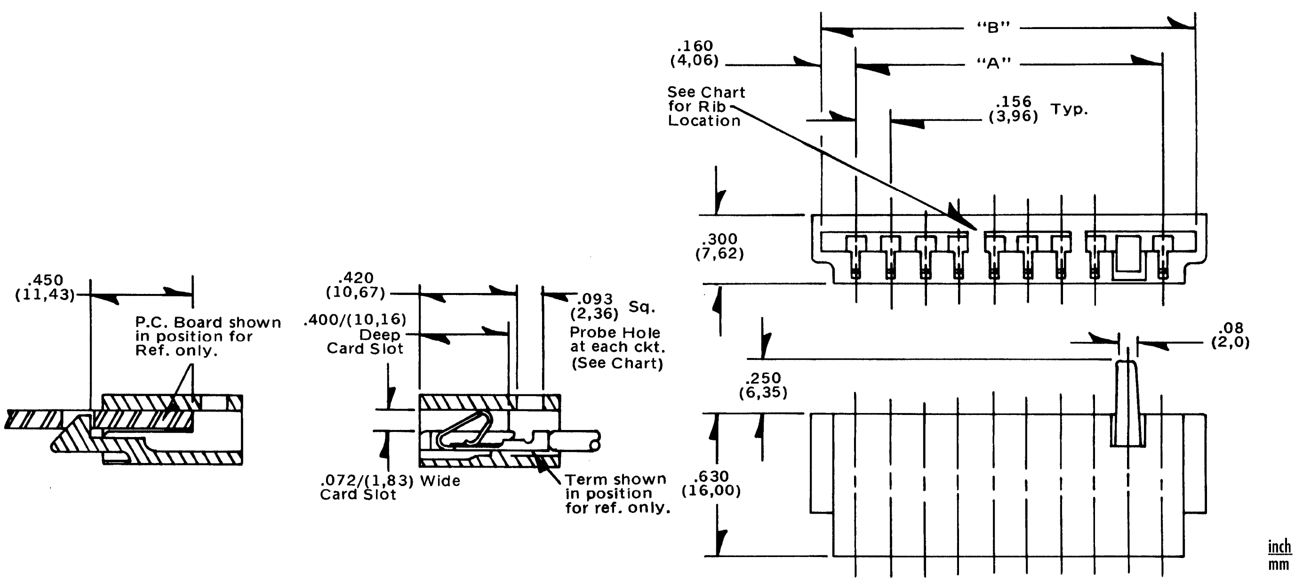
molex®

3.96mm (.156") Pitch Single-Sided Edge Connector Housing

6422

Polarized Edge Connector Housing with Positive Lock





ORDERING INFORMATION AND DIMENSIONS

Circuits*	Order No.		Dimension		Rib Located Between Circuits	Hook Located Between Circuits
	With Probe Hole	Without Probe Hole	A	B		
3		09-01-1038	7.92 (.312)	16.05 (.632)	None	1 and 3
5	09-01-1056	09-01-1058	15.85 (.624)	23.98 (.944)	None	1 and 3
6		09-01-1068	19.81 (.780)	27.94 (1.100)	None	1 and 3
9	09-01-1096	09-01-1098	31.70 (1.248)	39.83 (1.568)	3 and 4 / 5 and 6	3 and 5
10		09-01-1108	35.66 (1.404)	43.79 (1.724)	4 and 5 / 7 and 8	8 and 10
12		09-01-1128	43.59 (1.716)	51.71 (2.036)	6 and 7	8 and 10
15	09-01-1156		55.47 (2.184)	63.61 (2.504)	None	8 and 10

* 1 circuit lost to provide locking hook; i.e., 3 circuit accepts 2 terminals only

FEATURES AND SPECIFICATIONS

Single-Sided Terminals

2478/2578/2878

Features and Benefits

- Crimp wire sizes 18 to 26 AWG
- Patented double cantilever design
- Complete line of terminal crimping equipment available
- 2878 bifurcated terminal offers 2 points of contact for increased reliability

Reference Information

Packaging: Loose/Chain
Use With: 2574 housing
Designed In: Inches

Electrical

Voltage: 250V
Current: Use table

AWG	18	20	22	24	26
Phosphor Bronze (Amperes max.)	7.00	6.25	5.50	5.00	4.50
Brass (Amperes max.)	5.00	4.75	4.50	4.25	4.00

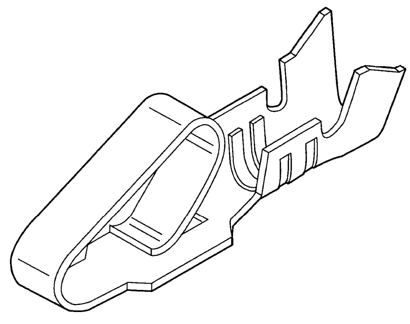
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50,000 MΩ min.

Mechanical

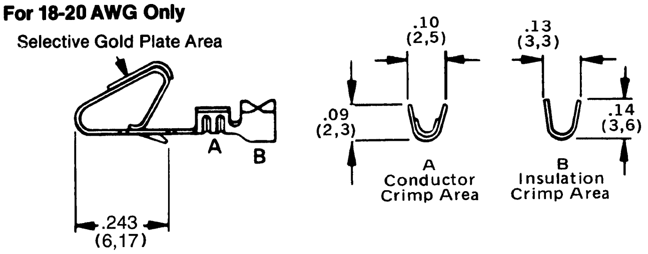
Contact Insertion Force: 1.36kg (3 lb) max.
Contact Retention to Housing: 3.63kg (8 lb) min. when pulled in an axial direction
Normal Force: 0.75kg (1.65 lb)
Durability: 25 cycles

Physical

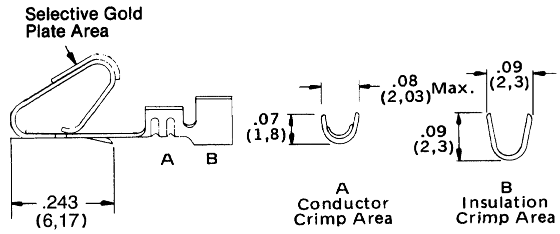
Contact: Brass/Phosphor Bronze
Plating: See Table
Temperature: -40 to +75°C



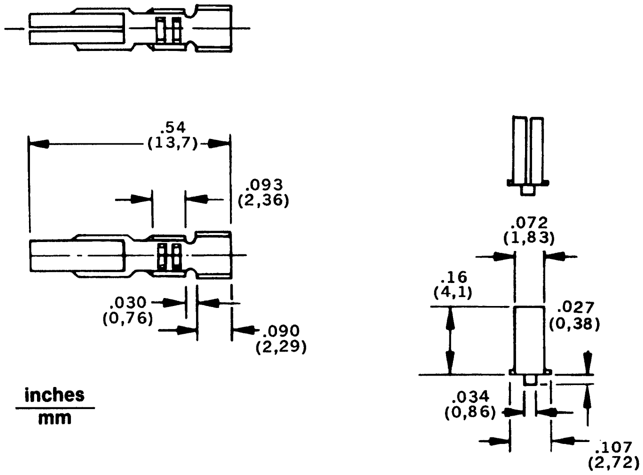
2478
For 18-20 AWG Only



2578
For 22-26 AWG



2878 Bifurcated Version
For 18-22 AWG



ORDERING INFORMATION AND DIMENSIONS

Wire Size	Maximum Insulation Outside Diameter	Series	Material	Tin Plating		Gold Plating No. 1		Gold Plating No. 2	
				Loose	Chain	Loose	Chain	Loose	Chain
18-20	2.79 (.110)	2478	Phosphor Bronze	• 08-52-0072	• 08-52-0071	• 08-58-0122	• 08-58-0121	• 08-65-0115	• 08-65-0114
18-20	2.79 (.110)	2478	Brass	08-50-0106	08-50-0105	08-56-0106	08-56-0105	08-55-0104	08-55-0103
18-22	2.79 (.110)	2878	Phosphor Bronze	• 08-52-0127	• 08-52-0126	• 08-58-0128	• 08-58-0127	• 08-65-0119	• 08-65-0118
18-22	2.79 (.110)	2878	Brass	08-50-0116	08-50-0115				
22-26	1.65 (.065)	2578	Phosphor Bronze	• 08-50-0134	• 08-50-0133	• 08-58-0126	• 08-58-0125	• 08-65-0117	• 08-65-0116
22-26	1.65 (.065)	2578	Brass	08-50-0108	08-50-0107	08-56-0108	08-56-0107	08-55-0106	08-55-0105

Terminal Engineering No.	Hand Tools		Crimp Machine	
	Crimping Order and Engineering No. (JHTR-2445-A)	Extraction Order and Engineering No. (HTA-2174)	Bench Order and Engineering No. (TM-40D)	Automatic Type
2478	11-01-0026	11-03-0016	11-04-0418	KM40S
2578(a)			11-04-0420	
2878			11-04-0418	

• US Standard Product, available through Molex franchised distributors
Recommended wire range assumes stranded wire
Plating No. 1: 20μ" min. Gold in contact area with a flash overall
Plating No. 2: 15μ" min. Gold in contact area only

ORDERING INFORMATION *Preferred Version in the US*

Application Tooling Crimp Tooling for Sockets and Edge Connectors

Crimp Tooling Molex US

Presses	
Description	**Order No.**
TM-44 Press without Mini-Mac (220V)	11-09-2074
TM-42 Press without Dies (110V)	69002-5001
TM-144 Press and Stripper without Mini-Mac (220V)	11-09-2073
TM-7 Press without Mini-Mac (110V)	11-05-0043
TM-7 Press without Mini-Mac (220V)	11-05-0046

Housing Series No.	Terminal Series No.	Order No.								Wire Gauge AWG (mm²)	Insulation Diameter
		Hand Crimper	Extraction Tool	Insertion Tool	Terminator Die†	Terminator Die† Spare Tooling	Mini-Mac	Mini-Mac Spare Tooling	TM-144‡		
1796	1797	11-01-0203	• 11-03-0002		11-40-2005	11-40-3005	11-18-2051	11-18-3051		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1796	1917	• 11-01-0008	• 11-03-0003		11-40-2005	11-40-3005	11-18-2051	11-18-3051		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1796	2012	• 11-01-0008	• 11-03-0003		11-40-2005	11-40-3005	11-18-2051	11-18-3051		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1796	2014	• 11-01-0006	• 11-03-0003		11-40-2011	11-40-3011				24-30 (0.20-0.05)	1.00-2.30 (.040-.090)
2574, 6422	2477-2478*	• 11-01-0026	• 11-03-0016		11-40-2096	11-40-3096	11-18-2210	11-18-3203	11-09-2082	18-24 (0.80-0.20)	2.80 (.110) max.
2539, 2574, 6422	2578	• 11-01-0026	• 11-03-0016		11-40-2097	11-40-3097	11-18-2022	11-18-3021		22-26 (0.35-0.12)	1.65 (.065) max.
4025	2759	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2265	11-40-3267	11-18-2171	11-18-3162		22-30 (0.35-0.05)	1.57 (.062) max.
2574, 6422	2878	• 11-01-0026	• 11-03-0016		11-40-2096	11-40-3096	11-18-2210	11-18-3203		18-24 (0.80-0.20)	2.80 (.110) max.
1796	4295	• 11-01-0008	• 11-03-0003		11-40-2005	11-40-3005	11-18-2051	11-18-3051		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
4338, 4802	4366	11-01-0203	• 11-03-0003		11-40-2005	11-40-3005	11-18-2051	11-18-3051		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
4338, 4802	4573	11-01-0203	• 11-03-0003		11-40-2011	11-40-3011	11-18-2210	11-18-3203		24-30 (0.20-0.05)	1.00-2.30 (.040-.090)

ORDERING INFORMATION *Preferred Version in Europe—Not Available in the US*

Crimp Tooling Molex Europe

Housing Series No.	Terminal Series No.	Order No.					Wire Gauge AWG (mm²)	Insulation Diameter
		Hand Crimper	Extraction Tool	Insertion Tool	Mini-Mac	Mini-Mac Spare Tooling		
1796	1917				69037-1109	69037-2109		
2574, 6422	2477-2478*	69008-0953	11-03-0016		69037-1008	69037-2008	18-24 (0.80-0.20)	2.80 (.110) max.
2539, 2574, 6422	2578	69008-0954	11-03-0016		69037-1010	69037-2010	22-26 (0.35-0.12)	1.65 (.065) max.
4025	2759	69008-0955	11-03-0022	11-02-0004	69037-1027	69037-2027	22-30 (0.35-0.05)	1.57 (.062) max.
2574, 6422	2878				69037-1008	69037-2008	18-24 (0.80-0.20)	2.80 (.110) max.

ORDERING INFORMATION *Preferred Version in Japan—Not Available in the US*

Crimp Tooling Molex Japan

Presses	
Description	**Order No.**
Press for Crimp Die	M15
Press for Modular Crimp Die	M15A
Mini Press for Modular Crimp Die	57177-4000

Housing Series No.	Terminal Series No.	Order No.					Wire Gauge AWG (mm²)	Insulation Diameter
		Hand Crimper	Extraction Tool	Insertion Tool	Modular Crimp Die	Crimp Die		
2574, 6422	2477-2478*	JHTR2455A			JM5868A	CDJ2242	18-24 (0.80-0.20)	2.80 (.110) max.
2539, 2574, 6422	2578	JHTR2455A			JM5868A	CDJ2242	22-26 (0.35-0.12)	1.65 (.065) max.
4025	2759	JHTR2262A			JM5858A	CDJ2810	22-26 (0.35-0.12)	(1.30-1.70)
2574, 6422	2878	JHTR2262J			JM5858A	CDJ5259	26-28 (0.12-0.08)	(0.80-1.30)

• US Standard Product, available through Molex franchised distributors
* TM-80 available—Order No. 69015-7000
† For use with TM-40/42 or Base Unit
‡ Includes Mini-Mac

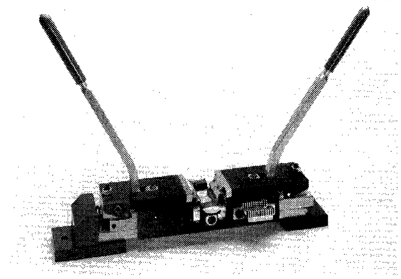
FEATURES AND SPECIFICATIONS

Application Tooling Modular IC Socket System and SIMM Module Tooling

Manual Bench Tool Double-Sided for Modular IC Socket System

Features
- Forms both sides of IC chip to carrier in 1 cycle
- Provisions for static grounding
- Interchangeable inserts for 24, 28 and 32 circuit carriers
- Compact and lightweight
- Minimal operator effort required

Specifications
Size: Width—114mm (4.5")
Depth—330mm (13")
Height—165mm (6.5")
Weight: 2.63kg (5 lb)
Rate: Up to 400 assemblies per hour, dependent on operator speed and application. Annual capacity of 800,000 assemblies.



ORDERING INFORMATION

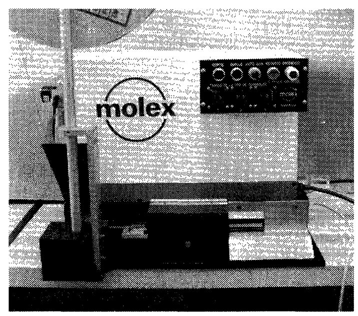
IC Size	Order No.		
	Base Machine with Tool Kit	Tool Kit Only	Base Machine Only
24 Circuit	11-20-0976	11-20-0662	11-20-0647
28 Circuit	11-20-0977	11-20-0663	11-20-0647
32 Circuit	11-20-0978	11-20-0951	11-20-0647

Customer must supply 12 I.C.'s with order to assure proper operation

Terminal Cutter for 50020 and 50002 Terminals

ORDERING INFORMATION

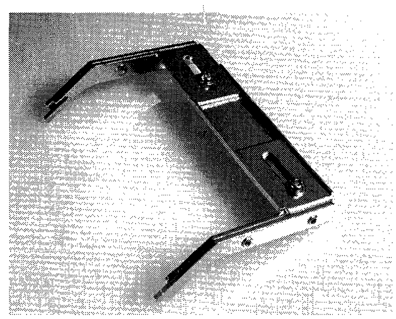
Description	Order No.	Terminal No.
Terminal Cutter	11-20-1219	50002, 50020



SIMM Module Extractor Tool

ORDERING INFORMATION

Description	Order No.
SIMM Extractor Tool	89500-0001



molex FFC/FPC Connectors

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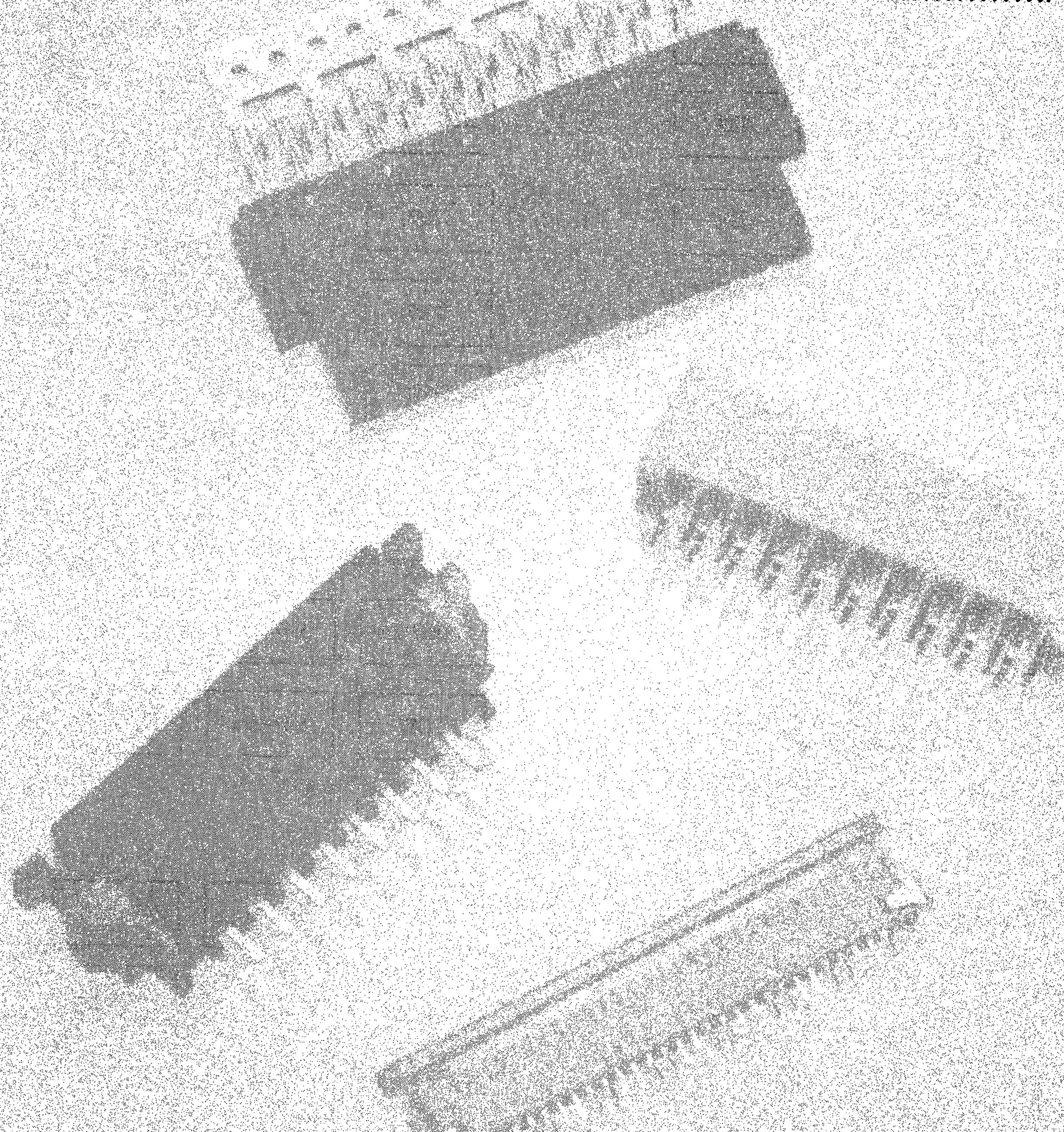


FFC/FPC Connectors Product Matrix

SMT Connectors

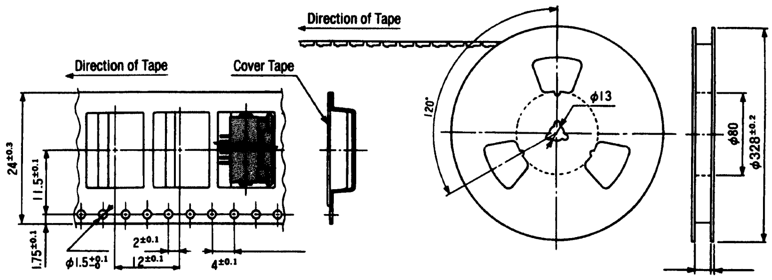
	0.50mm	0.625mm	0.80mm	1.00mm	1.25mm	2.54mm
ZIF Straight	52559	52205		52610		
ZIF Right Angle Top Contact	52745/52435	52204		52207/71220		
ZIF Right Angle Bottom Contact	52746/52437	52396		52271		
Non-ZIF Straight		52711		52808		
Non-ZIF Right Angle	52689 Dual Contact	52710 Top Contact	52557 Dual Contact	52643 Dual Contact		

Through-Hole Connectors

	0.50mm	0.625mm	0.80mm	1.00mm	1.25mm	2.54mm
ZIF Straight				52030/71226	5597-NCPB	90500-00XX
ZIF Right Angle Top Contact				52089	5597-NAPB	90500-01XX
ZIF Right Angle Bottom Contact				52043		
Non-ZIF Straight				52806	52045	5299-NCPB
Non-ZIF Right Angle				52807 Top Contact	52044 Top Contact	5299-NAPB Bottom Contact
Non-ZIF Bottom Entry					52492	

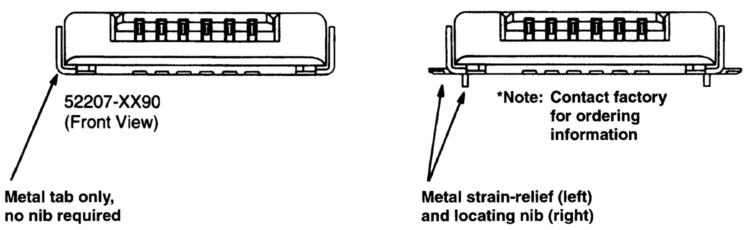
Embossed Tape Packaging of SMT Connectors

EIAJ Standard Reel Dimensions



*Note: EIAJ offers several standard reel dimensions. Above

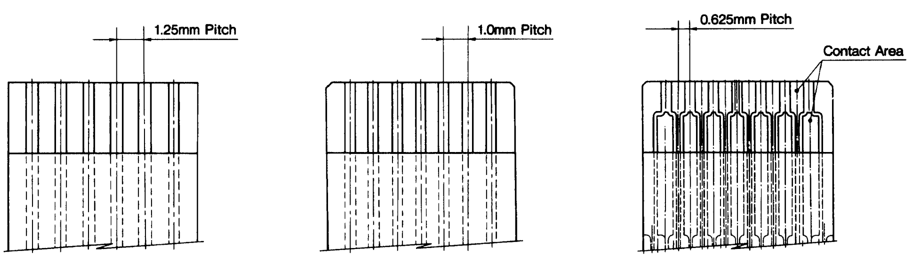
1.00mm SMT Connector



Molex offers tape packaging for robotic insertion of a variety of our SMT connectors. Tape packaging eliminates handling and provides for automatic higher insertion speeds compared to conventional tray packaging and hand assembly.

The tape-packaging style of our 1.00mm surface mount FFC/FPC connector (shown left) meets EIAJ (Electronics Industry Association of Japan) standards for robotic vacuum insertion machines, the most common type of insertion equipment used worldwide for robotic placement of SMT components.

A Closer Look at FFC and FPC Cable



Molex's FFC/FPC connectors use thin, light cable that can accommodate ultra-fine pitch sizes. The type of cable used often varies depending on the pitch size and application.

Our 1.25mm pitch connectors often use FFC (flat flexible cable). FFC is made of flat laminated Copper wire. It is usually offered in 0.30mm thickness.

For 1.00mm pitch and below, FPC (flexible printed circuitry) is usually used. FPC is made of polyimide material and etched Copper conductors. FPC can accept more severe tolerances than FFC and is also available in 0.30mm-thick versions.

Our 0.625mm pitch FPC connectors utilize a staggered contact principle that allows for a wider conductor area on the cable and more reliable connection (see diagram below). This 0.625mm pitch cable is available in 0.20mm thickness.

0.50mm (.020") Pitch FFC/FPC Connector

52559

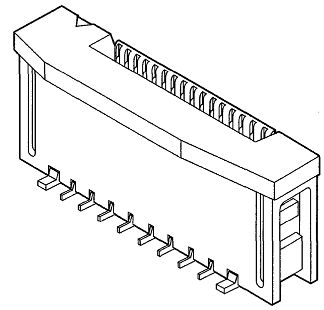
Straight, SMT, ZIF

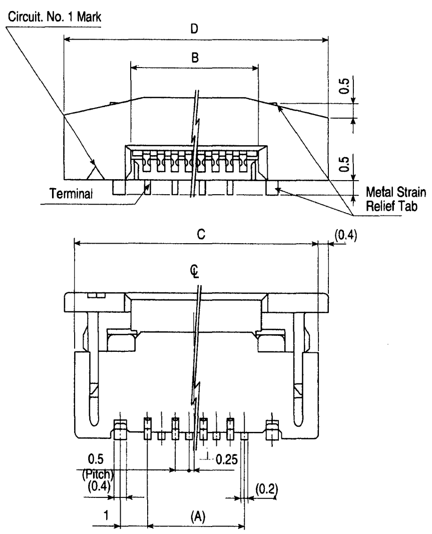
Features and Benefits
- Sizes 6 to 40 circuits
- For 0.30mm thick FFC/FPC

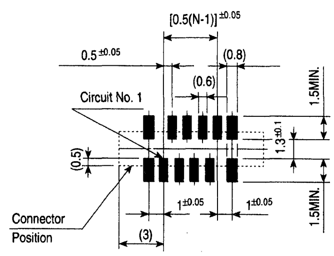
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 50 MΩ min.

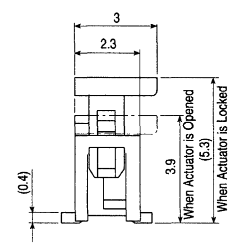
Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C







PCB Layout For Surface Mounting



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				Carrier Tape Width
		A	B	C	D	
6	52559-0692	2.50 (.098)	3.65 (.144)	7.90 (.311)	8.70 (.343)	24.00 (.945)
8	52559-0890	3.50 (.138)	4.65 (.183)	8.90 (.350)	9.70 (.382)	24.00 (.945)
10	52559-1092	4.50 (.177)	5.65 (.222)	9.90 (.390)	10.70 (.421)	24.00 (.945)
13	52559-1390	6.00 (.236)	7.15 (.281)	11.40 (.449)	12.20 (.480)	24.00 (.945)
14	52559-1490	6.50 (.256)	7.65 (.301)	11.90 (.469)	12.70 (.500)	24.00 (.945)
15	52559-1592	7.00 (.276)	8.15 (.321)	12.40 (.488)	13.20 (.520)	24.00 (.945)
16	52559-1690	7.50 (.295)	8.65 (.341)	12.90 (.508)	13.70 (.539)	24.00 (.945)
17	52559-1792	8.00 (.315)	9.15 (.360)	13.40 (.528)	14.20 (.559)	24.00 (.945)
18	52559-1890	8.50 (.335)	9.65 (.380)	13.90 (.547)	14.70 (.579)	24.00 (.945)
20	52559-2090	9.50 (.374)	10.65 (.419)	14.90 (.587)	15.70 (.618)	24.00 (.945)
22	52559-2290	10.50 (.413)	11.65 (.459)	15.90 (.625)	16.70 (.657)	24.00 (.945)
24	52559-2492	11.50 (.453)	12.65 (.498)	16.90 (.665)	17.70 (.697)	24.00 (.945)
25	52559-2590	12.00 (.472)	13.15 (.518)	17.40 (.685)	18.20 (.717)	32.00 (1.260)
28	52559-2892	13.50 (.531)	14.65 (.577)	18.90 (.744)	19.70 (.776)	32.00 (1.260)
30	52559-3092	14.50 (.571)	15.65 (.616)	19.90 (.783)	20.70 (.815)	32.00 (1.260)
32	52559-3292	15.50 (.610)	16.65 (.656)	20.90 (.823)	21.70 (.854)	32.00 (1.260)
40	52559-4092	19.50 (.768)	20.65 (.813)	24.90 (.980)	25.70 (1.012)	44.00 (1.732)

FEATURES AND SPECIFICATIONS

0.50mm (.020") Pitch FFC/FPC Connector

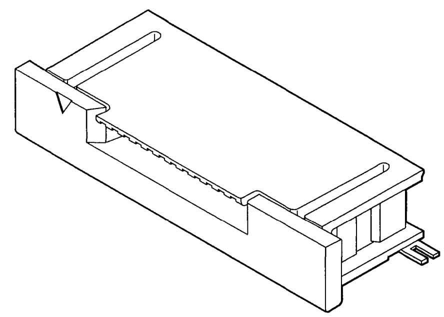
52745/52435 Right Angle, SMT, ZIF

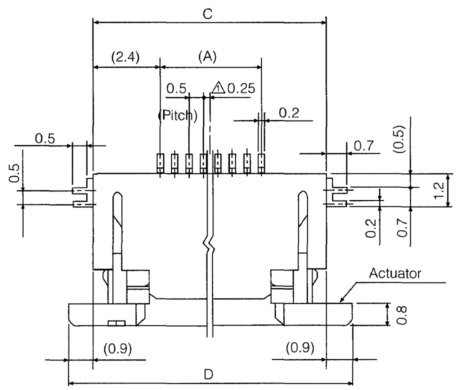
Features and Benefits
- Sizes 4 to 30 circuits
- For 0.30mm thick FFC/FPC

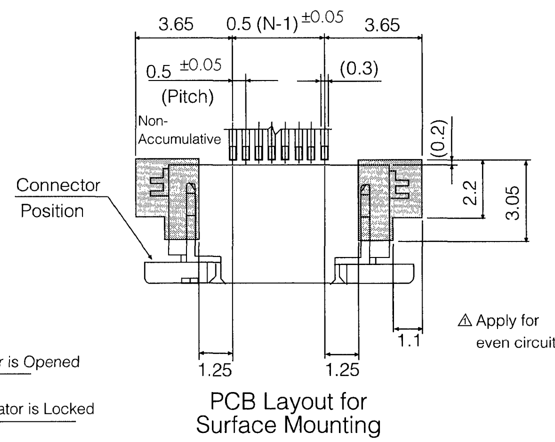
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

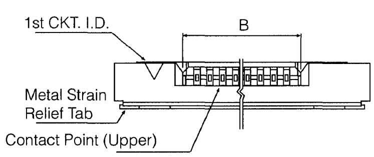
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 50 MΩ min.

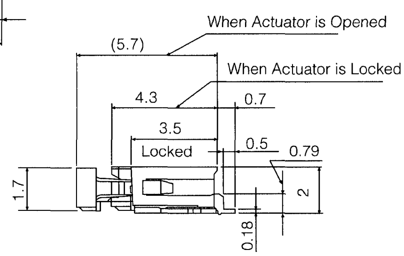
Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C











ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
4	52745-0490	1.50 (.059)	2.65 (.104)	6.30 (.248)	8.10 (.319)	16.00 (.630)
6	52745-0690	2.50 (.098)	3.65 (.144)	7.30 (.287)	9.10 (.358)	24.00 (.945)
7	52745-0790	3.00 (.118)	4.15 (.163)	7.80 (.307)	9.60 (.378)	24.00 (.945)
8	52745-0890	3.50 (.138)	4.65 (.183)	8.30 (.327)	10.10 (.398)	24.00 (.945)
9	52745-0990	4.00 (.157)	5.15 (.203)	8.80 (.346)	10.60 (.417)	24.00 (.945)
10	52745-1090	4.50 (.177)	5.65 (.222)	9.30 (.366)	11.10 (.437)	24.00 (.945)
11	52745-1190	5.00 (.197)	6.15 (.242)	9.80 (.386)	11.60 (.457)	24.00 (.945)
12	52745-1290	5.50 (.217)	6.65 (.262)	10.30 (.406)	12.10 (.476)	24.00 (.945)
13	52745-1390	6.00 (.236)	7.15 (.281)	10.80 (.425)	12.60 (.496)	24.00 (.945)
14	52745-1490	6.50 (.256)	7.65 (.301)	11.30 (.445)	13.10 (.516)	24.00 (.945)
15	52745-1590	7.00 (.276)	8.15 (.321)	11.80 (.465)	13.60 (.535)	24.00 (.945)
16	52745-1690	7.50 (.295)	8.65 (.341)	12.30 (.484)	14.10 (.555)	24.00 (.945)
17	52745-1790	8.00 (.315)	9.15 (.360)	12.80 (.504)	14.60 (.575)	24.00 (.945)

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
18	52745-1890	8.50 (.335)	9.65 (.380)	13.30 (.524)	15.10 (.594)	24.00 (.945)
19	52745-1990	9.00 (.354)	10.15 (.400)	13.80 (.543)	15.60 (.614)	24.00 (.945)
20	52745-2090	9.50 (.374)	10.65 (.419)	14.30 (.563)	16.10 (.634)	24.00 (.945)
21	52435-2191	10.00 (.394)	11.15 (.439)	14.80 (.583)	16.60 (.654)	24.00 (.945)
22	52435-2291	10.50 (.413)	11.65 (.459)	15.30 (.602)	17.10 (.673)	24.00 (.945)
23	52435-2391	11.00 (.433)	12.15 (.478)	15.80 (.622)	17.60 (.693)	32.00 (1.260)
24	52435-2491	11.50 (.453)	12.65 (.498)	16.30 (.642)	18.10 (.713)	32.00 (1.260)
25	52435-2591	12.00 (.472)	13.15 (.518)	16.80 (.661)	18.60 (.732)	32.00 (1.260)
26	52435-2691	12.50 (.492)	13.65 (.537)	17.30 (.681)	19.10 (.752)	32.00 (1.260)
27	52435-2791	13.00 (.512)	14.15 (.557)	17.80 (.701)	19.60 (.772)	32.00 (1.260)
28	52435-2891	13.50 (.531)	14.65 (.577)	18.30 (.720)	20.10 (.791)	32.00 (1.260)
29	52435-2991	14.00 (.551)	15.15 (.596)	18.80 (.740)	20.60 (.811)	32.00 (1.260)
30	52435-3091	14.50 (.571)	15.65 (.616)	19.30 (.760)	21.10 (.831)	32.00 (1.260)

FEATURES AND SPECIFICATIONS

0.50mm (.020") Pitch FFC/FPC Connector

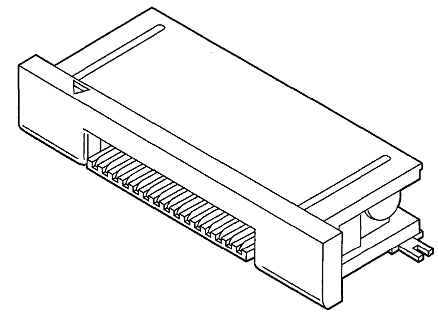
52746/52437 Right Angle, SMT, ZIF

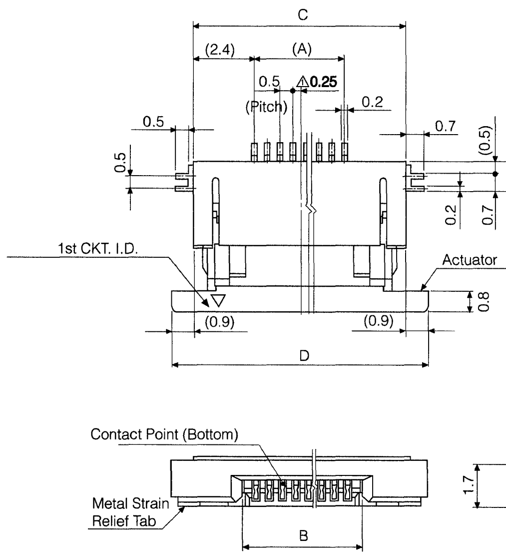
Features and Benefits
- Sizes 4 to 30 circuits
- For 0.30mm thick FFC/FPC

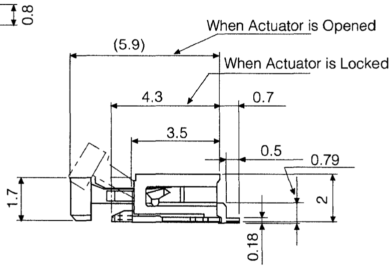
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

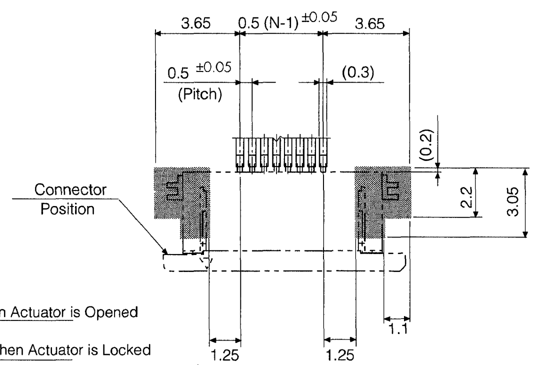
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 50 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C









PCB Layout for Surface Mounting

△Apply for even circuit

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
4	52745-0490	1.50 (.059)	2.65 (.104)	6.30 (.248)	8.10 (.319)	16.00 (.630)
6	52745-0690	2.50 (.098)	3.65 (.144)	7.30 (.287)	9.10 (.358)	24.00 (.945)
7	52745-0790	3.00 (.118)	4.15 (.163)	7.80 (.307)	9.60 (.378)	24.00 (.945)
8	52745-0890	3.50 (.138)	4.65 (.183)	8.30 (.327)	10.10 (.398)	24.00 (.945)
9	52745-0990	4.00 (.157)	5.15 (.203)	8.80 (.346)	10.60 (.417)	24.00 (.945)
10	52745-1090	4.50 (.177)	5.65 (.222)	9.30 (.366)	11.10 (.437)	24.00 (.945)
11	52745-1190	5.00 (.197)	6.15 (.242)	9.80 (.386)	11.60 (.457)	24.00 (.945)
12	52745-1290	5.50 (.217)	6.65 (.262)	10.30 (.406)	12.10 (.476)	24.00 (.945)
13	52745-1390	6.00 (.236)	7.15 (.281)	10.80 (.425)	12.60 (.496)	24.00 (.945)
14	52745-1490	6.50 (.256)	7.65 (.301)	11.30 (.445)	13.10 (.516)	24.00 (.945)
15	52745-1590	7.00 (.276)	8.15 (.321)	11.80 (.465)	13.60 (.535)	24.00 (.945)
16	52745-1690	7.50 (.295)	8.65 (.341)	12.30 (.484)	14.10 (.555)	24.00 (.945)
17	52745-1790	8.00 (.315)	9.15 (.360)	12.80 (.504)	14.60 (.575)	24.00 (.945)

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
18	52745-1890	8.50 (.335)	9.65 (.380)	13.30 (.524)	15.10 (.594)	24.00 (.945)
19	52745-1990	9.00 (.354)	10.15 (.400)	13.80 (.543)	15.60 (.614)	24.00 (.945)
20	52745-2090	9.50 (.374)	10.65 (.419)	14.30 (.563)	16.10 (.634)	24.00 (.945)
21	52437-2191	10.00 (.394)	11.15 (.439)	14.80 (.583)	16.60 (.654)	24.00 (.945)
22	52437-2291	10.50 (.413)	11.65 (.459)	15.30 (.602)	17.10 (.673)	24.00 (.945)
23	52437-2391	11.00 (.433)	12.15 (.478)	15.80 (.622)	17.60 (.693)	32.00 (1.260)
24	52437-2491	11.50 (.453)	12.65 (.498)	16.30 (.642)	18.10 (.713)	32.00 (1.260)
25	52437-2591	12.00 (.472)	13.15 (.518)	16.80 (.661)	18.60 (.732)	32.00 (1.260)
26	52437-2691	12.50 (.492)	13.65 (.537)	17.30 (.681)	19.10 (.752)	32.00 (1.260)
27	52437-2791	13.00 (.512)	14.15 (.557)	17.80 (.701)	19.60 (.772)	32.00 (1.260)
28	52437-2891	13.50 (.531)	14.65 (.577)	18.30 (.720)	20.10 (.791)	32.00 (1.260)
29	52437-2991	14.00 (.551)	15.15 (.596)	18.80 (.740)	20.60 (.811)	32.00 (1.260)
30	52437-3091	14.50 (.571)	15.65 (.616)	19.30 (.760)	21.10 (.831)	32.00 (1.260)

FEATURES AND SPECIFICATIONS

0.50mm (.020") Pitch FFC/FPC Connector

52689

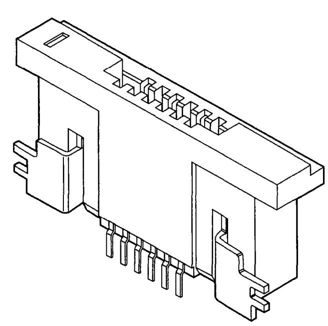
Right Angle, SMT Non-ZIF

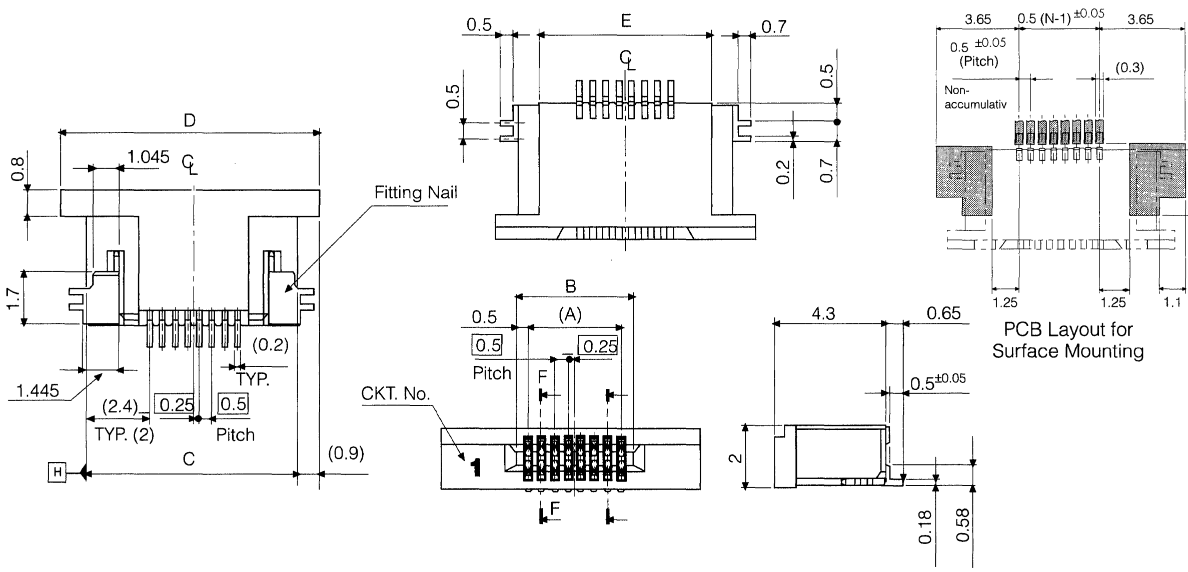
Features and Benefits
- Sizes 5 to 30 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 50 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin/Lead
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
5	52689-0593	2.00 (.079)	3.00 (.118)	6.80 (.268)	8.60 (.339)	24.00 (.945)
6	52689-0693	2.50 (.098)	3.50 (.138)	7.30 (.287)	9.10 (.358)	24.00 (.945)
7	52689-0793	3.00 (.118)	4.00 (.157)	7.80 (.307)	9.60 (.378)	24.00 (.945)
8	52689-0893	3.50 (.138)	4.50 (.177)	8.30 (.327)	10.10 (.398)	24.00 (.945)
9	52689-0993	4.00 (.157)	5.00 (.197)	8.80 (.346)	10.60 (.417)	24.00 (.945)
10	52689-1093	4.50 (.177)	5.50 (.217)	9.30 (.366)	11.10 (.437)	24.00 (.945)
11	52689-1193	5.00 (.197)	6.00 (.236)	9.80 (.386)	11.60 (.457)	24.00 (.945)
12	52689-1293	5.50 (.217)	6.50 (.256)	10.30 (.406)	12.10 (.476)	24.00 (.945)
13	52689-1393	6.00 (.236)	7.00 (.276)	10.80 (.425)	12.60 (.496)	24.00 (.945)
14	52689-1493	6.50 (.256)	7.50 (.295)	11.30 (.445)	13.10 (.516)	24.00 (.945)
15	52689-1593	7.00 (.276)	8.00 (.315)	11.80 (.465)	13.60 (.535)	24.00 (.945)
16	52689-1693	7.50 (.295)	8.50 (.335)	12.30 (.484)	14.10 (.555)	24.00 (.945)
17	52689-1793	8.00 (.315)	9.00 (.354)	12.80 (.504)	14.60 (.575)	24.00 (.945)

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
18	52689-1893	8.50 (.335)	9.50 (.374)	13.30 (.524)	15.10 (.594)	24.00 (.945)
19	52689-1993	9.00 (.354)	10.00 (.394)	13.80 (.543)	15.60 (.614)	24.00 (.945)
20	52689-2093	9.50 (.374)	10.50 (.413)	14.30 (.563)	16.10 (.634)	24.00 (.945)
21	52689-2193	10.00 (.394)	11.00 (.433)	14.80 (.583)	16.60 (.654)	24.00 (.945)
22	52689-2293	10.50 (.413)	11.50 (.453)	15.30 (.602)	17.10 (.673)	24.00 (.945)
23	52689-2393	11.00 (.433)	12.00 (.472)	15.80 (.622)	17.60 (.693)	32.00 (1.260)
24	52689-2493	11.50 (.453)	12.50 (.492)	16.30 (.642)	18.10 (.713)	32.00 (1.260)
25	52689-2593	12.00 (.472)	13.00 (.512)	16.80 (.661)	18.60 (.732)	32.00 (1.260)
26	52689-2693	12.50 (.492)	13.50 (.531)	17.30 (.681)	19.10 (.752)	32.00 (1.260)
27	52689-2793	13.00 (.512)	14.00 (.551)	17.80 (.701)	19.60 (.772)	32.00 (1.260)
28	52689-2893	13.50 (.531)	14.50 (.571)	18.30 (.720)	20.10 (.791)	32.00 (1.260)
29	52689-2993	14.00 (.551)	15.00 (.591)	18.80 (.740)	20.60 (.811)	32.00 (1.260)
30	52689-3093	14.50 (.571)	15.50 (.610)	19.30 (.760)	21.10 (.831)	32.00 (1.260)

FEATURES AND SPECIFICATIONS

molex® 0.625mm (.024") Pitch FPC Connector

52205

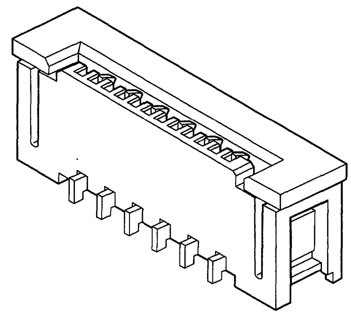
Straight, SMT, ZIF

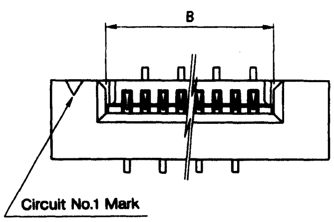
Features and Benefits
- Sizes 6 to 30 circuits
- For 0.20mm thick FPC
- Available in reel form only

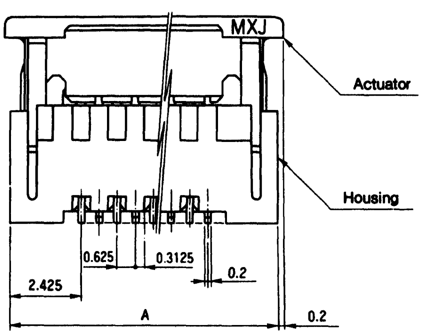
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

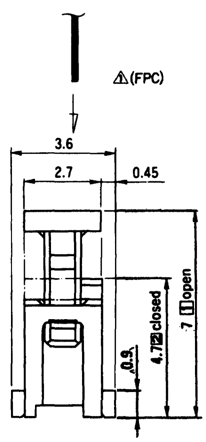
Electrical
Voltage: 50V
Current: 0.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 50 MΩ min.

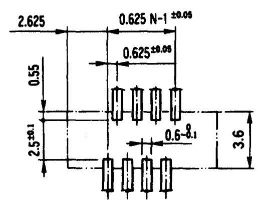
Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C











PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
6	52205-0690	7.975 (.313)	4.575 (.180)	24.000 (.945)
8	52205-0890	9.225 (.363)	5.825 (.229)	24.000 (.945)
9	52205-0990	9.850 (.387)	6.450 (.253)	24.000 (.945)
10	52205-1090	10.475 (.412)	7.075 (.278)	24.000 (.945)
12	52205-1290	11.725 (.461)	8.325 (.327)	24.000 (.945)
14	52205-1490	12.975 (.510)	9.575 (.376)	24.000 (.945)
15	52205-1590	13.600 (.535)	10.200 (.401)	24.000 (.945)
18	52205-1890	15.475 (.609)	12.075 (.475)	32.000 (1.260)

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
20	52205-2090	16.725 (.658)	13.325 (.524)	32.000 (1.260)
23	52205-2390	18.600 (.732)	15.200 (.598)	32.000 (1.260)
24	52205-2490	19.225 (.756)	15.825 (.623)	32.000 (1.260)
25	52205-2590	19.850 (.781)	16.450 (.647)	44.000 (1.732)
26	52205-2690	20.475 (.806)	17.075 (.672)	44.000 (1.732)
28	52205-2890	21.725 (.855)	18.325 (.721)	44.000 (1.732)
29	52205-2990	22.350 (.879)	18.950 (.746)	44.000 (1.732)
30	52205-3090	22.975 (.904)	19.575 (.770)	44.000 (1.732)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 6 to 30 circuits
- For 0.20mm thick FPC
- Available in reel form only

Reference Information
Packaging: Embossed tape
Designed In: Millimeters

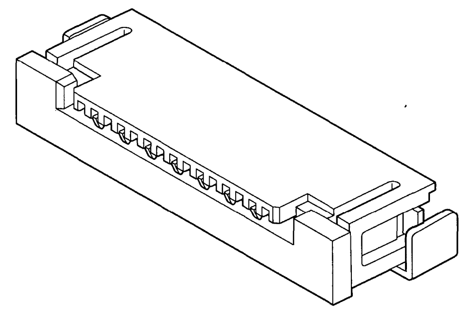
Electrical
Voltage: 50V
Current: 0.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC /1 min.
Insulation Resistance: 50 MΩ min.

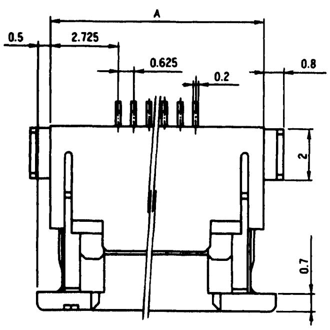
Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C

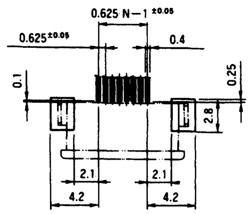
molex® 0.625mm (.024") Pitch FPC Connector

52204

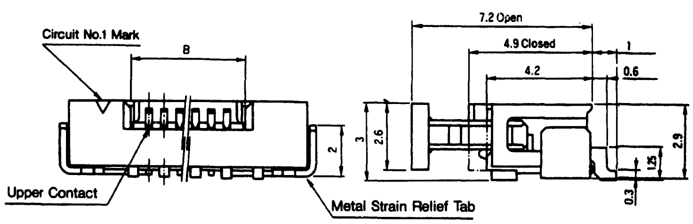
Right Angle, SMT, ZIF Top Contact Style







PCB Layout
For Surface Mounting



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
6	52204-0690	8.575 (.337)	4.575 (.180)	24.000 (.945)
7	52204-0790	9.200 (.362)	5.200 (.204)	24.000 (.945)
8	52204-0890	9.825 (.386)	5.825 (.229)	24.000 (.945)
9	52204-0990	10.450 (.411)	6.450 (.253)	24.000 (.945)
10	52204-1090	11.075 (.436)	7.075 (.278)	24.000 (.945)
11	52204-1190	11.700 (.460)	7.700 (.303)	24.000 (.945)
12	52204-1290	12.325 (.485)	8.325 (.327)	24.000 (.945)
13	52204-1390	12.950 (.509)	8.950 (.352)	24.000 (.945)
14	52204-1490	13.575 (.534)	9.575 (.376)	24.000 (.945)
15	52204-1590	14.200 (.559)	10.200 (.401)	24.000 (.945)
16	52204-1690	14.825 (.583)	10.825 (.426)	24.000 (.945)
17	52204-1790	15.450 (.608)	11.450 (.450)	24.000 (.945)
18	52204-1890	16.075 (.632)	12.075 (.475)	32.000 (1.260)
20	52204-2090	17.325 (.682)	13.325 (.524)	32.000 (1.260)
22	52204-2290	18.575 (.731)	14.575 (.573)	32.000 (1.260)
23	52204-2390	19.200 (.755)	15.200 (.598)	32.000 (1.260)
24	52204-2490	19.825 (.780)	15.825 (.623)	32.000 (1.260)
25	52204-2590	20.450 (.805)	16.450 (.647)	32.000 (1.260)
26	52204-2690	21.075 (.829)	17.075 (.672)	32.000 (1.260)
29	52204-2990	22.950 (.903)	18.950 (.746)	44.000 (1.732)
30	52204-3090	23.575 (.928)	19.575 (.770)	44.000 (1.732)

FEATURES AND SPECIFICATIONS

0.625mm (.024") Pitch FPC Connector

52396

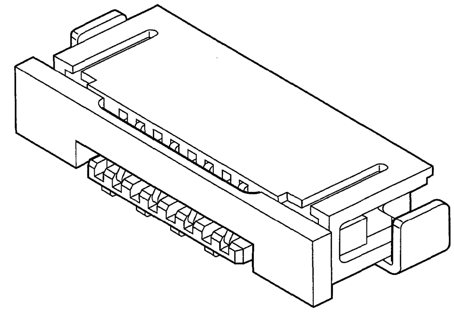
Right Angle, SMT, ZIF Bottom Contact Style

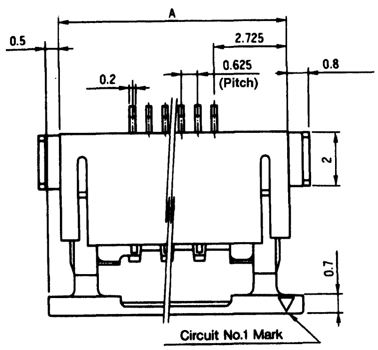
Features and Benefits
- Sizes 6 to 30 circuits
- Metal strain relief tabs
- For 0.20mm thick FPC
- Available in reel form only

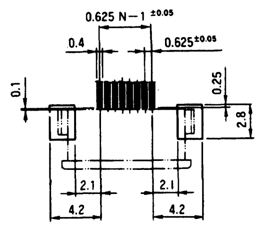
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 50 MΩ min.

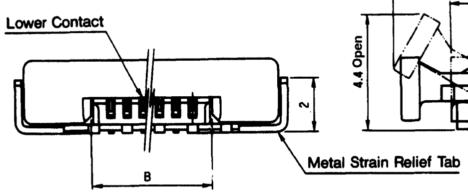
Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C

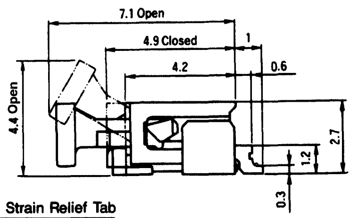






PCB Layout
For Surface Mounting





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
6	52396-0690	8.575 (.337)	4.575 (.180)	24.000 (.945)
7	52396-0790	9.200 (.362)	5.200 (.204)	24.000 (.945)
8	52396-0890	9.825 (.386)	5.825 (.229)	24.000 (.945)
9	52396-0990	10.450 (.411)	6.450 (.253)	24.000 (.945)
10	52396-1090	11.075 (.436)	7.075 (.278)	24.000 (.945)
11	52396-1190	11.700 (.460)	7.700 (.303)	24.000 (.945)
12	52396-1290	12.325 (.485)	8.325 (.327)	24.000 (.945)
13	52396-1390	12.950 (.509)	8.950 (.352)	24.000 (.945)
14	52396-1490	13.575 (.534)	9.575 (.376)	24.000 (.945)
15	52396-1590	14.200 (.559)	10.200 (.401)	24.000 (.945)
16	52396-1690	14.825 (.583)	10.825 (.426)	24.000 (.945)

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
17	52396-1790	15.450 (.608)	11.450 (.450)	24.000 (.945)
18	52396-1890	16.075 (.632)	12.075 (.475)	32.000 (1.260)
20	52396-2090	17.325 (.682)	13.325 (.524)	32.000 (1.260)
22	52396-2290	18.575 (.731)	14.575 (.573)	32.000 (1.260)
23	52396-2390	19.200 (.755)	15.200 (.598)	32.000 (1.260)
24	52396-2490	19.825 (.780)	15.825 (.623)	32.000 (1.260)
25	52396-2590	20.450 (.805)	16.450 (.647)	32.000 (1.260)
26	52396-2690	21.075 (.829)	17.075 (.672)	44.000 (1.732)
29	52396-2990	22.950 (.903)	18.950 (.746)	44.000 (1.732)
30	52396-3090	23.575 (.928)	19.575 (.770)	44.000 (1.732)

FEATURES AND SPECIFICATIONS

0.80mm (.031") Pitch FFC/FPC Connector

52557

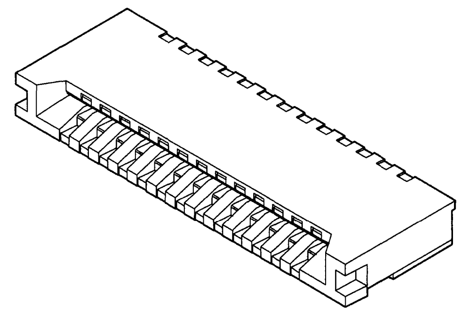
Right Angle, SMT

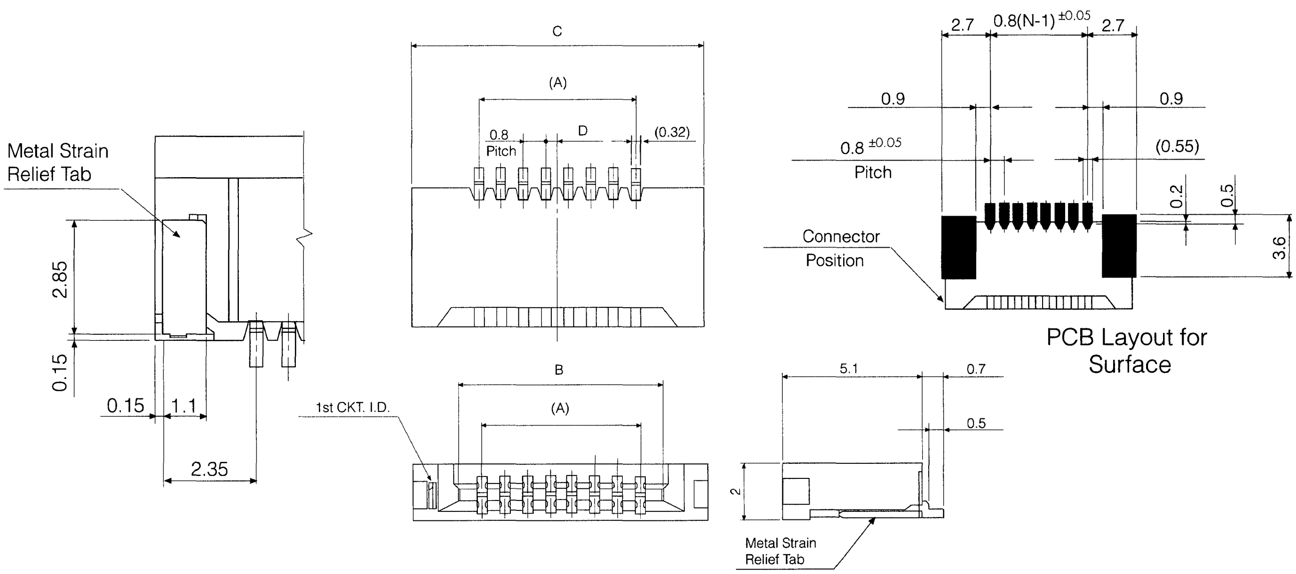
Features and Benefits
- Sizes 4 to 20 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				Carrier Tape Width
		A	B	C	D	
4	52557-0490	2.40 (.094)	4.02 (.158)	7.40 (.291)	0.40 (.016)	24.00 (.945)
6	52557-0690	4.00 (.157)	5.62 (.221)	9.00 (.354)	0.40 (.016)	24.00 (.945)
8	52557-0890	5.60 (.220)	7.22 (.284)	10.60 (.417)	0.40 (.016)	24.00 (.945)
11	52557-1190	8.00 (.315)	9.62 (.379)	13.00 (.512)	0.80 (.031)	24.00 (.945)
12	52557-1290	8.80 (.346)	10.42 (.410)	13.80 (.543)	0.40 (.016)	24.00 (.945)
13	52557-1390	9.60 (.378)	11.22 (.442)	14.60 (.575)	0.80 (.031)	24.00 (.945)
14	52557-1490	10.40 (.409)	12.02 (.473)	15.40 (.606)	0.40 (.016)	32.00 (1.260)
15	52557-1590	11.20 (.441)	12.82 (.505)	16.20 (.638)	0.80 (.031)	32.00 (1.260)
16	52557-1690	12.00 (.472)	13.62 (.536)	17.00 (.669)	0.40 (.016)	32.00 (1.260)
18	52557-1890	13.60 (.535)	15.22 (.599)	18.60 (.732)	0.40 (.016)	32.00 (1.260)
20	52557-2090	15.20 (.598)	16.82 (.662)	20.20 (.795)	0.40 (.016)	44.00 (1.732)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

52610

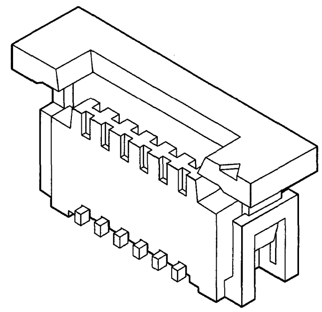
Straight, SMT, ZIF

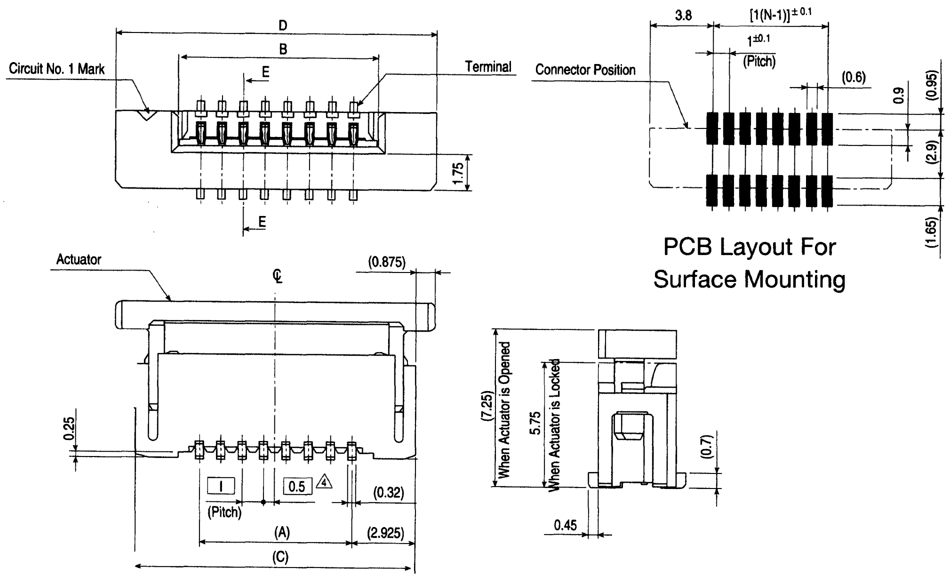
Features and Benefits
- Sizes 6 to 30 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Carrier Tape Width
6	52610-0690	5.00 (.197)	7.20 (.283)	10.85 (.427)	12.60 (.496)	24.00 (.945)
8	52610-0890	7.00 (.276)	9.20 (.362)	12.85 (.506)	14.60 (.575)	24.00 (.945)
10	52610-1090	9.00 (.354)	11.20 (.441)	14.85 (.585)	16.60 (.654)	24.00 (.945)
12	52610-1290	11.00 (.433)	13.20 (.520)	16.85 (.663)	18.60 (.732)	32.00 (1.260)
13	52610-1390	12.00 (.472)	14.20 (.559)	17.85 (.703)	19.60 (.772)	32.00 (1.260)
14	52610-1490	13.00 (.512)	15.20 (.598)	18.85 (.742)	20.60 (.811)	32.00 (1.260)
15	52610-1590	14.00 (.551)	16.20 (.638)	19.85 (.781)	21.60 (.850)	32.00 (1.260)
16	52610-1690	15.00 (.591)	17.20 (.677)	20.85 (.821)	22.60 (.890)	44.00 (1.732)
17	52610-1790	16.00 (.630)	18.20 (.717)	21.85 (.860)	23.60 (.929)	44.00 (1.732)
18	52610-1890	17.00 (.669)	19.20 (.756)	22.85 (.900)	24.60 (.969)	44.00 (1.732)
20	52610-2090	19.00 (.748)	21.20 (.835)	24.85 (.978)	26.60 (1.047)	44.00 (1.732)
22	52610-2290	21.00 (.827)	23.20 (.913)	26.85 (1.057)	28.60 (1.126)	44.00 (1.732)
24	52610-2490	23.00 (.906)	25.20 (.992)	28.85 (1.136)	30.60 (1.205)	44.00 (1.732)
25	52610-2590	24.00 (.945)	26.20 (1.031)	29.85 (1.175)	31.60 (1.244)	44.00 (1.732)
26	52610-2690	25.00 (.984)	27.20 (1.071)	30.85 (1.215)	32.60 (1.283)	44.00 (1.732)
28	52610-2890	27.00 (1.063)	29.20 (1.150)	32.85 (1.293)	34.60 (1.362)	56.00 (2.205)
30	52610-3090	29.00 (1.142)	31.20 (1.228)	34.85 (1.372)	36.60 (1.441)	56.00 (2.205)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

52207

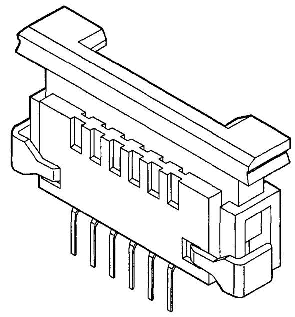
Right Angle, SMT, ZIF Top Contact Style

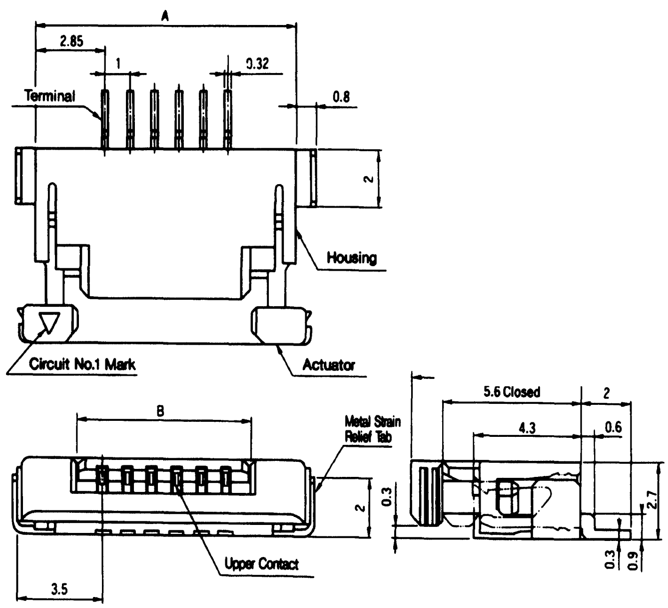
Features and Benefits
- Sizes 3 to 30 circuits
- Metal strain relief tabs
- For 0.30mm thick FPC
- Available in reel form only

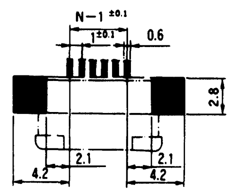
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C







PCB : t=0.8
PCB Layout
For Surface Mounting

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
3	52207-0390	7.70 (.303)	4.20 (.165)	16.00 (.629)
4	52207-0490	8.70 (.342)	5.20 (.204)	24.00 (.945)
5	52207-0590	9.70 (.381)	6.20 (.244)	24.00 (.945)
6	52207-0690	10.70 (.421)	7.20 (.283)	24.00 (.945)
7	52207-0790	11.70 (.460)	8.20 (.322)	24.00 (.945)
8	52207-0890	12.70 (.499)	9.20 (.362)	24.00 (.945)
9	52207-0990	13.70 (.539)	10.20 (.401)	24.00 (.945)
10	52207-1090	14.70 (.578)	11.20 (.440)	24.00 (.945)
11	52207-1190	15.70 (.618)	12.20 (.480)	24.00 (.945)
12	52207-1290	16.70 (.657)	13.20 (.519)	32.00 (1.260)
13	52207-1390	17.70 (.696)	14.20 (.559)	32.00 (1.260)
14	52207-1490	18.70 (.736)	15.20 (.598)	32.00 (1.260)
15	52207-1590	19.70 (.775)	16.20 (.637)	32.00 (1.260)
16	52207-1690	20.70 (.814)	17.20 (.677)	32.00 (1.260)

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
17	52207-1790	21.70 (.854)	18.20 (.716)	44.00 (1.732)
18	52207-1890	22.70 (.893)	19.20 (.755)	44.00 (1.732)
19	52207-1990	23.70 (.933)	20.20 (.795)	44.00 (1.732)
20	52207-2090	24.70 (.972)	21.20 (.834)	44.00 (1.732)
21	52207-2190	25.70 (1.011)	22.20 (.874)	44.00 (1.732)
22	52207-2290	26.70 (1.051)	23.20 (.913)	44.00 (1.732)
23	52207-2390	27.70 (1.090)	24.20 (.952)	44.00 (1.732)
24	52207-2490	28.70 (1.129)	25.20 (.992)	44.00 (1.732)
25	52207-2590	29.70 (1.169)	26.20 (1.031)	44.00 (1.732)
26	52207-2690	30.70 (1.208)	27.20 (1.070)	44.00 (1.732)
27	52207-2790	31.70 (1.248)	28.20 (1.110)	44.00 (1.732)
28	52207-2890	32.70 (1.287)	29.20 (1.149)	56.00 (2.205)
30	52207-3090	34.70 (1.366)	31.20 (1.228)	56.00 (2.205)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

71220

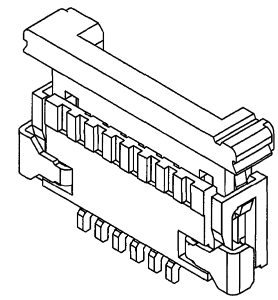
Right Angle, SMT, ZIF Top Contact Style

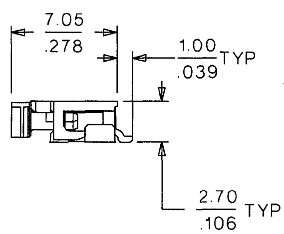
Features and Benefits
- Sizes 4 to 30 circuits
- Tuning fork contact assures stable, low contact resistance
- SMT solder hold-down tabs provide strain relief for SMT contacts
- Black actuator contrasts with light color housing for easy identification of actuator
- Packaged in anti-static standard EIA embossed tape and reel
- For use with 0.30mm thick FFC/FPC

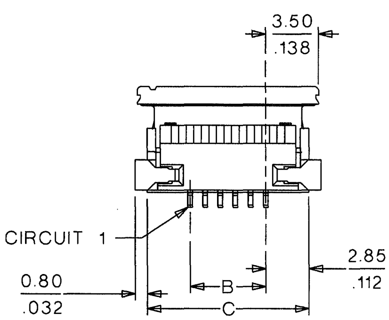
Reference Information
Product Specification: PS-71220
Packaging: Embossed tape on plastic reel
Designed In: Millimeters

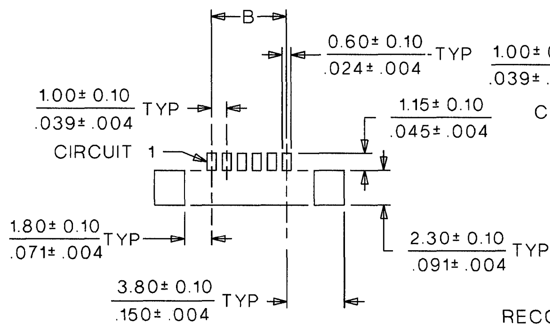
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: Tin/Lead, 90/10
Temperature: -20 to +80°C

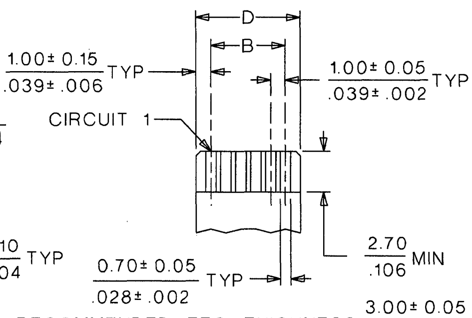








PCB LAYOUT: COMPONENT SIDE



RECOMMENDED FFC THICKNESS: 3.00± 0.05 / .118± .002

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
4	• 71220-0400	10.00 (.394)	3.00 (.118)	8.70 (.343)	5.20 (.205)
6	• 71220-0600	12.00 (.472)	5.00 (.197)	10.70 (.421)	7.20 (.283)
8	• 71220-0800	14.00 (.551)	7.00 (.276)	12.70 (.500)	9.20 (.362)
10	• 71220-1000	16.00 (.630)	9.00 (.354)	14.70 (.579)	11.20 (.441)
12	• 71220-1200	18.00 (.709)	11.00 (.433)	16.70 (.657)	13.20 (.520)
14	• 71220-1400	20.00 (.787)	13.00 (.512)	18.70 (.736)	15.20 (.598)
16	• 71220-1600	22.00 (.866)	15.00 (.591)	20.70 (.815)	17.20 (.677)
18	• 71220-1800	24.00 (.945)	17.00 (.669)	22.70 (.894)	19.20 (.756)
20	• 71220-2000	26.00 (1.024)	19.00 (.748)	24.70 (.972)	21.20 (.835)
22	• 71220-2200	28.00 (1.102)	21.00 (.827)	26.70 (1.051)	23.20 (.913)
24	• 71220-2400	30.00 (1.181)	23.00 (.906)	28.70 (1.130)	25.20 (.992)
26	• 71220-2600	32.00 (1.260)	25.00 (.984)	30.70 (1.209)	27.20 (1.071)
28	• 71220-2800	34.00 (1.339)	27.00 (1.063)	32.70 (1.287)	29.20 (1.150)
30	• 71220-3000	36.00 (1.417)	29.00 (1.142)	34.70 (1.366)	31.20 (1.228)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

52271

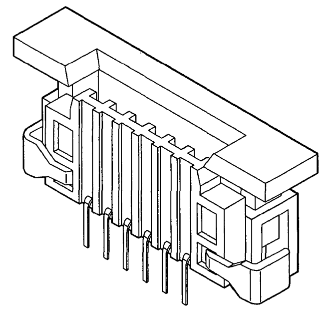
Right Angle, SMT, ZIF Bottom Contact Style

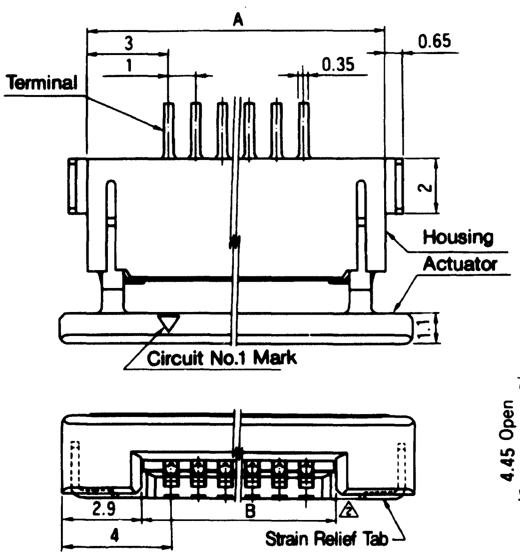
Features and Benefits
- Sizes 7 to 30 circuits
- For 0.30mm thick FFC/FPC
- Metal strain relief tabs
- Available in reel form only

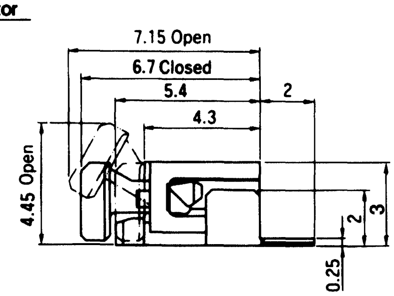
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

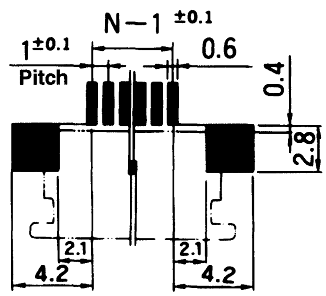
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C









PCB Layout
For Surface Mounting

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Carrier Tape Width
7	52271-0790	12.00 (.472)	8.20 (.322)	24.00 (.945)
8	52271-0890	13.00 (.511)	9.20 (.362)	24.00 (.945)
9	52271-0990	14.00 (.551)	10.20 (.401)	24.00 (.945)
10	52271-1090	15.00 (.590)	11.20 (.440)	24.00 (.945)
11	52271-1190	16.00 (.629)	12.20 (.480)	24.00 (.945)
12	52271-1290	17.00 (.669)	13.20 (.519)	32.00 (1.260)
13	52271-1390	18.00 (.708)	14.20 (.559)	32.00 (1.260)
14	52271-1490	19.00 (.748)	15.20 (.598)	32.00 (1.260)
15	52271-1590	20.00 (.787)	16.20 (.637)	32.00 (1.260)
16	52271-1690	21.00 (.826)	17.20 (.677)	32.00 (1.260)
17	52271-1790	22.00 (.866)	18.20 (.716)	44.00 (1.732)
18	52271-1890	23.00 (.905)	19.20 (.755)	44.00 (1.732)
19	52271-1990	24.00 (.944)	20.20 (.795)	44.00 (1.732)
20	52271-2090	25.00 (.984)	21.20 (.834)	44.00 (1.732)
22	52271-2290	27.00 (1.062)	23.20 (.913)	44.00 (1.732)
23	52271-2390	28.00 (1.102)	24.20 (.952)	44.00 (1.732)
24	52271-2490	29.00 (1.141)	25.20 (.992)	44.00 (1.732)
25	52271-2590	30.00 (1.181)	26.20 (1.031)	44.00 (1.732)
26	52271-2690	31.00 (1.220)	27.20 (1.070)	44.00 (1.732)
27	52271-2790	32.00 (1.259)	28.20 (1.110)	44.00 (1.732)
28	52271-2890	33.00 (1.299)	29.20 (1.149)	56.00 (2.205)
30	52271-3090	35.00 (1.377)	31.20 (1.228)	56.00 (2.205)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

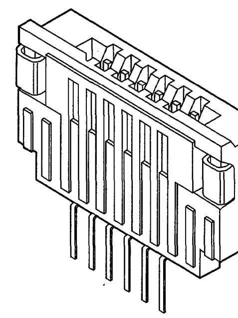
52643 Right Angle, SMT

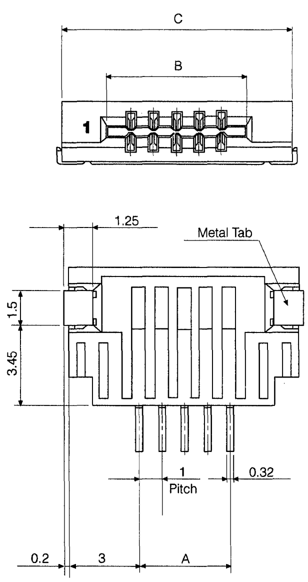
Features and Benefits
- Sizes 4 to 15 circuits
- For 0.30mm thick FFC/FPC

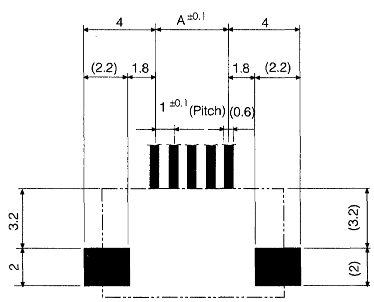
Reference Information
Packaging: Embossed tape
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 100 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C







SMT PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			Carrier Tape Width
		A	B	C	
4	52643-0490	3.00 (.118)	5.15 (.202)	9.00 (.354)	24.00 (.945)
5	52643-0590	4.00 (.157)	6.15 (.242)	10.00 (.393)	24.00 (.945)
6	52643-0690	5.00 (.196)	7.15 (.281)	11.00 (.433)	24.00 (.945)
7	52643-0790	6.00 (.236)	8.15 (.320)	12.00 (.472)	24.00 (.945)
8	52643-0890	7.00 (.275)	9.15 (.360)	13.00 (.511)	24.00 (.945)
9	52643-0990	8.00 (.314)	10.15 (.399)	14.00 (.551)	24.00 (.945)
10	52643-1090	9.00 (.354)	11.15 (.438)	15.00 (.590)	24.00 (.945)
11	52643-1190	10.00 (.393)	12.15 (.478)	16.00 (.629)	24.00 (.945)
12	52643-1290	11.00 (.433)	13.15 (.517)	17.00 (.669)	24.00 (.945)
13	52643-1390	12.00 (.472)	14.15 (.557)	18.00 (.708)	32.00 (1.260)
14	52643-1490	13.00 (.511)	15.15 (.596)	19.00 (.748)	32.00 (1.260)
15	52643-1590	14.00 (.551)	16.15 (.635)	20.00 (.787)	32.00 (1.260)

FEATURES AND SPECIFICATIONS

molex®

1.00mm (.039") Pitch FFC/FPC Connector

52030

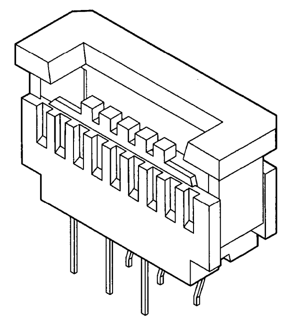
Straight, ZIF

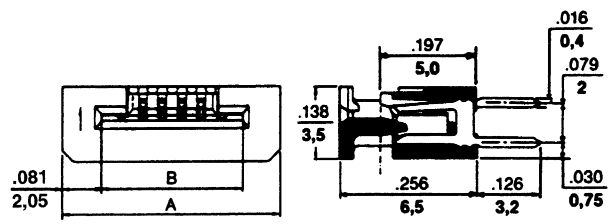
Features and Benefits
- Sizes 8 to 30 circuits
- For 0.30mm thick FFC/FPC

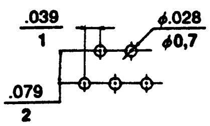
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

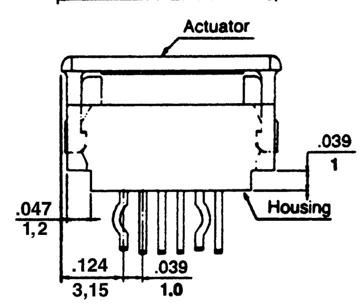
Physical
Housing: 6/6 nylon, UL 94V-0
Actuator: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C

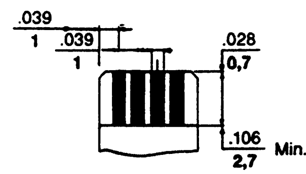






PCB Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
8	52030-0810	13.30 (.524)	9.20 (.362)
10	52030-1010	15.30 (.602)	11.20 (.441)
12	52030-1210	17.30 (.681)	13.20 (.520)
14	52030-1410	19.30 (.760)	15.20 (.598)
16	52030-1610	21.30 (.839)	17.20 (.677)
18	52030-1810	23.30 (.917)	19.20 (.756)
20	52030-2010	25.30 (.996)	21.20 (.834)
22	52030-2210	27.30 (1.074)	23.20 (.913)
24	52030-2410	29.30 (1.154)	25.20 (.992)
26	52030-2610	31.30 (1.232)	27.20 (1.070)
28	52030-2810	33.30 (1.311)	29.20 (1.150)
30	52030-3010	35.30 (1.390)	31.20 (1.228)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

71226

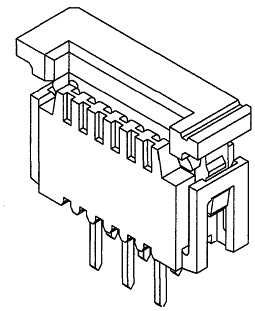
Straight, ZIF

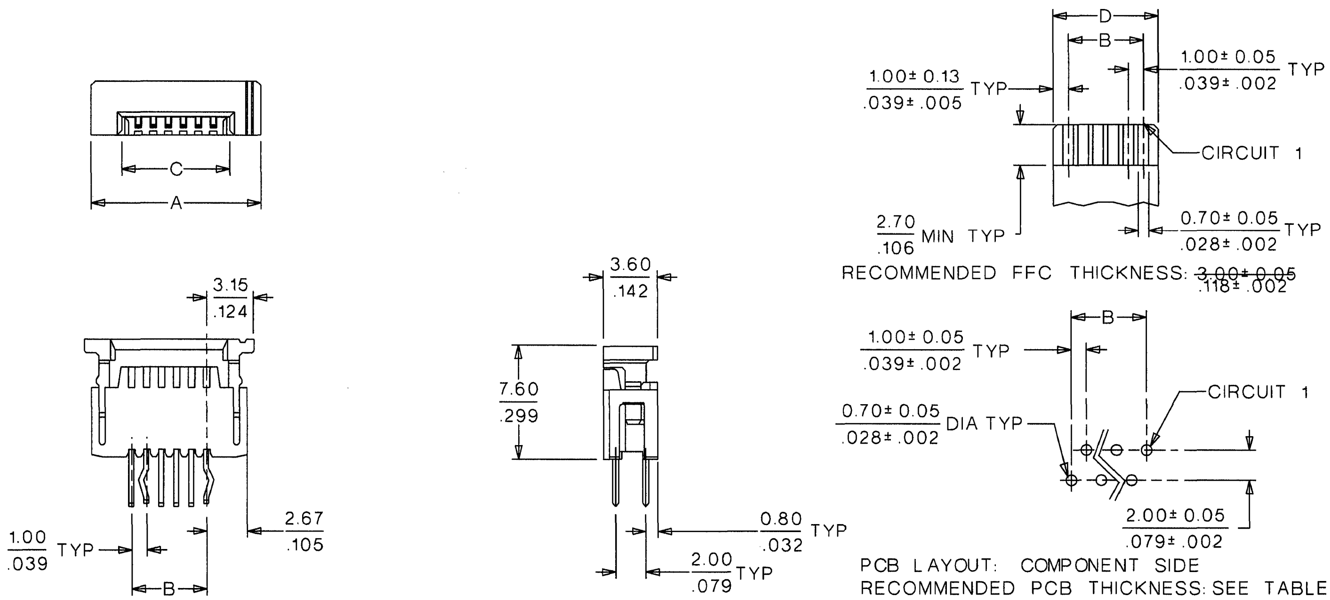
Features and Benefits
- Sizes 4 to 30 circuits
- Tuning fork contacts assure stable, low contact resistance
- Optional cable retention barbs provide cable strain relief and assure full retention of cable
- Optional polarizing peg assures proper orientation to PCB
- Kinked solder tails provide retention to the PCB before soldering
- For use with 0.30mm thick FFC/FPC

Reference Information
Product Specification: PS-71226
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980A-320
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Physical
Housing: 4/6 nylon, UL 94V-0
Actuator: LCP, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: Tin/Lead, 90/10
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

71226 - XX X X
A B C

A
Number of Circuits
04-30 (even only)

B	
Tail Length	
2	2.25mm (.089")
3	3.15mm (.124")

C	
Barb and Peg Option	
3	With barbs, with peg, green actuator
4	Without barbs, with peg, blue actuator
1	With barbs, without peg, green actuator
5	Without barbs, without pegs, blue actuator

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

52089

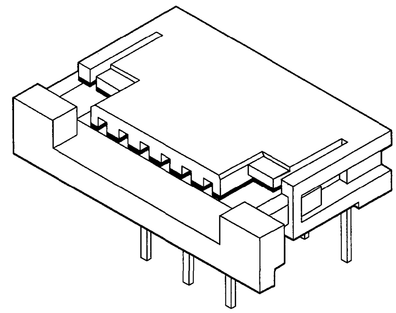
Right Angle, Low Profile ZIF, Top Contact Style

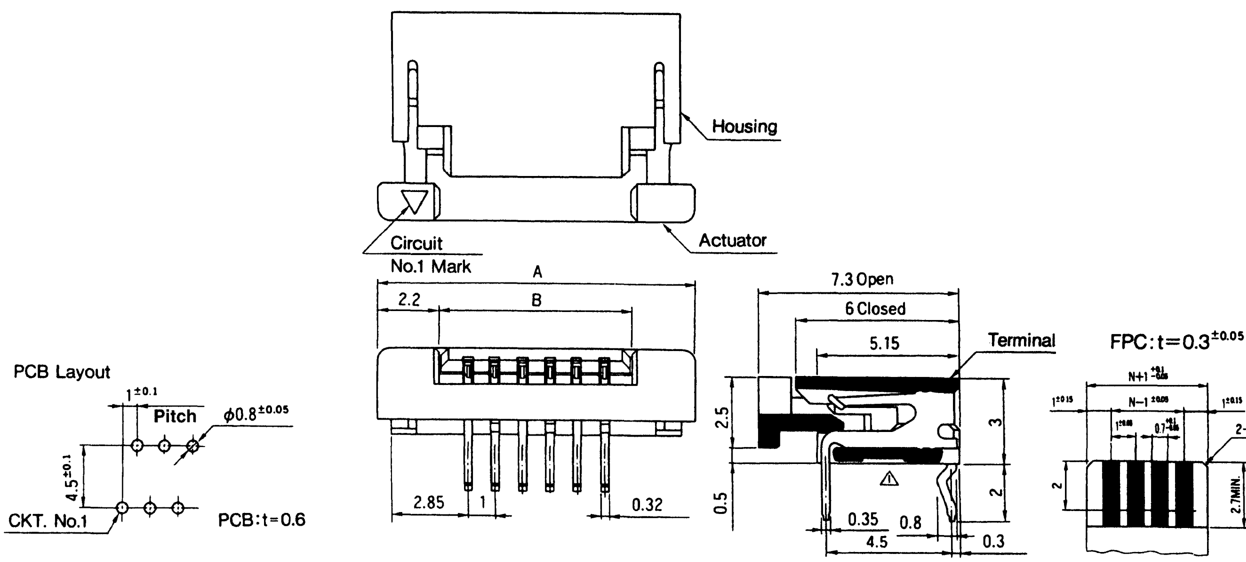
Features and Benefits
- Sizes 4 to 30 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Actuator: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	52089-0410	9.60 (.377)	5.20 (.204)
5	52089-0510	10.60 (.417)	6.20 (.244)
6	52089-0610	11.60 (.456)	7.20 (.283)
7	52089-0710	12.60 (.496)	8.20 (.322)
8	52089-0810	13.60 (.535)	9.20 (.362)
9	52089-0910	14.60 (.574)	10.20 (.401)
10	52089-1010	15.60 (.614)	11.20 (.440)
11	52089-1110	16.60 (.653)	12.20 (.480)
12	52089-1210	17.60 (.692)	13.20 (.519)
13	52089-1310	18.60 (.732)	14.20 (.559)
14	52089-1410	19.60 (.771)	15.20 (.598)
15	52089-1510	20.60 (.811)	16.20 (.637)
16	52089-1610	21.60 (.850)	17.20 (.677)
17	52089-1710	22.60 (.889)	18.20 (.716)

Circuits	Order No.	Dimension A	Dimension B
18	52089-1810	23.60 (.929)	19.20 (.755)
19	52089-1910	24.60 (.968)	20.20 (.795)
20	52089-2010	25.60 (1.007)	21.20 (.834)
21	52089-2110	26.60 (1.047)	22.20 (.874)
22	52089-2210	27.60 (1.068)	23.20 (.913)
23	52089-2310	28.60 (1.125)	24.20 (.952)
24	52089-2410	29.60 (1.165)	25.20 (.992)
25	52089-2510	30.60 (1.204)	26.20 (1.031)
26	52089-2610	31.60 (1.244)	27.20 (1.070)
27	52089-2710	32.60 (1.283)	28.20 (1.110)
28	52089-2810	33.60 (1.322)	29.20 (1.149)
29	52089-2910	34.60 (1.362)	30.20 (1.188)
30	52089-3010	35.60 (1.401)	31.20 (1.228)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

52043

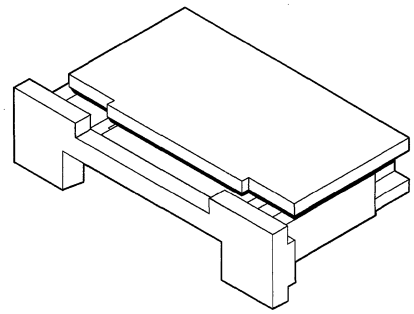
Right Angle, ZIF Bottom Contact Style

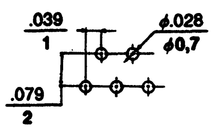
Features and Benefits
- Sizes 4 to 20 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Tray
Designed In: Millimeters

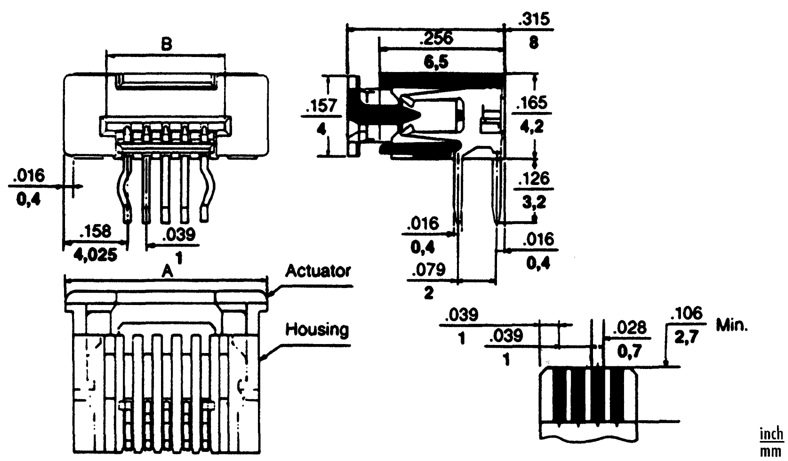
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 Min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Actuator: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





PCB Layout



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
4	52043-0410	11.05 (.435)	5.20 (.205)
6	52043-0610	13.05 (.514)	7.20 (.283)
8	52043-0810	15.05 (.593)	9.20 (.362)
10	52043-1010	17.05 (.671)	11.20 (.441)
12	52043-1210	19.05 (.750)	13.20 (.520)
14	52043-1410	21.05 (.829)	15.20 (.598)
16	52043-1610	23.05 (.907)	17.20 (.677)
18	52043-1810	25.05 (.986)	19.20 (.756)
20	52043-2010	27.05 (1.065)	21.20 (.834)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

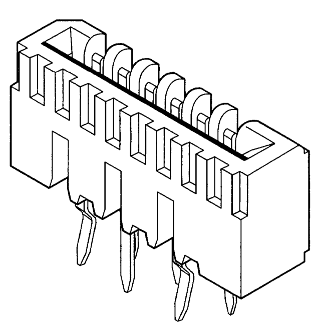
52806 Straight, Non-ZIF

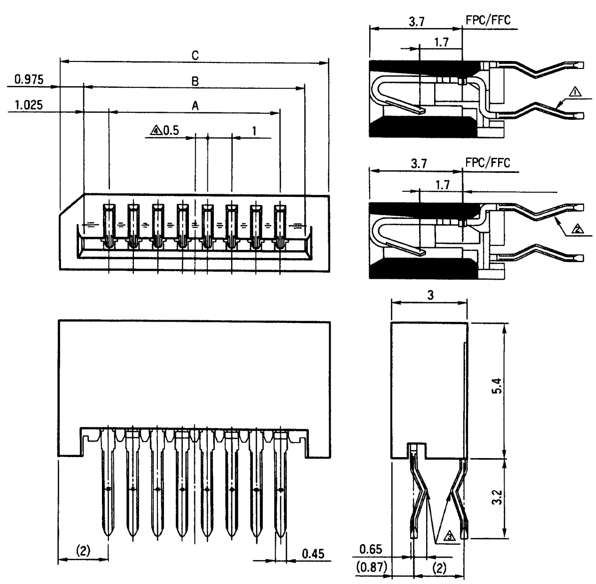
Features and Benefits
- Sizes 3 to 30 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C
3	52806-0310	2.00 (.079)	4.05 (.159)	6.00 (.236)
4	52806-0410	3.00 (.118)	5.05 (.199)	7.00 (.276)
5	52806-0510	4.00 (.157)	6.05 (.238)	8.00 (.315)
6	52806-0610	5.00 (.197)	7.05 (.278)	9.00 (.354)
7	52806-0710	6.00 (.236)	8.05 (.317)	10.00 (.394)
8	52806-0810	7.00 (.276)	9.05 (.356)	11.00 (.433)
9	52806-0910	8.00 (.315)	10.05 (.396)	12.00 (.472)
10	52806-1010	9.00 (.354)	11.05 (.435)	13.00 (.512)
11	52806-1110	10.00 (.394)	12.05 (.474)	14.00 (.551)
12	52806-1210	11.00 (.433)	13.05 (.514)	15.00 (.591)
13	52806-1310	12.00 (.472)	14.05 (.553)	16.00 (.630)
14	52806-1410	13.00 (.512)	15.05 (.593)	17.00 (.669)
15	52806-1510	14.00 (.551)	16.05 (.632)	18.00 (.709)
16	52806-1610	15.00 (.591)	17.05 (.671)	19.00 (.748)
17	52806-1710	16.00 (.630)	18.05 (.711)	20.00 (.787)
18	52806-1810	17.00 (.669)	19.05 (.750)	21.00 (.827)
19	52806-1910	18.00 (.709)	20.05 (.789)	22.00 (.866)
20	52806-2010	19.00 (.748)	21.05 (.829)	23.00 (.906)
21	52806-2110	20.00 (.787)	22.05 (.868)	24.00 (.945)
22	52806-2210	21.00 (.827)	23.05 (.907)	25.00 (.984)
23	52806-2310	22.00 (.866)	24.05 (.947)	26.00 (1.024)
24	52806-2410	23.00 (.906)	25.05 (.986)	27.00 (1.063)
25	52806-2510	24.00 (.945)	26.05 (1.026)	28.00 (1.102)
26	52806-2610	25.00 (.984)	27.05 (1.065)	29.00 (1.142)
27	52806-2710	26.00 (1.024)	28.05 (1.104)	30.00 (1.181)
28	52806-2810	27.00 (1.063)	29.05 (1.144)	31.00 (1.220)
29	52806-2910	28.00 (1.102)	30.05 (1.183)	32.00 (1.260)
30	52806-3010	29.00 (1.142)	31.05 (1.222)	33.00 (1.299)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch FFC/FPC Connector

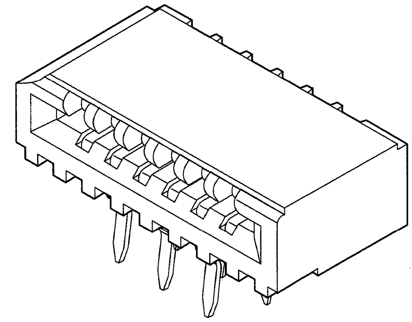
52807 Right Angle, Non-ZIF

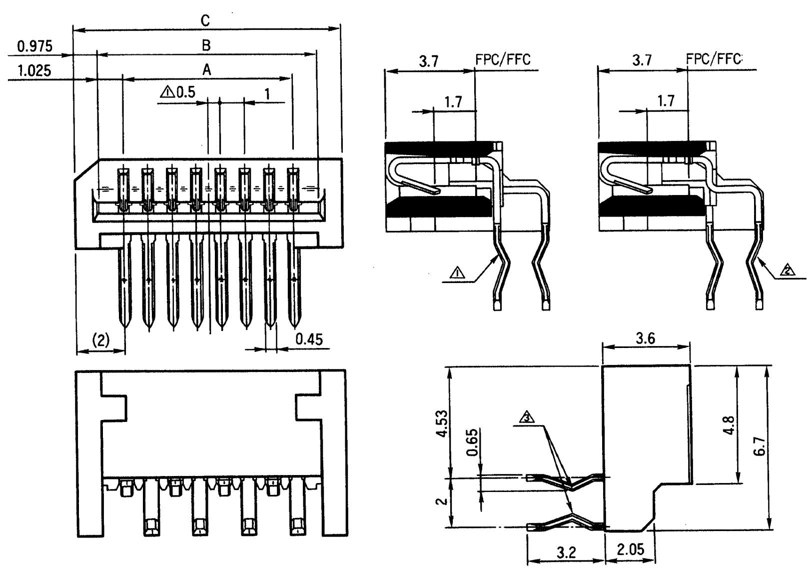
Features and Benefits
- Sizes 4 to 20 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 100 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
4	52234-0410	7.00 (.275)	5.05 (.198)
6	52234-0610	9.00 (.354)	7.05 (.277)
8	52234-0810	11.00 (.433)	9.05 (.356)
10	52234-1010	13.00 (.511)	11.05 (.435)
12	52234-1210	15.00 (.590)	13.05 (.513)
14	52234-1410	17.00 (.669)	15.05 (.592)
16	52234-1610	19.00 (.748)	17.05 (.671)
18	52234-1810	21.00 (.826)	19.05 (.749)
20	52234-2010	23.00 (.905)	21.05 (.828)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch FFC/FPC Connector

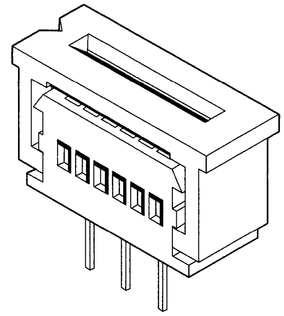
5597/5598 Straight, ZIF

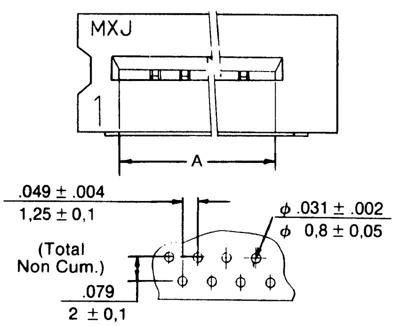
Features and Benefits
- Sizes 3 to 30 circuits
- Staggered solder tails, 3.50mm (.138") long
- 5597 accommodates FFC/FPC 0.30mm (.012") thick
- 5598 accommodates FFC/FPC 0.10mm (.004") thick

Reference Information
Packaging: Tray
Designed In: Millimeters

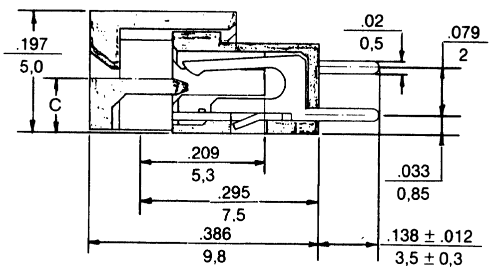
Electrical
Voltage: 200V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 500 MΩ min.

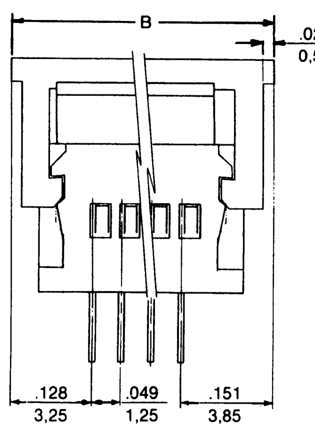
Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





PCB Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Series	Recommended FFC/FPC Thickness	Dimension A	Dimension B	Dimension C
3	39-51-3034 39-51-4032	5597 5598	0.30 (.012) 0.10 (.004)	5.20 (.205)	9.50 (.374)	2.30 (.091) 2.50 (.098)
4	39-51-3044 39-51-4042	5597 5598	0.30 (.012) 0.10 (.004)	6.45 (.254)	10.75 (.423)	2.30 (.091) 2.50 (.098)
5	39-51-3054 39-51-4052	5597 5598	0.30 (.012) 0.10 (.004)	7.70 (.303)	12.00 (.472)	2.30 (.091) 2.50 (.098)
6	39-51-3064 39-51-4062	5597 5598	0.30 (.012) 0.10 (.004)	8.95 (.352)	13.25 (.522)	2.30 (.091) 2.50 (.098)
7	39-51-3074 39-51-4072	5597 5598	0.30 (.012) 0.10 (.004)	10.20 (.401)	14.50 (.571)	2.30 (.091) 2.50 (.098)
8	39-51-3084 39-51-4082	5597 5598	0.30 (.012) 0.10 (.004)	11.45 (.451)	15.75 (.620)	2.30 (.091) 2.50 (.098)
9	39-51-3094 39-51-4092	5597 5598	0.30 (.012) 0.10 (.004)	12.70 (.500)	17.00 (.669)	2.30 (.091) 2.50 (.098)
10	39-51-3104 39-51-4102	5597 5598	0.30 (.012) 0.10 (.004)	13.95 (.549)	18.25 (.719)	2.30 (.091) 2.50 (.098)
11	39-51-3114 39-51-4112	5597 5598	0.30 (.012) 0.10 (.004)	15.20 (.598)	19.50 (.768)	2.30 (.091) 2.50 (.098)
12	39-51-3124 39-51-4122	5597 5598	0.30 (.012) 0.10 (.004)	16.45 (.648)	20.75 (.817)	2.30 (.091) 2.50 (.098)
13	39-51-3134 39-51-4132	5597 5598	0.30 (.012) 0.10 (.004)	17.70 (.697)	22.00 (.866)	2.30 (.091) 2.50 (.098)
14	39-51-3144 39-51-4142	5597 5598	0.30 (.012) 0.10 (.004)	18.95 (.746)	23.25 (.915)	2.30 (.091) 2.50 (.098)
15	39-51-3154 39-51-4152	5597 5598	0.30 (.012) 0.10 (.004)	20.20 (.795)	24.50 (.965)	2.30 (.091) 2.50 (.098)
16	39-51-3164 39-51-4162	5597 5598	0.30 (.012) 0.10 (.004)	21.45 (.845)	25.75 (1.014)	2.30 (.091) 2.50 (.098)
17	39-51-3174 39-51-4172	5597 5598	0.30 (.012) 0.10 (.004)	22.70 (.894)	27.00 (1.063)	2.30 (.091) 2.50 (.098)
18	39-51-3184 39-51-4182	5597 5598	0.30 (.012) 0.10 (.004)	23.95 (.943)	28.25 (1.112)	2.30 (.091) 2.50 (.098)
19	39-51-3194 39-51-4192	5597 5598	0.30 (.012) 0.10 (.004)	25.20 (.992)	29.50 (1.161)	2.30 (.091) 2.50 (.098)
20	39-51-3204 39-51-4202	5597 5598	0.30 (.012) 0.10 (.004)	26.45 (1.041)	30.75 (1.211)	2.30 (.091) 2.50 (.098)
21	39-51-3214 39-51-4212	5597 5598	0.30 (.012) 0.10 (.004)	27.70 (1.090)	32.00 (1.260)	2.30 (.091) 2.50 (.098)
22	39-51-3224 39-51-4222	5597 5598	0.30 (.012) 0.10 (.004)	28.95 (1.140)	33.25 (1.309)	2.30 (.091) 2.50 (.098)
23	39-51-3234 39-51-4232	5597 5598	0.30 (.012) 0.10 (.004)	30.20 (1.189)	34.50 (1.358)	2.30 (.091) 2.50 (.098)
24	39-51-3244 39-51-4242	5597 5598	0.30 (.012) 0.10 (.004)	31.45 (1.238)	35.75 (1.407)	2.30 (.091) 2.50 (.098)
25	39-51-3254 39-51-4252	5597 5598	0.30 (.012) 0.10 (.004)	32.70 (1.287)	37.00 (1.475)	2.30 (.091) 2.50 (.098)
26	39-51-3264 39-51-4262	5597 5598	0.30 (.012) 0.10 (.004)	33.95 (1.337)	38.25 (1.506)	2.30 (.091) 2.50 (.098)
27	39-51-3274 39-51-4272	5597 5598	0.30 (.012) 0.10 (.004)	35.20 (1.386)	39.50 (1.555)	2.30 (.091) 2.50 (.098)
28	39-51-3284 39-51-4282	5597 5598	0.30 (.012) 0.10 (.004)	36.45 (1.435)	40.75 (1.604)	2.30 (.091) 2.50 (.098)
29	39-51-3294 39-51-4292	5597 5598	0.30 (.012) 0.10 (.004)	37.70 (1.484)	42.00 (1.654)	2.30 (.091) 2.50 (.098)
30	39-51-3304 39-51-4302	5597 5598	0.30 (.012) 0.10 (.004)	38.95 (1.534)	43.25 (1.703)	2.30 (.091) 2.50 (.098)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch FFC/FPC Connector

5597/5598 Right Angle, ZIF

Features and Benefits

- Sizes 3 to 30 circuits
- Staggered solder tails, 3.50mm (.138") long
- 5597 accommodates FFC/FPC 0.30mm (.012") thick
- 5598 accommodates FFC/FPC 0.10mm (.004") thick

Reference Information

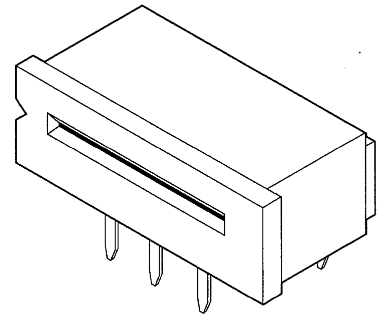
Packaging: Tray
Designed In: Millimeters

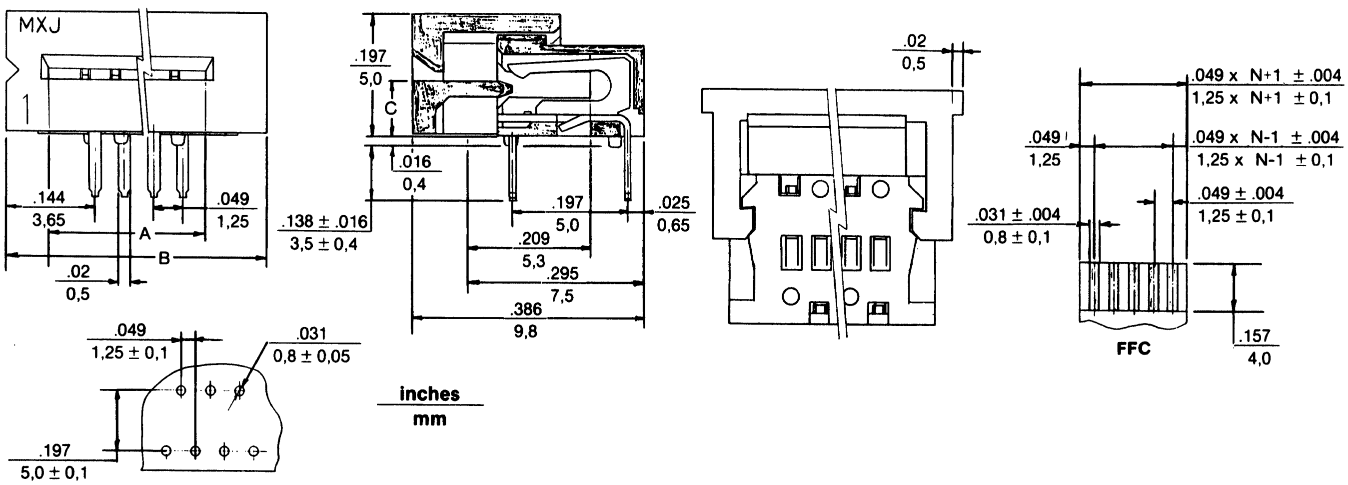
Electrical

Voltage: 200V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 500 MΩ min.

Physical

Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +80°C





PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Series	Recommended FFC/FPC Thickness	Dimension A	Dimension B	Dimension C
3	39-51-3033 39-51-4031	5597 5598	0.30 (.012) 0.10 (.004)	5.20 (.205)	9.50 (.374)	2.30 (.091) 2.50 (.098)
4	39-51-3043 39-51-4041	5597 5598	0.30 (.012) 0.10 (.004)	6.45 (.254)	10.75 (.423)	2.30 (.091) 2.50 (.098)
5	39-51-3053 39-51-4051	5597 5598	0.30 (.012) 0.10 (.004)	7.70 (.303)	12.00 (.472)	2.30 (.091) 2.50 (.098)
6	39-51-3063 39-51-4061	5597 5598	0.30 (.012) 0.10 (.004)	8.95 (.352)	13.25 (.522)	2.30 (.091) 2.50 (.098)
7	39-51-3073 39-51-4071	5597 5598	0.30 (.012) 0.10 (.004)	10.20 (.401)	14.50 (.571)	2.30 (.091) 2.50 (.098)
8	39-51-3083 39-51-4081	5597 5598	0.30 (.012) 0.10 (.004)	11.45 (.451)	15.75 (.620)	2.30 (.091) 2.50 (.098)
9	39-51-3093 39-51-4091	5597 5598	0.30 (.012) 0.10 (.004)	12.70 (.500)	17.00 (.669)	2.30 (.091) 2.50 (.098)
10	39-51-3103 39-51-4101	5597 5598	0.30 (.012) 0.10 (.004)	13.95 (.549)	18.25 (.719)	2.30 (.091) 2.50 (.098)
11	39-51-3113 39-51-4111	5597 5598	0.30 (.012) 0.10 (.004)	15.20 (.598)	19.50 (.768)	2.30 (.091) 2.50 (.098)
12	39-51-3123 39-51-4121	5597 5598	0.30 (.012) 0.10 (.004)	16.45 (.648)	20.75 (.817)	2.30 (.091) 2.50 (.098)
13	39-51-3133 39-51-4131	5597 5598	0.30 (.012) 0.10 (.004)	17.70 (.697)	22.00 (.866)	2.30 (.091) 2.50 (.098)
14	39-51-3143 39-51-4141	5597 5598	0.30 (.012) 0.10 (.004)	18.95 (.746)	23.25 (.915)	2.30 (.091) 2.50 (.098)
15	39-51-3153 39-51-4151	5597 5598	0.30 (.012) 0.10 (.004)	20.20 (.795)	24.50 (.965)	2.30 (.091) 2.50 (.098)
16	39-51-3163 39-51-4161	5597 5598	0.30 (.012) 0.10 (.004)	21.45 (.845)	25.75 (1.014)	2.30 (.091) 2.50 (.098)
17	39-51-3173 39-51-4171	5597 5598	0.30 (.012) 0.10 (.004)	22.70 (.894)	27.00 (1.063)	2.30 (.091) 2.50 (.098)
18	39-51-3183 39-51-4181	5597 5598	0.30 (.012) 0.10 (.004)	23.95 (.943)	28.25 (1.112)	2.30 (.091) 2.50 (.098)
19	39-51-3193 39-51-4191	5597 5598	0.30 (.012) 0.10 (.004)	25.20 (.992)	29.50 (1.161)	2.30 (.091) 2.50 (.098)
20	39-51-3203 39-51-4201	5597 5598	0.30 (.012) 0.10 (.004)	26.45 (1.041)	30.75 (1.211)	2.30 (.091) 2.50 (.098)
21	39-51-3213 39-51-4211	5597 5598	0.30 (.012) 0.10 (.004)	27.70 (1.090)	32.00 (1.260)	2.30 (.091) 2.50 (.098)
22	39-51-3223 39-51-4221	5597 5598	0.30 (.012) 0.10 (.004)	28.95 (1.140)	33.25 (1.309)	2.30 (.091) 2.50 (.098)
23	39-51-3233 39-51-4231	5597 5598	0.30 (.012) 0.10 (.004)	30.20 (1.189)	34.50 (1.358)	2.30 (.091) 2.50 (.098)
24	39-51-3243 39-51-4241	5597 5598	0.30 (.012) 0.10 (.004)	31.45 (1.238)	35.75 (1.407)	2.30 (.091) 2.50 (.098)
25	39-51-3253 39-51-4251	5597 5598	0.30 (.012) 0.10 (.004)	32.70 (1.287)	37.00 (1.475)	2.30 (.091) 2.50 (.098)
26	39-51-3263 39-51-4261	5597 5598	0.30 (.012) 0.10 (.004)	33.95 (1.337)	38.25 (1.506)	2.30 (.091) 2.50 (.098)
27	39-51-3273 39-51-4271	5597 5598	0.30 (.012) 0.10 (.004)	35.20 (1.386)	39.50 (1.555)	2.30 (.091) 2.50 (.098)
28	39-51-3283 39-51-4281	5597 5598	0.30 (.012) 0.10 (.004)	36.45 (1.435)	40.75 (1.604)	2.30 (.091) 2.50 (.098)
29	39-51-3293 39-51-4291	5597 5598	0.30 (.012) 0.10 (.004)	37.70 (1.484)	42.00 (1.654)	2.30 (.091) 2.50 (.098)
30	39-51-3303 39-51-4301	5597 5598	0.30 (.012) 0.10 (.004)	38.95 (1.534)	43.25 (1.703)	2.30 (.091) 2.50 (.098)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch FFC/FPC Connector

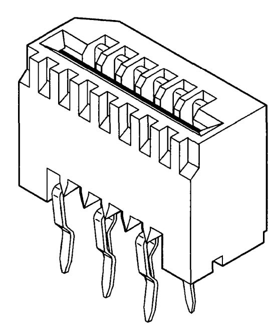
52045 Straight, Non-ZIF

Features and Benefits
- Sizes 3 to 40 circuits
- For 0.30mm thick FFC/FPC

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 200V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 500 MΩ min.

Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C



FFC/FPC Connectors

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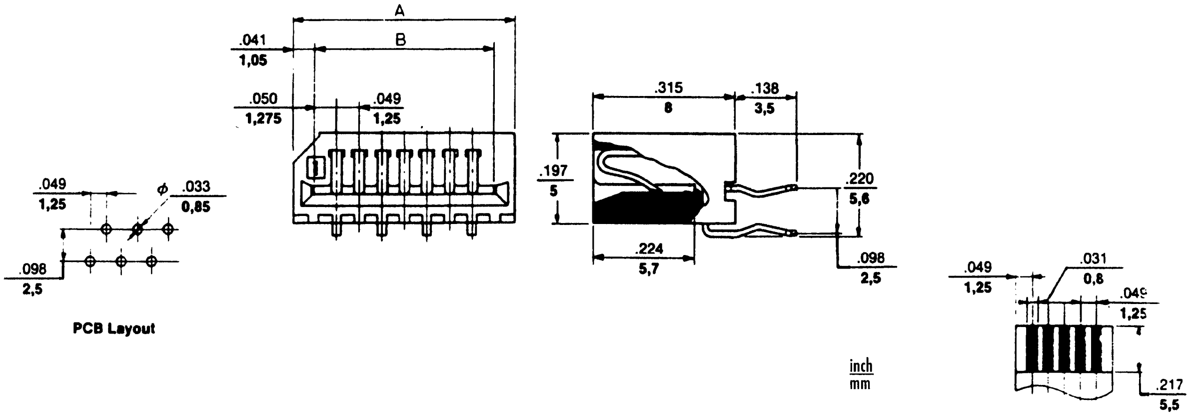


ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
3	52045-0345	7.15 (.281)	5.05 (.199)
4	52045-0445	8.40 (.331)	6.30 (.248)
5	52045-0545	9.65 (.380)	7.55 (.297)
6	52045-0645	10.90 (.429)	8.80 (.346)
7	52045-0745	12.15 (.478)	10.05 (.396)
8	52045-0845	13.40 (.528)	11.30 (.445)
9	52045-0945	14.65 (.577)	12.55 (.494)
10	52045-1045	15.90 (.626)	13.80 (.543)
11	52045-1145	17.15 (.675)	15.05 (.593)
12	52045-1245	18.40 (.724)	16.30 (.642)
13	52045-1345	19.65 (.774)	17.55 (.691)
14	52045-1445	20.90 (.823)	18.80 (.740)
15	52045-1545	22.15 (.872)	20.05 (.789)

Circuits	Order No.	Dimension A	Dimension B
16	52045-1645	23.40 (.921)	21.30 (.839)
17	52045-1745	24.65 (.970)	22.55 (.888)
18	52045-1845	25.90 (1.020)	23.80 (.937)
19	52045-1945	27.15 (1.069)	25.05 (.986)
20	52045-2045	28.40 (1.118)	26.30 (1.035)
21	52045-2145	29.65 (1.167)	27.55 (1.085)
22	52045-2245	30.90 (1.217)	28.80 (1.134)
23	52045-2345	32.15 (1.266)	30.05 (1.183)
24	52045-2445	33.40 (1.314)	31.30 (1.232)
25	52045-2545	34.65 (1.364)	32.55 (1.281)
26	52045-2645	35.90 (1.413)	33.80 (1.331)
27	52045-2745	37.15 (1.463)	35.05 (1.380)
28	52045-2845	38.40 (1.512)	36.30 (1.429)

Circuits	Order No.	Dimension A	Dimension B
29	52045-2945	39.65 (1.561)	37.55 (1.478)
30	52045-3045	40.90 (1.610)	38.80 (1.528)
31	52045-3145	42.15 (1.659)	40.05 (1.577)
32	52045-3245	43.40 (1.709)	41.30 (1.626)
33	52045-3345	44.65 (1.758)	42.55 (1.675)
34	52045-3445	45.90 (1.807)	43.80 (1.724)
35	52045-3545	47.15 (1.856)	45.05 (1.774)
36	52045-3645	48.40 (1.906)	46.30 (1.822)
37	52045-3745	49.65 (1.955)	47.55 (1.872)
38	52045-3845	50.90 (2.004)	48.80 (1.921)
39	52045-3945	52.15 (2.053)	50.05 (1.970)
40	52045-4045	53.40 (2.102)	51.30 (2.019)

FEATURES AND SPECIFICATIONS

molex®

1.25mm (.049") Pitch FFC/FPC Connector

52044

Right Angle, Non-ZIF

Features and Benefits

- Sizes 3 to 40 circuits
- For 0.30mm thick FFC/FPC

Reference Information

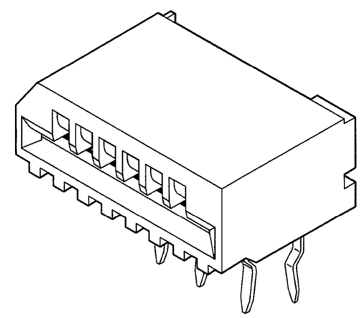
Packaging: Tray
Designed In: Millimeters

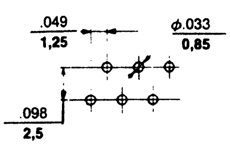
Electrical

Voltage: 200V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 500 MΩ min.

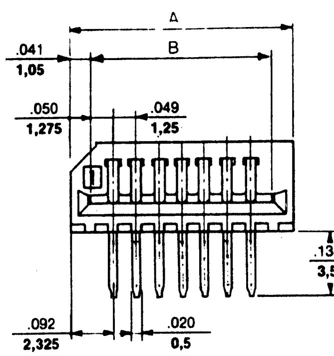
Physical

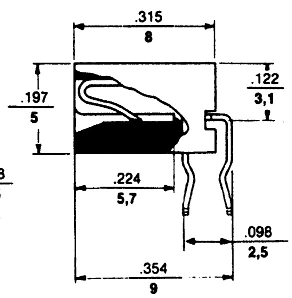
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C

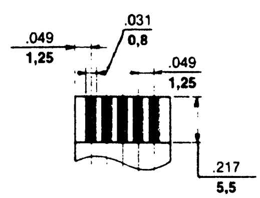




PCB Layout







Inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	52044-0345	7.15 (.281)	5.05 (.199)
4	52044-0445	8.40 (.331)	6.30 (.248)
5	52044-0545	9.65 (.380)	7.55 (.297)
6	52044-0645	10.90 (.429)	8.80 (.346)
7	52044-0745	12.15 (.478)	10.05 (.396)
8	52044-0845	13.40 (.528)	11.30 (.445)
9	52044-0945	14.65 (.577)	12.55 (.494)
10	52044-1045	15.90 (.626)	13.80 (.543)
11	52044-1145	17.15 (.675)	15.05 (.593)
12	52044-1245	18.40 (.724)	16.30 (.642)
13	52044-1345	19.65 (.774)	17.55 (.691)
14	52044-1445	20.90 (.823)	18.80 (.740)
15	52044-1545	22.15 (.872)	20.05 (.789)
16	52044-1645	23.40 (.921)	21.30 (.839)
17	52044-1745	24.65 (.970)	22.55 (.888)
18	52044-1845	25.90 (1.020)	23.80 (.937)
19	52044-1945	27.15 (1.069)	25.05 (.986)
20	52044-2045	28.40 (1.118)	26.30 (1.035)
21	52044-2145	29.65 (1.167)	27.55 (1.085)
22	52044-2245	30.90 (1.217)	28.80 (1.134)
23	52044-2345	32.15 (1.266)	30.05 (1.183)
24	52044-2445	33.40 (1.314)	31.30 (1.232)
25	52044-2545	34.65 (1.364)	32.55 (1.281)
26	52044-2645	35.90 (1.413)	33.80 (1.331)
27	52044-2745	37.15 (1.463)	35.05 (1.380)
28	52044-2845	38.40 (1.512)	36.30 (1.429)
29	52044-2945	39.65 (1.561)	37.55 (1.478)
30	52044-3045	40.90 (1.610)	38.80 (1.528)
31	52044-3145	42.15 (1.659)	40.05 (1.577)
32	52044-3245	43.40 (1.709)	41.30 (1.626)
33	52044-3345	44.65 (1.758)	42.55 (1.675)
34	52044-3445	45.90 (1.807)	43.80 (1.724)
35	52044-3545	47.15 (1.856)	45.05 (1.774)
36	52044-3645	48.40 (1.906)	46.30 (1.822)
37	52044-3745	49.65 (1.955)	47.55 (1.872)
38	52044-3845	50.90 (2.004)	48.80 (1.921)
39	52044-3945	52.15 (2.053)	50.05 (1.970)
40	52044-4045	53.40 (2.102)	51.30 (2.019)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch FFC/FPC Connector

52492

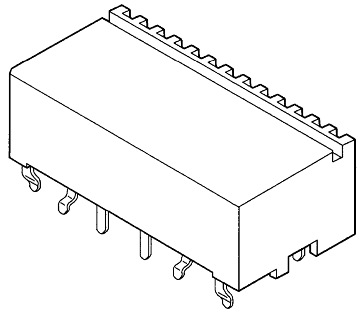
Bottom Entry

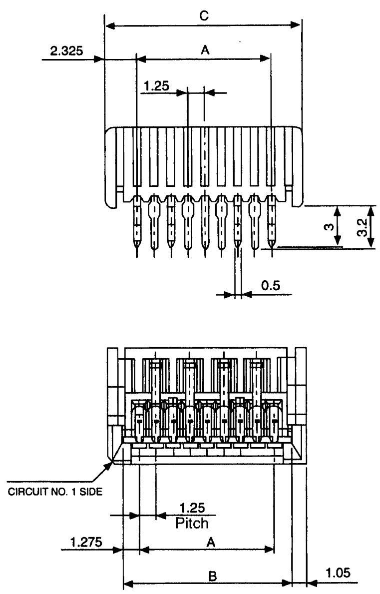
Features and Benefits
- Sizes 6 to 36 circuits
- For 0.30mm thick FFC/FPC

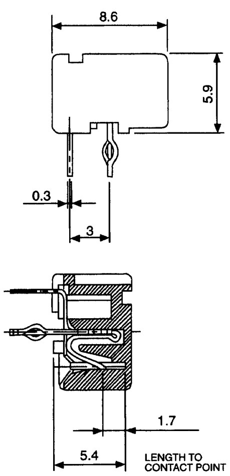
Reference Information
Packaging: Tray
Designed In: Millimeters

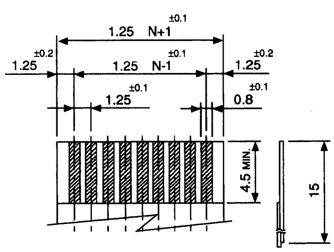
Electrical
Voltage: 200V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 500 MΩ min.

Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C

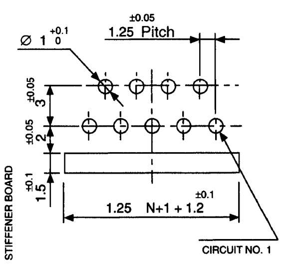








THICKNESS: 0.3 ±0.05
APPLICABLE FFC/FPC RECOMMENDED DIMENSION



PCB Layout
MOUNTING SIDE
P.C. BOARD THICKNESS: 1.6

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C
6	52492-0620	6.25 (.246)	8.80 (.346)	10.90 (.429)
7	52492-0720	7.50 (.295)	10.05 (.396)	12.15 (.478)
8	52492-0820	8.75 (.344)	11.30 (.445)	13.40 (.528)
9	52492-0920	10.00 (.394)	12.55 (.494)	14.65 (.577)
10	52492-1020	11.25 (.443)	13.80 (.543)	15.90 (.626)
11	52492-1120	12.50 (.492)	15.05 (.593)	17.15 (.675)
12	52492-1220	13.75 (.541)	16.30 (.642)	18.40 (.724)
13	52492-1320	15.00 (.591)	17.55 (.691)	19.65 (.774)
14	52492-1420	16.25 (.640)	18.80 (.740)	20.90 (.823)
15	52492-1520	17.50 (.689)	20.05 (.789)	22.15 (.872)
16	52492-1620	18.75 (.738)	21.30 (.839)	23.40 (.921)
17	52492-1720	20.00 (.787)	22.55 (.888)	24.65 (.970)
18	52492-1820	21.25 (.837)	23.80 (.937)	25.90 (1.020)
19	52492-1920	22.50 (.886)	25.05 (.986)	27.15 (1.069)
20	52492-2020	23.75 (.935)	26.30 (1.035)	28.40 (1.118)
21	52492-2120	25.00 (.984)	27.55 (1.085)	29.65 (1.167)

Circuits	Order No.	Dimension A	Dimension B	Dimension C
22	52492-2220	26.25 (1.033)	28.80 (1.134)	30.90 (1.217)
23	52492-2320	27.50 (1.083)	30.05 (1.183)	32.15 (1.266)
24	52492-2420	28.75 (1.132)	31.30 (1.232)	33.40 (1.315)
25	52492-2520	30.00 (1.181)	32.55 (1.281)	34.65 (1.364)
26	52492-2620	31.25 (1.230)	33.80 (1.331)	35.90 (1.413)
27	52492-2720	32.50 (1.280)	35.05 (1.380)	37.15 (1.463)
28	52492-2820	33.75 (1.329)	36.30 (1.429)	38.40 (1.512)
29	52492-2920	35.00 (1.378)	37.55 (1.478)	39.65 (1.561)
30	52492-3020	36.25 (1.427)	38.80 (1.528)	40.90 (1.610)
31	52492-3120	37.50 (1.476)	40.05 (1.577)	42.15 (1.659)
32	52492-3220	38.75 (1.526)	41.30 (1.626)	43.40 (1.709)
33	52492-3320	40.00 (1.575)	42.55 (1.675)	44.65 (1.758)
34	52492-3420	41.25 (1.624)	43.80 (1.724)	45.90 (1.807)
35	52492-3520	42.50 (1.673)	45.05 (1.774)	47.15 (1.856)
36	52492-3620	43.75 (1.722)	46.30 (1.823)	48.40 (1.906)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch FFC/FPC Connector

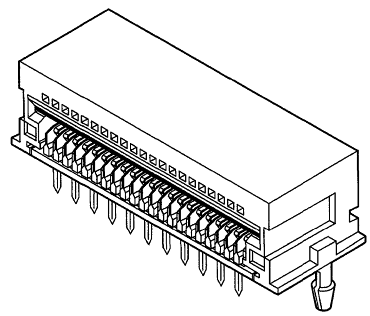
52489 Right Angle

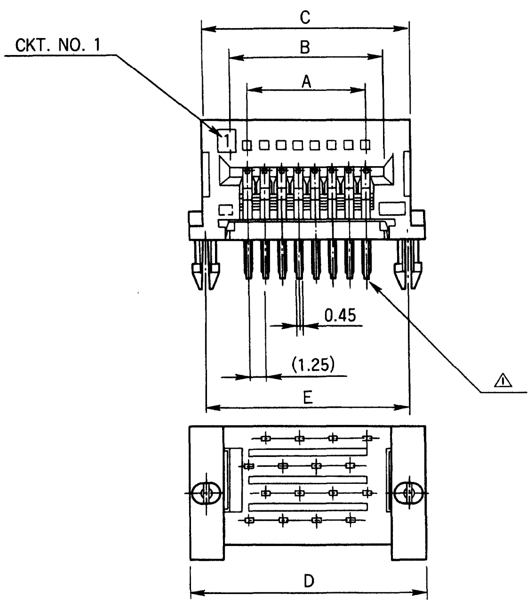
Features and Benefits
- Sizes 32, 40 and 44 circuits
- For 0.60mm thick FFC

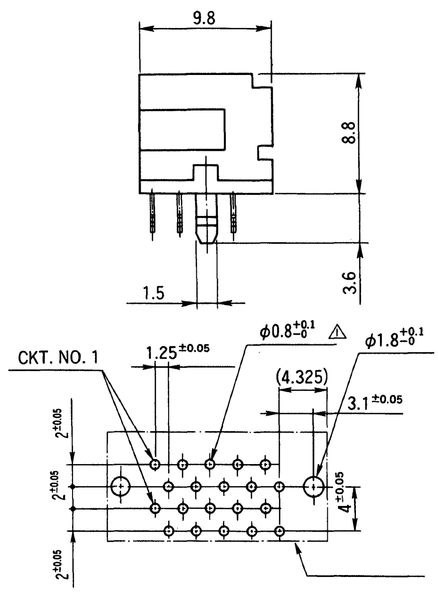
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 200V
Current: 1.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +80°C







ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Flex Circuit-to-Board FFC/FPC Connector

90500 Straight, ZIF

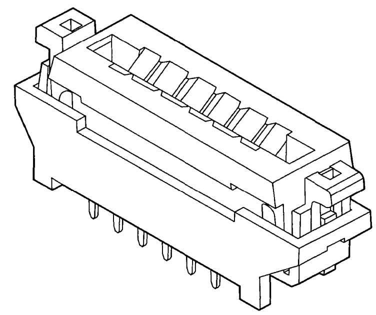
Features and Benefits
- Sizes 4 to 20 circuits
- For 0.20 ± 0.10mm thick FFC/FPC
- Zero insertion force (ZIF)
- Dual beam contact
- Audible click when cover closed

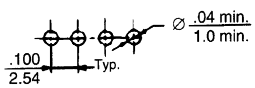
Reference Information
Product Specification: PS-90500E
Packaging: Tube
UL File No.: E29179
Designed In: Millimeters

Electrical
Voltage: 250V DC
Current: 1.0A max. per circuit
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.

Mechanical
Contact Retention to Housing: 300g min.
Unmating Force: 35g min.

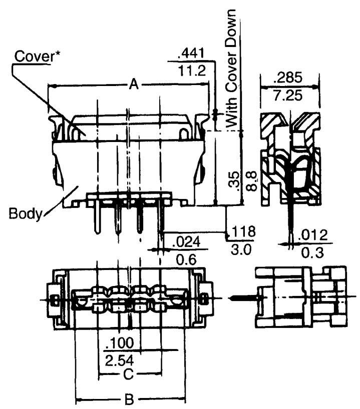
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C



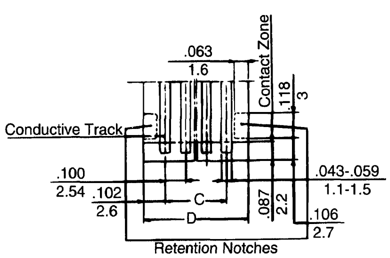


PCB Layout

inches
mm



Straight Version



Flat Flex Circuitry Preparation

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
4	90500-3004	22.52 (.887)	12.92 (.509)	7.62 (.300)	12.82 (.505)
5	90500-3005	25.06 (.987)	15.46 (.609)	10.16 (.400)	15.36 (.605)
6	90500-3006	27.60 (1.087)	18.00 (.709)	12.70 (.500)	17.90 (.705)
7	90500-3007	30.14 (1.187)	20.54 (.809)	15.24 (.600)	20.44 (.805)
8	90500-3008	32.68 (1.287)	23.08 (.909)	17.78 (.700)	22.98 (.905)
9	90500-3009	35.22 (1.387)	25.62 (1.009)	20.32 (.800)	25.52 (1.005)
10	90500-3010	37.76 (1.487)	28.16 (1.109)	22.86 (.900)	28.06 (1.105)
11	90500-3011	40.30 (1.587)	30.70 (1.209)	25.40 (1.000)	30.60 (1.205)
12	90500-3012	42.84 (1.687)	33.24 (1.309)	27.94 (1.100)	33.14 (1.305)
13	90500-3013	45.38 (1.787)	35.78 (1.409)	30.48 (1.200)	35.68 (1.405)
14	90500-3014	47.92 (1.887)	38.32 (1.509)	33.02 (1.300)	38.22 (1.505)
15	90500-3015	50.46 (1.987)	40.86 (1.609)	35.56 (1.400)	40.76 (1.605)
16	90500-3016	53.00 (2.087)	43.40 (1.709)	38.10 (1.500)	43.30 (1.705)
17	90500-3017	55.54 (2.187)	45.94 (1.809)	40.64 (1.600)	45.84 (1.805)
18	90500-3018	58.08 (2.287)	48.48 (1.909)	43.18 (1.700)	48.38 (1.905)
19	90500-3019	60.62 (2.387)	51.02 (2.009)	45.72 (1.800)	50.92 (2.005)
20	90500-3020	63.16 (2.487)	53.56 (2.109)	48.26 (1.900)	53.46 (2.105)

Note: Available with kinked tails, contact factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Flex Circuit-to-Board FFC/FPC Connector

90500

Right Angle, ZIF

Features and Benefits
- Sizes 4 to 20 circuits
- For 0.20 ± 0.10mm thick FFC/FPC
- Zero insertion force (ZIF)
- Dual beam contact
- Audible click when cover closed

Reference Information
Product Specification: PS-90500E
Packaging: Tube
UL File No.: E29179
Designed In: Millimeters

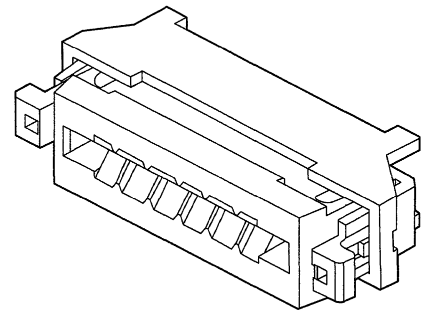
Electrical
Voltage: 250V DC
Current: 1.0A max. per circuit
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 5000 MΩ min.

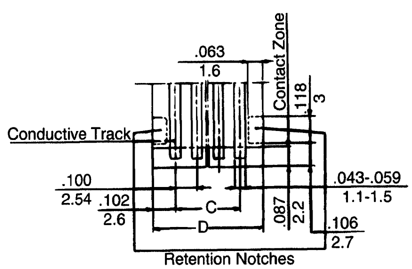
Mechanical
Contact Retention to Housing: 300g min.
Unmating Force: 35g min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C

FFC/FCP Connectors

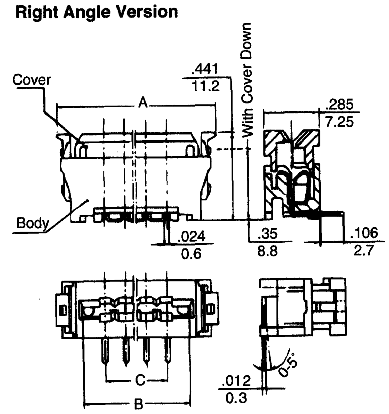
F



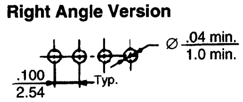


Flat Flex Circuitry Preparation

Right Angle Version



Right Angle Version



PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
4	90500-4004	22.52 (.887)	12.92 (.509)	7.62 (.300)	12.82 (.505)
5	90500-4005	25.06 (.987)	15.46 (.609)	10.16 (.400)	15.36 (.605)
6	90500-4006	27.60 (1.087)	18.00 (.709)	12.70 (.500)	17.90 (.705)
7	90500-4007	30.14 (1.187)	20.54 (.809)	15.24 (.600)	20.44 (.805)
8	90500-4008	32.68 (1.287)	23.08 (.909)	17.78 (.700)	22.98 (.905)
9	90500-4009	35.22 (1.387)	25.62 (1.009)	20.32 (.800)	25.52 (1.005)
10	90500-4010	37.76 (1.487)	28.16 (1.109)	22.86 (.900)	28.06 (1.105)
11	90500-4011	40.30 (1.587)	30.70 (1.209)	25.40 (1.000)	30.60 (1.205)
12	90500-4012	42.84 (1.687)	33.24 (1.309)	27.94 (1.100)	33.14 (1.305)
13	90500-4013	45.38 (1.787)	35.78 (1.409)	30.48 (1.200)	35.68 (1.405)
14	90500-4014	47.92 (1.887)	38.32 (1.509)	33.02 (1.300)	38.22 (1.505)
15	90500-4015	50.46 (1.987)	40.86 (1.609)	35.56 (1.400)	40.76 (1.605)
16	90500-4016	53.00 (2.087)	43.40 (1.709)	38.10 (1.500)	43.30 (1.705)
17	90500-4017	55.54 (2.187)	45.94 (1.809)	40.64 (1.600)	45.84 (1.805)
18	90500-4018	58.08 (2.287)	48.48 (1.909)	43.18 (1.700)	48.38 (1.905)
19	90500-4019	60.62 (2.387)	51.02 (2.009)	45.72 (1.800)	50.92 (2.005)
20	90500-4020	63.16 (2.487)	53.56 (2.109)	48.26 (1.900)	53.46 (2.105)

Note: Available with kinked tails, contact factory

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch FFC/FPC Connector

5229

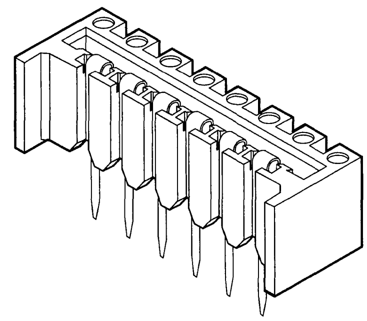
Straight, Low Profile

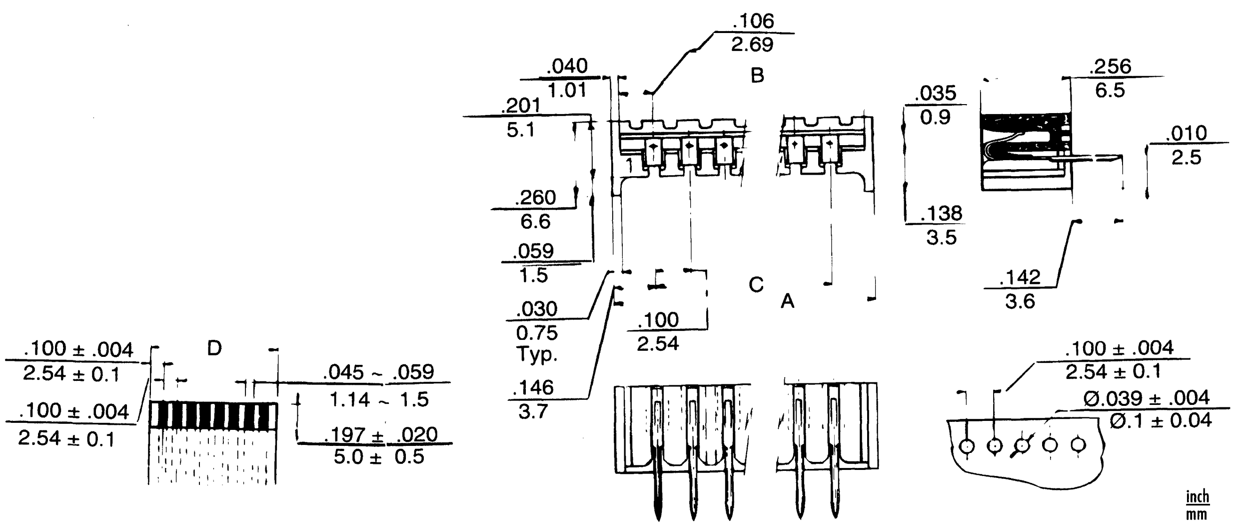
Features and Benefits
- Sizes 3 to 27 circuits
- For 0.30mm thick FFC/FPC
- Low insertion force (LIF)
- Also accepts conductive ink circuit (membrane switch)
- Completely eliminates flux intrusion

Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 200V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 650V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D
3	22-02-3033	12.48 (.491)	10.46 (.412)	5.08 (.200)	10.16 (.400)
4	22-02-3043	15.02 (.591)	13.00 (.512)	7.62 (.300)	12.70 (.500)
5	22-02-3053	17.56 (.691)	15.54 (.612)	10.16 (.400)	15.24 (.600)
6	22-02-3063	20.10 (.791)	18.08 (.712)	12.70 (.500)	17.78 (.700)
7	22-02-3073	22.64 (.891)	20.62 (.812)	15.24 (.600)	20.32 (.800)
8	22-02-3083	25.18 (.991)	23.16 (.912)	17.78 (.700)	22.86 (.900)
9	22-02-3093	27.72 (1.091)	25.70 (1.012)	20.32 (.800)	25.40 (1.000)
10	22-02-3103	30.26 (1.191)	28.24 (1.112)	22.86 (.900)	27.94 (1.100)
11	22-02-3113	32.80 (1.291)	30.78 (1.212)	25.40 (1.000)	30.48 (1.200)
12	22-02-3123	35.34 (1.391)	33.32 (1.312)	27.94 (1.100)	33.02 (1.300)
13	22-02-3133	37.88 (1.491)	35.86 (1.412)	30.48 (1.200)	35.56 (1.400)
14	22-02-3143	40.42 (1.591)	38.40 (1.512)	33.02 (1.300)	38.10 (1.500)
15	22-02-3153	42.96 (1.691)	40.94 (1.612)	35.56 (1.400)	40.64 (1.600)

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D
16	22-02-3163	45.50 (1.791)	43.48 (1.712)	38.10 (1.500)	43.18 (1.700)
17	22-02-3173	48.04 (1.891)	46.02 (1.812)	40.64 (1.600)	45.72 (1.800)
18	22-02-3183	50.58 (1.991)	48.56 (1.912)	43.18 (1.700)	48.26 (1.900)
19	22-02-3193	53.12 (2.091)	51.10 (2.012)	45.72 (1.800)	50.80 (2.000)
20	22-02-3203	55.66 (2.191)	53.64 (2.112)	48.26 (1.900)	53.34 (2.100)
21	22-02-3213	58.20 (2.291)	56.18 (2.212)	50.80 (2.000)	55.88 (2.200)
22	22-02-3223	60.74 (2.391)	58.72 (2.312)	53.34 (2.100)	58.42 (2.300)
23	22-02-3233	63.28 (2.491)	61.26 (2.412)	55.88 (2.200)	60.96 (2.400)
24	22-02-3243	65.82 (2.591)	63.80 (2.512)	58.42 (2.300)	63.50 (2.500)
25	22-02-3253	68.36 (2.691)	66.34 (2.612)	60.96 (2.400)	66.04 (2.600)
26	22-02-3263	70.90 (2.791)	68.88 (2.712)	63.50 (2.500)	68.58 (2.700)
27	22-02-3273	73.44 (2.891)	71.42 (2.812)	66.04 (2.600)	71.12 (2.800)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch FFC/FPC Connector

5229

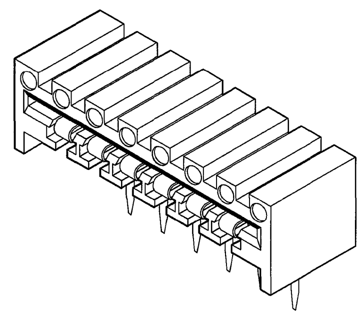
Right Angle, Low Profile

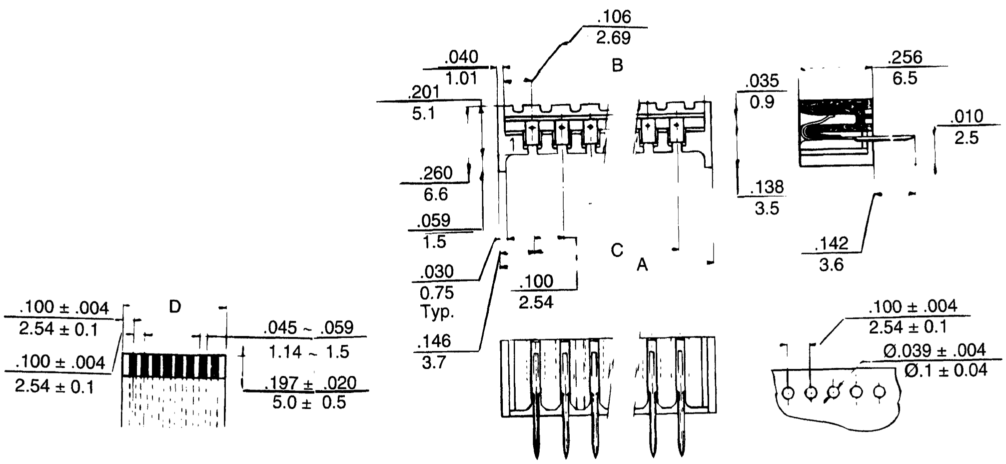
Features and Benefits
- Sizes 3 to 27 circuits
- For 0.30mm thick FFC/FPC
- Low insertion force (LIF)
- Also accepts conductive ink circuit (membrane switch)
- Completely eliminates flux intrusion

Reference Information
Packaging: Tray
Designed In: Inches

Electrical
Voltage: 200V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 650V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
3	22-15-3033	12.48 (.491)	10.46 (.412)	5.08 (.200)	10.16 (.400)
4	22-15-3043	15.02 (.591)	13.00 (.512)	7.62 (.300)	12.70 (.500)
5	22-15-3053	17.56 (.691)	15.54 (.612)	10.16 (.400)	15.24 (.600)
6	22-15-3063	20.10 (.791)	18.08 (.712)	12.70 (.500)	17.78 (.700)
7	22-15-3073	22.64 (.891)	20.62 (.812)	15.24 (.600)	20.32 (.800)
8	22-15-3083	25.18 (.991)	23.16 (.912)	17.78 (.700)	22.86 (.900)
9	22-15-3093	27.72 (1.091)	25.70 (1.012)	20.32 (.800)	25.40 (1.000)
10	22-15-3103	30.26 (1.191)	28.24 (1.112)	22.86 (.900)	27.94 (1.100)
11	22-15-3113	32.80 (1.291)	30.78 (1.212)	25.40 (1.000)	30.48 (1.200)
12	22-15-3123	35.34 (1.391)	33.32 (1.312)	27.94 (1.100)	33.02 (1.300)
13	22-15-3133	37.88 (1.491)	35.86 (1.412)	30.48 (1.200)	35.56 (1.400)
14	22-15-3143	40.42 (1.591)	38.40 (1.512)	33.02 (1.300)	38.10 (1.500)
15	22-15-3153	42.96 (1.691)	40.94 (1.612)	35.56 (1.400)	40.64 (1.600)

Circuits	Order No.	Dimension			
		A	B	C	D
16	22-15-3163	45.50 (1.791)	43.48 (1.712)	38.10 (1.500)	43.18 (1.700)
17	22-15-3173	48.04 (1.891)	46.02 (1.812)	40.64 (1.600)	45.72 (1.800)
18	22-15-3183	50.58 (1.991)	48.56 (1.912)	43.18 (1.700)	48.26 (1.900)
19	22-15-3193	53.12 (2.091)	51.10 (2.012)	45.72 (1.800)	50.80 (2.000)
20	22-15-3203	55.66 (2.191)	53.64 (2.112)	48.26 (1.900)	53.34 (2.100)
21	22-15-3213	58.20 (2.291)	56.18 (2.212)	50.80 (2.000)	55.88 (2.200)
22	22-15-3223	60.74 (2.391)	58.72 (2.312)	53.34 (2.100)	58.42 (2.300)
23	22-15-3233	63.28 (2.491)	61.26 (2.412)	55.88 (2.200)	60.96 (2.400)
24	22-15-3243	65.82 (2.591)	63.80 (2.512)	58.42 (2.300)	63.50 (2.500)
25	22-15-3253	68.36 (2.691)	66.34 (2.612)	60.96 (2.400)	66.04 (2.600)
26	22-15-3263	70.90 (2.791)	68.88 (2.712)	63.50 (2.500)	68.58 (2.700)
27	22-15-3273	73.44 (2.891)	71.42 (2.812)	66.04 (2.600)	71.12 (2.800)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Flex-C-Term™ Connector

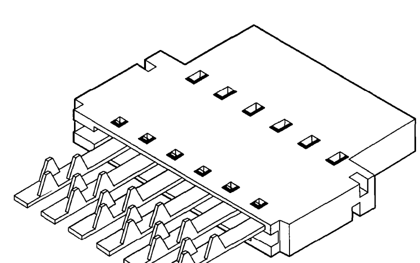
40556

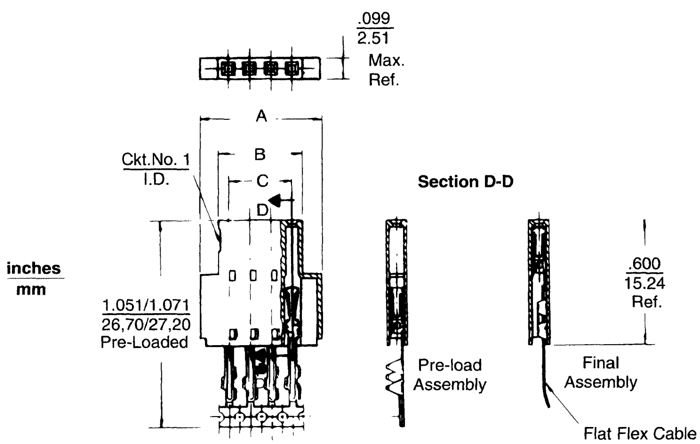
Features and Benefits
- Sizes 4 to 25 circuits
- Terminates membrane switches, flat connector flat cable and flexible circuitry
- Insulation piercing terminals pre-assembled into housing
- Stripping of insulation not required

Reference Information
Product Specification: PSX40556-0001
Packaging: Tube
Tooling Information: See page F-41
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70431 and .025" pins
Designed In: Inches

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Copper Alloy
Plating: See Table
Temperature: -40 to +120°C





Delivered on a carrier with 20 pieces per strip.

Actual Size  **Universal Polarizing Pin 40713-1**
Order No. 15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Plating No. 1	Plating No. 2	A	B	C
4	• 22-41-9043	• 22-51-9043	14.74 (.580)	10.13 (.399)	7.62 (.300)
5	• 22-41-9053	• 22-51-9053	17.28 (.680)	12.67 (.499)	10.16 (.400)
6	• 22-41-9063	• 22-51-9063	19.82 (.780)	15.21 (.599)	12.70 (.500)
7	• 22-41-9073	• 22-51-9073	22.36 (.880)	17.75 (.699)	15.24 (.600)
8	• 22-41-9083	• 22-51-9083	24.90 (.980)	20.29 (.799)	17.78 (.700)
9	• 22-41-9093	• 22-51-9093	27.44 (1.080)	22.83 (.899)	20.32 (.800)
10	• 22-41-9103	• 22-51-9103	29.98 (1.180)	25.37 (.999)	22.86 (.900)
11	• 22-41-9113	• 22-51-9113	32.52 (1.280)	27.91 (1.099)	25.40 (1.000)
12	• 22-41-9123	• 22-51-9123	35.06 (1.380)	30.45 (1.199)	27.94 (1.100)
13	• 22-41-9133	• 22-51-9133	37.60 (1.480)	32.99 (1.299)	30.48 (1.200)
14	• 22-41-9143	• 22-51-9143	40.14 (1.580)	35.53 (1.399)	33.02 (1.300)
15	• 22-41-9153	• 22-51-9153	42.68 (1.680)	38.07 (1.499)	35.56 (1.400)
16	• 22-41-9163	• 22-51-9163	45.22 (1.780)	40.61 (1.599)	38.10 (1.500)
17	• 22-41-9173	• 22-51-9173	47.76 (1.880)	43.15 (1.699)	40.64 (1.600)
18	• 22-41-9183	• 22-51-9183	50.30 (1.980)	45.69 (1.799)	43.18 (1.700)
19	• 22-41-9193	• 22-51-9193	52.84 (2.080)	48.23 (1.899)	45.72 (1.800)
20	• 22-41-9203	• 22-51-9203	55.38 (2.180)	50.77 (1.999)	48.26 (1.900)
21	• 22-41-9213	• 22-51-9213	57.92 (2.280)	53.31 (2.099)	50.80 (2.000)
22	• 22-41-9223	• 22-51-9223	60.46 (2.380)	55.85 (2.199)	53.34 (2.100)
23	• 22-41-9233	• 22-51-9233	63.00 (2.480)	58.39 (2.299)	55.88 (2.200)
24	• 22-41-9243	• 22-51-9243	65.54 (2.580)	60.93 (2.399)	58.42 (2.300)
25	• 22-41-9253	• 22-51-9253	68.08 (2.680)	63.47 (2.499)	60.96 (2.400)

Arbor Press Termination Tooling	
Type	Order No.
Manual	11-04-0592
Pneumatic	11-04-0617

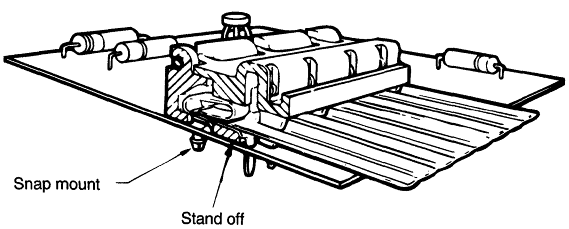
• US Standard Product, available through Molex franchised distributors
Plating No. 1: 200μ" min. Tin over 100μ" Copper
Plating No. 2: 15μ" Gold in contact area, 75μ" min. Tin/Lead in termination area all over 50μ" Nickel

2.54mm (.100") Pitch Flat Flex Connector

4850

Design Features

Prenotched cable is inserted between the second arm and the base of the double cantilever terminal. Closing the cover of the connector actuates the cam. (See Fig.2) This forces the terminal contact area to wipe the oxides from the cable without damaging conductor plating. The cover then locks the cable in place. (See Fig.1)



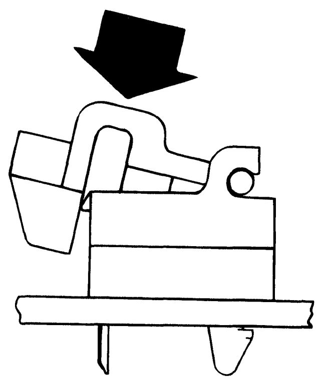


Fig. 1

Locking Force: To be applied in direction shown to allow cover to "FLEX" cut over the locking dimples of the housing.

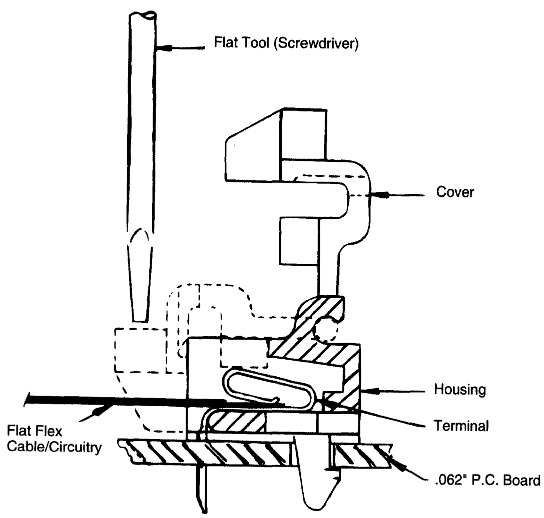


Fig. 2

Locking/Unlocking Procedure

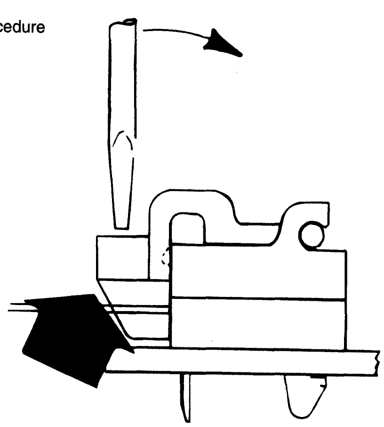


Fig. 3

Unlocking Force: To be applied in direction shown with fingers or use flat tool (screwdriver) to open cover, applying pressure as shown.

FEATURES AND SPECIFICATIONS

molex® 2.54mm (.100") Pitch Flat Flex Connector

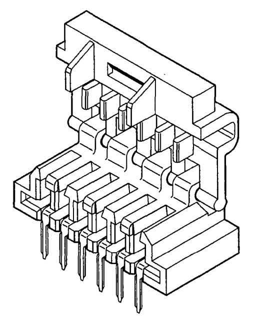
4850

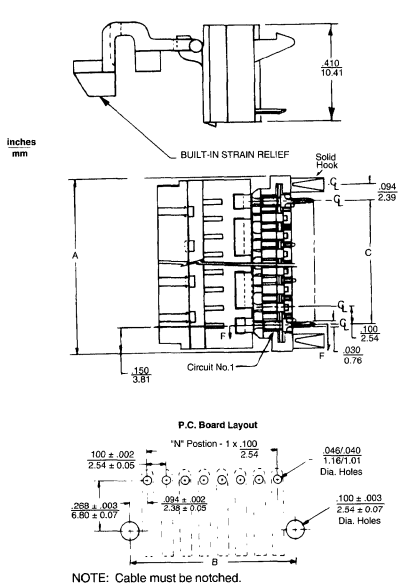
Features and Benefits
- Sizes 5 to 25 circuits
- Low insertion force (LIF)
- Accepts flat conductor flexible cable or flat flexible circuitry on .100" centers
- Snaps into PC board with retaining locks
- Printed circuit board solder tail terminals
- Built-in polarized strain relief

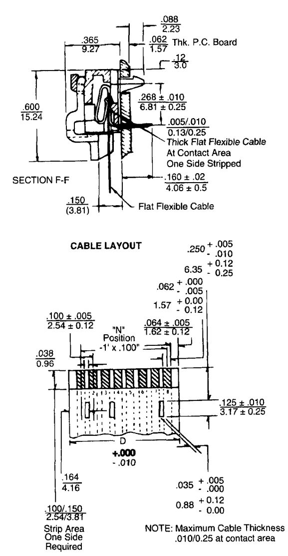
Reference Information
Product Specification: PS-4850
Packaging: Bag
Tooling Information: See page F-42
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 20 MΩ min.

Physical
Housing: Green glass-filled polyester, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +70°C







Note: Cable must be notched

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Cable Slots for Strain Relief Located Between
5	15-25-4051	17.78 (.700)	14.94 (.588)	10.16 (.400)	14.98 (.590)	1-2,3-4
6	15-25-4061	20.32 (.800)	17.48 (.688)	12.70 (.500)	17.52 (.690)	1-2,4-5
7	15-25-4071	22.86 (.900)	20.02 (.788)	15.24 (.600)	20.06 (.790)	1-2,5-6
8	15-25-4081	25.40 (1.000)	22.56 (.888)	17.78 (.700)	22.60 (.890)	1-2,3-4,7-8
9	15-25-4091	27.94 (1.100)	25.10 (.988)	20.32 (.800)	25.14 (.990)	1-2,3-4,8-9
10	15-25-4101	30.48 (1.200)	27.64 (1.088)	22.86 (.900)	27.68 (1.090)	1-2,3-4,9-10
11	15-25-4111	33.02 (1.300)	30.18 (1.188)	25.40 (1.000)	30.22 (1.190)	1-2,3-4,10-11
12	15-25-4121	35.56 (1.400)	32.72 (1.288)	27.94 (1.100)	32.76 (1.290)	1-2,3-4,11-12
13	15-25-4131	38.10 (1.500)	35.26 (1.388)	30.48 (1.200)	35.30 (1.390)	1-2,3-4,12-13
14	15-25-4141	40.64 (1.600)	37.80 (1.488)	33.02 (1.300)	37.84 (1.490)	1-2,3-4,13-14
15	15-25-4151	43.18 (1.700)	40.34 (1.588)	35.56 (1.400)	40.38 (1.590)	1-2,3-4,14-15

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Cable Slots for Strain Relief Located Between
16	15-25-4161	45.72 (1.800)	42.88 (1.688)	38.10 (1.500)	42.92 (1.690)	1-2,3-4,15-16
17	15-25-4171	48.26 (1.900)	45.42 (1.788)	40.64 (1.600)	45.46 (1.790)	1-2,3-4,16-17
18	15-25-4181	50.80 (2.000)	47.96 (1.888)	43.18 (1.700)	48.00 (1.890)	1-2,3-4,17-18
19	15-25-4191	53.34 (2.100)	50.50 (1.988)	45.72 (1.800)	50.54 (1.990)	1-2,3-4,18-19
20	15-25-4201	55.88 (2.200)	53.04 (2.088)	48.26 (1.900)	53.08 (2.090)	1-2,3-4,19-20
21	15-25-4211	58.42 (2.300)	55.58 (2.188)	50.80 (2.000)	55.62 (2.190)	1-2,3-4,20-21
22	15-25-4221	60.96 (2.400)	58.12 (2.288)	53.34 (2.100)	58.16 (2.290)	1-2,3-4,21-22
23	15-25-4231	63.50 (2.500)	60.66 (2.388)	55.88 (2.200)	60.70 (2.390)	1-2,3-4,22-23
24	15-25-4241	66.04 (2.600)	63.20 (2.488)	58.42 (2.300)	63.24 (2.490)	1-2,3-4,23-24
25	15-25-4251	68.58 (2.700)	65.74 (2.588)	60.69 (2.400)	65.78 (2.590)	1-2,3-4,24-25

2.54mm (.100") Pitch C-Grid SL™ FFC/FPC Connector

70431 Single Row, Male Version D

FEATURES AND SPECIFICATIONS

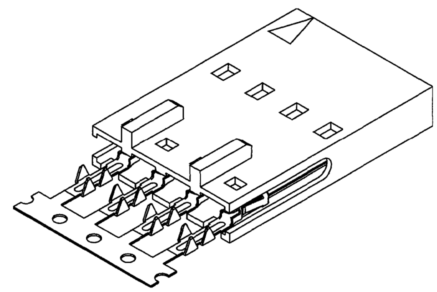
Features and Benefits
- Sizes 2 to 25 circuits
- Stackable end-to-end and back-to-back
- Back ribs prevent movement when used within panel mount housings
- Piercing crimp provides 3 high-pressure interfaces with the conductor
- Terminals preloaded into housing

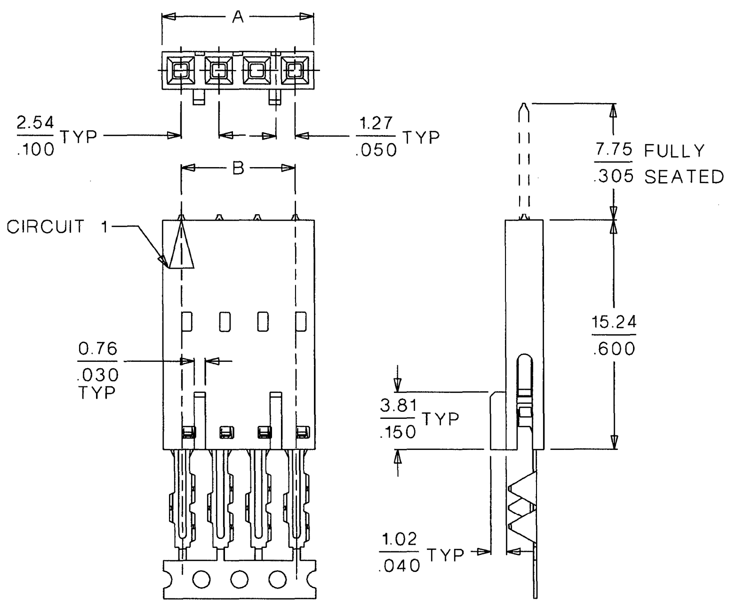
Reference Information
Product Specification: PS-70431
Packaging: Tube
Tooling Information: See page F-41
UL File No.: E29179
CSA File No.: LR19980
Mates With: Female connectors on 2.54mm (.100") pitch and 70018, 70022 and 70104 panel mount housings
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.0A (for Copper conductors)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 1.4kg (3 lb) min. per circuit
Wire Pull-Out Force: 2.7kg (6 lb)
Durability: Tin/Lead—25 cycles max.
Gold—50 cycles max.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION

Circuits	Order No.		
	15µ" Gold	30µ" Gold	200µ" Tin
2	15-47-5020	15-47-5024	15-38-9022
3	15-47-5030	15-47-5034	15-38-9032
4	15-47-5040	15-47-5044	15-38-9042
5	15-47-5050	15-47-5054	15-38-9052
6	15-47-5060	15-47-5064	15-38-9062
7	15-47-5070	15-47-5074	15-38-9072
8	15-47-5080	15-47-5084	15-38-9082
9	15-47-5090	15-47-5094	15-38-9092
10	15-47-5100	15-47-5104	15-38-9102
11	15-47-5110	15-47-5114	15-38-9112
12	15-47-5120	15-47-5124	15-38-9122
13	15-47-5130	15-47-5134	15-38-9132

Circuits	Order No.		
	15µ" Gold	30µ" Gold	200µ" Tin
14	15-47-5140	15-47-5144	15-38-9142
15	15-47-5150	15-47-5154	15-38-9152
16	15-47-5160	15-47-5164	15-38-9162
17	15-47-5170	15-47-5174	15-38-9172
18	15-47-5180	15-47-5184	15-38-9182
19	15-47-5190	15-47-5194	15-38-9192
20	15-47-5200	15-47-5204	15-38-9202
21	15-47-5210	15-47-5214	15-38-9212
22	15-47-5220	15-47-5224	15-38-9222
23	15-47-5230	15-47-5234	15-38-9232
24	15-47-5240	15-47-5244	15-38-9242
25	15-47-5250	15-47-5254	15-38-9252

15µ" Gold plating: 15µ" min. selective Gold in contact area with 75µ" min. Tin/Lead in the termination area over 50µ" min. Nickel overall

30µ" Gold plating: 30µ" min. selective Gold in contact area with 75µ" min. Tin/Lead in the termination area over 50µ" min. Nickel overall

200µ" Tin plating: 200µ" min. Tin over 100µ" Copper

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ FFC/FPC Connector

70430

Single Row, Female Version A

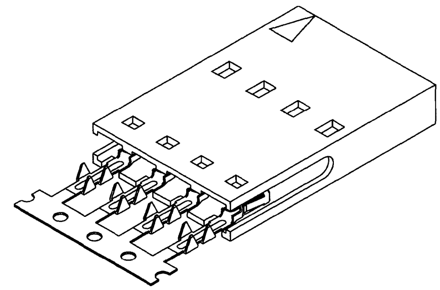
Features and Benefits
- Sizes 2 to 25 circuits
- Stackable end-to-end and side-by-side
- Piercing crimp provides 3 high-pressure interfaces with the conductor
- Terminals preloaded into housing

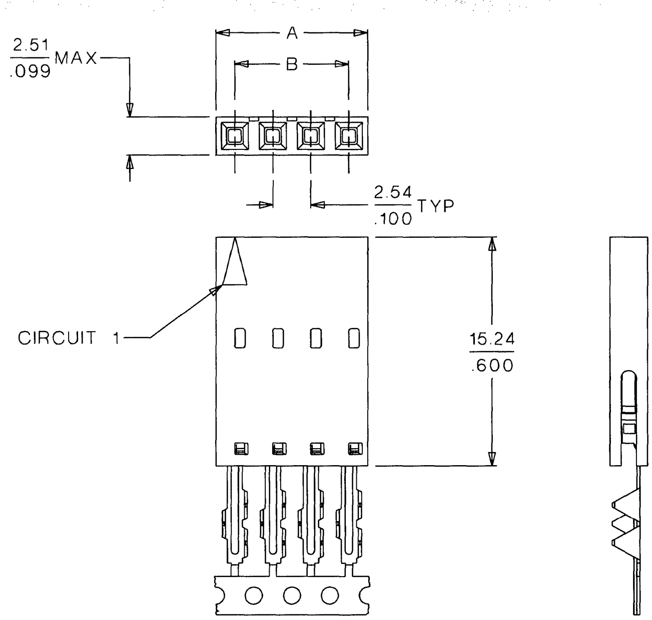
Reference Information
Product Specification: PS-40586
Packaging: Tube
Tooling Information: See page F-41
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2.54mm (.100") pitch, single or dual row, breakaway headers
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.0A (for Copper conductors)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 330g (0.7 lb) max.
Contact Retention to Housing: 1.4kg (3 lb) min. per circuit
Wire Pull-Out Force: 2.7kg (6 lb)
Durability: Tin/Lead—25 cycles max.
Gold—50 cycles max.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 15μ" Gold	Order No. 30μ" Gold	Order No. 200μ" Tin	Dimension A	Dimension B
2	15-47-4020	15-47-4024	15-38-8028	5.05 (.199)	2.54 (.100)
3	15-47-4030	15-47-4034	15-38-8038	7.59 (.299)	5.08 (.200)
4	15-47-4040	15-47-4044	15-38-8048	10.13 (.399)	7.62 (.300)
5	15-47-4050	15-47-4054	15-38-8058	12.67 (.499)	10.16 (.400)
6	15-47-4060	15-47-4064	15-38-8068	15.21 (.599)	12.70 (.500)
7	15-47-4070	15-47-4074	15-38-8078	17.75 (.699)	15.24 (.600)
8	15-47-4080	15-47-4084	15-38-8088	20.29 (.799)	17.78 (.700)
9	15-47-4090	15-47-4094	15-38-8098	22.83 (.899)	20.32 (.800)
10	15-47-4100	15-47-4104	15-38-8108	25.37 (.999)	22.86 (.900)
11	15-47-4110	15-47-4114	15-38-8118	27.91 (1.099)	25.40 (1.000)
12	15-47-4120	15-47-4124	15-38-8128	30.45 (1.199)	27.94 (1.100)
13	15-47-4130	15-47-4134	15-38-8138	32.99 (1.299)	30.48 (1.200)

Circuits	Order No. 15μ" Gold	Order No. 30μ" Gold	Order No. 200μ" Tin	Dimension A	Dimension B
14	15-47-4140	15-47-4144	15-38-8148	35.53 (1.399)	33.02 (1.300)
15	15-47-4150	15-47-4154	15-38-8158	38.07 (1.499)	35.56 (1.400)
16	15-47-4160	15-47-4164	15-38-8168	40.61 (1.599)	38.10 (1.500)
17	15-47-4170	15-47-4174	15-38-8178	43.15 (1.699)	40.64 (1.600)
18	15-47-4180	15-47-4184	15-38-8188	45.69 (1.799)	43.18 (1.700)
19	15-47-4190	15-47-4194	15-38-8198	48.23 (1.899)	45.72 (1.800)
20	15-47-4200	15-47-4204	15-38-8208	50.77 (1.999)	48.26 (1.900)
21	15-47-4210	15-47-4214	15-38-8218	53.31 (2.099)	50.80 (2.000)
22	15-47-4220	15-47-4224	15-38-8228	55.85 (2.199)	53.34 (2.100)
23	15-47-4230	15-47-4234	15-38-8238	58.39 (2.299)	55.88 (2.200)
24	15-47-4240	15-47-4244	15-38-8248	60.93 (2.399)	58.42 (2.300)
25	15-47-4250	15-47-4254	15-38-8258	63.47 (2.499)	60.96 (2.400)

15μ" Gold plating: 15μ" min. selective Gold in contact area with 75μ" min. Tin/Lead in the termination area over 50μ" min. Nickel overall

30μ" Gold plating: 30μ" min. selective Gold in contact area with 75μ" min. Tin/Lead in the termination area over 50μ" min. Nickel overall

200μ" Tin plating: 200μ" min. Tin over 100μ" Copper

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ FFC/FPC Connector

70430 Single Row, Female Version C

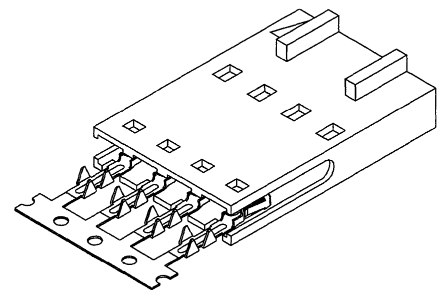
Features and Benefits
- Sizes 2 to 25 circuits
- Front polarizing ribs prevent pin damage during disconnect, housing cannot be twisted off pins
- Piercing crimp provides 3 high-pressure interfaces with the conductor
- Terminals preloaded into housing

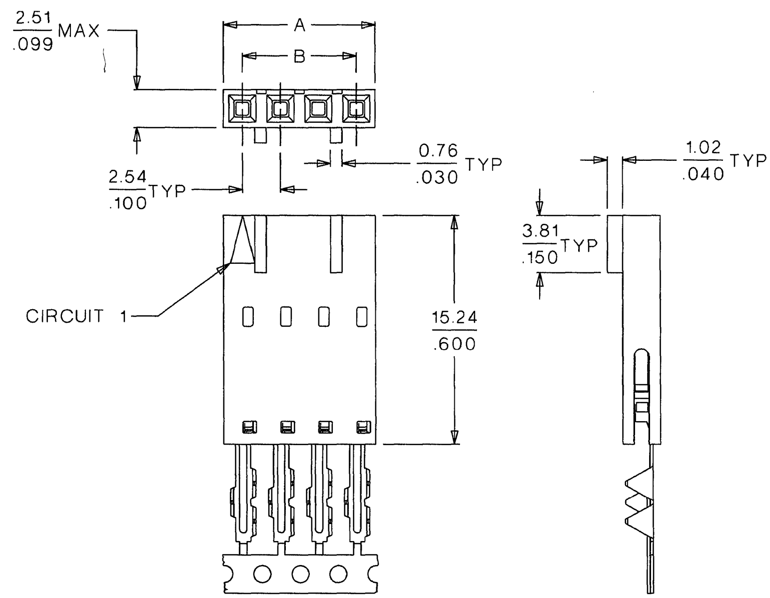
Reference Information
Product Specification: PS-40556
Packaging: Tube
Tooling Information: See page F-41
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70544, 70546 straight and 70554, 70556 right angle polarized headers
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.0A (for Copper conductors)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 330g (0.7 lb) max.
Contact Retention to Housing: 1.4kg (3 lb) min. per circuit
Wire Pull-Out Force: 2.7kg (6 lb)
Durability: Tin/Lead—25 cycles max.
Gold—50 cycles max.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15μ" Gold	30μ" Gold	200μ" Tin	A	B
2	15-47-4021	15-47-4025	15-38-8027	5.05 (.199)	2.54 (.100)
3	15-47-4031	15-47-4035	15-38-8037	7.59 (.299)	5.08 (.200)
4	15-47-4041	15-47-4045	15-38-8047	10.13 (.399)	7.62 (.300)
5	15-47-4051	15-47-4055	15-38-8057	12.67 (.499)	10.16 (.400)
6	15-47-4061	15-47-4065	15-38-8067	15.21 (.599)	12.70 (.500)
7	15-47-4071	15-47-4075	15-38-8077	17.75 (.699)	15.24 (.600)
8	15-47-4081	15-47-4085	15-38-8087	20.29 (.799)	17.78 (.700)
9	15-47-4091	15-47-4095	15-38-8097	22.83 (.899)	20.32 (.800)
10	15-47-4101	15-47-4105	15-38-8107	25.37 (.999)	22.86 (.900)
11	15-47-4111	15-47-4115	15-38-8117	27.91 (1.099)	25.40 (1.000)
12	15-47-4121	15-47-4125	15-38-8127	30.45 (1.199)	27.94 (1.100)
13	15-47-4131	15-47-4135	15-38-8137	32.99 (1.299)	30.48 (1.200)

Circuits	Order No.			Dimension	
	15μ" Gold	30μ" Gold	200μ" Tin	A	B
14	15-47-4141	15-47-4145	15-38-8147	35.53 (1.399)	33.02 (1.300)
15	15-47-4151	15-47-4155	15-38-8157	38.07 (1.499)	35.56 (1.400)
16	15-47-4161	15-47-4165	15-38-8167	40.61 (1.599)	38.10 (1.500)
17	15-47-4171	15-47-4175	15-38-8177	43.15 (1.699)	40.64 (1.600)
18	15-47-4181	15-47-4185	15-38-8187	45.69 (1.799)	43.18 (1.700)
19	15-47-4191	15-47-4195	15-38-8197	48.23 (1.899)	45.72 (1.800)
20	15-47-4201	15-47-4205	15-38-8207	50.77 (1.999)	48.26 (1.900)
21	15-47-4211	15-47-4215	15-38-8217	53.31 (2.099)	50.80 (2.000)
22	15-47-4221	15-47-4225	15-38-8227	55.85 (2.199)	53.34 (2.100)
23	15-47-4231	15-47-4235	15-38-8237	58.39 (2.299)	55.88 (2.200)
24	15-47-4241	15-47-4245	15-38-8247	60.93 (2.399)	58.42 (2.300)
25	15-47-4251	15-47-4255	15-38-8257	63.47 (2.499)	60.96 (2.400)

15μ" Gold plating: 15μ" min. selective Gold in contact area with 75μ" min. Tin/Lead in the termination area over 50μ" min. Nickel overall

30μ" Gold plating: 30μ" min. selective Gold in contact area with 75μ" min. Tin/Lead in the termination area over 50μ" min. Nickel overall

200μ" Tin plating: 200μ" min. Tin over 100μ" Copper

2.54mm (.100") Pitch C-Grid SL™ FFC/FPC Connector

70430

Single Row, Female Version D

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 25 circuits
- Stackable end-to-end and back-to-back
- Back polarizing ribs prevent the assembly from drifting within the interim clip when another module is removed
- Piercing crimp provides 3 high-pressure interfaces with the conductor
- Terminals preloaded into housing

Reference Information

Product Specification: PS-40556
Packaging: Tube
Tooling Information: See page F-41
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70004 single row and 70013 dual row interim clips
Designed In: Inches

Electrical

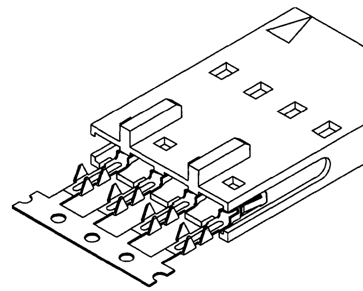
Voltage: 250V
Current: 2.0A (for Copper conductors)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

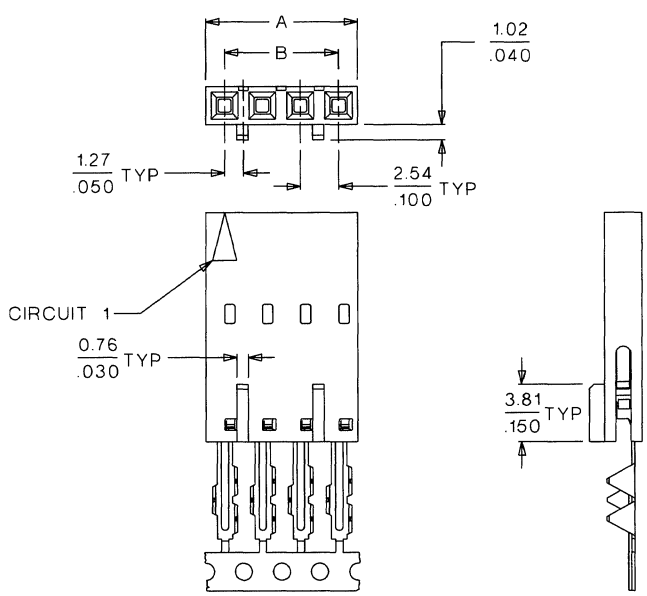
Mechanical

Contact Insertion Force: 330g (0.7 lb) max.
Contact Retention to Housing: 1.4kg (3 lb) min. per circuit
Wire Pull-Out Force: 2.7kg (6 lb)
Durability: Tin/Lead—25 cycles max.
Gold—50 cycles max.

Physical

Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15μ" Gold	30μ" Gold	200μ" Tin	A	B
2	15-47-4022	15-47-4026	15-38-8029	5.05 (.199)	2.54 (.100)
3	15-47-4032	15-47-4036	15-38-8039	7.59 (.299)	5.08 (.200)
4	15-47-4042	15-47-4046	15-38-8049	10.13 (.399)	7.62 (.300)
5	15-47-4052	15-47-4056	15-38-8059	12.67 (.499)	10.16 (.400)
6	15-47-4062	15-47-4066	15-38-8069	15.21 (.599)	12.70 (.500)
7	15-47-4072	15-47-4076	15-38-8079	17.75 (.699)	15.24 (.600)
8	15-47-4082	15-47-4086	15-38-8089	20.29 (.799)	17.78 (.700)
9	15-47-4092	15-47-4096	15-38-8099	22.83 (.899)	20.32 (.800)
10	15-47-4102	15-47-4106	15-38-8109	25.37 (.999)	22.86 (.900)
11	15-47-4112	15-47-4116	15-38-8119	27.91 (1.099)	25.40 (1.000)
12	15-47-4122	15-47-4126	15-38-8129	30.45 (1.199)	27.94 (1.100)
13	15-47-4132	15-47-4136	15-38-8139	32.99 (1.299)	30.48 (1.200)

Circuits	Order No.			Dimension	
	15μ" Gold	30μ" Gold	200μ" Tin	A	B
14	15-47-4142	15-47-4146	15-38-8149	35.53 (1.399)	33.02 (1.300)
15	15-47-4152	15-47-4156	15-38-8159	38.07 (1.499)	35.56 (1.400)
16	15-47-4162	15-47-4166	15-38-8169	40.61 (1.599)	38.10 (1.500)
17	15-47-4172	15-47-4176	15-38-8179	43.15 (1.699)	40.64 (1.600)
18	15-47-4182	15-47-4186	15-38-8189	45.69 (1.799)	43.18 (1.700)
19	15-47-4192	15-47-4196	15-38-8199	48.23 (1.899)	45.72 (1.800)
20	15-47-4202	15-47-4206	15-38-8209	50.77 (1.999)	48.26 (1.900)
21	15-47-4212	15-47-4216	15-38-8219	53.31 (2.099)	50.80 (2.000)
22	15-47-4222	15-47-4226	15-38-8229	55.85 (2.199)	53.34 (2.100)
23	15-47-4232	15-47-4236	15-38-8239	58.39 (2.299)	55.88 (2.200)
24	15-47-4242	15-47-4246	15-38-8249	60.93 (2.399)	58.42 (2.300)
25	15-47-4252	15-47-4256	15-38-8259	63.47 (2.499)	60.96 (2.400)

15μ" Gold plating: 15μ" min. selective Gold in contact area with 75μ" min. Tin/Lead in the termination area over 50μ" min. Nickel overall

30μ" Gold plating: 30μ" min. selective Gold in contact area with 75μ" min. Tin/Lead in the termination area over 50μ" min. Nickel overall

200μ" Tin plating: 200μ" min. Tin over 100μ" Copper

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch C-Grid SL™ FFC/FPC Connector

70430 Single Row, Female Version G

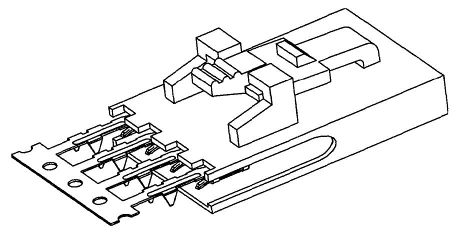
Features and Benefits
- Sizes 2 to 25 circuits
- Positive latch locks connector to header or panel mount
- Piercing crimp provides 3 high-pressure interfaces with the conductor
- Terminals preloaded into housing

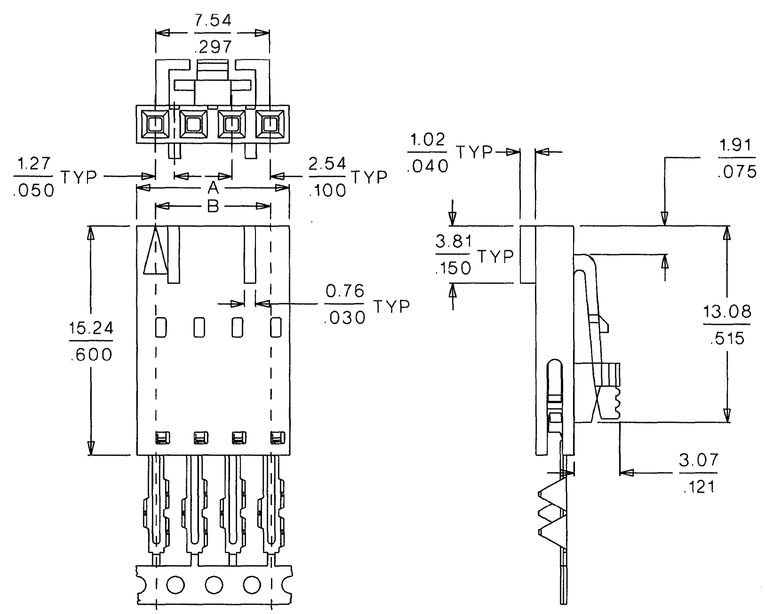
Reference Information
Product Specification: PS-40556
Packaging: Tube
Tooling Information: See page F-41
UL File No.: E29179
CSA File No.: LR19980
Mates With: C-Grid® locking headers and panel mounts
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.0A (for Copper conductors)
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 330g (0.7 lb) max.
Contact Retention to Housing: 1.4kg (3 lb) min. per circuit
Wire Pull-Out Force: 2.7kg (6 lb)
Durability: Tin/Lead — 25 cycles max.
Gold — 50 cycles max.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	15µ" Gold	30µ" Gold	200µ" Tin	A	B
2	15-47-4023	15-47-4027	15-38-8020	5.05 (.199)	2.54 (.100)
3	15-47-4033	15-47-4037	15-38-8030	7.59 (.299)	5.08 (.200)
4	15-47-4043	15-47-4047	15-38-8040	10.13 (.399)	7.62 (.300)
5	15-47-4053	15-47-4057	15-38-8050	12.67 (.499)	10.16 (.400)
6	15-47-4063	15-47-4067	15-38-8060	15.21 (.599)	12.70 (.500)
7	15-47-4073	15-47-4077	15-38-8070	17.75 (.699)	15.24 (.600)
8	15-47-4083	15-47-4087	15-38-8080	20.29 (.799)	17.78 (.700)
9	15-47-4093	15-47-4097	15-38-8090	22.83 (.899)	20.32 (.800)
10	15-47-4103	15-47-4107	15-38-8100	25.37 (.999)	22.86 (.900)
11	15-47-4113	15-47-4117	15-38-8110	27.91 (1.099)	25.40 (1.000)
12	15-47-4123	15-47-4127	15-38-8120	30.45 (1.199)	27.94 (1.100)
13	15-47-4133	15-47-4137	15-38-8130	32.99 (1.299)	30.48 (1.200)

Circuits	Order No.			Dimension	
	15µ" Gold	30µ" Gold	200µ" Tin	A	B
14	15-47-4143	15-47-4147	15-38-8140	35.53 (1.399)	33.02 (1.300)
15	15-47-4153	15-47-4157	15-38-8150	38.07 (1.499)	35.56 (1.400)
16	15-47-4163	15-47-4167	15-38-8160	40.61 (1.599)	38.10 (1.500)
17	15-47-4173	15-47-4177	15-38-8170	43.15 (1.699)	40.64 (1.600)
18	15-47-4183	15-47-4187	15-38-8180	45.69 (1.799)	43.18 (1.700)
19	15-47-4193	15-47-4197	15-38-8190	48.23 (1.899)	45.72 (1.800)
20	15-47-4203	15-47-4207	15-38-8200	50.77 (1.999)	48.26 (1.900)
21	15-47-4213	15-47-4217	15-38-8210	53.31 (2.099)	50.80 (2.000)
22	15-47-4223	15-47-4227	15-38-8220	55.85 (2.199)	53.34 (2.100)
23	15-47-4233	15-47-4237	15-38-8230	58.39 (2.299)	55.88 (2.200)
24	15-47-4243	15-47-4247	15-38-8240	60.93 (2.399)	58.42 (2.300)
25	15-47-4253	15-47-4257	15-38-8250	63.47 (2.499)	60.96 (2.400)

15µ" Gold plating: 15µ" min. selective Gold in contact area with 75µ" min. Tin/Lead in the termination area over 50µ" min. Nickel overall

30µ" Gold plating: 30µ" min. selective Gold in contact area with 75µ" min. Tin/Lead in the termination area over 50µ" min. Nickel overall

200µ" Tin plating: 200µ" min. Tin over 100µ" Copper

Toggle Presses for 40556, 70430, 70431

FEATURES AND SPECIFICATIONS

Features
- Adjustable tooling for various circuit sizes
- Guide plates precisely locate contacts for termination
- Positive tooling stops for reliable crimp heights
- Adaptable for different connector types (40556, 70430, 70431)
- Product supplied in tubes for superior protection

Specifications

Manual Toggle Press
Weight: 61kg (135 lb)
Size: 324 by 419 by 889mm (12.75" wide by 16.50" long by 35" high)

Pneumatic Toggle Press
Pneumatics: 5 BAR (80psig) at 14L per minute (0.5 CFM)
Weight: 61kg (135 lb)
Size: 711 by 508 by 660mm (28" wide by 20" long by 26" high)
Rate: Up to 300 assemblies per hour, dependent on cable length and operator speed

ORDERING INFORMATION

Description	Order No.
Manual Toggle Press	11-04-0592
Pneumatic Toggle Press	11-04-0617

Semi-Automatic Assembly Machines for 40556, 70430, 70431

FEATURES AND SPECIFICATIONS

Features
- Electronic controller for machine operation
- Adjustable tooling for various circuit sizes
- Guide plates precisely locate contacts for termination
- Positive tooling stops for reliable crimp heights
- Automatic connector feed crimp, insert and carrier strip breakoff
- Product supplied in tubes for superior protection

Specifications
Electrical: 115V AC, 50/60 Hz, 5.0A
Pneumatics: 5 BAR (80psig) at 28L per minute (1 CFM)
Weight: 227kg (500 lb)
Size: 1702 by 610 by 772mm (67" wide by 24" long by 30.375" high)
Rate: Up to 600 assemblies per hour, dependent on cable length and operator speed

ORDERING INFORMATION

Description	Order No.
Single Tube Load Machine	11-04-0653
Magazine Tube Load Machine	11-04-0654

FEATURES AND SPECIFICATIONS

Application Tooling FFC/FPC Connectors

Single Hole Punch For 4850

Features

- Punches 1 slot at a time
- Processes FFC/FPC cable or switch tails

Specifications

Rate: Up to 200 cables per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.
Single Hole Punch Hand Tool	11-10-1043

FEATURES AND SPECIFICATIONS

Air-Operated Punch For For 4850

Features

- Punches 3 slots at each cycle
- Adjustable punch locations
- Adjustable edge guide
- Processes FFC/FPC cable or switch tails

Specifications

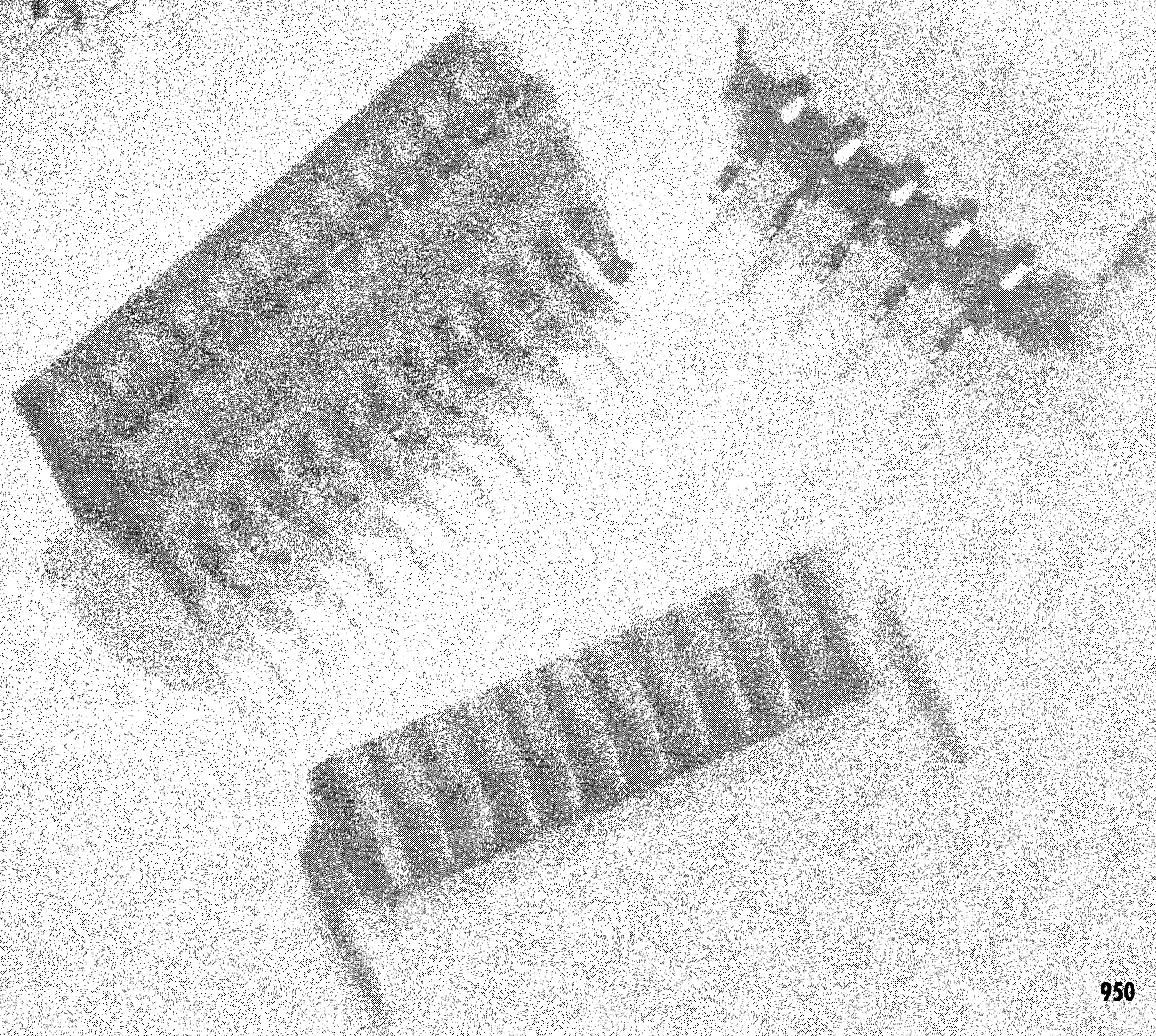
Size: Width—203mm (8")
Depth—102mm (4")
Height—152mm (6")
Weight: 6.75kg (15 lb)
Pneumatics: 5 BAR (80psig) at 5.6L per minute (0.2 CFM)
Rate: Up to 650 cables per hour, dependent on operator speed

ORDERING INFORMATION

Description	Order No.
Multiple Hole Punch Bench Tool	11-10-1044

Wire Traps/Jumpers/Holders

G

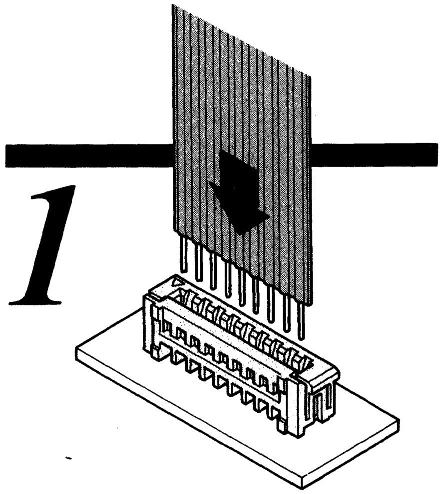


Wire Trap Connectors

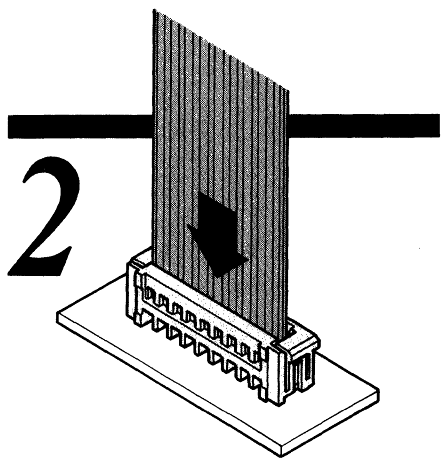
INTRODUCTION

Molex Wire Trap connectors minimize your harness assembly costs and provide secure cable retention for multiple cycles. We offer 2 types of Wire Traps: our standard push-cover version (52004, 52007 and 52008) and a new low-profile pull-cover version (52328, 52147 and 52151).

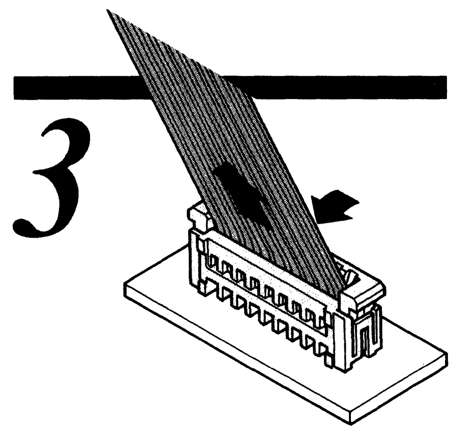
Pull-Cover Style



With the cover in the down position, insert the trimmed cable end into the connector.

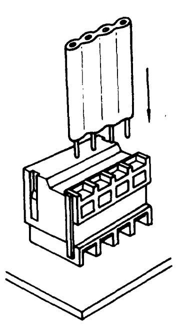


The spring force of the terminals holds the cable leads securely in place.

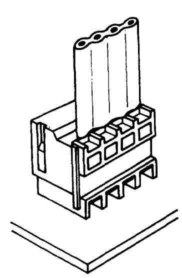


To release the cable, first lift the cover, pulling up on both sides. For minimum extraction force, pull the cable out at a 45° angle. Push cover back into down position before inserting cable again.

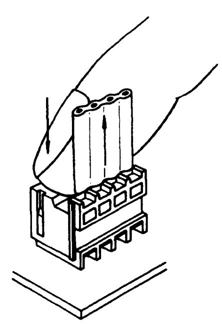
Push-Cover Style



Insert the trimmed cable end into the connector.



The spring force of the connector terminals holds the cable leads securely in place (1kg per circuit retention force).



Press the cover of the connector and the cable lifts out easily. Pressing the connector can also facilitate insertion by minimizing the force required.

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Wire Trap

52004

Push-Cover Style Straight

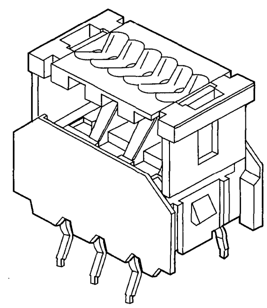
Features and Benefits
- Sizes 3 to 12 circuits
- For topcoated ribbon cable
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.50mm max.
- Strip length: 7.00mm

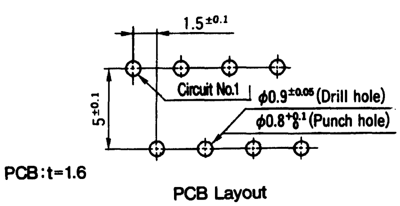
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 150V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

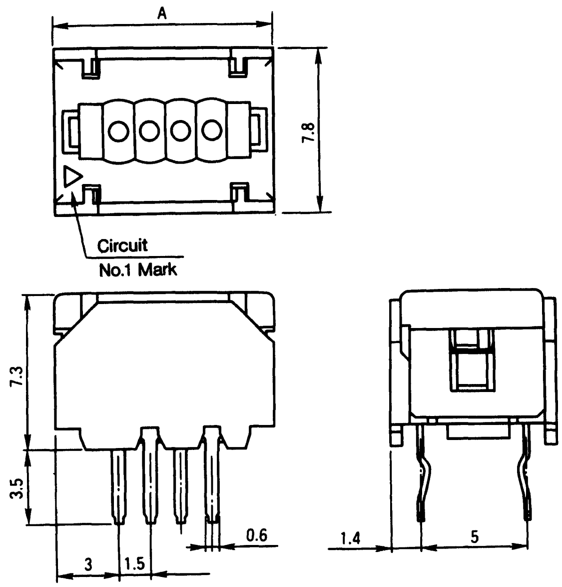
Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.0kgf min. (9.8N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB Layout



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	52004-0310	9.00 (.354)
4	52004-0410	10.50 (.413)
5	52004-0510	12.00 (.472)
6	52004-0610	13.50 (.531)
7	52004-0710	15.00 (.591)
8	52004-0810	16.50 (.650)
9	52004-0910	18.00 (.709)
10	52004-1010	19.50 (.768)
11	52004-1110	21.00 (.827)
12	52004-1210	22.50 (.886)

FEATURES AND SPECIFICATIONS

molex®

1.50mm (.059") Pitch Wire Trap

52328

Pull-Cover Style Straight

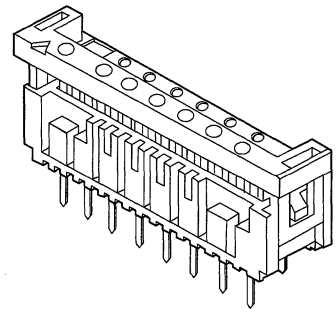
Features and Benefits
- Sizes 8 to 18 circuits
- For topcoated ribbon cable
- Wire range:26 to 28 AWG
- Insulation diameter: 1.50mm max.
- Strip length: 7.00mm

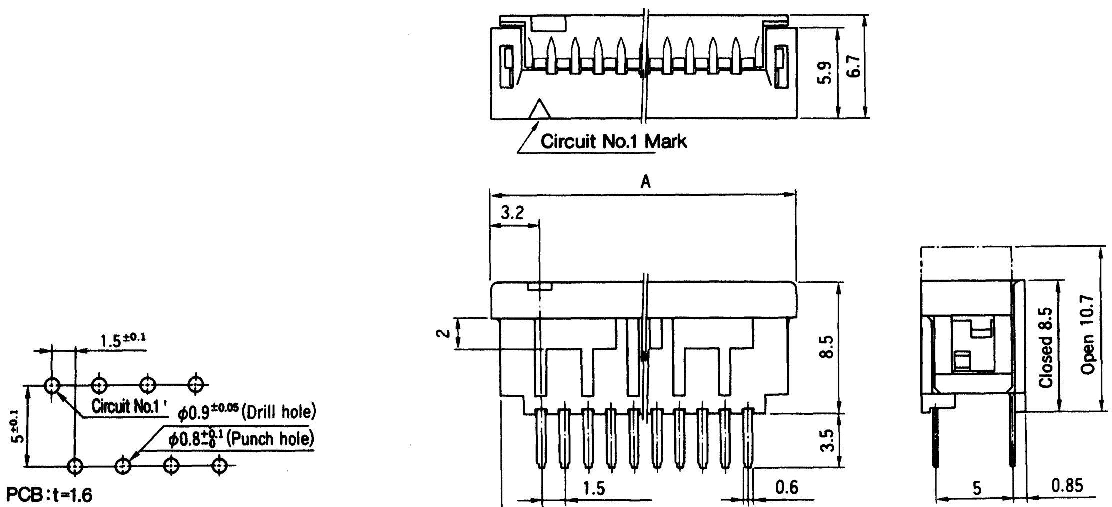
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 150V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.0kgf min. (9.8N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
8	52328-0810	16.90 (.665)
9	52328-0910	18.40 (.724)
10	52328-1010	19.90 (.783)
11	52328-1110	21.40 (.843)
12	52328-1210	22.90 (.902)
13	52328-1310	24.40 (.961)
14	52328-1410	25.90 (1.020)
15	52328-1510	27.40 (1.079)
16	52328-1610	28.90 (1.138)
17	52328-1710	30.40 (1.197)
18	52328-1810	31.90 (1.256)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire Trap

52007 Push-Cover Style Straight

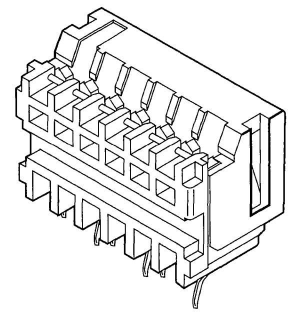
Features and Benefits
- Sizes 2 to 12 circuits
- For topcoated ribbon cable
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.70mm max.
- Strip length: 6.00mm

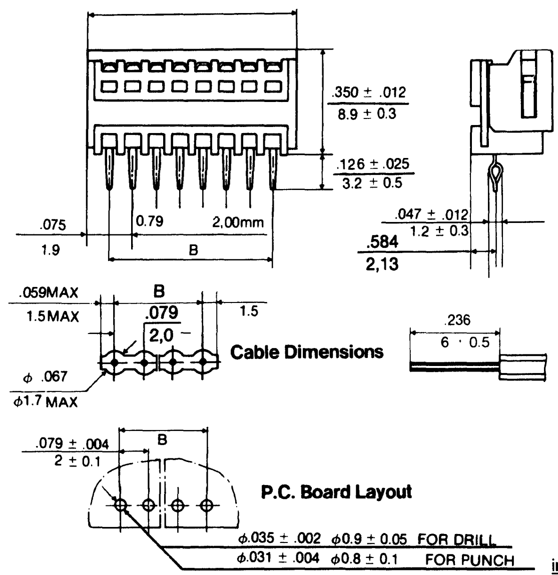
Reference Information
Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical
Voltage: 150V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.0kgf min. (9.8N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	52007-0210	5.80 (.228)	2.00 (.079)
3	52007-0310	7.80 (.307)	4.00 (.157)
4	52007-0410	9.80 (.386)	6.00 (.236)
5	52007-0510	11.80 (.464)	8.00 (.315)
6	52007-0610	13.80 (.543)	10.00 (.393)
7	52007-0710	15.80 (.622)	12.00 (.472)
8	52007-0810	17.80 (.701)	14.00 (.551)
9	52007-0910	19.80 (.780)	16.00 (.630)
10	52007-1010	21.80 (.858)	18.00 (.709)
11	52007-1110	23.80 (.937)	20.00 (.737)
12	52007-1210	25.80 (1.016)	22.00 (.866)

FEATURES AND SPECIFICATIONS

molex® **2.00mm (.079") Pitch Wire Trap**

52008

Push-Cover Style Right Angle

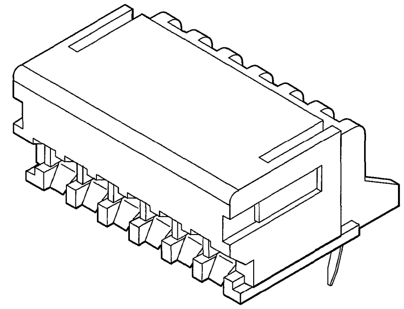
Features and Benefits
- Sizes 2 to 12 circuits
- For topcoated ribbon cable
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.70mm max.
- Strip length: 6.00mm

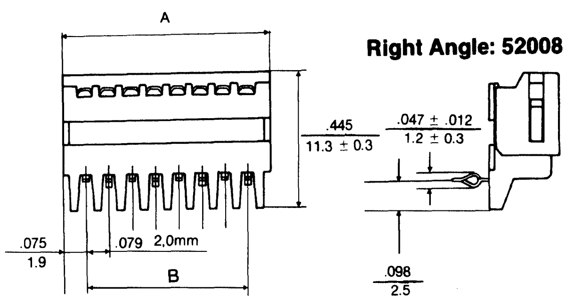
Reference Information
Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

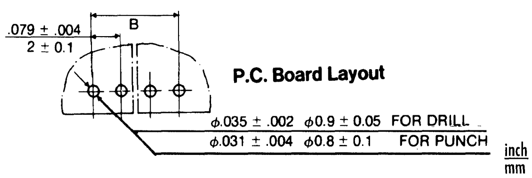
Electrical
Voltage: 150V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.0kgf min. (9.8N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	52008-0210	5.80 (.228)	2.00 (.079)
3	52008-0310	7.80 (.307)	4.00 (.157)
4	52008-0410	9.80 (.386)	6.00 (.236)
5	52008-0510	11.80 (.464)	8.00 (.315)
6	52008-0610	13.80 (.543)	10.00 (.393)
7	52008-0710	15.80 (.622)	12.00 (.472)
8	52008-0810	17.80 (.701)	14.00 (.551)
9	52008-0910	19.80 (.780)	16.00 (.630)
10	52008-1010	21.80 (.858)	18.00 (.709)
11	52008-1110	23.80 (.937)	20.00 (.737)
12	52008-1210	25.80 (1.016)	22.00 (.866)

FEATURES AND SPECIFICATIONS

molex® **2.00mm (.079") Pitch Wire Trap**

52147 Pull-Cover Style Straight

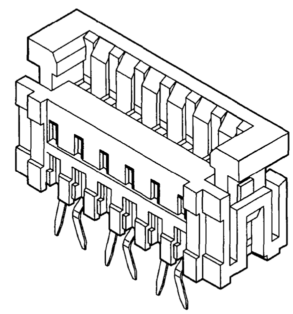
Features and Benefits
- Sizes 2 to 15 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.60mm max.
- Strip length: 4.50mm

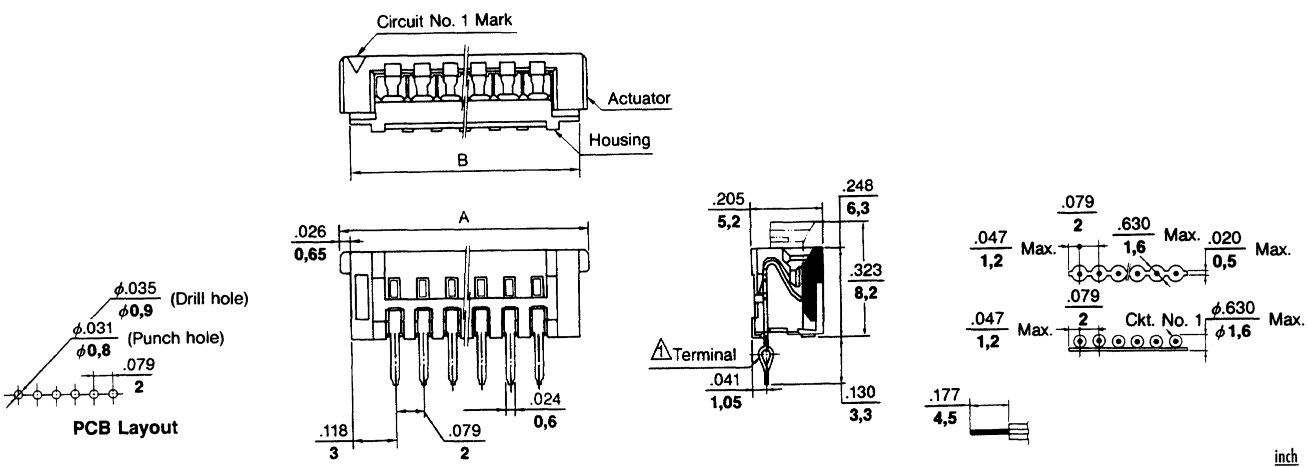
Reference Information
Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical
Voltage: 150V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.5kgf min. (14.7N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





⚠ All PC tails are kinked except 2 circuit

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	52147-0210	9.30 (.366)	8.00 (.315)
3	52147-0310	11.30 (.445)	10.00 (.344)
4	52147-0410	13.30 (.524)	12.00 (.472)
5	52147-0510	15.30 (.602)	14.00 (.551)
6	52147-0610	17.30 (.681)	16.00 (.630)
7	52147-0710	19.30 (.760)	18.00 (.709)
8	52147-0810	21.30 (.839)	20.00 (.787)
9	52147-0910	23.30 (.917)	22.00 (.866)
10	52147-1010	25.30 (.996)	24.00 (.945)
11	52147-1110	27.30 (1.075)	26.00 (1.024)
12	52147-1210	29.30 (1.154)	28.00 (1.102)
13	52147-1310	31.30 (1.232)	30.00 (1.181)
14	52147-1410	33.30 (1.311)	32.00 (1.260)
15	52147-1510	35.30 (1.390)	34.00 (1.339)

2.00mm (.079") Pitch Wire Trap

52151

Pull-Cover Style Right Angle

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 15 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.60mm max.
- Strip length: 4.50mm

Reference Information

Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical

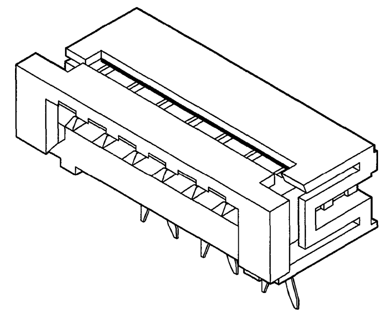
Voltage: 150V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

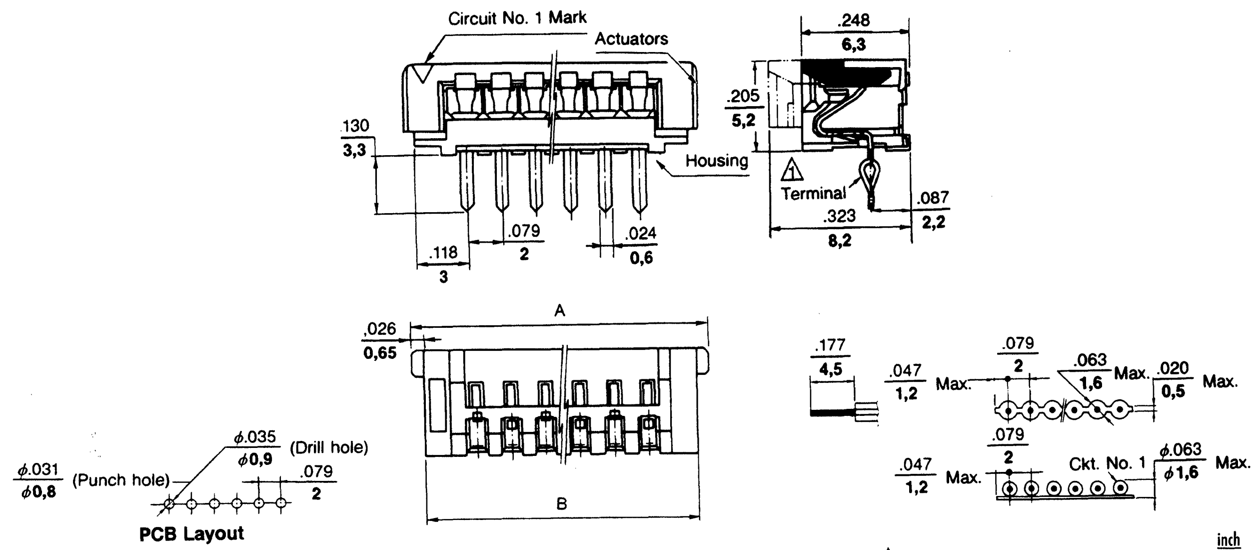
Mechanical

Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.5kgf min. (14.7N)

Physical

Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





⚠ All PC tails are kinked except 2 circuit

inch / mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	52151-0210	9.30 (.366)	8.00 (.315)
3	52151-0310	11.30 (.445)	10.00 (.344)
4	52151-0410	13.30 (.524)	12.00 (.472)
5	52151-0510	15.30 (.602)	14.00 (.551)
6	52151-0610	17.30 (.681)	16.00 (.630)
7	52151-0710	19.30 (.760)	18.00 (.709)
8	52151-0810	21.30 (.839)	20.00 (.787)
9	52151-0910	23.30 (.917)	22.00 (.866)
10	52151-1010	25.30 (.996)	24.00 (.945)
11	52151-1110	27.30 (1.075)	26.00 (1.024)
12	52151-1210	29.30 (1.154)	28.00 (1.102)
13	52151-1310	31.30 (1.232)	30.00 (1.181)
14	52151-1410	33.30 (1.311)	32.00 (1.260)
15	52151-1510	35.30 (1.390)	34.00 (1.339)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Wire Trap

52011

Push-Cover Style Straight

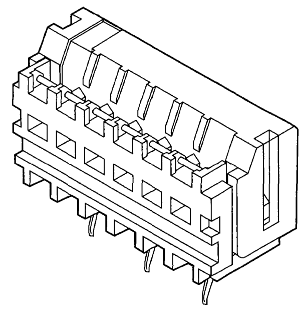
Features and Benefits
- Sizes 2 to 12 circuits
- For topcoated ribbon cable
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.70mm max.
- Strip length: 6.00mm

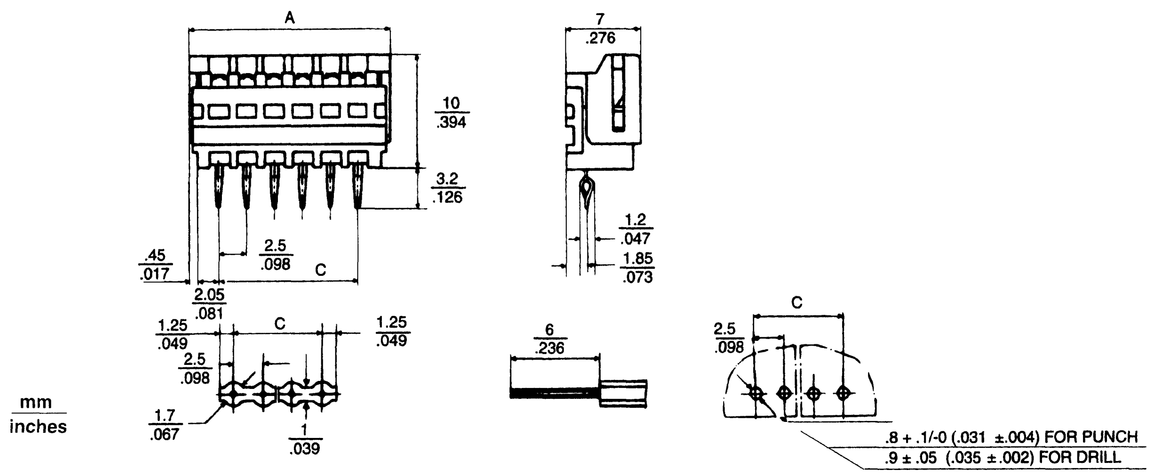
Reference Information
Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.2kgf min. (11.8N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





Cable Dimensions

PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	C
2	52011-0210	8.10 (.319)	2.50 (.098)
3	52011-0310	10.60 (.417)	5.00 (.197)
4	52011-0410	13.10 (.516)	7.50 (.295)
5	52011-0510	15.60 (.614)	10.00 (.394)
6	52011-0610	18.10 (.713)	12.50 (.492)
7	52011-0710	20.60 (.811)	15.00 (.591)
8	52011-0810	23.10 (.909)	17.50 (.689)
9	52011-0910	25.60 (1.008)	20.00 (.787)
10	52011-1010	28.10 (1.106)	22.50 (.886)
11	52011-1110	30.60 (1.204)	25.00 (.985)
12	52011-1210	33.10 (1.303)	27.50 (1.083)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Wire Trap

52012

Push-Cover Style Right Angle

Features and Benefits

- Sizes 2 to 12 circuits
- For topcoated ribbon cable
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.70mm max.
- Strip length: 6.00mm

Reference Information

Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical

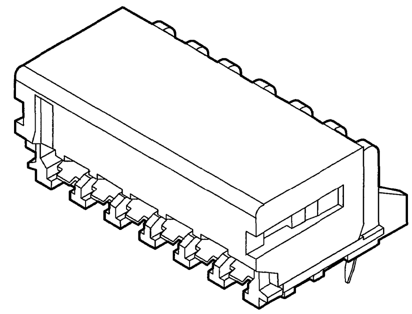
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

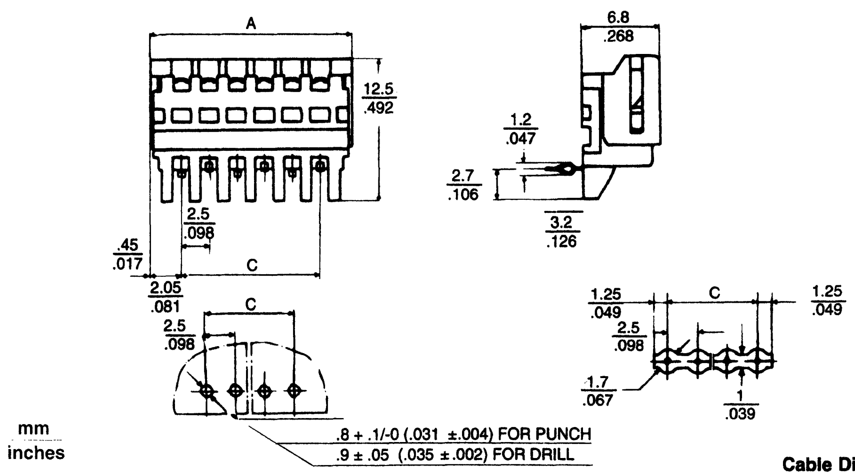
Mechanical

Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.2kgf min. (11.8N)

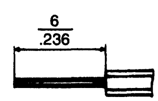
Physical

Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB Layout



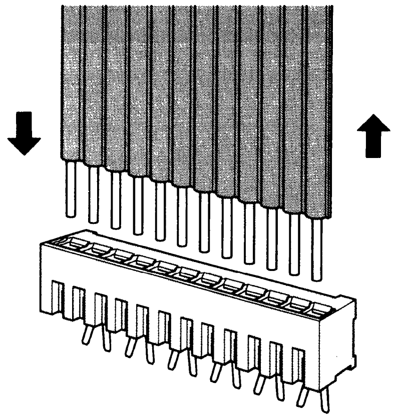
Cable Dimensions

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension C
2	52012-0210	8.10 (.319)	2.50 (.098)
3	52012-0310	10.60 (.417)	5.00 (.197)
4	52012-0410	13.10 (.516)	7.50 (.295)
5	52012-0510	15.60 (.614)	10.00 (.394)
6	52012-0610	18.10 (.713)	12.50 (.492)
7	52012-0710	20.60 (.811)	15.00 (.591)
8	52012-0810	23.10 (.909)	17.50 (.689)
9	52012-0910	25.60 (1.008)	20.00 (.787)
10	52012-1010	28.10 (1.106)	22.50 (.886)
11	52012-1110	30.60 (1.204)	25.00 (.985)
12	52012-1210	33.10 (1.303)	27.50 (1.083)

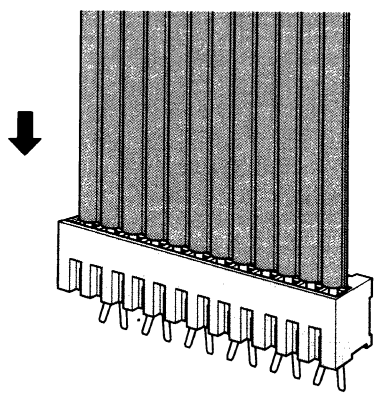
Removable Type

Molex Jumper Sockets provide a simple, one-step method of cable-to-board connection. They can be used together or with our Wire Trap or Cable Holder connectors. Our growing range of Jumper Sockets includes removable styles for several insertions and a fixed type for one-time termination. The fixed type is available in 2.00mm pitch only, while the removable style can be ordered in both 1.50 and 2.00mm pitch versions.



Cable can be easily inserted and removed.

Fixed Type



Once cable is inserted the leads are held firmly in place and cannot be removed.

FEATURES AND SPECIFICATIONS

molex®

1.50mm (.059") Pitch Jumper Socket

52273

Removable Type Right Angle

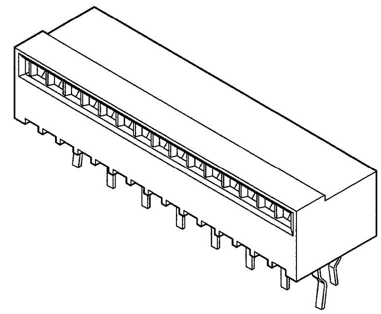
Features and Benefits
- Sizes 7 to 11, 15, 18 and 19 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.50mm max.
- Strip length: 4.50mm

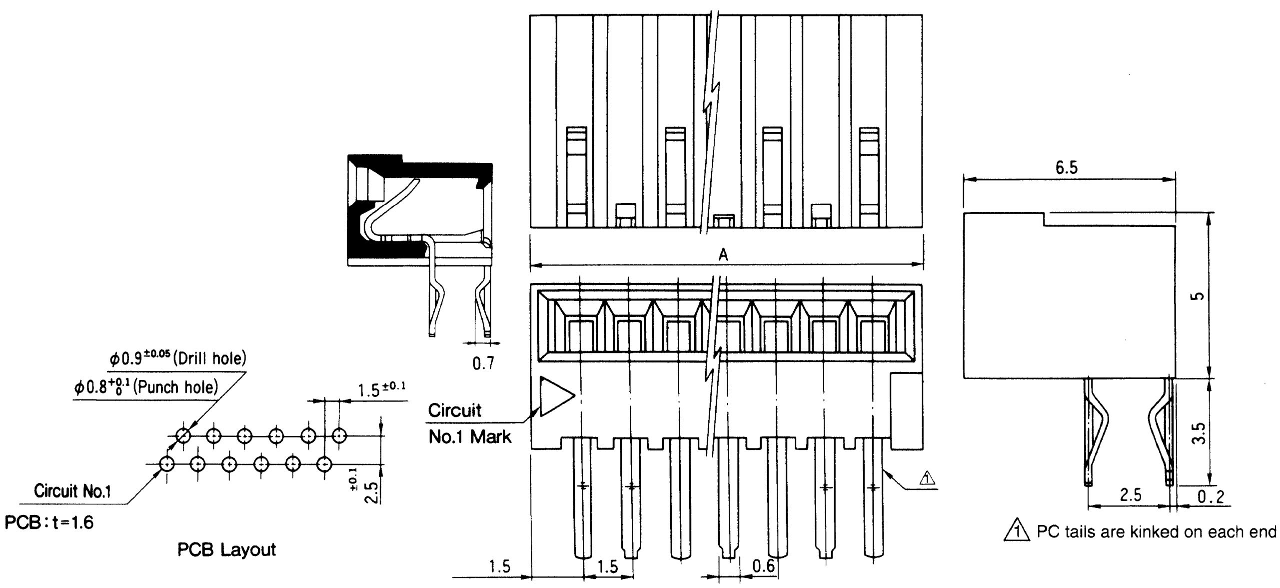
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 150V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 0.1kgf min. (9.8N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
7	52273-0710	12.00 (.472)
8	52273-0810	13.50 (.531)
9	52273-0910	15.00 (.591)
10	52273-1010	16.50 (.650)
11	52273-1110	18.00 (.709)
15	52273-1510	24.00 (.945)
18	52273-1810	28.50 (1.122)
19	52273-1910	30.00 (1.181)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Jumper Socket

52153

Fixed Type Straight

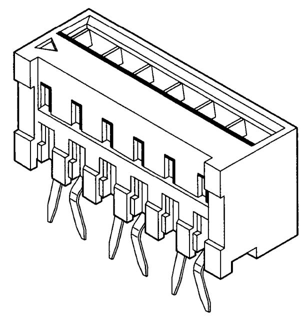
Features and Benefits
- Sizes 2 to 15 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.60mm max.
- Strip length: 4.50mm

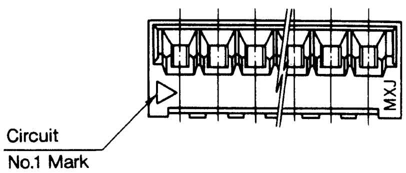
Reference Information
Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

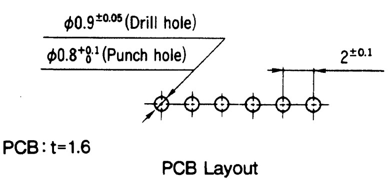
Electrical
Voltage: 150V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

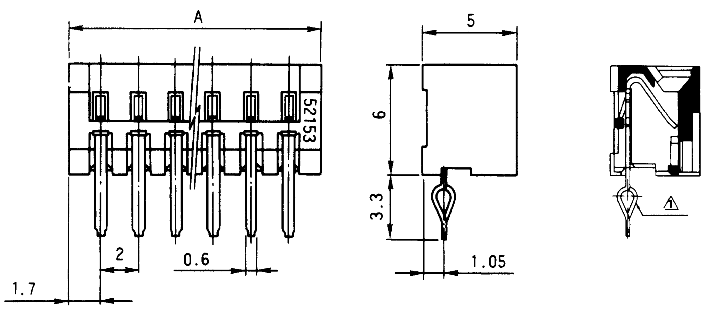
Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.5kgf min. (14.7N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C









⚠ All PC tails are kinked except 2 ckt.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
2	52153-0210	5.40 (.213)
3	52153-0310	7.40 (.291)
4	52153-0410	9.40 (.370)
5	52153-0510	11.40 (.449)
6	52153-0610	13.40 (.528)
7	52153-0710	15.40 (.606)
8	52153-0810	17.40 (.685)
9	52153-0910	19.40 (.764)
10	52153-1010	21.40 (.843)
11	52153-1110	23.40 (.921)
12	52153-1210	25.40 (1.000)
13	52153-1310	27.40 (1.079)
14	52153-1410	29.40 (1.157)
15	52153-1510	31.40 (1.236)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Jumper Socket

52154

Fixed Type Right Angle

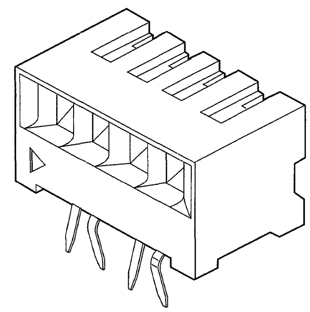
Features and Benefits
- Sizes 2 to 15 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.60mm max.
- Strip length: 4.50mm

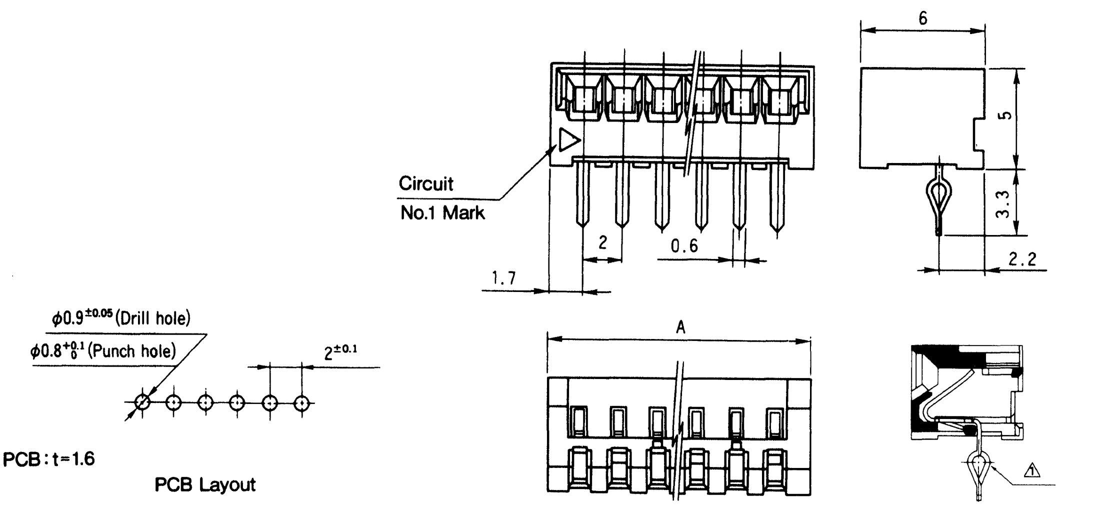
Reference Information
Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical
Voltage: 150V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Insertion Force: 0.5kgf max. (4.9N)
Wire Retention Force: 1.5kgf min. (14.7N)

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





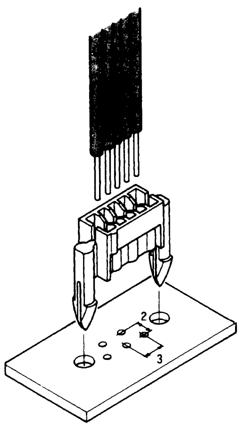
⚠1 All PC tails are kinked except 2 ckt.

ORDERING INFORMATION AND DIMENSIONS

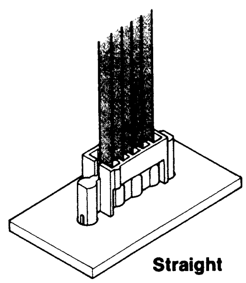
Circuits	Order No.	Dimension A
2	52154-0210	5.40 (.213)
3	52154-0310	7.40 (.291)
4	52154-0410	9.40 (.370)
5	52154-0510	11.40 (.449)
6	52154-0610	13.40 (.528)
7	52154-0710	15.40 (.606)
8	52154-0810	17.40 (.685)
9	52154-0910	19.40 (.764)
10	52154-1010	21.40 (.843)
11	52154-1110	23.40 (.921)
12	52154-1210	25.40 (1.000)
13	52154-1310	27.40 (1.079)
14	52154-1410	29.40 (1.157)
15	52154-1510	31.40 (1.236)

Cable Holders

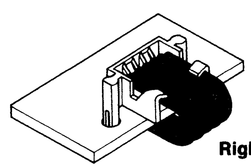
Available in straight and right angle versions for 1.50, 2.00 and 2.50mm cable, this product serves 3 important functions:



Guides the cable leads into an easy-to-solder 2 by 3mm PCB layout.



Secures the cable to the PCB for soldering.



Right Angle

Serves as a strain relief to prevent undue stress on the solder joints.

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Cable Holder

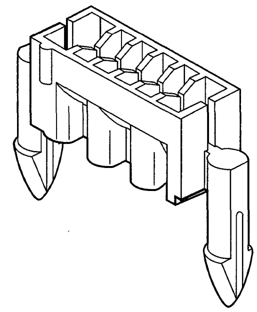
51016

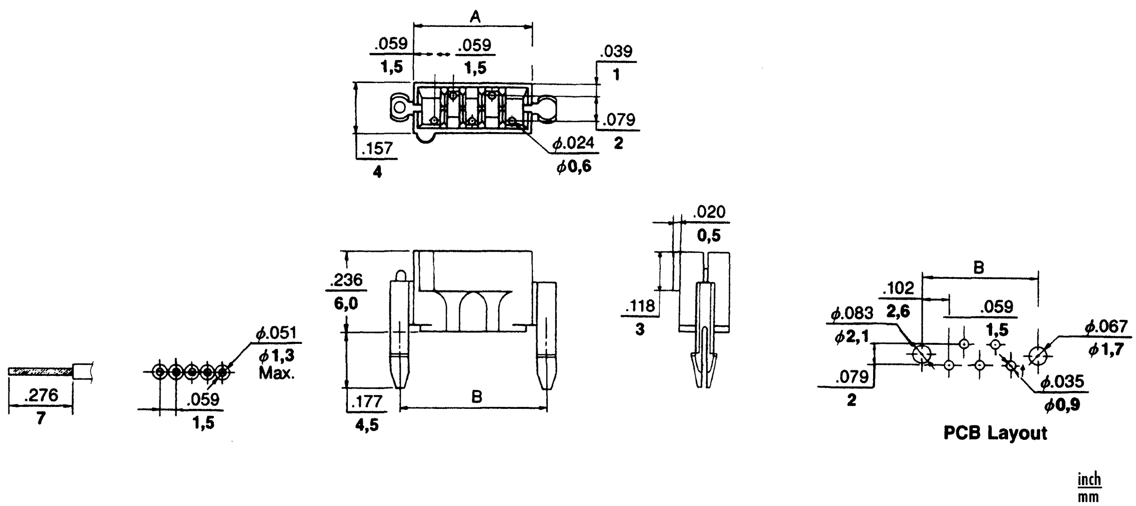
Straight For Ribbon Cable

Features and Benefits
- Sizes 3 to 12 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.30mm max.
- Strip length: 7.00mm

Reference Information
Packaging: Bag
Designed In: Millimeters

Physical
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	51016-0300	6.00 (.236)	8.20 (.323)
4	51016-0400	7.50 (.295)	9.70 (.382)
5	51016-0500	9.00 (.354)	11.20 (.441)
6	51016-0600	10.50 (.413)	12.70 (.500)
7	51016-0700	12.00 (.472)	14.20 (.559)
8	51016-0800	13.50 (.531)	15.70 (.618)
9	51016-0900	15.00 (.591)	17.20 (.677)
10	51016-1000	16.50 (.650)	18.70 (.736)
11	51016-1100	18.00 (.709)	20.20 (.795)
12	51016-1200	19.50 (.768)	21.70 (.854)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 3 to 12 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.30mm max.
- Strip length: 7.00mm

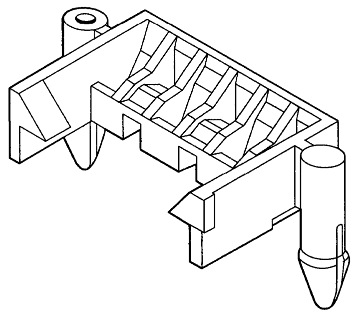
Reference Information
Packaging: Bag
Designed In: Millimeters

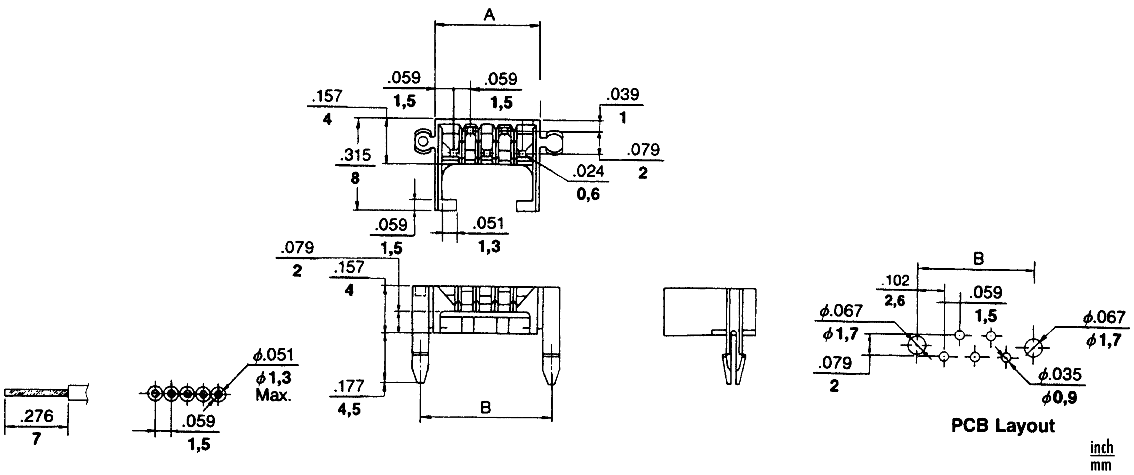
Physical
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C

1.50mm (.059") Pitch Cable Holder

51020

Right Angle For Ribbon Cable





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	51020-0300	6.00 (.236)	8.20 (.323)
4	51020-0400	7.50 (.295)	9.70 (.382)
5	51020-0500	9.00 (.354)	11.20 (.441)
6	51020-0600	10.50 (.413)	12.70 (.500)
7	51020-0700	12.00 (.472)	14.20 (.559)
8	51020-0800	13.50 (.531)	15.70 (.618)
9	51020-0900	15.00 (.591)	17.20 (.677)
10	51020-1000	16.50 (.650)	18.70 (.736)
11	51020-1100	18.00 (.709)	20.20 (.795)
12	51020-1200	19.50 (.768)	21.70 (.854)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Cable Holder

30453

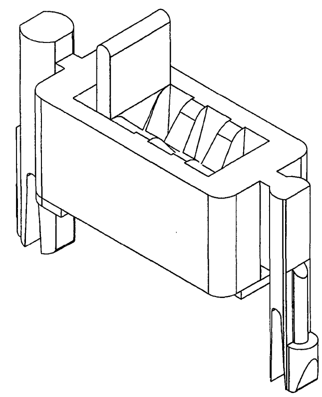
Straight For Ribbon Cable

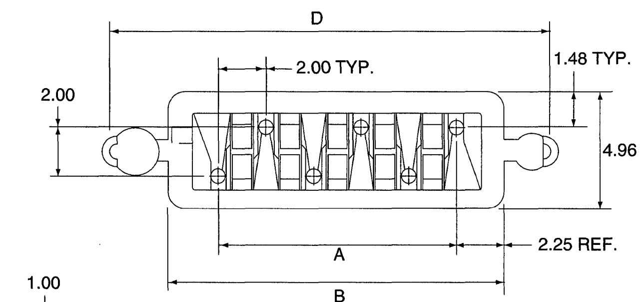
Features and Benefits
- Sizes 4 to 21 circuits
- For topcoated or solid wire ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.20mm max.
- Strip length: 6.00mm
- Polarized for correct insertion to PCB, optional polarization for cable leading (pin 1 to pin 1)

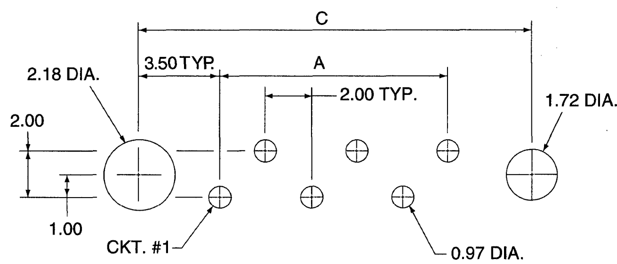
Reference Information
Product Specification: 30453-0000
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.5A

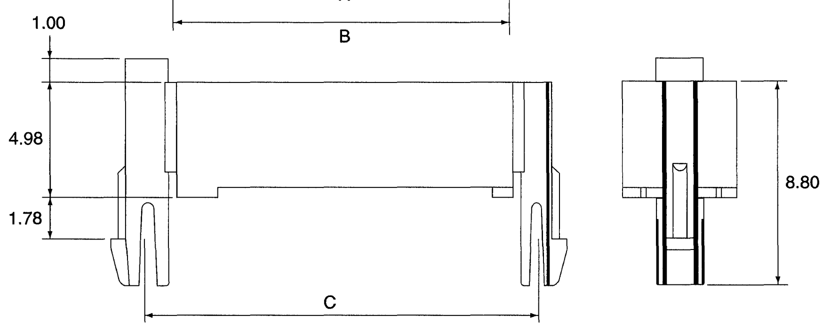
Physical
Housing: Glass-filled polyester, UL 94V-0
Temperature: -40 to +85°C







RECOMMENDED P.C. BOARD LAYOUT
BOARD THICKNESS 1.57 ±.05



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
4	30453-0400	6.00 (.236)	10.50 (.413)	13.00 (.512)	15.01 (.591)
5	30453-0500	8.00 (.315)	12.50 (.492)	15.00 (.591)	17.01 (.670)
6	30453-0600	10.00 (.394)	14.50 (.571)	17.00 (.669)	19.01 (.748)
7	30453-0700	12.00 (.472)	16.50 (.650)	19.00 (.748)	21.01 (.827)
8	30453-0800	14.00 (.551)	18.50 (.728)	21.00 (.827)	23.01 (.906)
9	30453-0900	16.00 (.630)	20.50 (.807)	23.00 (.906)	25.01 (.985)
10	30453-1000	18.00 (.709)	22.50 (.886)	25.00 (.984)	27.01 (1.063)
11	30453-1100	20.00 (.787)	24.50 (.965)	27.00 (1.063)	29.01 (1.142)
12	30453-1200	22.00 (.866)	26.50 (1.043)	29.00 (1.142)	31.01 (1.221)
13	30453-1300	24.00 (.945)	28.50 (1.122)	31.00 (1.220)	33.01 (1.300)
14	30453-1400	26.00 (1.024)	30.50 (1.201)	33.00 (1.299)	35.01 (1.378)
15	30453-1500	28.00 (1.102)	32.50 (1.280)	35.00 (1.378)	37.01 (1.457)
16	30453-1600	30.00 (1.181)	34.50 (1.358)	37.00 (1.457)	39.01 (1.536)
17	30453-1700	32.00 (1.260)	36.50 (1.437)	39.00 (1.535)	41.01 (1.615)
18	30453-1800	34.00 (1.339)	38.50 (1.516)	41.00 (1.614)	43.01 (1.693)
19	30453-1900	36.00 (1.417)	40.50 (1.594)	43.00 (1.693)	45.01 (1.772)
20	30453-2000	38.00 (1.496)	42.50 (1.673)	45.00 (1.772)	47.01 (1.851)
21	30453-2100	40.00 (1.575)	44.50 (1.752)	47.00 (1.850)	49.01 (1.930)

FEATURES AND SPECIFICATIONS

molex

2.00mm (.079") Pitch Cable Holder

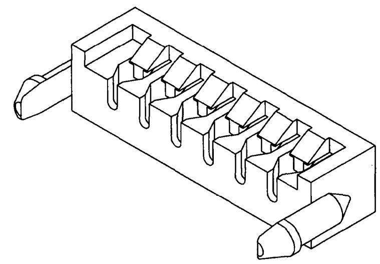
87280

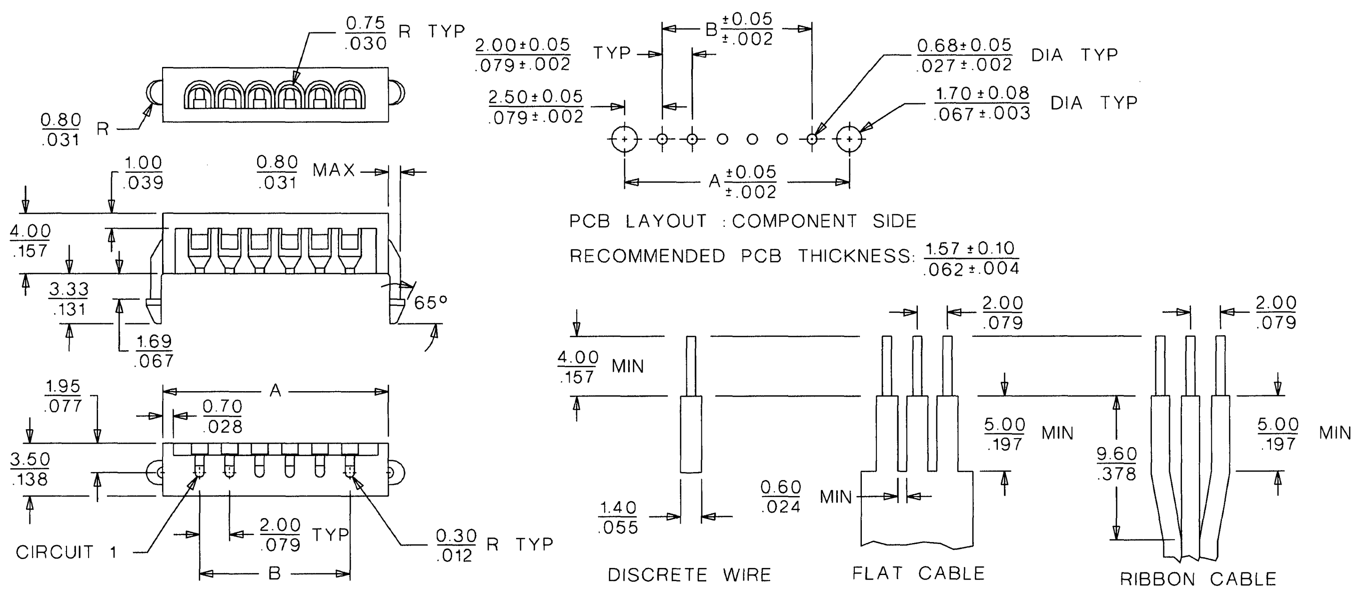
For Discrete Wire, Flat Cable and Ribbon Cable

Features and Benefits
- Sizes 2 to 15 circuits
- Wire range: 26 to 28 AWG
- Insulation diameter: 1.42mm
- Strip length: 4.00mm

Physical
Housing: 6/6 nylon, UL 94V-0

Reference Information
Product Specification: PS-87280
Packaging: Bag
CSA File No.: LR19980A
Designed In: Millimeters





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	87280-0200	2.00 (.079)	7.00 (.276)
3	87280-0300	4.00 (.157)	9.00 (.354)
4	87280-0400	6.00 (.236)	11.00 (.433)
5	87280-0500	8.00 (.315)	13.00 (.512)
6	87280-0600	10.00 (.394)	15.00 (.591)
7	87280-0700	12.00 (.472)	17.00 (.670)
8	87280-0800	14.00 (.551)	19.00 (.748)
9	87280-0900	16.00 (.630)	21.00 (.827)
10	87280-1000	18.00 (.709)	23.00 (.906)
11	87280-1100	20.00 (.787)	25.00 (.984)
12	87280-1200	22.00 (.866)	27.00 (1.063)
13	87280-1300	24.00 (.945)	29.00 (1.142)
14	87280-1400	26.00 (1.024)	31.00 (1.220)
15	87280-1500	28.00 (1.102)	33.00 (1.299)

2.00mm (.079") Pitch Cable Holder

51039

Straight For Ribbon Cable

FEATURES AND SPECIFICATIONS

Features and Benefits

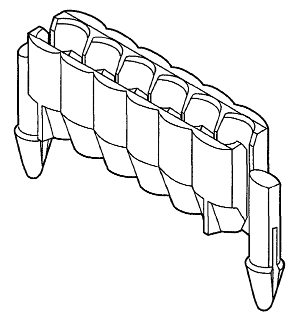
- Sizes 2 to 12 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.60mm max.
- Strip length: 6.00mm

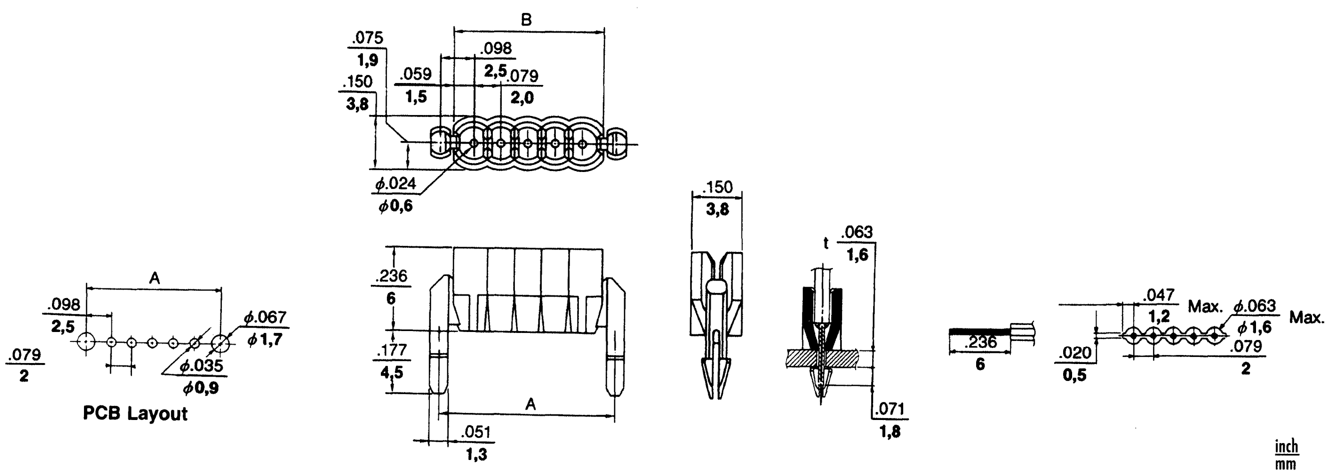
Reference Information

Packaging: Bag
Designed In: Millimeters

Physical

Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	51039-0200	7.00 (.276)	5.00 (.197)
3	51039-0300	9.00 (.354)	7.00 (.276)
4	51039-0400	11.00 (.433)	9.00 (.354)
5	51039-0500	13.00 (.512)	11.00 (.433)
6	51039-0600	15.00 (.590)	13.00 (.512)
7	51039-0700	17.00 (.670)	15.00 (.591)
8	51039-0800	19.00 (.748)	17.00 (.670)
9	51039-0900	21.00 (.827)	19.00 (.748)
10	51039-1000	23.00 (.906)	21.00 (.827)
11	51039-1100	25.00 (.984)	23.00 (.906)
12	51039-1200	27.00 (1.063)	25.00 (.984)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Cable Holder

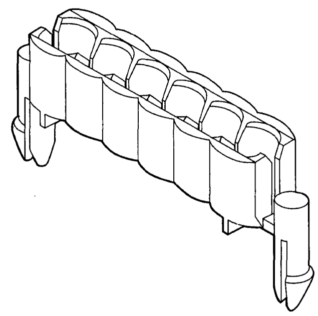
51048

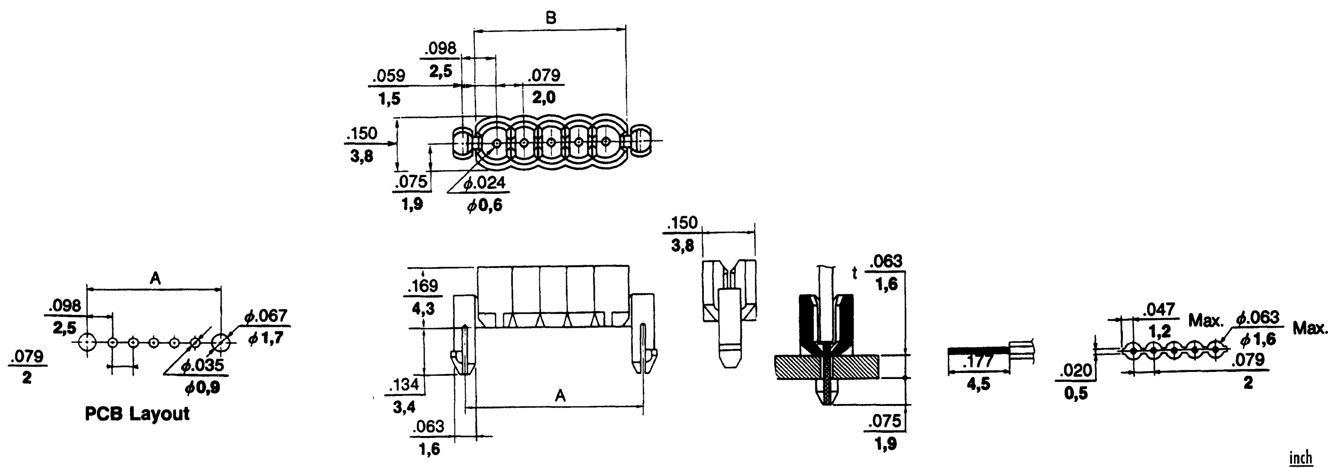
Right Angle, Low Profile For Ribbon Cable

Features and Benefits
- Sizes 2 to 16 circuits
- For topcoated ribbon cable
- Wire range: 26 AWG
- Insulation diameter: 1.60mm max.
- Strip length: 4.50mm

Reference Information
Packaging: Bag
Designed In: Millimeters

Physical
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C





PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51048-0200	7.00 (.276)	5.00 (.197)
3	51048-0300	9.00 (.354)	7.00 (.276)
4	51048-0400	11.00 (.433)	9.00 (.354)
5	51048-0500	13.00 (.512)	11.00 (.433)
6	51048-0600	15.00 (.591)	13.00 (.512)
7	51048-0700	17.00 (.670)	15.00 (.591)
8	51048-0800	19.00 (.748)	17.00 (.670)
9	51048-0900	21.00 (.827)	19.00 (.748)
10	51048-1000	23.00 (.906)	21.00 (.827)
11	51048-1100	25.00 (.984)	23.00 (.906)
12	51048-1200	27.00 (1.063)	25.00 (.984)
13	51048-1300	29.00 (1.141)	27.00 (1.063)
14	51048-1400	31.00 (1.220)	29.00 (1.142)
15	51048-1500	33.00 (1.299)	31.00 (1.220)
16	51048-1600	35.00 (1.378)	33.00 (1.299)

FEATURES AND SPECIFICATIONS

molex®

2.50mm (.098") Pitch Cable Holder

51052

Straight For Ribbon Cable

Features and Benefits

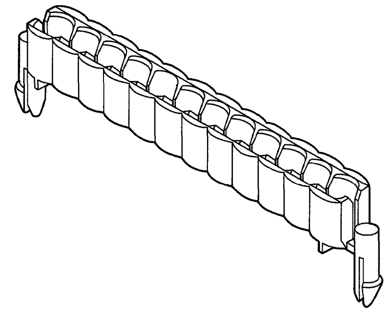
- Sizes 2 to 12 circuits
- For topcoated ribbon cable
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.70mm max.
- Strip length: 6.00mm

Reference Information

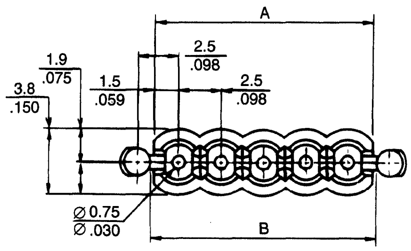
Packaging: Bag
Designed In: Millimeters

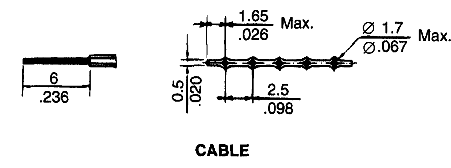
Physical

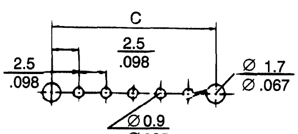
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



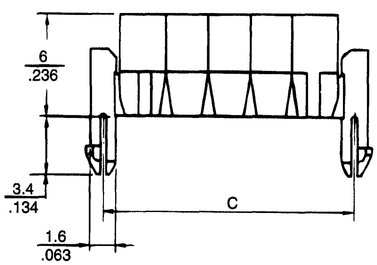
mm
inches

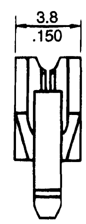


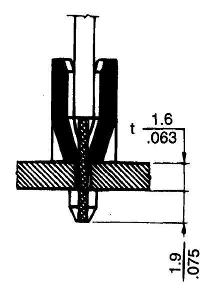




PCB Layout







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	51052-0200	5.50 (.217)	5.90 (.232)	7.50 (.295)
3	51052-0300	8.00 (.315)	8.40 (.331)	10.00 (.394)
4	51052-0400	10.50 (.413)	10.90 (.429)	12.50 (.492)
5	51052-0500	13.50 (.531)	13.40 (.528)	15.00 (.590)
6	51052-0600	15.50 (.610)	15.90 (.626)	17.50 (.689)
7	51052-0700	18.00 (.709)	18.40 (.724)	20.00 (.787)
8	51052-0800	20.50 (.807)	20.90 (.823)	22.50 (.886)
9	51052-0900	23.00 (.906)	23.40 (.921)	25.00 (.984)
10	51052-1000	25.50 (1.004)	25.90 (1.020)	27.50 (1.083)
11	51052-1100	28.00 (1.102)	28.40 (1.118)	30.00 (1.181)
12	51052-1200	30.50 (1.201)	30.90 (1.217)	32.50 (1.280)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Cable Holder

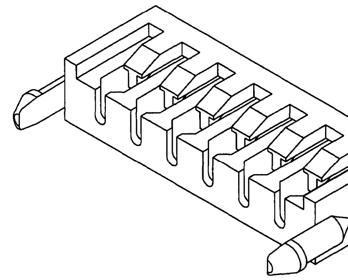
87130

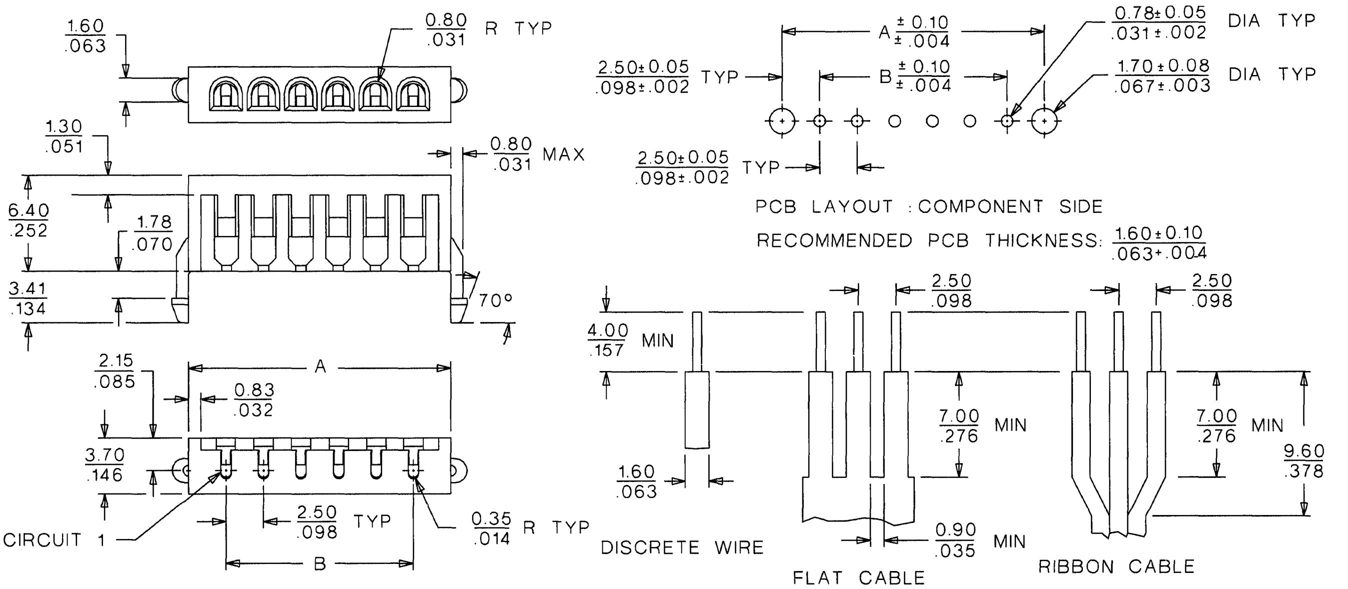
For Discrete Wire, Flat Cable and Ribbon Cable

Features and Benefits
- Sizes 2 to 20 circuits
- Accepts topcoated ribbon cable or discrete wire
- Wire range: 24 to 26 AWG
- Insulation diameter: 1.20 to 1.60mm
- Strip length: 4.00mm

Reference Information
Product Specification: PS-87130
Packaging: Bag
Designed In: Millimeters

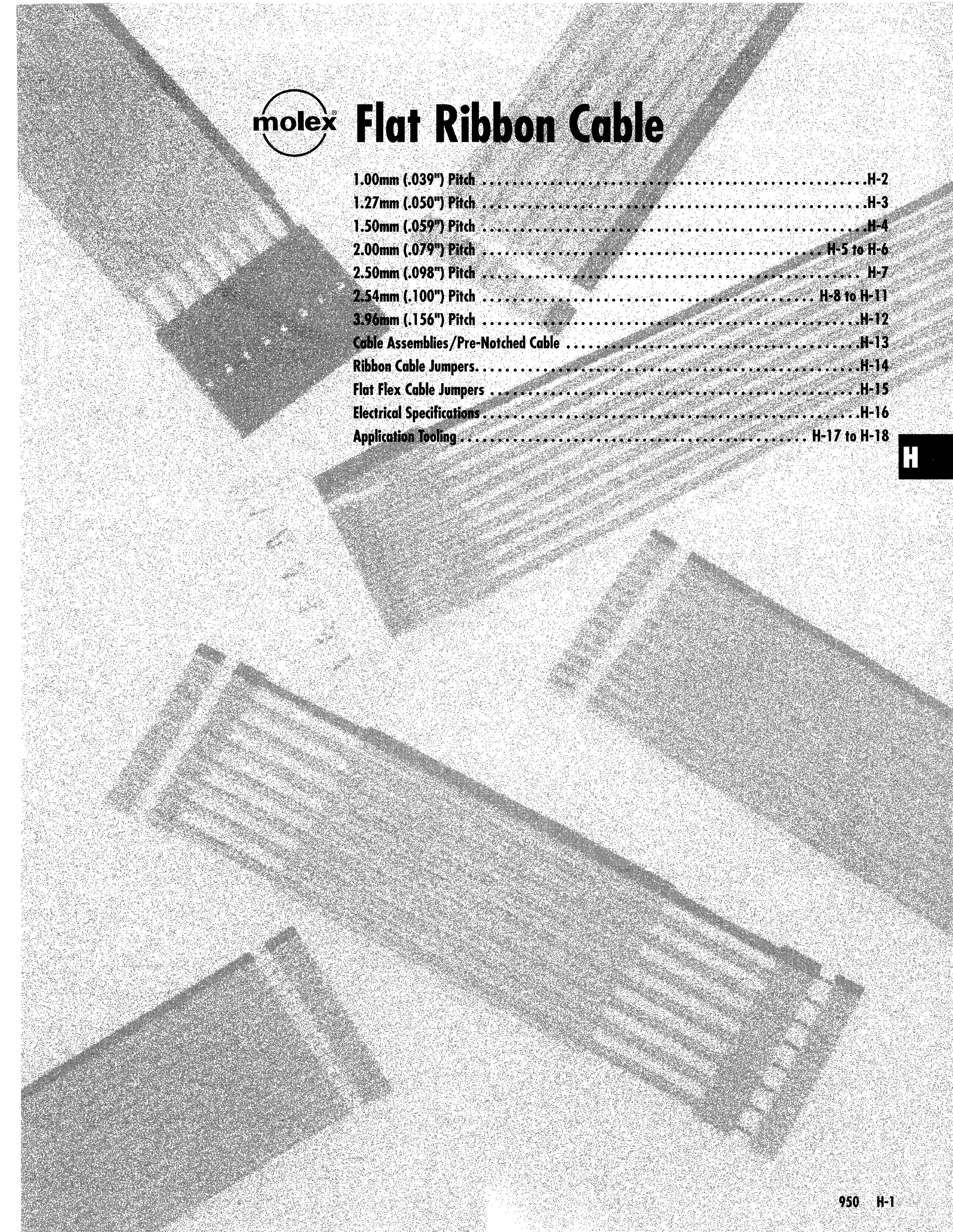
Physical
Housing: 6/6 nylon, UL 94V-0





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension C
2	87130-0200	7.50 (.295)	2.50 (.098)
3	87130-0300	10.00 (.394)	5.00 (.197)
4	87130-0400	12.50 (.492)	7.50 (.295)
5	87130-0500	15.00 (.591)	10.00 (.394)
6	87130-0600	17.50 (.689)	12.50 (.492)
7	87130-0700	20.00 (.787)	15.00 (.591)
8	87130-0800	22.50 (.886)	17.50 (.689)
9	87130-0900	25.00 (.984)	20.00 (.787)
10	87130-1000	27.50 (1.083)	22.50 (.886)
11	87130-1100	30.00 (1.181)	25.00 (.984)
12	87130-1200	32.50 (1.280)	27.50 (1.083)
13	87130-1300	35.00 (1.378)	30.00 (1.181)
14	87130-1400	37.50 (1.476)	32.50 (1.280)
15	87130-1500	40.00 (1.575)	35.00 (1.378)
16	87130-1600	42.50 (1.673)	37.50 (1.476)
17	87130-1700	45.00 (1.772)	40.00 (1.575)
18	87130-1800	47.50 (1.870)	42.50 (1.673)
19	87130-1900	50.00 (1.969)	45.00 (1.772)
20	87130-2000	52.50 (2.067)	47.50 (1.870)



molex

Flat Ribbon Cable

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Round Conductor Flat Cable

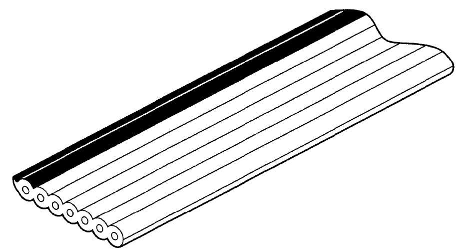
24500 28 AWG (7 x 36) Stranded, Tinned

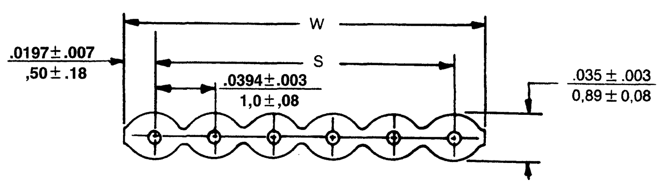
Features and Benefits
- Sizes 10 to 50 circuits
- UL Style No. 2678

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Millimeters

Electrical
Voltage: 150V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





inch
mm

ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100′ Reel	300′ Reel	500′ Reel
24500-XX	• 82-28-30XX	• 82-28-31XX	• 82-28-32XX
Replace "XX" with number of circuits, 10-50			

Circuits*	Dimension	
	S	W (Ref)
10	9.00 (.354)	10.00 (.394)
20	19.00 (.748)	20.00 (.787)
24	23.00 (.906)	24.00 (.945)
40	39.00 (1.535)	40.00 (1.575)
44	43.00 (1.693)	44.00 (1.732)
50	49.00 (1.929)	50.00 (1.969)

• US Standard Product, available through Molex franchised distributors
* Other sizes available, contact factory

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 9 to 68 circuits (No. 8863 9 to 50 circuits)
- UL Style No. 2651

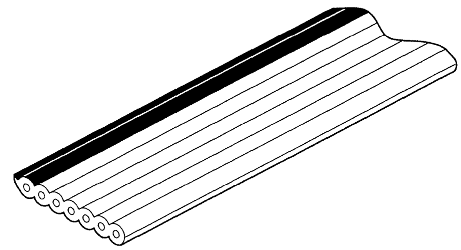
Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Inches

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC

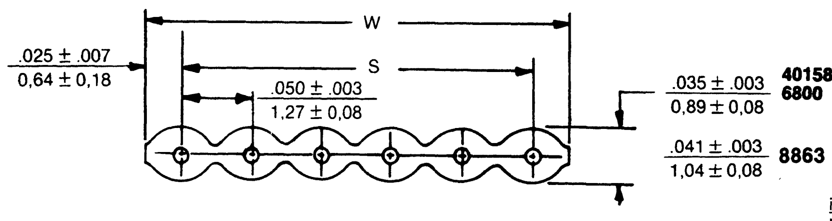
1.27mm (.050") Pitch Round Conductor Flat Cable

6800 28 AWG (7 x 36) Stranded, Tinned
8863 26 AWG (7 x 34) Stranded, Tinned
40158 28 AWG (7 x 36) Stranded, Topcoat



Flat Ribbon Cable

H



ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No. 100′ Reel	300′ Reel	500′ Reel
6800-XX	• 82-28-57XX	• 82-28-59XX	• 82-28-54XX
8863-XX*	• 82-26-68XX	• 82-26-72XX	• 82-26-80XX
40158-XX	• 82-28-55XX	• 82-28-53XX	• 82-28-56XX
Replace "XX" with number of circuits, 09-68			

Circuits†	Dimension S	W (Ref)
9	10.16 (.400)	11.43 (.450)
10	11.43 (.450)	12.70 (.500)
14	16.51 (.650)	17.78 (.700)
15	17.78 (.700)	19.05 (.750)
16	19.05 (.750)	20.32 (.800)
20	24.13 (.950)	25.40 (1.000)
25	30.48 (1.200)	31.75 (1.250)
26	31.74 (1.250)	33.02 (1.300)
34	41.91 (1.650)	43.18 (1.700)
36	44.45 (1.750)	45.72 (1.800)
37	45.72 (1.800)	46.99 (1.850)
40	49.53 (1.950)	50.80 (2.000)
50	62.23 (2.450)	63.50 (2.500)
60	74.93 (2.950)	76.20 (3.000)
64	80.01 (3.150)	81.28 (3.200)
68	85.09 (3.350)	86.36 (3.400)

• US Standard Product, available through Molex franchised distributors
* Series No. 8863 9 to 50 circuits
† Other sizes available, contact factory

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Round Conductor Flat Cable

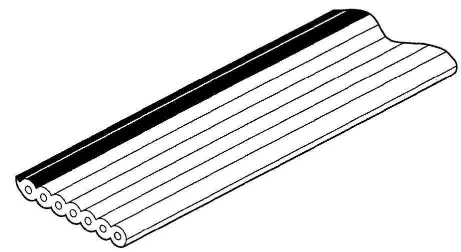
24483 26 AWG (7 x 34) Stranded, Topcoat

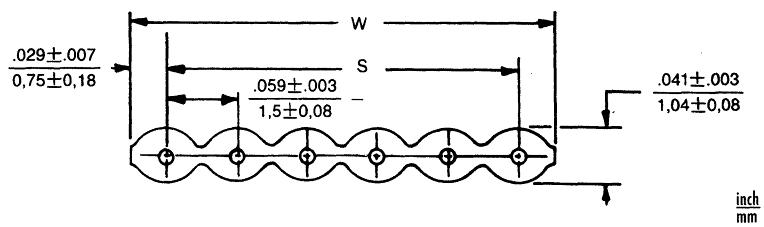
Features and Benefits
- Sizes 4 to 30 circuits, contact factory for 16 to 30 circuits
- UL Style No. 2651

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Millimeters

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100′ Reel	300′ Reel	500′ Reel
24483-XX	• 82-26-38XX	• 82-26-40XX	• 82-26-39XX
Replace "XX" with number of circuits, 04-15			

Circuits*	Dimension	
	S	W (Ref)
4	4.50 (.177)	6.00 (.236)
5	6.00 (.236)	7.50 (.295)
6	7.50 (.295)	9.00 (.354)
7	9.00 (.354)	10.50 (.413)
8	10.50 (.413)	12.00 (.472)
9	12.00 (.472)	13.50 (.531)
10	13.50 (.531)	15.00 (.590)
11	15.00 (.590)	16.50 (.649)
12	16.50 (.649)	18.00 (.708)
13	18.00 (.708)	19.50 (.767)
14	19.50 (.767)	21.00 (.826)
15	21.00 (.826)	22.50 (.885)

• US Standard Product, available through Molex franchised distributors
* Contact factory for 16 to 30 circuits

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Round Conductor Flat Cable

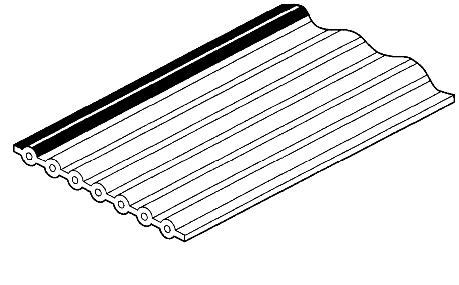
24471 24 AWG (7 x 32) Stranded, Tinned
24472 24 AWG (7 x 32) Stranded, Topcoat
24461 26 AWG (7 x 34) Stranded, Tinned
24462 26 AWG (7 x 34) Stranded, Topcoat

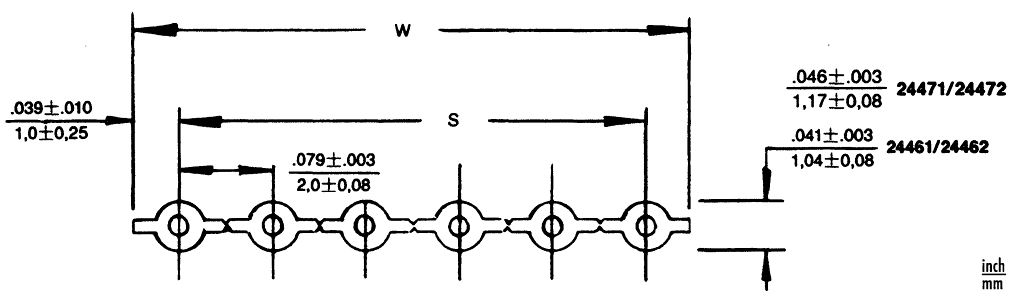
Features and Benefits
- Sizes 2 to 28 circuits
- UL Style No. 2651

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Millimeters

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100′ Reel	300′ Reel	500′ Reel
24471-XX	• 82-24-41XX	• 82-24-42XX	• 82-24-43XX
24472-XX	• 82-24-44XX	• 82-24-45XX	• 82-24-46XX
24461-XX	• 82-26-41XX	• 82-26-42XX	• 82-26-43XX
24462-XX	• 82-26-44XX	• 82-26-45XX	• 82-26-46XX
Replace "XX" with number of circuits, 02-28			

Circuits	Dimension	
	S	W (Ref)
2	2.00 (.079)	4.00 (.157)
3	4.00 (.157)	6.00 (.236)
4	6.00 (.236)	8.00 (.315)
5	8.00 (.315)	10.00 (.394)
6	10.00 (.394)	12.00 (.472)
7	12.00 (.472)	14.00 (.551)
8	14.00 (.551)	16.00 (.630)
9	16.00 (.630)	18.00 (.709)
10	18.00 (.709)	20.00 (.787)
11	20.00 (.787)	22.00 (.866)

Circuits	Dimension	
	S	W (Ref)
12	22.00 (.866)	24.00 (.945)
13	24.00 (.945)	26.00 (1.024)
14	26.00 (1.024)	28.00 (1.102)
15	28.00 (1.102)	30.00 (1.181)
16	30.00 (1.181)	32.00 (1.260)
17	32.00 (1.260)	34.00 (1.339)
18	34.00 (1.339)	36.00 (1.417)
19	36.00 (1.417)	38.00 (1.496)
20	38.00 (1.496)	40.00 (1.575)
21	40.00 (1.575)	42.00 (1.654)
22	42.00 (1.654)	44.00 (1.732)
23	44.00 (1.732)	46.00 (1.811)
24	46.00 (1.811)	48.00 (1.890)
25	48.00 (1.890)	50.00 (1.969)
26	50.00 (1.969)	52.00 (2.047)
27	52.00 (2.047)	54.00 (2.126)
28	54.00 (2.126)	56.00 (2.205)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Flextran™ High Flex Life Cable

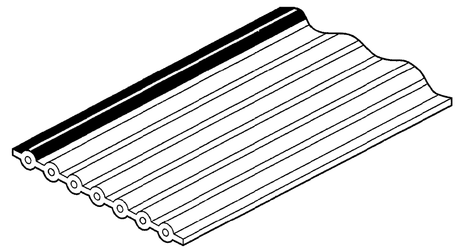
24463 26 AWG (19 x 38) Stranded, Topcoat
24473 24 AWG (19 x 36) Stranded, Topcoat

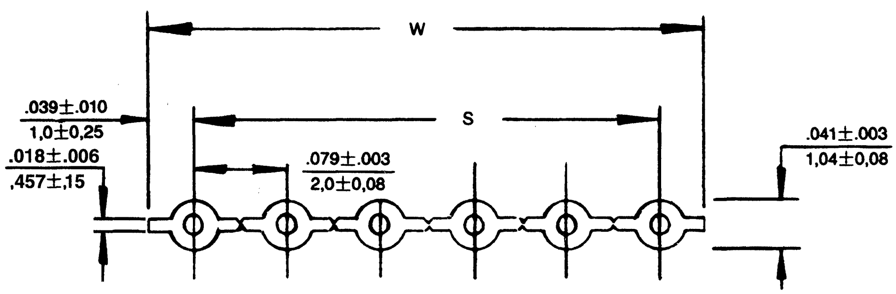
Features and Benefits
- Sizes 2 to 28 circuits
- Special high-performance flex life conductors (per ASTM B470)
- UL Style No. 2651

Reference Information
UL File No.: E61522
Designed In: Millimeters

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100′ Reel	300′ Reel	500′ Reel
24463-XX	• 82-26-30XX	• 82-26-31XX	• 82-26-32XX
24473-XX	• 82-24-34XX	• 82-24-35XX	• 82-24-36XX
Replace "XX" with number of circuits, 02-28			

Circuits	Dimension	
	S	W (Ref)
2	2.00 (.079)	4.00 (.157)
3	4.00 (.157)	6.00 (.236)
4	6.00 (.236)	8.00 (.315)
5	8.00 (.315)	10.00 (.394)
6	10.00 (.394)	12.00 (.472)
7	12.00 (.472)	14.00 (.551)
8	14.00 (.551)	16.00 (.630)
9	16.00 (.630)	18.00 (.709)
10	18.00 (.709)	20.00 (.787)
11	20.00 (.787)	22.00 (.866)
12	22.00 (.866)	24.00 (.945)

• US Standard Product, available through Molex franchised distributors

Circuits	Dimension	
	S	W (Ref)
13	24.00 (.945)	26.00 (1.024)
14	26.00 (1.024)	28.00 (1.102)
15	28.00 (1.102)	30.00 (1.181)
16	30.00 (1.181)	32.00 (1.260)
17	32.00 (1.260)	34.00 (1.339)
18	34.00 (1.339)	36.00 (1.417)
19	36.00 (1.417)	38.00 (1.496)
20	38.00 (1.496)	40.00 (1.575)
21	40.00 (1.929)	42.00 (1.654)
22	42.00 (1.654)	44.00 (1.732)
23	44.00 (1.732)	46.00 (1.811)
24	46.00 (1.811)	48.00 (1.890)
25	48.00 (1.890)	50.00 (1.969)
26	50.00 (1.969)	52.00 (2.047)
27	52.00 (2.047)	54.00 (2.126)
28	54.00 (2.126)	56.00 (2.205)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Round Conductor Flat Cable

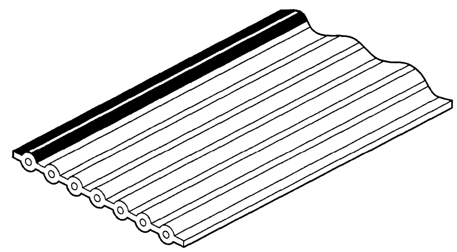
24491 24 AWG (7 x 32) Stranded, Tinned
24492 24 AWG (7 x 32) Stranded, Topcoat
24490 26 AWG (7 x 34) Stranded, Tinned
40160 26 AWG (7 x 34) Stranded, Topcoat

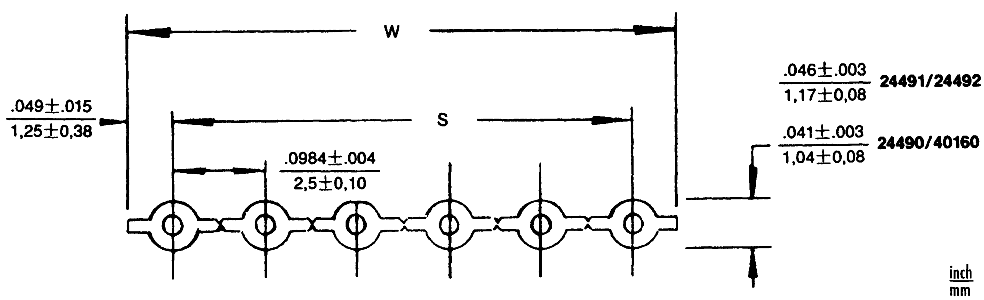
Features and Benefits
- Sizes 2 to 30 circuits
- UL Style No. 2651

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Millimeters

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100' Reel	300' Reel	500' Reel
24491-XX	• 82-24-50XX	• 82-24-51XX	• 82-24-52XX
24492-XX	• 82-24-85XX	• 82-24-86XX	• 82-24-87XX
24490-XX	• 82-26-35XX	• 82-26-36XX	• 82-26-37XX
40160-XX	• 82-26-55XX	• 82-26-81XX	• 82-26-82XX
Replace "XX" with number of circuits, 02-30			

Circuits	Dimension	
	S	W (Ref)
2	2.50 (.098)	5.00 (.197)
3	5.00 (.197)	7.50 (.295)
4	7.50 (.295)	10.00 (.394)
5	10.00 (.394)	12.50 (.492)
6	12.50 (.492)	15.00 (.591)
7	15.00 (.591)	17.50 (.689)
8	17.50 (.689)	20.00 (.787)
9	20.00 (.787)	22.50 (.886)
10	22.50 (.886)	25.00 (.984)
11	25.00 (.984)	27.50 (1.083)
12	27.50 (1.083)	30.00 (1.181)
13	30.00 (1.181)	32.50 (1.280)
14	32.50 (1.280)	35.00 (1.378)
15	35.00 (1.378)	37.50 (1.476)
16	37.50 (1.476)	40.00 (1.575)
17	40.00 (1.575)	42.50 (1.673)
18	42.50 (1.673)	45.00 (1.772)
19	45.00 (1.772)	47.50 (1.870)
20	47.50 (1.870)	50.00 (1.968)
21	50.00 (1.968)	52.50 (2.067)
22	52.50 (2.067)	55.00 (2.165)
23	55.00 (2.165)	57.50 (2.264)
24	57.50 (2.264)	60.00 (2.362)
25	60.00 (2.362)	62.50 (2.461)
26	62.50 (2.461)	65.00 (2.559)
27	65.00 (2.559)	67.50 (2.657)
28	67.50 (2.657)	70.00 (2.756)
29	70.00 (2.756)	72.50 (2.854)
30	72.50 (2.854)	75.00 (2.953)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Round Conductor Flat Cable

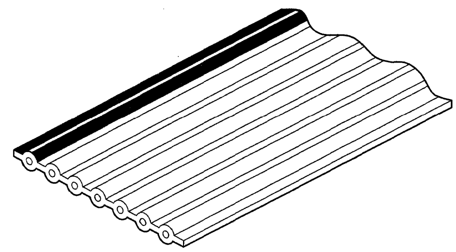
7234 26 AWG (1 x 26) Solid, Tinned
7307 28 AWG (7 x 36) Stranded, Tinned
7560 22 AWG (7 x 30) Stranded, Tinned
24241 26 AWG (7 x 34) Stranded, Tinned
24226 24 AWG (7 x 32) Stranded, Tinned

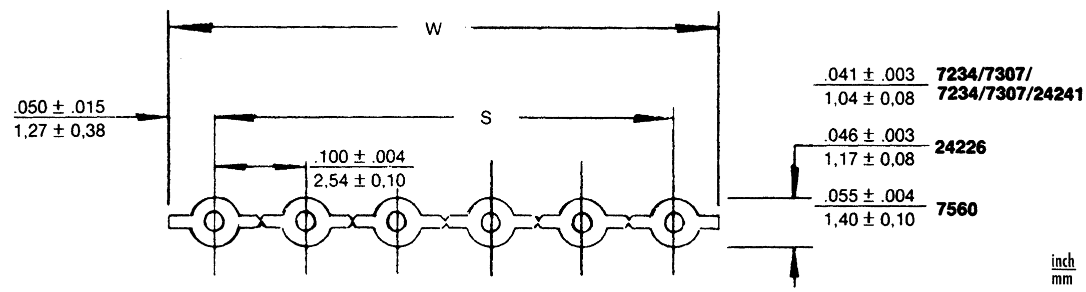
Features and Benefits
- Sizes 2 to 36 circuits
- UL Style No. 2651

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Inches

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No. 100′ Reel	300′ Reel	500′ Reel
7234-XX	• 82-26-57XX	• 82-26-59XX	• 82-26-66XX
7307-XX	• 82-28-58XX	• 82-28-6XX2	• 82-28-6XX5
7560-XX	• 82-22-61XX	• 82-22-62XX	• 82-22-71XX
24241-XX	• 82-26-56XX	• 82-26-53XX	• 82-26-75XX
24226-XX	• 82-24-77XX	• 82-24-73XX	• 82-24-55XX
Replace "XX" with number of cicuits, 02-36			

Circuits	Dimension S	W (Ref)
2	2.54 (.100)	5.08 (.200)
3	5.08 (.200)	7.62 (.300)
4	7.62 (.300)	10.16 (.400)
5	10.16 (.400)	12.70 (.500)
6	12.70 (.500)	15.24 (.600)
7	15.24 (.600)	17.78 (.700)
8	17.78 (.700)	20.32 (.800)

• US Standard Product, available through Molex franchised distributors

Circuits	Dimension S	W (Ref)
9	20.32 (.800)	22.86 (.900)
10	22.86 (.900)	25.40 (1.000)
11	25.40 (1.000)	27.94 (1.100)
12	27.94 (1.100)	30.48 (1.200)
13	30.48 (1.200)	33.02 (1.300)
14	33.02 (1.300)	35.56 (1.400)
15	35.56 (1.400)	38.10 (1.500)
16	38.10 (1.500)	40.64 (1.600)
17	40.64 (1.600)	43.18 (1.700)
18	43.18 (1.700)	45.72 (1.800)
19	45.72 (1.800)	48.26 (1.900)
20	48.26 (1.900)	50.80 (2.000)
21	50.80 (2.000)	53.34 (2.100)
22	53.34 (2.100)	55.88 (2.200)
23	55.58 (2.200)	58.42 (2.300)
24	58.42 (2.300)	60.96 (2.400)

Circuits	Dimension S	W (Ref)
25	60.96 (2.400)	63.50 (2.500)
26	63.50 (2.500)	66.04 (2.600)
27	66.04 (2.600)	68.58 (2.700)
28	68.58 (2.700)	71.12 (2.800)
29	71.12 (2.800)	73.66 (2.900)
30	73.66 (2.900)	76.20 (3.000)
31	76.20 (3.000)	78.74 (3.100)
32	78.74 (3.100)	81.28 (3.200)
33	81.28 (3.200)	83.82 (3.300)
34	83.82 (3.300)	86.36 (3.400)
35	86.36 (3.400)	88.90 (3.500)
36	88.90 (3.500)	91.44 (3.600)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Round Conductor Flat Cable

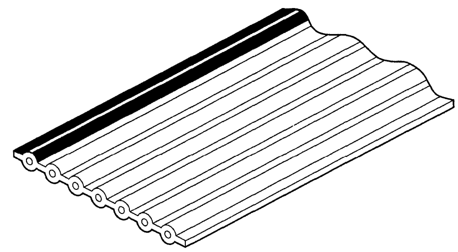
7767 28 AWG (7 x 36) Stranded, Topcoat
8996 26 AWG (7 x 34) Stranded, Topcoat
8997 24 AWG (7 x 32) Stranded, Topcoat
8867 22 AWG (7 x 30) Stranded, Topcoat

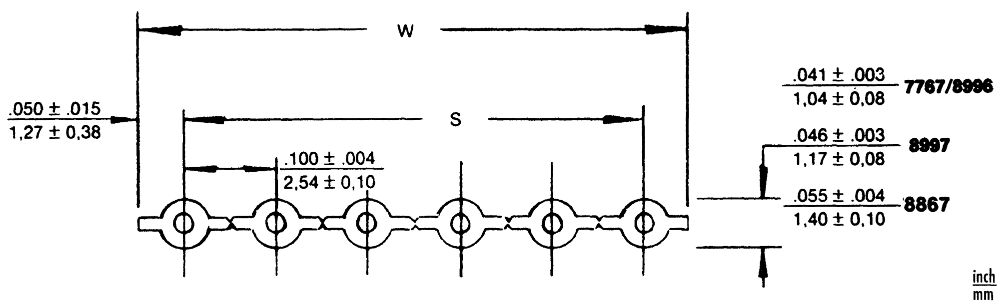
Features and Benefits
- Sizes 2 to 36 circuits
- UL Style No. 2651

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Inches

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105 °C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No. 100′ Reel	Order No. 300′ Reel	Order No. 500′ Reel
7767-XX	• 82-28-6XX1	• 82-28-6XX3	• 82-28-6XX8
8996-XX	• 82-26-58XX	• 82-26-71XX	• 82-26-76XX
8997-XX	• 82-24-59XX	• 82-24-60XX	• 82-24-65XX
8867-XX	• 82-22-60XX	• 82-22-65XX	• 82-22-74XX
Replace "XX" with number of circuits, 02-36			

Circuits	Dimension S	Dimension W (Ref)
2	2.54 (.100)	5.08 (.200)
3	5.08 (.200)	7.62 (.300)
4	7.62 (.300)	10.16 (.400)
5	10.16 (.400)	12.70 (.500)
6	12.70 (.500)	15.24 (.600)
7	15.24 (.600)	17.78 (.700)
8	17.78 (.700)	20.32 (.800)
9	20.32 (.800)	22.86 (.900)

• US Standard Product, available through Molex franchised distributors

Circuits	Dimension S	Dimension W (Ref)
10	22.86 (.900)	25.40 (1.000)
11	25.40 (1.000)	27.94 (1.100)
12	27.94 (1.100)	30.48 (1.200)
13	30.48 (1.200)	33.02 (1.300)
14	33.02 (1.300)	35.56 (1.400)
15	35.56 (1.400)	38.10 (1.500)
16	38.10 (1.500)	40.64 (1.600)
17	40.64 (1.600)	43.18 (1.700)
18	43.18 (1.700)	45.72 (1.800)
19	45.72 (1.800)	48.26 (1.900)
20	48.26 (1.900)	50.80 (2.000)
21	50.80 (2.000)	53.34 (2.100)
22	53.34 (2.100)	55.88 (2.200)
23	55.88 (2.200)	58.42 (2.300)
24	58.42 (2.300)	60.96 (2.400)
25	60.96 (2.400)	63.50 (2.500)

Circuits	Dimension S	Dimension W (Ref)
26	63.50 (2.500)	66.04 (2.600)
27	66.04 (2.600)	68.58 (2.700)
28	68.58 (2.700)	71.12 (2.800)
29	71.12 (2.800)	73.66 (2.900)
30	73.66 (2.900)	76.20 (3.000)
31	76.20 (3.000)	78.74 (3.100)
32	78.74 (3.100)	81.28 (3.200)
33	81.28 (3.200)	83.82 (3.300)
34	83.82 (3.300)	86.36 (3.400)
35	86.36 (3.400)	88.90 (3.500)
36	88.90 (3.500)	91.44 (3.600)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Flextran™ High Flex Life Cable

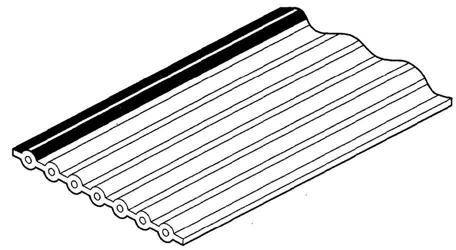
24369 26 AWG (19 x 38) Stranded, Topcoat
24389 24 AWG (19 x 36) Stranded, Topcoat

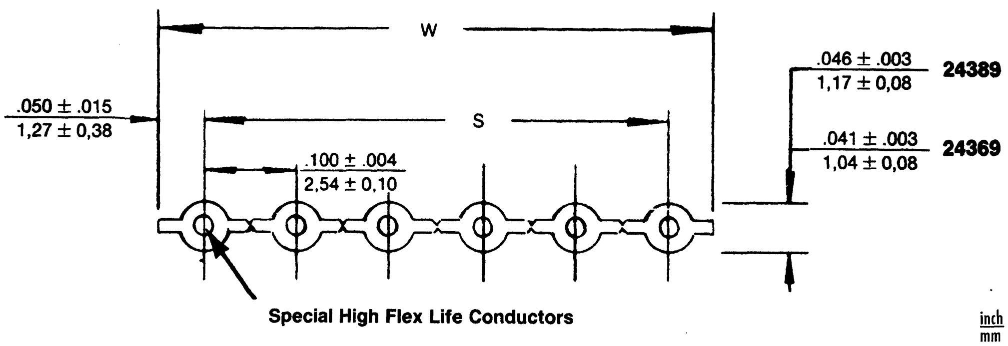
Features and Benefits
- Sizes 2 to 36 circuits
- Special high-performance flex life conductors (per ASTM B470)
- UL Style No. 2651

Reference Information
UL File No.: E61522
Designed In: Inches

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100′ Reel	300′ Reel	500′ Reel
24369-XX	• 82-26-62XX	• 82-26-60XX	• 82-26-65XX
24389-XX	• 82-24-80XX	• 82-24-81XX	• 82-24-82XX
Replace "XX" with number of circuits, 02-36			

Circuits	Dimension	
	S	W (Ref)
2	2.54 (.100)	5.08 (.200)
3	5.08 (.200)	7.62 (.300)
4	7.62 (.300)	10.16 (.400)
5	10.16 (.400)	12.70 (.500)
6	12.70 (.500)	15.24 (.600)
7	15.24 (.600)	17.78 (.700)
8	17.78 (.700)	20.32 (.800)
9	20.32 (.800)	22.86 (.900)
10	22.86 (.900)	25.40 (1.000)
11	25.40 (1.000)	27.94 (1.100)

• US Standard Product, available through Molex franchised distributors

Circuits	Dimension	
	S	W (Ref)
12	27.94 (1.100)	30.48 (1.200)
13	30.48 (1.200)	33.02 (1.300)
14	33.02 (1.300)	35.56 (1.400)
15	35.56 (1.400)	38.10 (1.500)
16	38.10 (1.500)	40.64 (1.600)
17	40.64 (1.600)	43.18 (1.700)
18	43.18 (1.700)	45.72 (1.800)
19	45.72 (1.800)	48.26 (1.900)
20	48.26 (1.900)	50.80 (2.000)
21	50.80 (2.000)	53.34 (2.100)
22	53.34 (2.100)	55.88 (2.200)
23	55.88 (2.200)	58.42 (2.300)
24	58.42 (2.300)	60.96 (2.400)
25	60.96 (2.400)	63.50 (2.500)
26	63.50 (2.500)	66.04 (2.600)
27	66.04 (2.600)	68.58 (2.700)

Circuits	Dimension	
	S	W (Ref)
28	68.58 (2.700)	71.12 (2.800)
29	71.12 (2.800)	73.66 (2.900)
30	73.66 (2.900)	76.20 (3.000)
31	76.20 (3.000)	78.74 (3.100)
32	78.74 (3.100)	81.28 (3.200)
33	81.28 (3.200)	83.82 (3.300)
34	83.82 (3.300)	86.36 (3.400)
35	86.36 (3.400)	88.90 (3.500)
36	88.90 (3.500)	91.44 (3.600)

2.54mm (.100") Pitch Heavy Duty Composite Cable

24327 24 AWG (19 x 36) Stranded, Overcoat Pre-Insulated

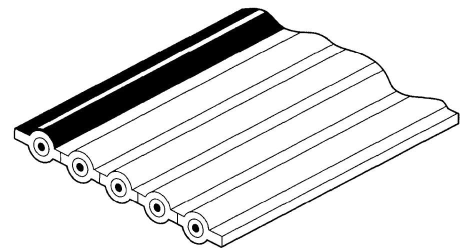
FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 24 circuits
- Tough primary insulation resists cut/melt-through
- High flex life conductors

Reference Information
Designed In: Inches

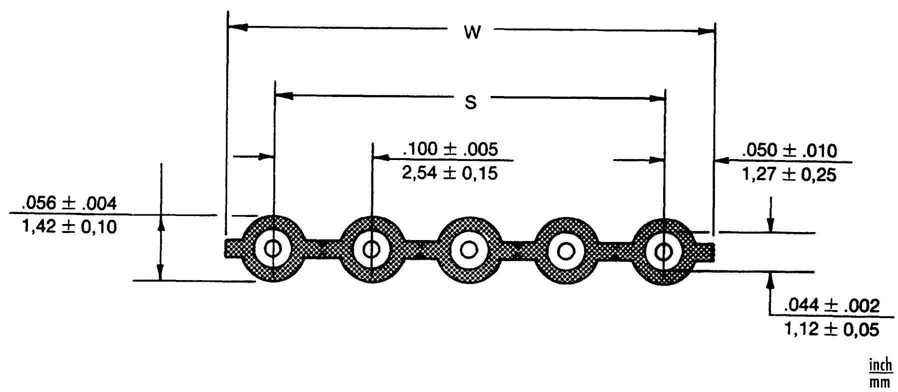
Electrical
See Electrical Specifications Table on Page H-16 for More Information

Physical
Insulation: Primary-irradiated PVC; secondary-tan PVC



Flat Ribbon Cable

H



ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No.		
	100′ Reel	300′ Reel	500′ Reel
24327-XX	• 82-24-84XX	• 82-24-79XX	• 82-24-75XX
Replace "XX" with number of circuits, 02-24			

Circuits	Dimension	
	S	W (Ref)
2	2.54 (.100)	5.08 (.200)
3	5.08 (.200)	7.62 (.300)
4	7.62 (.300)	10.16 (.400)
5	10.16 (.400)	12.70 (.500)
6	12.70 (.500)	15.24 (.600)
7	15.24 (.600)	17.78 (.700)
8	17.78 (.700)	20.32 (.800)
9	20.32 (.800)	22.86 (.900)
10	22.86 (.900)	25.40 (1.000)
11	25.40 (1.000)	27.94 (1.100)
12	27.94 (1.100)	30.48 (1.200)
13	30.48 (1.200)	33.02 (1.300)
14	33.02 (1.300)	35.56 (1.400)
15	35.56 (1.400)	38.10 (1.500)
16	38.10 (1.500)	40.64 (1.600)
17	40.64 (1.600)	43.18 (1.700)
18	43.18 (1.700)	45.72 (1.800)
19	45.72 (1.800)	48.26 (1.900)
20	48.26 (1.900)	50.80 (2.000)
21	50.80 (2.000)	53.34 (2.100)
22	53.34 (2.100)	55.88 (2.200)
23	55.88 (2.200)	58.42 (2.300)
24	58.42 (2.300)	60.96 (2.400)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

molex® **3.96mm (.156") Pitch Round Conductor Flat Cable**

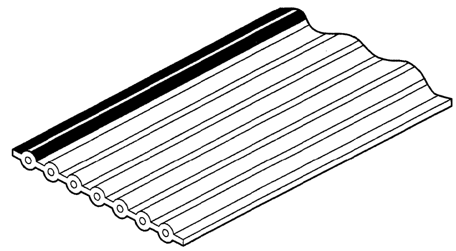
7382 22 AWG (7 x 30) Stranded, Tinned
7517 18 AWG (19 x 30) Stranded, Tinned
40174 18 AWG (7 x 26) Stranded, Tinned
8868 22 AWG (7 x 30) Stranded, Topcoat

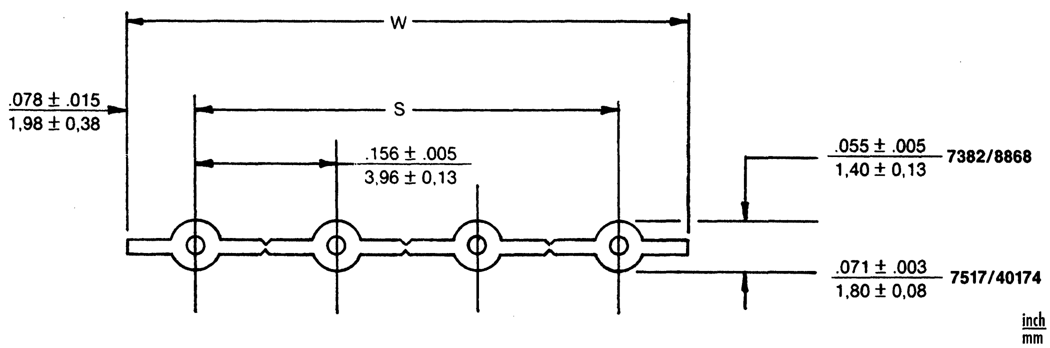
Features and Benefits
- Sizes 2 to 24 circuits
- UL Style No. 2651

Reference Information
UL File No.: E61522
CSA File No.: LL61126
Designed In: Inches

Electrical
Voltage: 300V
See Electrical Specifications Table on Page H-16 for More Information

Physical
Flammability: VW-1
Temperature: -20 to +105°C
Insulation: Gray PVC





ORDERING INFORMATION AND DIMENSIONS

For Cable Series No.	Order No. 100′ Reel	300′ Reel	500′ Reel
7382-XX	• 82-22-58XX	• 82-22-63XX	• 82-22-73XX
7517-XX	• 82-18-5XX1	• 82-18-5XX2	• 82-18-5XX3
40174-XX	• 82-18-60XX	• 82-18-61XX	• 82-18-62XX
8868-XX	• 82-22-59XX	• 82-22-67XX	• 82-22-68XX
Replace "XX" with number of circuits, 02-24			

Circuits	Dimension S	W (Ref)
2	3.96 (.156)	7.93 (.312)
3	7.93 (.312)	11.89 (.468)
4	11.89 (.468)	15.85 (.624)
5	15.85 (.624)	19.81 (.780)
6	19.81 (.780)	23.77 (.936)
7	23.77 (.936)	27.74 (1.092)
8	27.74 (1.092)	31.70 (1.248)
9	31.70 (1.248)	35.66 (1.404)

Circuits	Dimension S	W (Ref)
10	35.66 (1.404)	39.62 (1.560)
11	39.62 (1.560)	43.59 (1.716)
12	43.59 (1.716)	47.55 (1.872)
13	47.55 (1.872)	51.51 (2.028)
14	51.51 (2.028)	55.47 (2.184)
15	55.47 (2.184)	59.44 (2.340)
16	59.44 (2.340)	63.40 (2.496)
17	63.40 (2.496)	67.36 (2.652)
18	67.36 (2.652)	71.32 (2.808)
19	71.32 (2.808)	75.29 (2.964)
20	75.29 (2.964)	79.25 (3.120)
21	79.25 (3.120)	83.21 (3.276)
22	83.21 (3.276)	87.17 (3.432)
23	87.17 (3.432)	91.14 (3.588)
24	91.14 (3.588)	95.10 (3.744)

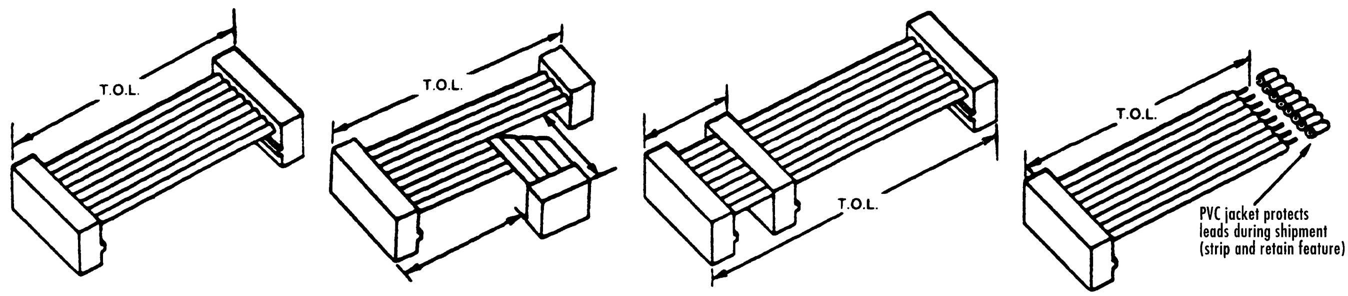
• US Standard Product, available through Molex franchised distributors

Molex offers a variety of standard and custom cable and discrete wire assemblies at industry-competitive prices.

- Quality assurance guaranteed
- Samples available
- Production quantities in 4 to 6 weeks
- We provide finished assemblies or components and equipment for you to complete your own assemblies
- SPC and EDT used in all cable facilities

Features

- Single- or double-ended assemblies
- Daisy chain assemblies
- Right angle or in-line IDT
- Variety of center spacings 2.50 (.050), 2.00 (.100) and 1.50mm (.156")



Molex offers cable pre-notched for connector termination. Pre-notched cable offers the benefits of jumpers or bulk cable without the expense of notching equipment. Molex pre-notched cable is available on 100 and 300′ reels.

Notched cable is available through US Molex franchised distributors

Ribbon Cable Jumpers

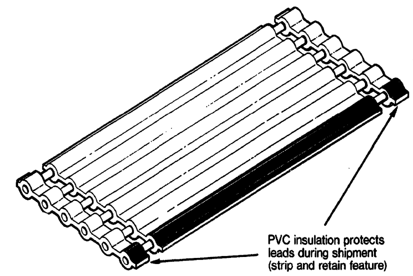
A practical and cost-effective method of board-to-board interconnection—not requiring a disconnect is the Molex PVC cable jumper system. Our jumpers utilize solid or topcoated conductors in a variety of spacings with a strip and retain feature that protects the wire leads during shipment and handling.

Molex has recognized the need for a system to design, quote and produce cable jumpers quickly. Our 28XXX system provides immediate quotations and the shortest lead times possible!

Other features on 28XXX cable jumpers include end notching for IDT termination, intermittent notching and slits for increased flexibility.

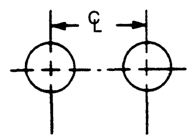
Contact factory with the following information:

- Wire Type
- Centerline Spacing
- Circuit Size
- Length (Minimum Overall Length 1.000" (No Maximum))
- Strip and Retain Dimensions Between 3.00 to 8.00mm (.118 to .315")



Specifications

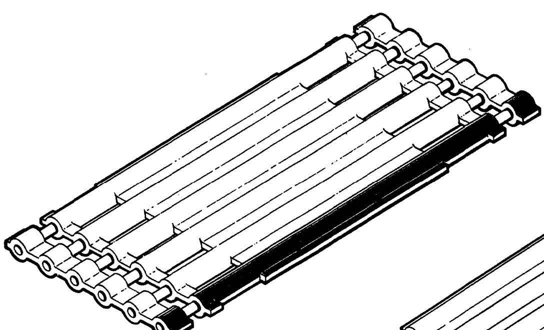
Cable Spacings: 1.27mm (.050")	Circuits: 10 to 60
2.54mm (.100")	3 to 36
3.96mm (.156")	2 to 24
2.50mm (.098")	3 to 30
2.00mm (.079")	4 to 28
1.50mm (.059")	6 to 30



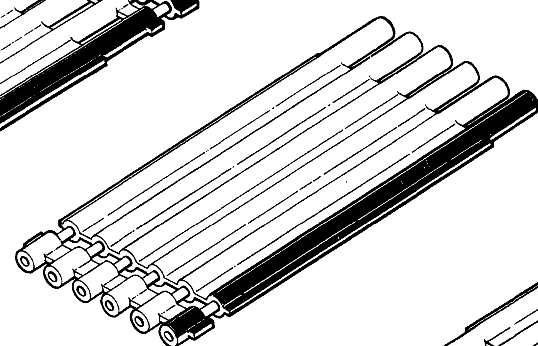
* Hole Diameter

Wire Gauge (Stranded, Topcoat)	Recommended Hole Diameter	
	mm (in.)	Tolerance
28	0.75 (.031)	±0.08 (.003)
26	0.80 (.032)	±0.08 (.003)
24	0.95 (.037)	±0.10 (.004)
22	1.10 (.043)	±0.10 (.004)

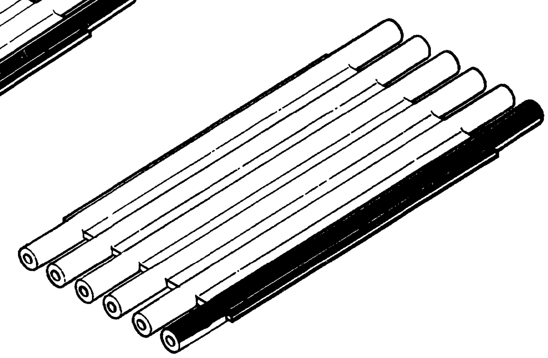
Cable jumpers are available through Molex franchised US distributors



Strip and Retain w/"Flex" Notches



Strip and Retain w/End Notch for IDT



Notched Both Ends for IDT

When disconnects are required and size is critical, Molex Flat Flex Cable (FFC) Jumpers* used with Molex ZIF and LIF Connectors† provide an easy-to-use solution! Molex FFC Jumpers are available in 0.50, 1.00 and 1.25mm centerline spacings.

Durability Testing

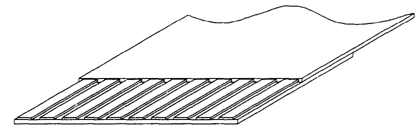
Number of Conductors: 9 to 50 on 0.50mm pitch
4 to 30 on 1.00mm pitch
3 to 40 on 1.25mm pitch
Minimum Length: 30mm

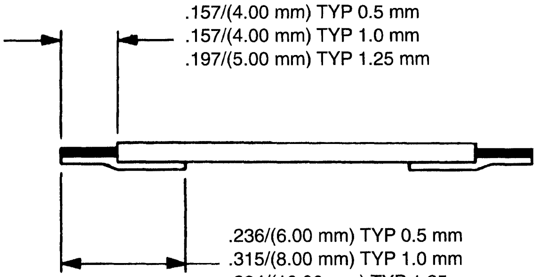
L Style

UL Style No.: 2896
Temperature Rating: -40 to +80°C
Voltage Rating: 30V

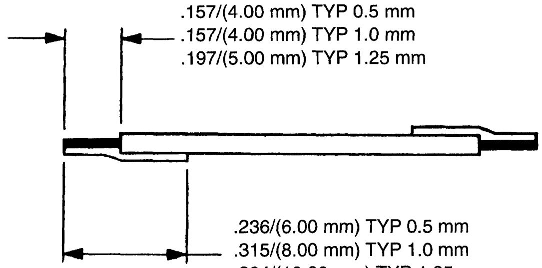
H Style

UL Style No.: 2643
Temperature Rating: -40 to +105°C
Voltage Rating: 300V

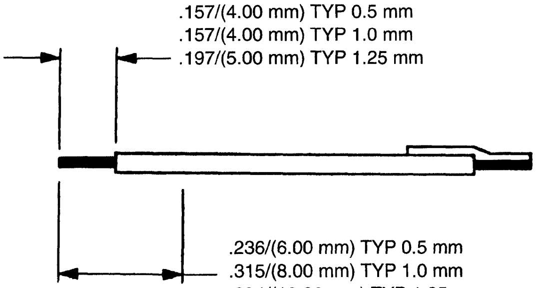




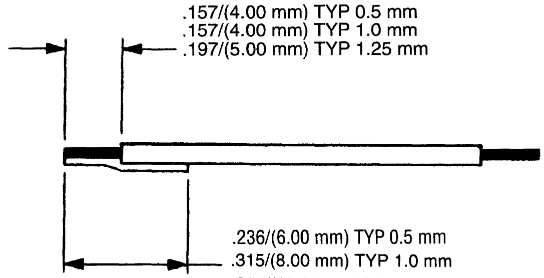
Type "A"



Type "D"



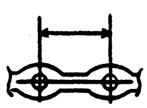
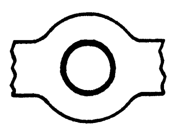
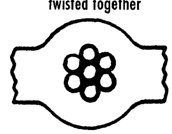
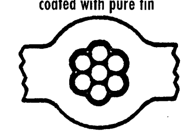
Type "E"



Type "F"

* Each application for an FFC Jumper is unique. Please contact the factory for custom part numbers and ordering information.
† See section I of this catalog for information on Molex ZIF and LIF Connectors

Pitch	Cable Series	AWG	Copper Conductor Type	Max. Conductor Resistance, mΩ/ft	Nominal Characteristic Impedance, Ω		Nominal Capacitance, pf/ft		Nominal Prop. Delay, ns/ft	Min. Dielectric Withstanding Voltage, (VRMS)	Page No.
					GS	GSG	GS	GSG			
ROUND CONDUCTOR FLAT CABLE											
1.00 (.039)	24500	28	Stranded, Tinned (7 x 36)	68	112	83	11.8	18.3	1.4	1500	H-2
1.27 (.050)	6800	28	Stranded, Tinned (7 x 36)	68	123	100	9.1	17.0	1.4	2000	H-3
	8863	26	Stranded, Tinned (7 x 34)	43	115	93	8.9	18.0	1.4	2000	
	40158	28	Stranded, Topcoat (7 x 36)	68	123	100	9.1	17.0	1.4	2000	
1.50 (.059)	24483	26	Stranded, Topcoat (7 x 34)	43	121	99	9.0	16.5	1.4	2000	H-4
2.00 (.079)	24461	26	Stranded, Tinned (7 x 34)	43	133	111	7.3	13.4	1.4	2000	H-5
	24462	26	Stranded, Topcoat (7 x 34)	43	133	111	7.3	13.4	1.4	2000	
	24471	24	Stranded, Tinned (7 x 32)	27	124	104	8.2	14.6	1.4	2000	
	24472	24	Stranded, Topcoat (7 x 32)	27	124	104	8.2	14.6	1.4	2000	
2.50 (.098)	24490	26	Stranded, Tinned (7 x 34)	43	143	121	5.7	10.4	1.4	2000	H-7
	40160	26	Stranded, Topcoat (7 x 34)	43	143	121	5.7	10.4	1.4	2000	
	24491	24	Stranded, Tinned (7 x 32)	27	133	113	6.6	11.8	1.4	2000	
	24492	24	Stranded, Topcoat (7 x 32)	27	133	113	6.6	11.8	1.4	2000	
2.54 (.100)	7234	26	Solid, Tinned (1 x 26)	45	150	128	5.2	9.2	1.4	2000	H-8
	7307	28	Stranded, Tinned (7 x 36)	68	150	128	5.0	9.1	1.4	2000	
	7560	22	Stranded, Tinned (7 x 30)	17	128	104	7.2	13.4	1.4	2000	
	7767	28	Stranded, Topcoat (7 x 36)	68	150	128	5.0	9.1	1.4	2000	H-9
	8996	26	Stranded, Topcoat (7 x 34)	43	145	123	5.6	10.3	1.4	2000	
	8997	24	Stranded, Topcoat (7 x 32)	27	134	114	6.6	12.0	1.4	2000	
	8867	22	Stranded, Topcoat (7 x 30)	17	128	104	7.2	13.4	1.4	2000	
	24241	26	Stranded, Tinned (7 x 34)	43	145	123	5.6	10.3	1.4	2000	
	24226	24	Stranded, Tinned (7 x 32)	27	134	114	6.6	12.0	1.4	2000	
3.96 (.156)	7382	22	Stranded, Tinned (7 x 30)	17	140	123	4.7	8.5	1.4	2000	H-12
	7517	18	Stranded, Tinned (19 x 30)	7	128	105	5.9	10.9	1.4	2000	
	8868	22	Stranded, Topcoat (7 x 30)	17	140	123	4.7	8.5	1.4	2000	
	40174	18	Stranded, Tinned (7 x 26)	7	128	105	5.9	10.9	1.4	2000	
FLEXTRAN™ HIGH FLEX LIFE CABLE											
2.00 (.079)	24463	26	Stranded, Topcoat (19 x 38)	52	164	121	7.6	11.5	1.3	2000	H-6
	24473	24	Stranded, Topcoat (19 x 36)	32	148	106	8.2	12.9	1.3	2000	
2.54 (.100)	24369	26	Stranded, Topcoat (19 x 38)	54	158	131	5.3	9.2	1.4	2000	H-10
	24389	24	Stranded, Topcoat (19 x 36)	34	146	122	6.2	10.7	1.4	2000	
HEAVY-DUTY COMPOSITE CABLE											
2.54 (.100)	24327	24	Stranded, Overcoat (19 x 36)	31	113	109	8.8	13.0	1.4	2000	H-11

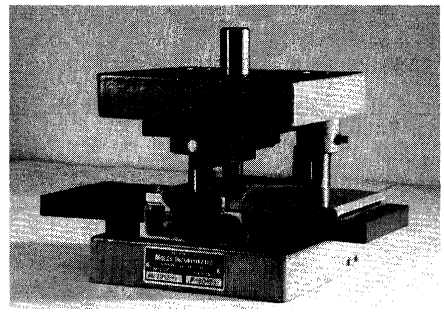
PITCH	AWG	CONDUCTOR TYPES		
		Solid Tinned One tinned Copper wire conductor	**Stranded Tinned** Individual tinned Copper wires, twisted together	**Topcoated** Bare Copper wires twisted together, then coated with pure tin
				

FEATURES AND SPECIFICATIONS

Bench Mounted Prep Cable Notcher

Features
- Notches cable for feed through or end termination of Molex IDT connectors
- Must be used with Molex 3BF Press (see section W for press information)

Specifications
Size: Width—254mm (10")
Depth—229mm (9")
Height—203mm (8")
Weight: 22.5kg (50 lb)
Rate: Up to 500 notches per hour, dependent on operator speed and application



ORDERING INFORMATION

Press	
Description	**Order No.**
Rebuilt 3BF Press	11-05-0003

Description	Order No.	Cable Series No.
.156" Pitch Cable Notcher (18-22 gauge) 2-24 circuits	• 11-21-0728	7382, 7517, 8868, 40174
*.156" Pitch Cable Notcher (18-24 gauge) 2-24 circuits	11-39-0263	7382, 7517, 8868, 40174
*.156" Pitch Cable Notcher (18-24 gauge) 2-24 circuits	11-20-1121	7382, 7517, 8868, 40174
†.100" Pitch Cable Notcher (22-24 gauge) 2-28 circuits	• 11-21-4114	7560, 8867, 8997, 24226, 24327, 24389
‡.100" Pitch Cable Notcher (22-24 gauge) 2-28 circuits	• 11-21-4120	7560, 8867, 8997, 24226, 24327, 24389
§.100" Pitch Cable Notcher (24-28 gauge) 2-28 circuits	11-20-0944	7234, 7307, 7767, 8996, 8997, 24226, 24241, 24327, 24369, 24389
†.100" Pitch Cable Notcher (26-30 gauge) 2-28 circuits	• 11-21-4112	7234, 7307, 7767, 8996, 24241, 24369
.100" Pitch Cable Notcher (26-30 gauge) 2-28 circuits	• 11-20-0464	7234, 7307, 7767, 8996, 24241, 24369
‡2.50mm Pitch Cable Notcher (24-28 gauge) 2-28 circuits	11-20-0439	24490, 24491, 24492, 40160
2.50mm Pitch Cable Notcher (24-28 gauge) 2-28 circuits	• 11-20-1258	24490, 24491, 24492, 40160
2.00mm Pitch Cable Notcher (24-26 gauge) 2-28 circuits	• 11-20-1321	24461, 24462, 24463, 24471, 24472, 24473

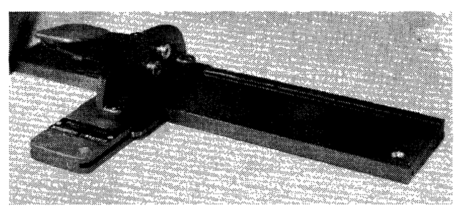
• US Standard Product, available through Molex franchised distributors
* Wide notch
† Full notch
‡ Web notch
§ Full notch for C-Grid SL™ application only

FEATURES AND SPECIFICATIONS

Bench Style Cable Shear

Features
- Accommodates all Molex cable
- Table mounted hand tool for fast, accurate and low cost cable cutting
- Cable stop to control cut length
- Maximum cable width 92.42mm (3-7/8")
- Also for flat flexible cable

Specifications
Size: Width—510mm (20")
Depth—254mm (10")
Height—127mm (5")
Weight: 2.13kg (4.75 lb)



ORDERING INFORMATION

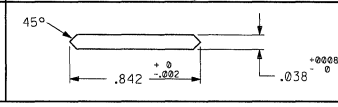
Description	Order No.
Bench Style Cable Shear	• 11-20-0785

• US Standard Product, available through Molex franchised distributors
See following page for notch data

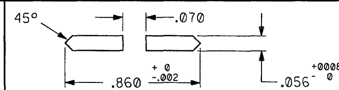
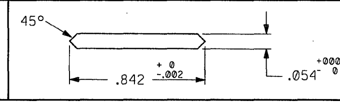
Flat Ribbon Cable
H

Cable Notcher
Punch Configurations

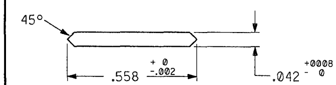
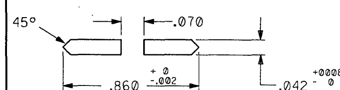
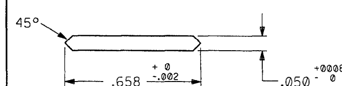
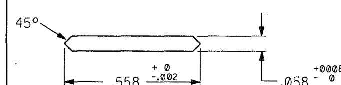
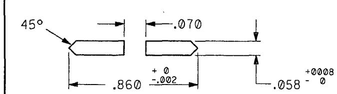
2.00mm (.079") Cable

Description	Cable Series No.	Connector Series No.	Punch Configuration
2.00mm Center Distance	24461, 24462, 24463, 24471, 24472, 24473	30452	

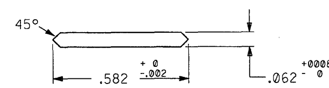
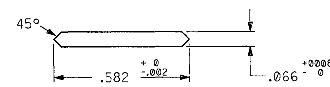
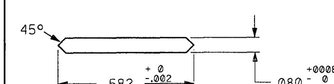
2.50mm (.098") Cable

Description	Cable Series No.	Connector Series No.	Punch Configuration
2.50mm Center Distance	24490, 24491, 24492, 40160	SPOX™—42219, 42254; User Friendly—90650, 90652 KK® Connector 7795	
2.50mm Center Distance	24490, 24491, 24492, 40160	SPOX—42219, 42254; User Friendly—90650, 90652 KK Connector 7795	

2.54mm (.100") Cable

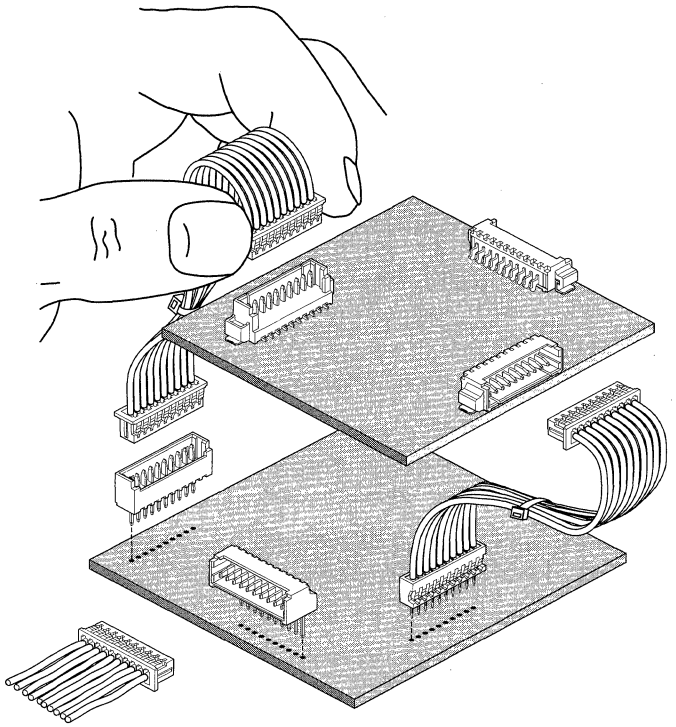
Description	Cable Series No.	Connector Series No.	Punch Configuration
.100" Center Distance 22-24 AWG	7560, 8867, 8997, 24226, 24327, 24389	7720, 7720S, 7822, 40555	
.100" Center Distance 22-24 AWG	7560, 8867, 8997, 24226, 24327, 24389	7720, 7720S, 7822, 40555	
.100" Center Distance 24-28 AWG SL	7234, 7307, 7767, 8996, 8997, 24226, 24241, 24327, 24369, 24389	SL 70400 Series	
.100" Center Distance 26-30 AWG	7234, 7307, 7767, 8996, 24241, 24369	7720, 7720S, 7822, 40555	
.100" Center Distance 26-30 AWG	7234, 7307, 7767, 8996, 24241, 24369	7720, 7720S, 7822, 40555	

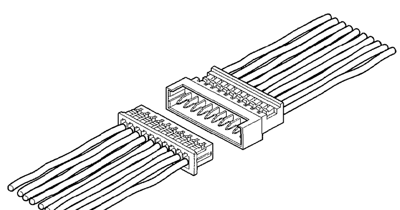
3.96mm (.156") Cable

Description	Cable Series No.	Connector Series No.	Punch Configuration
.156" Center Distance 18-24 AWG	7382, 7517, 8868, 40174	7674, 7675, 6952	
.156" Center Distance 18-24 AWG Wide Notch	7382, 7517, 8868, 40174	7674, 7675, 6952	
.156" Center Distance 18-24 AWG Wide Notch	7382, 7517, 8868, 40174	7674, 7675, 6952	

Micro Connectors

Wire-to-Board, Wire-to-Wire and Board-In Connectors





Single-Row Systems										
Pages	Pitch	Name	Crimp Receptacle		IDT Receptacle	Through-Hole Headers			SMT Headers	
			Terminal	Housing	Housing	Straight	Right Angle	Bottom Entry	Straight	Right Angle
I-3-I-8	1.25mm		50058/50079	51021		53047	53048		53398	53261
I-18-I-22	2.00mm	V-5	50011	51004	(30452)	53014	53015	53025		
I-14-I-17	2.00mm	T-2	50212	51065		53253	53254			
I-30-I-43	2.00mm	Mi-II	50212	51090		53324	53325			

Dual-Row Systems										
Pages	Pitch	Name	Crimp Receptacle		IDT Receptacle	Through-Hole Headers			SMT Headers	
			Terminal	Housing	Housing	Straight	Right Angle	Bottom Entry	Straight	Right Angle
I-30-I-43	2.00 by 2.50mm	Mi-II	50212	51089	52478	53313	53314			
I-90-I-120	2.00 by 2.00mm	Milli-Grid*	50394	51110	87259	87089/87331	87049/87033		87267/87332	

Wire-to-Wire Connectors						
Pages	Pitch	Name	Receptacle		Plug	
			Terminal	Housing	Terminal	Housing
I-9-I-11	1.25mm		50058/50079	51021	50125/50133	51047
I-23-I-25	2.00mm		50013	51005	50012	51006

Board-In Connectors			
Pages	Pitch	Terminal	Housing
I-11-I-12	1.25mm	50061	51022
I-28-I-29	2.00mm	5378	5379
I-26-I-27	2.00mm	50034	51015
I-32	2.00mm IDT	Right Angle	52693

Wire-to-Wire Panel Adapter			
Page	Pitch	Name	Receptacle
			Terminal
I-43	2.00mm	Mi-II	53358

* Milli-Grid System also offers straddle-mount and edge-mount headers

FEATURES AND SPECIFICATIONS

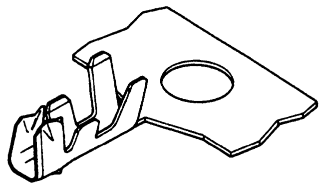
1.25mm (.049") Pitch Wire-to-Board Crimp Terminal

50058/50079

Reference Information
Packaging: Chain or loose
Use With: 51021
Designed In: Millimeters

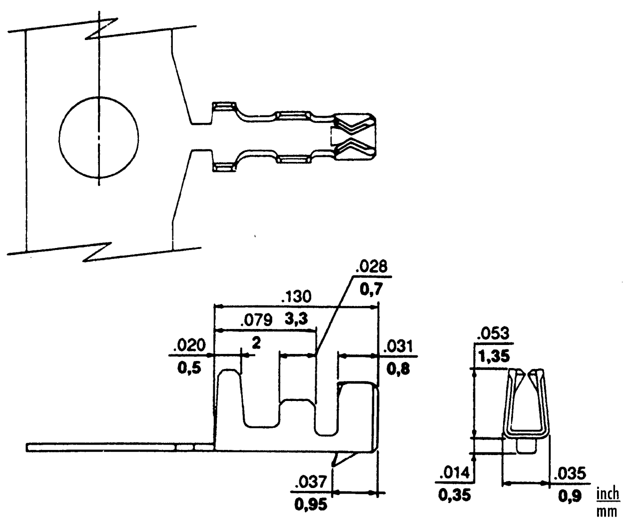
Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Wire Range: 50058–28 to 32 AWG
50079–26 to 28 AWG
Insulation Range: 1.00mm dia. max.
Strip Length: 1.40 to 1.90mm



Micro Connectors

I



ORDERING INFORMATION

Order No.	Terminal	Wire Range AWG	Automatic Tooling Press	Automatic Tooling Crimp Die	Mini-Mac Applicator	TM-40/42 Crimp Die	Hand Tool	Extraction Tool
50058-8000	Chain	28 - 32	M15A 57117-4000	57067-3000	11-18-2154	11-40-2245		57072-6000
50079-8000		26 - 28						
50058-8100	Loose	28 - 32			11-18-2156		57068-5000	
50079-8100		26 - 28					57177-5000	

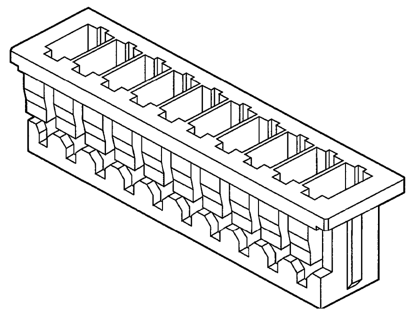
FEATURES AND SPECIFICATIONS

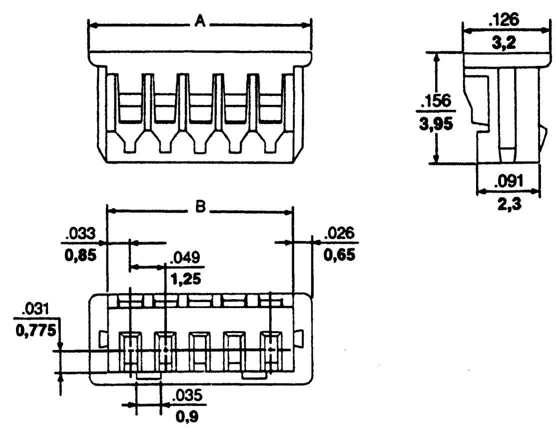
1.25mm (.049") Pitch Wire-to-Board Receptacle Housing

51021

Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53047, 53048, 53261 and 53398
Use With: 50058 and 50079
Designed In: Millimeters

Physical
Housing: PBTP, UL 94V-0
Temperature: -40 to +85°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51021-0200	4.25 (.167)	2.95 (.116)
3	51021-0300	5.50 (.217)	4.20 (.165)
4	51021-0400	6.75 (.266)	5.45 (.215)
5	51021-0500	8.00 (.315)	6.70 (.264)
6	51021-0600	9.25 (.364)	7.95 (.313)
7	51021-0700	10.50 (.413)	9.20 (.362)
8	51021-0800	11.75 (.463)	10.45 (.411)
9	51021-0900	13.00 (.512)	11.70 (.461)
10	51021-1000	14.25 (.561)	12.95 (.510)
11	51021-1100	15.50 (.610)	14.20 (.559)
12	51021-1200	16.75 (.659)	15.45 (.608)
13	51021-1300	18.00 (.709)	16.70 (.657)
14	51021-1400	19.25 (.758)	17.95 (.707)
15	51021-1500	20.50 (.807)	19.20 (.756)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch Wire-to-Board Header

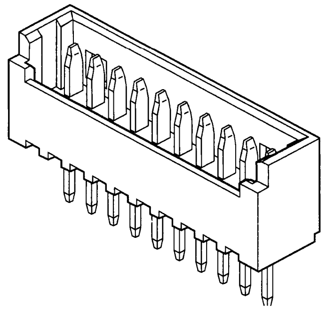
53047 Straight

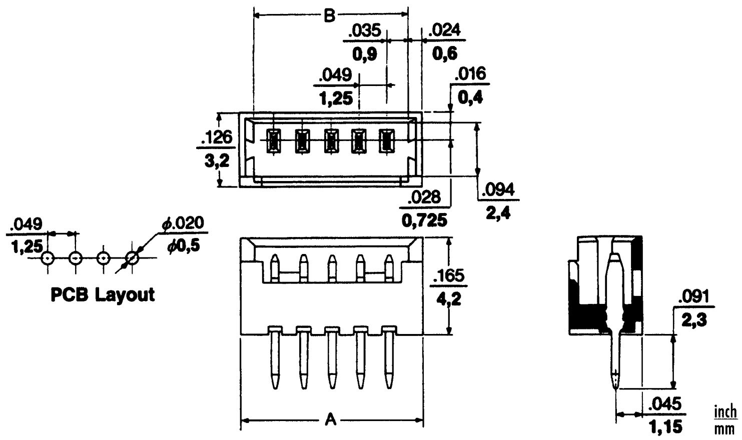
Features and Benefits
- Sizes 2 to 15 circuits

Reference Information
Packaging: Tray
Mates With: 51021
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C
Mated Height: 5.20mm (.205")
Mated Width: 3.20mm (.126")





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	53047-0210	4.25 (.167)	3.05 (.120)
3	53047-0310	5.50 (.217)	4.30 (.169)
4	53047-0410	6.75 (.266)	5.55 (.219)
5	53047-0510	8.00 (.315)	6.80 (.268)
6	53047-0610	9.25 (.364)	8.05 (.317)
7	53047-0710	10.50 (.413)	9.30 (.366)
8	53047-0810	11.75 (.463)	10.55 (.415)
9	53047-0910	13.00 (.512)	11.80 (.465)
10	53047-1010	14.25 (.561)	13.05 (.514)
11	53047-1110	15.50 (.610)	14.30 (.563)
12	53047-1210	16.75 (.659)	15.55 (.612)
13	53047-1310	18.00 (.709)	16.80 (.661)
14	53047-1410	19.25 (.758)	18.05 (.711)
15	53047-1510	20.50 (.807)	19.30 (.760)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch Wire-to-Board Header

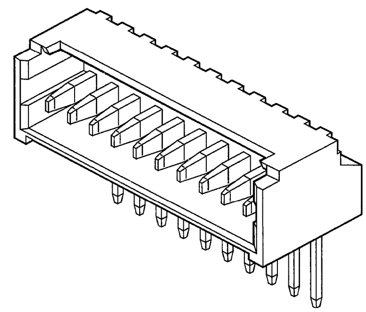
53048 Right Angle

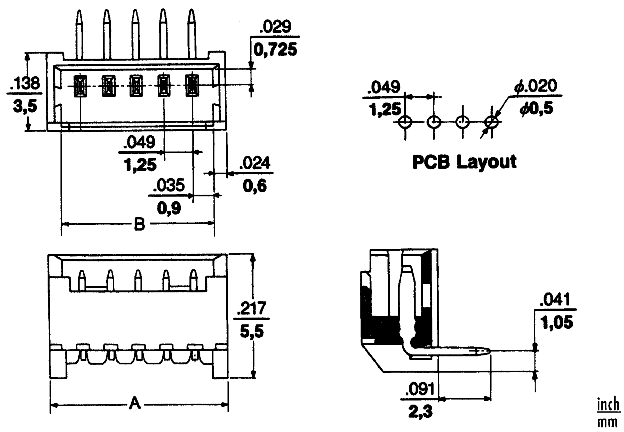
Features and Benefits
- Sizes 2 to 15 circuits

Reference Information
Packaging: Tray
Mates With: 51021
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +85°C
Mated Height: 3.50mm (.138")
Mated Width: 6.50mm (.256")





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	53048-0210	4.25 (.167)	3.05 (.120)
3	53048-0310	5.50 (.217)	4.30 (.169)
4	53048-0410	6.75 (.266)	5.55 (.219)
5	53048-0510	8.00 (.315)	6.80 (.268)
6	53048-0610	9.25 (.364)	8.05 (.317)
7	53048-0710	10.50 (.413)	9.30 (.366)
8	53048-0810	11.75 (.463)	10.55 (.415)
9	53048-0910	13.00 (.512)	11.80 (.465)
10	53048-1010	14.25 (.561)	13.05 (.514)
11	53048-1110	15.50 (.610)	14.30 (.563)
12	53048-1210	16.75 (.659)	15.55 (.612)
13	53048-1310	18.00 (.709)	16.80 (.661)
14	53048-1410	19.25 (.758)	18.05 (.711)
15	53048-1510	20.50 (.807)	19.30 (.760)

FEATURES AND SPECIFICATIONS

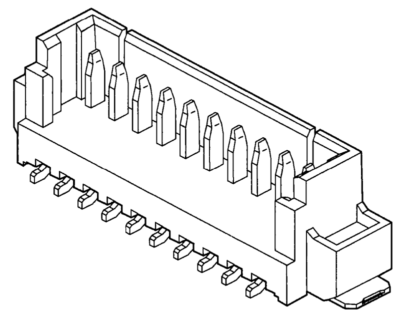
1.25mm (.049") Pitch Wire-to-Board Header

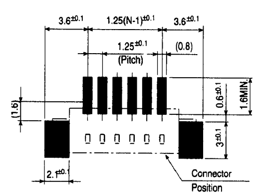
53398 SMT Straight

Reference Information
Packaging: Embossed tape
Mates With: 51021
Designed In: Millimeters

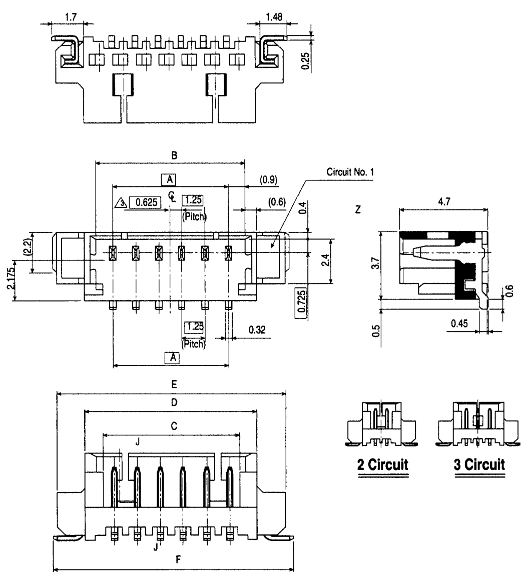
Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: Glass-filled 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin/Lead
Temperature: -40 to +85°C





PCB Layout For Surface Mounting



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension						Tape Width
		A	B	C	D	E	F	
2	53398-0290	1.25 (.049)	3.05 (.120)	2.35 (.092)	4.25 (.167)	7.25 (.285)	7.65 (.301)	16.00 (.630)
3	53398-0390	2.50 (.098)	4.30 (.169)	3.60 (.141)	5.50 (.216)	8.50 (.334)	8.90 (.350)	
4	53398-0490	3.75 (.147)	5.55 (.218)	4.85 (.190)	6.75 (.265)	9.75 (.383)	10.15 (.399)	24.00 (.945)
5	53398-0590	5.00 (.196)	6.80 (.267)	6.10 (.240)	8.00 (.314)	11.00 (.433)	11.40 (.448)	
6	53398-0690	6.25 (.246)	8.05 (.316)	7.35 (.289)	9.25 (.364)	12.25 (.482)	12.65 (.498)	
7	53398-0790	7.50 (.295)	9.30 (.366)	8.60 (.338)	10.50 (.413)	13.50 (.531)	13.90 (.547)	
8	53398-0890	8.75 (.344)	10.55 (.415)	9.85 (.387)	11.75 (.462)	14.75 (.580)	15.15 (.596)	
9	53398-0990	10.00 (.393)	11.80 (.464)	11.10 (.437)	13.00 (.511)	16.00 (.629)	16.40 (.645)	
10	53398-1090	11.25 (.442)	13.05 (.513)	12.35 (.486)	14.25 (.561)	17.25 (.679)	17.65 (.694)	
11	53398-1190	12.50 (.492)	14.30 (.562)	13.60 (.535)	15.50 (.610)	18.50 (.728)	18.90 (.744)	32.00 (1.260)
12	53398-1290	13.75 (.541)	15.55 (.612)	14.85 (.584)	16.75 (.659)	19.75 (.777)	20.15 (.793)	
13	53398-1390	15.00 (.590)	16.80 (.661)	16.10 (.633)	18.00 (.708)	21.00 (.826)	21.40 (.842)	
14	53398-1490	16.25 (.639)	18.05 (.710)	17.35 (.683)	19.25 (.757)	22.25 (.875)	22.65 (.891)	44.00 (1.732)
15	53398-1590	17.50 (.688)	19.30 (.759)	18.60 (.732)	20.50 (.807)	23.50 (.925)	23.90 (.940)	

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch Wire-to-Board Header

53261

SMT

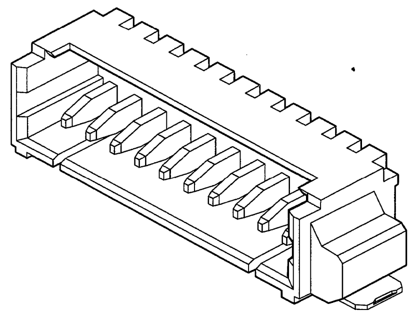
Right Angle

Features and Benefits
- Sizes 2 to 15 circuits
- Metal strain relief tabs

Reference Information
Packaging: Embossed tape
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51021
Designed In: Millimeters

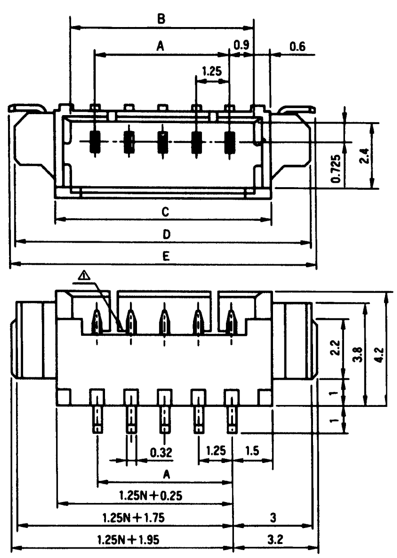
Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

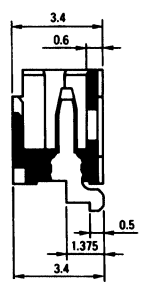
Physical
Housing: 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin/Lead
Temperature: -40 to +85°C



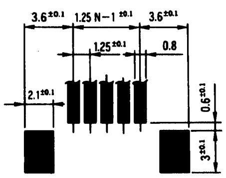
Micro Connectors

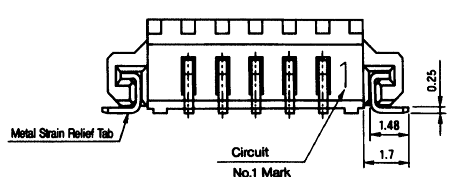
I





PCB Layout For Surface Mounting





⚠ Locking window: One place for 2 and 3 circuits and two places for more than 3 circuits

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension					Tape Width
		A	B	C	D	E	
2	53261-0290	1.25 (.049)	3.05 (.120)	4.25 (.167)	7.25 (.285)	7.65 (.301)	16.00 (.630)
3	53261-0390	2.50 (.098)	4.30 (.169)	5.50 (.217)	8.50 (.335)	8.90 (.350)	
4	53261-0490	3.75 (.148)	5.55 (.219)	6.75 (.266)	9.75 (.384)	10.15 (.400)	24.00 (.945)
5	53261-0590	5.00 (.197)	6.80 (.268)	8.00 (.315)	11.00 (.423)	11.40 (.449)	
6	53261-0690	6.25 (.246)	8.05 (.317)	9.25 (.364)	12.25 (.482)	12.65 (.498)	
7	53261-0790	7.50 (.295)	9.30 (.366)	10.50 (.413)	13.50 (.531)	13.90 (.547)	
8	53261-0890	8.75 (.344)	10.55 (.415)	11.75 (.463)	14.75 (.581)	15.15 (.596)	
9	53261-0990	10.00 (.394)	11.80 (.465)	13.00 (.512)	16.00 (.630)	16.40 (.646)	
10	53261-1090	11.25 (.443)	13.05 (.514)	14.25 (.561)	17.25 (.679)	17.65 (.695)	
11	53261-1190	12.50 (.492)	14.30 (.563)	15.50 (.610)	18.50 (.728)	18.90 (.744)	32.00 (1.260)
12	53261-1290	13.75 (.541)	15.55 (.612)	16.75 (.659)	19.75 (.778)	20.15 (.793)	
14	53261-1490	16.25 (.640)	18.05 (.711)	19.25 (.758)	22.25 (.876)	22.65 (.892)	44.00 (1.732)
15	53261-1590	17.50 (.689)	19.30 (.760)	20.50 (.807)	23.50 (.925)	23.90 (.941)	

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch Wire-to-Wire Plug

51047

Features and Benefits

- Sizes 2 to 10 circuits

Reference Information

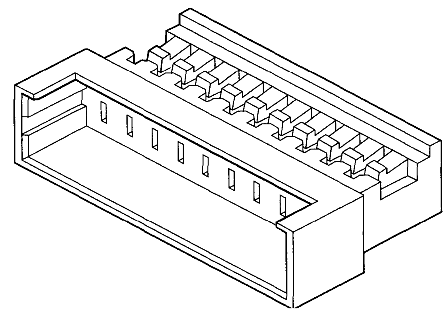
Packaging: Bag
Use With: 50125 and 50133
Designed In: Millimeters

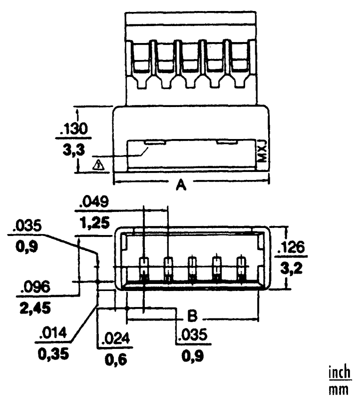
Electrical

Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical

Housing: PBTP, UL 94V-0
Temperature: -40 to +85°C





⚠ Locking window: One place for 2 and 3 circuits and two places for more than 3 circuits

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	51047-0200	4.25 (.167)	3.05 (.120)
3	51047-0300	5.50 (.217)	4.30 (.169)
4	51047-0400	6.75 (.268)	5.55 (.219)
5	51047-0500	8.00 (.315)	6.80 (.268)
6	51047-0600	9.25 (.364)	8.05 (.317)
7	51047-0700	10.50 (.413)	9.30 (.366)
8	51047-0800	11.75 (.463)	10.55 (.415)
9	51047-0900	13.00 (.512)	11.80 (.465)
10	51047-1000	14.25 (.561)	13.05 (.514)

FEATURES AND SPECIFICATIONS

1.25mm (.049") Pitch Wire-to-Wire Receptacle

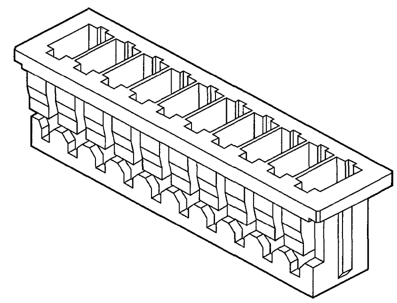
51021

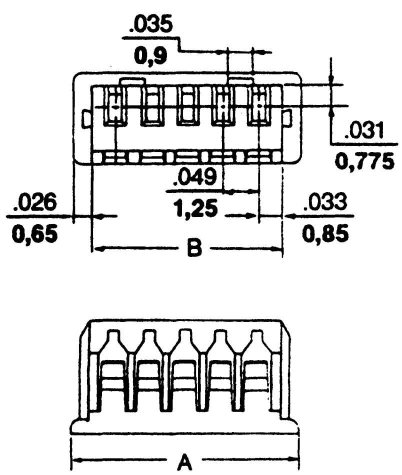
Features and Benefits
- Sizes 2 to 10 circuits

Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Use With: 50058 and 50079
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PBTP, UL 94V-0
Temperature: -40 to +85°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51021-0200	4.25 (.167)	2.95 (.116)
3	51021-0300	5.50 (.217)	4.20 (.165)
4	51021-0400	6.75 (.266)	5.45 (.215)
5	51021-0500	8.00 (.315)	6.70 (.264)
6	51021-0600	9.25 (.364)	7.95 (.313)
7	51021-0700	10.50 (.413)	9.20 (.362)
8	51021-0800	11.75 (.463)	10.45 (.411)
9	51021-0900	13.00 (.512)	11.70 (.461)
10	51021-1000	14.25 (.561)	12.95 (.510)

FEATURES AND SPECIFICATIONS

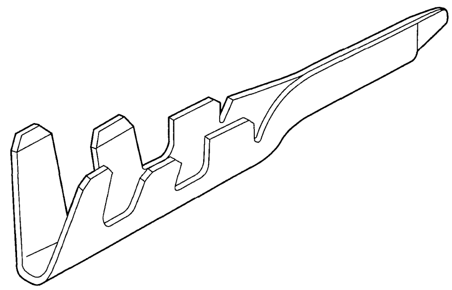
1.25mm (.049") Pitch Wire-to-Wire Terminal

50125/50133 Male
50079/50058 Female

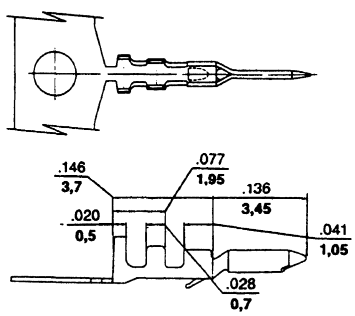
Reference Information
Packaging: Chain or loose
Use With: Male—51047; Female—51021
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

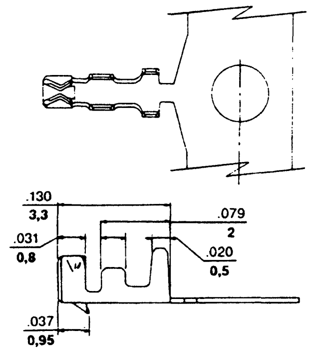
Physical
Contact: Phosphor Bronze
Plating: Tin
Wire Range: 50133/50058–28 to 32 AWG
50125/50079–26 to 28 AWG
Insulation Range: 1.00mm dia. max.
Strip Length: 1.40 to 1.90mm



50125-8X00, 50133-8X00 (Male)



50079-8X00, 50058-8X00 (Female)



inch
mm

ORDERING INFORMATION

Order No.	Terminal	Wire Gauge AWG	Automatic Tooling Press	Automatic Tooling Crimp Die	Hand Tool	Extraction Tool
50125-8000	Chain	26-28	M15A 57117-4000	57138-3000		57072-6000
50133-8000		28-32				
50125-8100	Loose	26-28			57140-5000	
50133-8100		28-32			57139-5000	
50079-8000	Chain	26-28	M15A 57117-4000	57067-3000		
50058-8000		28-32				
50079-8100	Loose	26-28			57177-5000	
50058-8100		28-32			57068-5000	

Note: Contact factory for special application tooling instructions

FEATURES AND SPECIFICATIONS

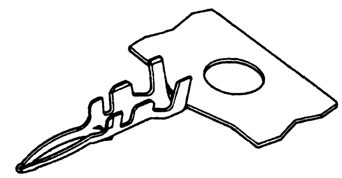
1.25mm (.049") Pitch Board-In Connector Crimp Terminal

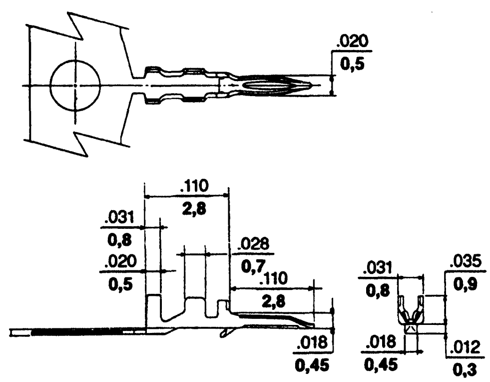
50061

Reference Information
Packaging: Chain or loose
Use With: 51022
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A (0.8A for 32 AWG)
Contact Resistance on Crimped Portion: 5mΩ max.
Dielectric Withstanding Voltage: 250V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Wire Range: 28 to 32 AWG
Insulation Range: 1.00mm dia. max.
Strip Length: 1.40 to 1.90mm





inch
mm

ORDERING INFORMATION

Order No.	Terminal	Automatic Tooling		TM-40/42 Applicator	Hand Tool	Extraction Tool
		Press	Crimp Die			
50061-8000	Chain	M15A 57117-4000	57069-3000	11-40-2194		57072-6000
50061-8100	Loose				57070-5000	

Note: Contact factory for special application tooling instructions

FEATURES AND SPECIFICATIONS

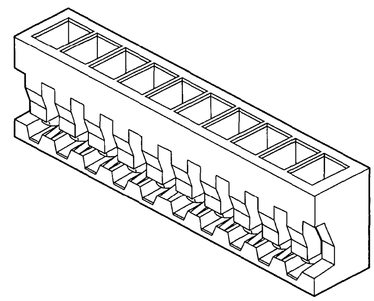
1.25mm (.049") Pitch Board-In Connector Housing

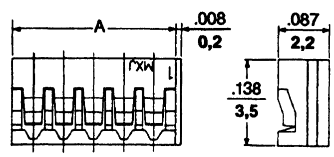
51022

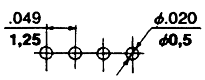
Features and Benefits
- Sizes 2 to 15 circuits
- Low profile

Physical
Housing: PBTP, UL 94V-0
Temperature: -40 to +85°C

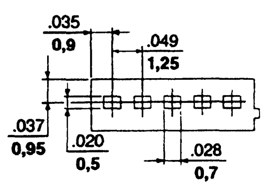
Reference Information
Packaging: Bag
Use With: 50061
Designed In: Millimeters







PCB Layout
PCB thickness: 0.8mm



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
2	51022-0200	3.05 (.120)
3	51022-0300	4.30 (.169)
4	51022-0400	5.55 (.219)
5	51022-0500	6.80 (.268)
6	51022-0600	8.05 (.317)
7	51022-0700	9.30 (.366)
8	51022-0800	10.55 (.415)
9	51022-0900	11.80 (.465)
10	51022-1000	13.05 (.514)
11	51022-1100	14.30 (.563)
12	51022-1200	15.55 (.612)
13	51022-1300	16.80 (.661)
14	51022-1400	18.05 (.711)
15	51022-1500	19.30 (.760)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Board Crimp Terminal

50212

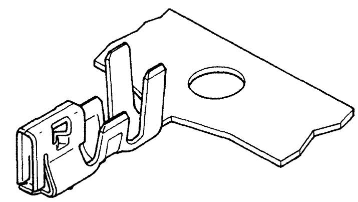
Reference Information
Packaging: Chain or loose
Use With: 51065
Designed In: Millimeters

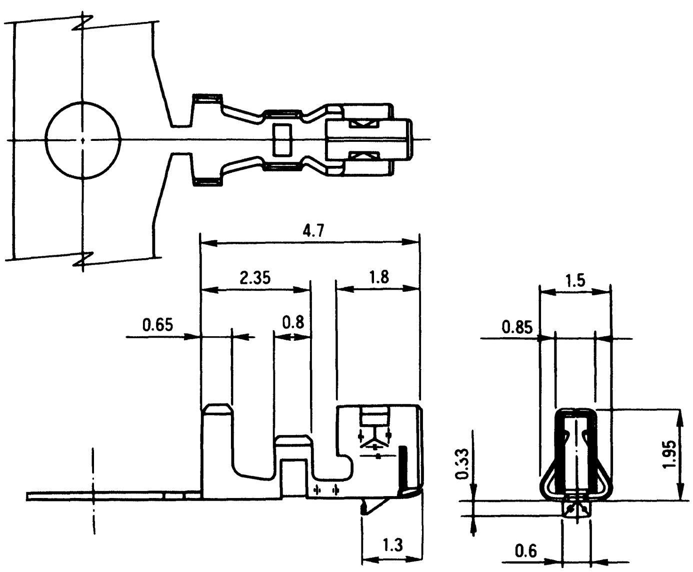
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Wire Range: 24 to 30 AWG
Insulation Range: 1.40mm dia. max.





ORDERING INFORMATION

Order No.	Terminal	Automatic Tooling		TM-40/42 Applicator	TM-40/42 Spare Tooling Kit	Mini-Mac Applicator	Mini-Mac Spare Tooling Kit	Hand Tool	Extraction Tool
		Press	Crimp Die						
50212-8000	Chain	M15A 57117-4000	57175-3000	11-40-2255	11-40-3259	11-18-2169	11-18-3160		57105-6000
50212-8100	Loose							57176-5000	

Note: Contact factory for special application tooling instructions

FEATURES AND SPECIFICATIONS

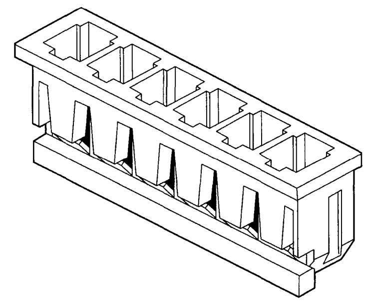
molex 2.00mm (.079") Pitch Wire-to-Board Housing

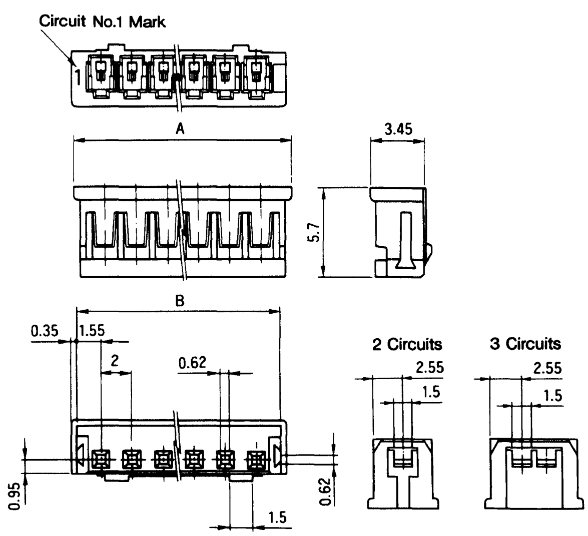
51065

Features and Benefits
- Sizes 2 to 15 circuits

Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53253 and 53254
Use With: 50212
Designed In: Millimeters

Physical
Housing: PBTP, UL 94V-0
Temperature: -20 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51065-0200	5.80 (.228)	5.10 (.201)
3	51065-0300	7.80 (.307)	7.10 (.280)
4	51065-0400	9.80 (.386)	9.10 (.358)
5	51065-0500	11.80 (.465)	11.10 (.437)
6	51065-0600	13.80 (.543)	13.10 (.516)
7	51065-0700	15.80 (.622)	15.10 (.594)
8	51065-0800	17.80 (.701)	17.10 (.673)
9	51065-0900	19.80 (.780)	19.10 (.752)
10	51065-1000	21.80 (.858)	21.10 (.831)
11	51065-1100	23.80 (.937)	23.10 (.909)
12	51065-1200	25.80 (1.016)	25.10 (.988)
13	51065-1300	27.80 (1.094)	27.10 (1.067)
14	51065-1400	29.80 (1.173)	29.10 (1.146)
15	51065-1500	31.80 (1.252)	31.10 (1.224)

FEATURES AND SPECIFICATIONS

molex®

2.00mm (.079") Pitch Wire-to-Board Header

53253 Straight

Features and Benefits
- Sizes 2 to 15 circuits

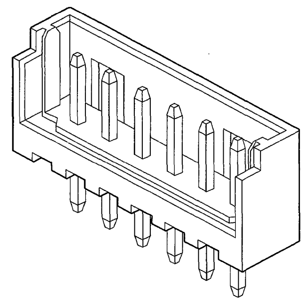
Reference Information
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51065
Designed In: Millimeters

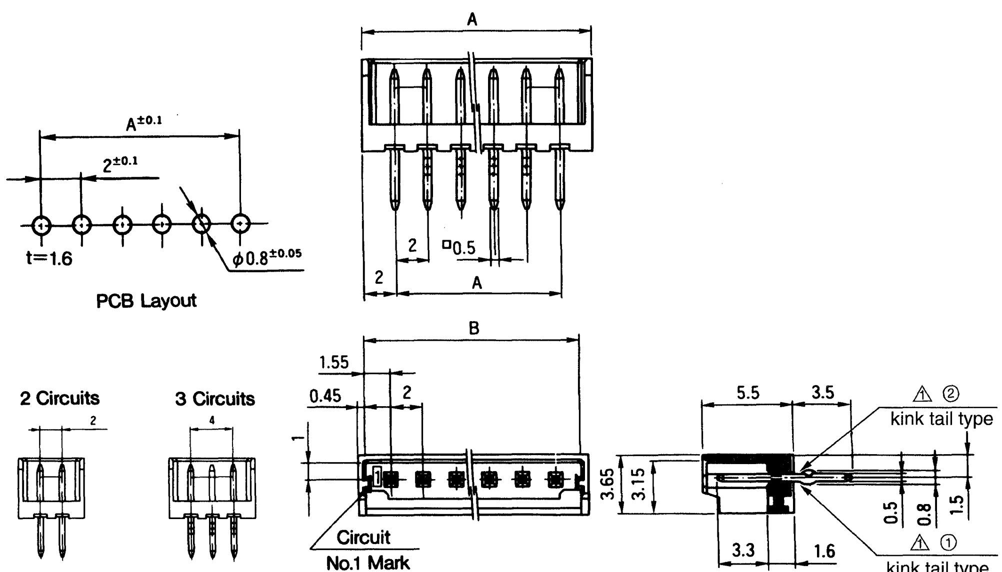
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -20 to +85°C





⚠ Kink to be applied as follows, 2 circuit has no kinks.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	53253-0210	6.00 (.236)	5.10 (.201)
3	53253-0310	8.00 (.315)	7.10 (.280)
4	53253-0410	10.00 (.394)	9.10 (.358)
5	53253-0510	12.00 (.472)	11.10 (.437)
6	53253-0610	14.00 (.551)	13.10 (.516)
7	53253-0710	16.00 (.630)	15.10 (.594)
8	53253-0810	18.00 (.709)	17.10 (.673)
9	53253-0910	20.00 (.787)	19.10 (.752)
10	53253-1010	22.00 (.866)	21.10 (.831)
11	53253-1110	24.00 (.945)	23.10 (.909)
12	53253-1210	26.00 (1.024)	25.10 (.988)
13	53253-1310	28.00 (1.102)	27.10 (1.067)
14	53253-1410	30.00 (1.181)	29.10 (1.146)
15	53253-1510	32.00 (1.260)	31.10 (1.224)

Circuits	Circuit No. 1	2	3	4	5	N-2	N-1	N
3	①	②	①					
4	①	②	②	①				
5	①	②		②	①			
more than 6		①	②			②	①	

2.00mm (.079") Pitch Wire-to-Board Header

53254 Right Angle

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 15 circuits

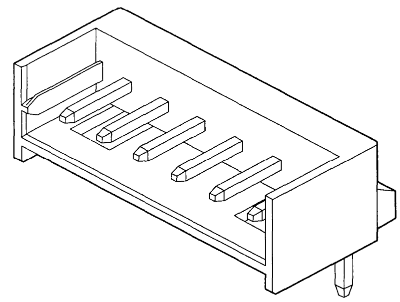
Reference Information
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51065
Designed In: Millimeters

Electrical
Voltage: 125V
Current

AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -20 to +85°C



Micro Connectors

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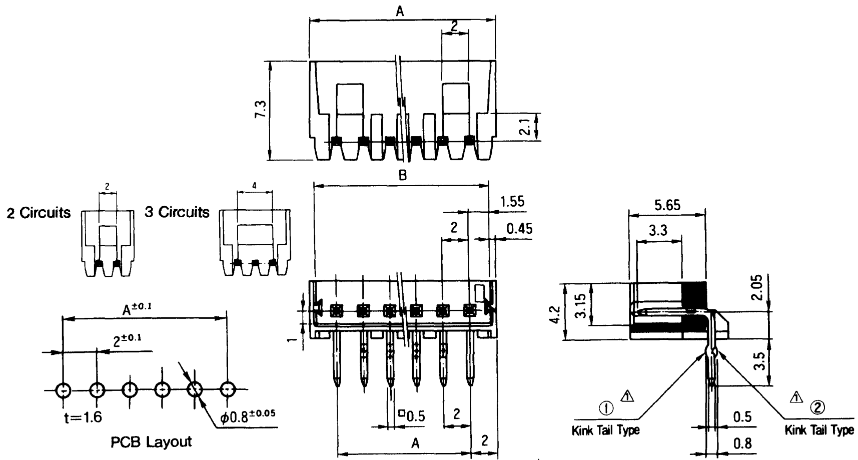


⚠ Kink to be applied as follows, 2 circuit has no kinks.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	53254-0210	6.00 (.236)	5.10 (.201)
3	53254-0310	8.00 (.315)	7.10 (.280)
4	53254-0410	10.00 (.394)	9.10 (.358)
5	53254-0510	12.00 (.472)	11.10 (.437)
6	53254-0610	14.00 (.551)	13.10 (.516)
7	53254-0710	16.00 (.630)	15.10 (.594)
8	53254-0810	18.00 (.709)	17.10 (.673)
9	53254-0910	20.00 (.787)	19.10 (.752)
10	53254-1010	22.00 (.866)	21.10 (.831)
11	53254-1110	24.00 (.945)	23.10 (.909)
12	53254-1210	26.00 (1.024)	25.10 (.988)
13	53254-1310	28.00 (1.102)	27.10 (1.067)
14	53254-1410	30.00 (1.181)	29.10 (1.146)
15	53254-1510	32.00 (1.260)	31.10 (1.224)

Circuits	Circuit No.							
	1	2	3	4	5	N-2	N-1	N
3	①	②	①					
4	①	②	②	①				
5	①	②		②	①			
more than 6		①	②			②	①	

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Board Crimp Terminal

50011

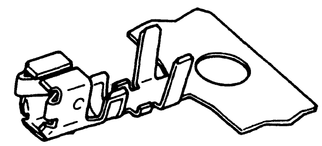
Reference Information
Packaging: Chain or loose
Use With: 51004
Designed In: Millimeters

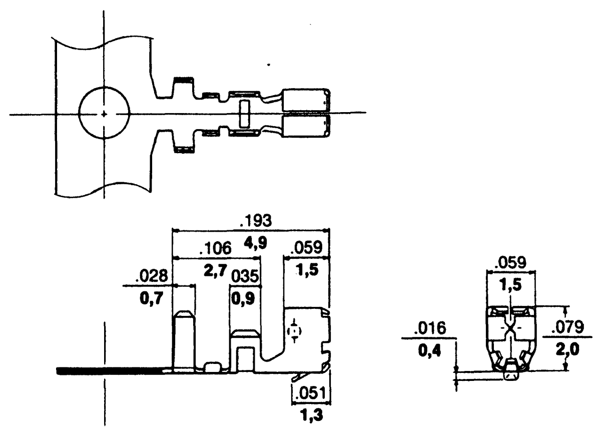
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30-40
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Wire Range: 24 to 34 AWG
Insulation Range: 1.40mm dia. max.
Strip Length: 1.60 to 2.10mm





inch
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ORDERING INFORMATION

Order No.	Terminal	Wire Range AWG	Automatic Tooling				Hand Tool	Extraction Tool
			Press	Crimp Die	Mini-Mac Applicator	TM-40/42 Die		
50011-8000	Chain	24-30	M15A 57117-4000	57030-3000	11-18-3085	11-40-2136		57105-6000
50011-8100	Loose						57032-5000	

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Board Housing

51004

Features and Benefits

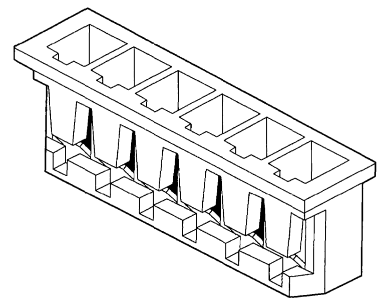
- Sizes 2 to 15 circuits

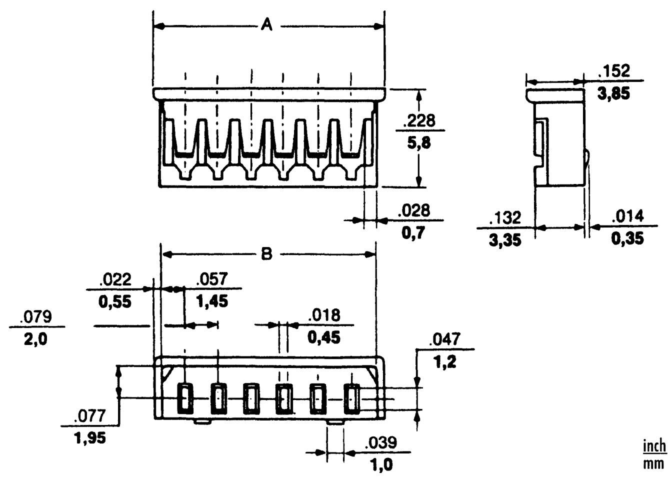
Reference Information

Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53014, 53015 and 53025
Use With: 50011
Designed In: Millimeters

Physical

Housing: PBTP, UL 94V-0
Temperature: -20 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51004-0200	6.00 (.236)	4.90 (.193)
3	51004-0300	8.00 (.315)	6.90 (.272)
4	51004-0400	10.00 (.394)	8.90 (.350)
5	51004-0500	12.00 (.472)	10.90 (.429)
6	51004-0600	14.00 (.551)	12.90 (.508)
7	51004-0700	16.00 (.630)	14.90 (.587)
8	51004-0800	18.00 (.709)	16.90 (.665)
9	51004-0900	20.00 (.787)	18.90 (.744)
10	51004-1000	22.00 (.866)	20.90 (.823)
11	51004-1100	24.00 (.945)	22.90 (.902)
12	51004-1200	26.00 (1.024)	24.90 (.980)
13	51004-1300	28.00 (1.102)	26.90 (1.059)
14	51004-1400	30.00 (1.181)	28.90 (1.138)
15	51004-1500	32.00 (1.260)	30.90 (1.217)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Board Header

53014 Straight

Features and Benefits
- Sizes 2 to 15 circuits

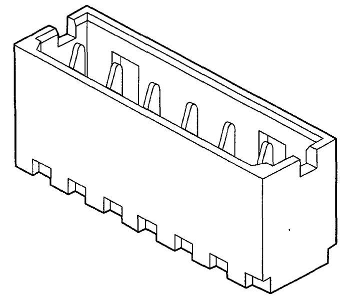
Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51004
Designed In: Millimeters

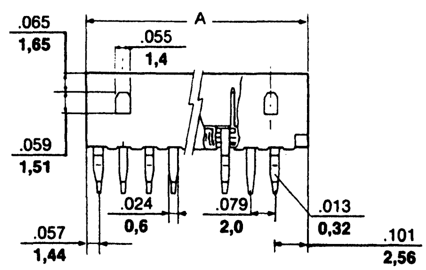
Electrical
Voltage: 125V
Current:

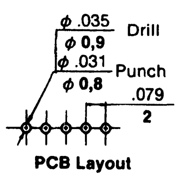
AWG	24	26	28	30-34
Amperes	2.0	1.5	1.0	0.5

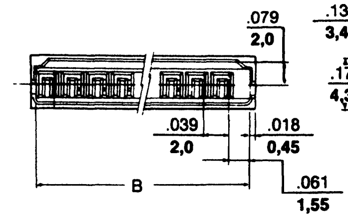
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

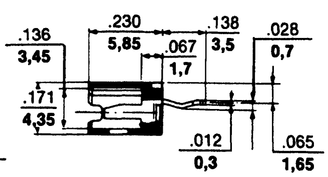
Physical
Housing: Glass-filled 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C











inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	53014-0210	6.00 (.236)	5.10 (.201)
3	53014-0310	8.00 (.315)	7.10 (.280)
4	53014-0410	10.00 (.394)	9.10 (.358)
5	53014-0510	12.00 (.472)	11.10 (.437)
6	53014-0610	14.00 (.551)	13.10 (.516)
7	53014-0710	16.00 (.630)	15.10 (.594)
8	53014-0810	18.00 (.709)	17.10 (.673)
9	53014-0910	20.00 (.787)	19.10 (.752)
10	53014-1010	22.00 (.866)	21.10 (.831)
11	53014-1110	24.00 (.945)	23.10 (.909)
12	53014-1210	26.00 (1.024)	25.10 (.988)
13	53014-1310	28.00 (1.102)	27.10 (1.067)
14	53014-1410	30.00 (1.181)	29.10 (1.146)
15	53014-1510	32.00 (1.260)	31.10 (1.224)

FEATURES AND SPECIFICATIONS

molex

2.00mm (.079") Pitch Wire-to-Board Header

53015

Right Angle

Features and Benefits
- Sizes 2 to 15 circuits

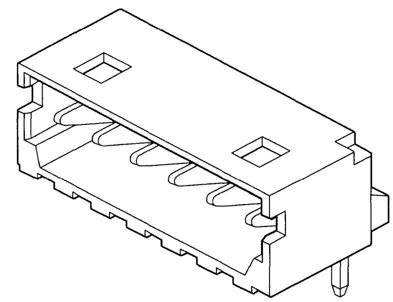
Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 51004
Designed In: Millimeters

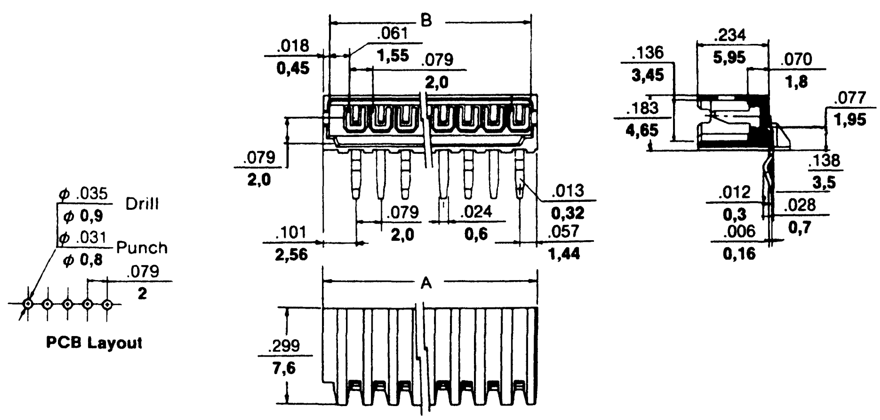
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30-34
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	53015-0210	6.00 (.236)	5.10 (.201)
3	53015-0310	8.00 (.315)	7.10 (.280)
4	53015-0410	10.00 (.394)	9.10 (.358)
5	53015-0510	12.00 (.472)	11.10 (.437)
6	53015-0610	14.00 (.551)	13.10 (.516)
7	53015-0710	16.00 (.630)	15.10 (.594)
8	53015-0810	18.00 (.709)	17.10 (.673)
9	53015-0910	20.00 (.787)	19.10 (.752)
10	53015-1010	22.00 (.866)	21.10 (.831)
11	53015-1110	24.00 (.945)	23.10 (.909)
12	53015-1210	26.00 (1.024)	25.10 (.988)
13	53015-1310	28.00 (1.102)	27.10 (1.067)
14	53015-1410	30.00 (1.181)	29.10 (1.146)
15	53015-1510	32.00 (1.260)	31.10 (1.224)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Board Header
53025
Bottom Entry

Features and Benefits
- Sizes 2 to 10 circuits

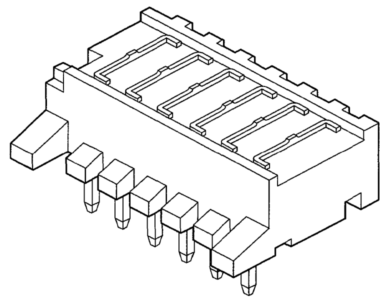
Reference Information
Packaging: Tray
Mates With: 51004
Designed In: Millimeters

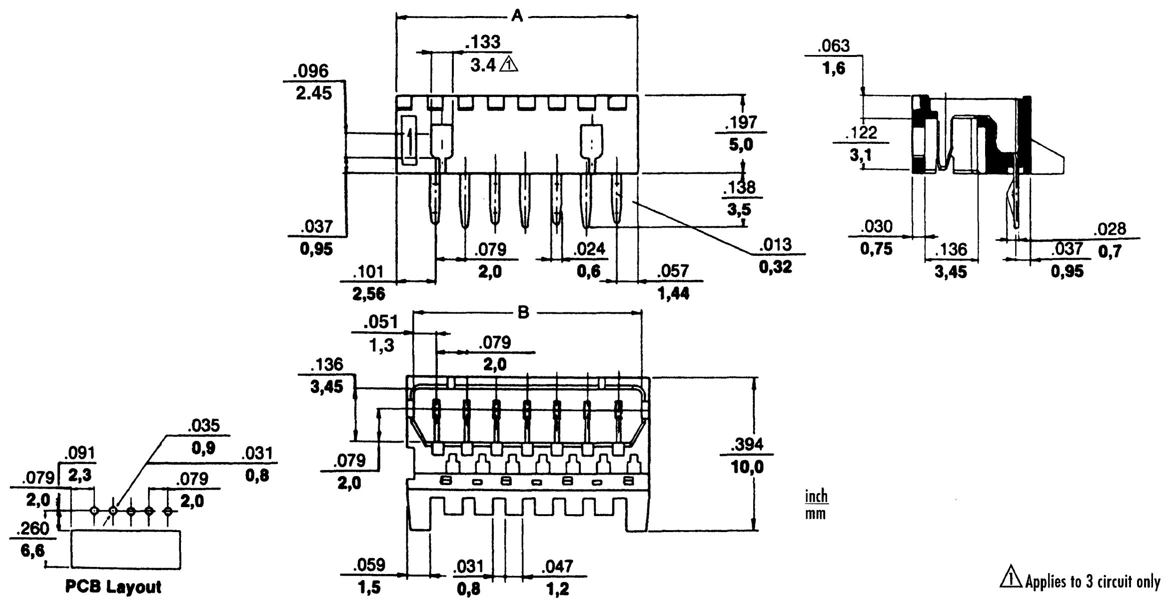
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30-34
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +85°C
Mated Height: 7.40mm (.291")
Mated Width: 10.00mm (.394")





Applies to 3 circuit only

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	53025-0210	6.00 (.236)	5.00 (.197)
3	53025-0310	8.00 (.315)	7.00 (.276)
4	53025-0410	10.00 (.394)	9.00 (.354)
5	53025-0510	12.00 (.472)	11.00 (.433)
6	53025-0610	14.00 (.551)	13.00 (.512)
7	53025-0710	16.00 (.630)	15.00 (.590)
8	53025-0810	18.00 (.709)	17.00 (.669)
9	53025-0910	20.00 (.787)	19.00 (.748)
10	53025-1010	22.00 (.866)	21.00 (.827)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Wire Plug

51006

Features and Benefits
- Sizes 2 to 10 circuits

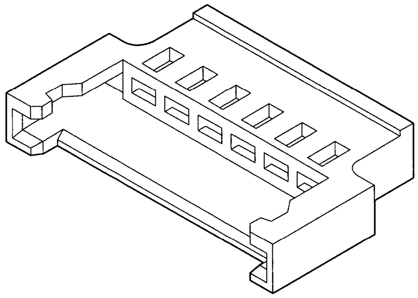
Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Use With: 50012
Designed In: Millimeters

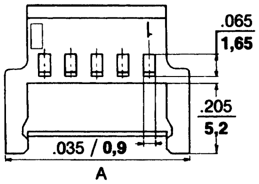
Electrical
Voltage: 125V
Current:

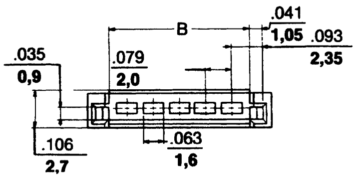
AWG	24	26	28
Amperes	2.0	1.5	1.0

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: PBTP, UL 94V-0
Temperature: -40 to +105°C







inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51006-0200	8.00 (.315)	4.60 (.181)
3	51006-0300	10.00 (.394)	6.60 (.260)
4	51006-0400	12.00 (.472)	8.60 (.339)
5	51006-0500	14.00 (.551)	10.60 (.417)
6	51006-0600	16.00 (.630)	12.60 (.496)
7	51006-0700	18.00 (.709)	14.60 (.575)
8	51006-0800	20.00 (.787)	16.60 (.654)
9	51006-0900	22.00 (.866)	18.60 (.732)
10	51006-1000	24.00 (.945)	20.60 (.811)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Wire Receptacle

51005

Features and Benefits

- Sizes 2 to 10 circuits

Reference Information

Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Use With: 50013
Designed In: Millimeters

Electrical

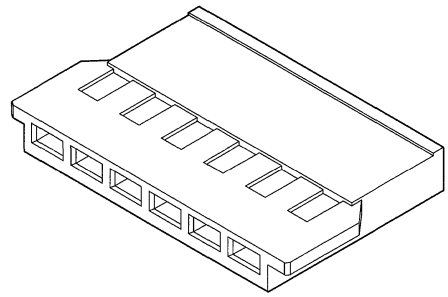
Voltage: 125V
Current:

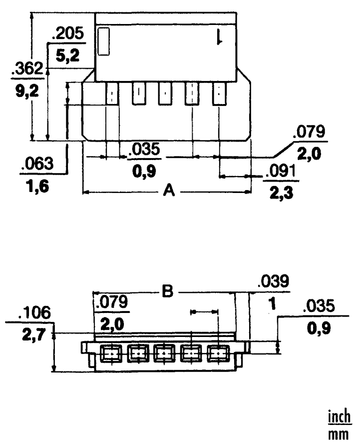
AWG	24	26	28
Amperes	2.0	1.5	1.0

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: PBTP, UL 94V-0
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	51005-0200	6.60 (.260)	4.60 (.181)
3	51005-0300	8.60 (.339)	6.60 (.260)
4	51005-0400	10.60 (.417)	8.60 (.339)
5	51005-0500	12.60 (.496)	10.60 (.417)
6	51005-0600	14.60 (.575)	12.60 (.496)
7	51005-0700	16.60 (.654)	14.60 (.575)
8	51005-0800	18.60 (.732)	16.60 (.654)
9	51005-0900	20.60 (.811)	18.60 (.732)
10	51005-1000	22.60 (.890)	20.60 (.811)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Wire-to-Wire Crimp Terminal

50012 Male
50013 Female

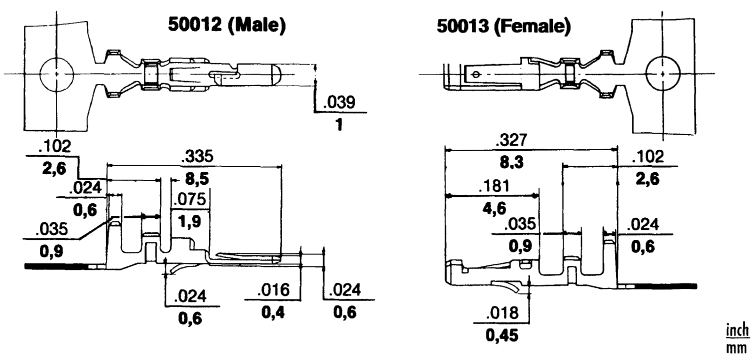
Reference Information
Packaging: Chain or loose
Use With: Male—51006; Female—51005
Designed In: Millimeters

Electrical
Voltage: 125V
Current:

AWG	24	26	28
Amperes	2.0	1.5	1.0

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Wire Range: 24 to 28 AWG
Insulation Range: 1.15mm dia. max.
Strip Length: 1.70 to 2.30mm



ORDERING INFORMATION

Order No.	Terminal	Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
		Press	Crimp Die			
50012-8000	Chain	M15A 57117-4000	57045-3000			
50013-8000						
50012-8100	Loose			57046-5000		
50013-8100						

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-In Connector Crimp Terminal

50034

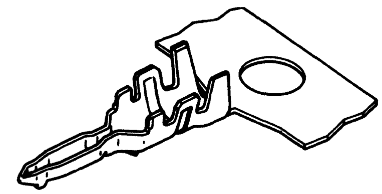
Reference Information
Packaging: Chain or loose
Use With: 51015
Designed In: Millimeters

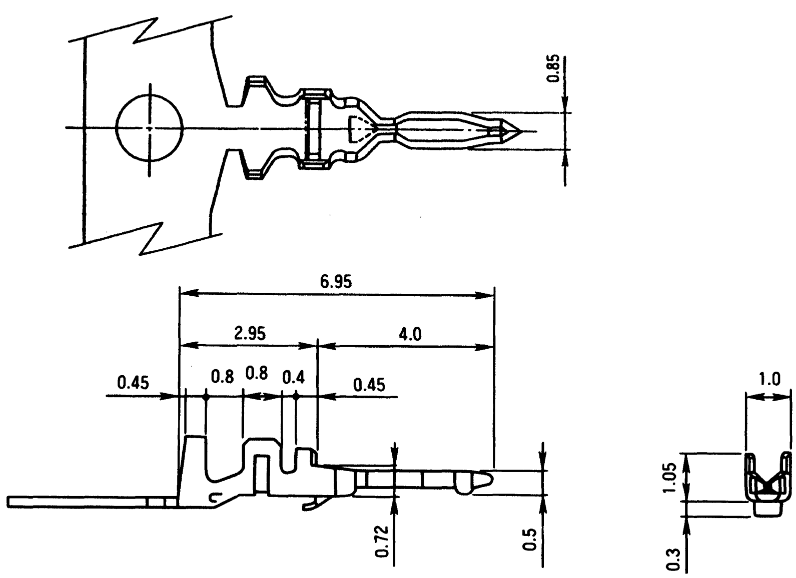
Electrical
Voltage: 125V
Current:

AWG	26	28	30
Amperes	2.0	1.5	1.0

Contact Resistance: 5mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Wire Range: 26 to 30 AWG
Insulation Range: 1.40mm dia. max.
Strip Length: 1.40 to 1.90mm





ORDERING INFORMATION

Order No.	Terminal	Automatic Tooling				Hand Tool	Extraction Tool
		Press	Crimp Die	TM-40/42 Press and Die	TM-40/42 Crimp Die		
50034-8000	Chain	M15A 57117-4000	57055-3000	TM40D8366A	11-40-2156		57057-6000
50034-8100	Loose					57056-5000	

FEATURES AND SPECIFICATIONS

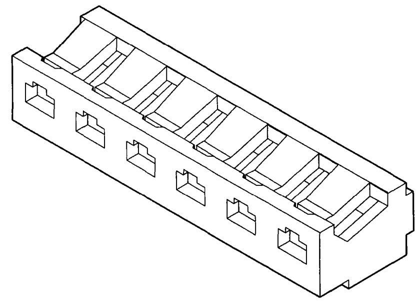
2.00mm (.079") Pitch Board-In Connector Housing

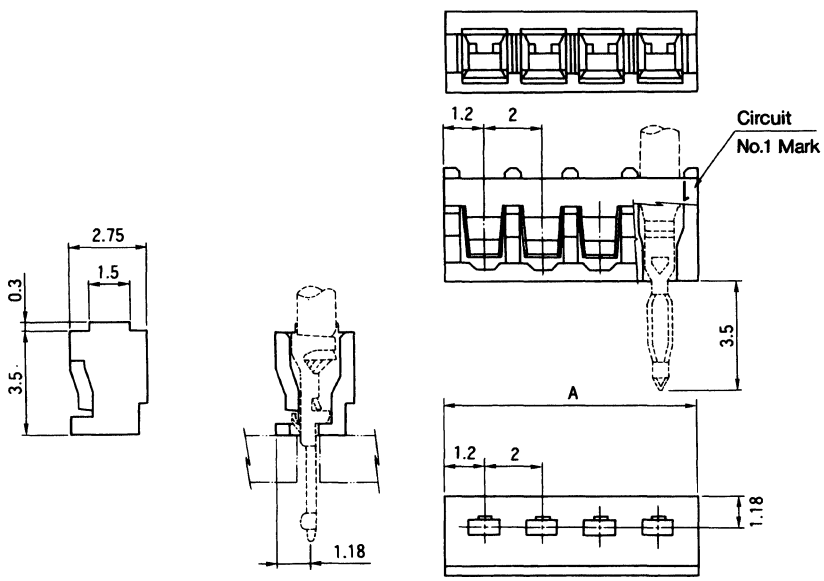
51015

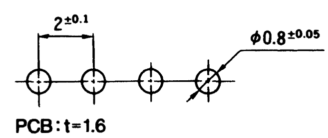
Features and Benefits
- Sizes 3 to 15 circuits
- Low profile

Reference Information
Packaging: Bag
Use With: 50034
Designed In: Millimeters

Physical
Housing: PBTP, UL 94V-0
Temperature: -40 to +105°C







PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	51015-0300	6.40 (.252)
4	51015-0400	8.40 (.331)
5	51015-0500	10.40 (.409)
6	51015-0600	12.40 (.488)
7	51015-0700	14.40 (.567)
8	51015-0800	16.40 (.646)
9	51015-0900	18.40 (.724)
10	51015-1000	20.40 (.803)
11	51015-1100	22.40 (.882)
12	51015-1200	24.40 (.961)
13	51015-1300	26.40 (1.039)
14	51015-1400	28.40 (1.118)
15	51015-1500	30.40 (1.197)

2.00mm (.079") Pitch Board-In Connector Terminal

5378

FEATURES AND SPECIFICATIONS

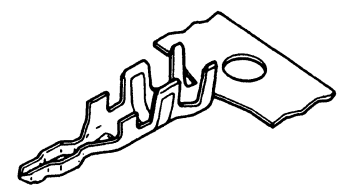
Reference Information
Packaging: Chain or loose
Use With: 5379
Designed In: Millimeters

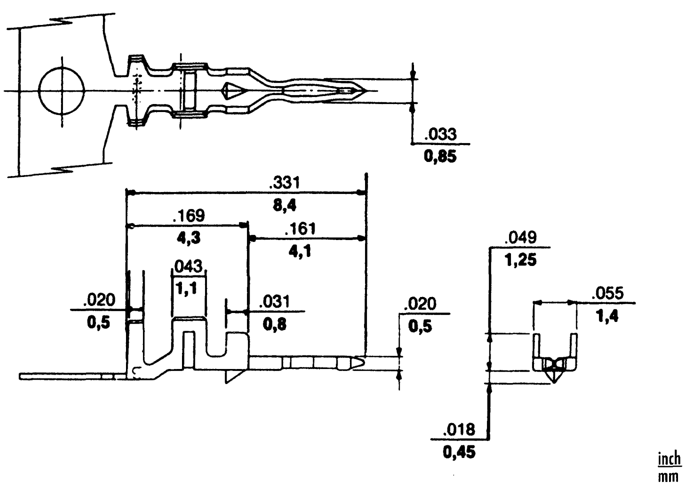
Electrical
Voltage: 125V
Current:

AWG	24	26	28
Amperes	2.0	2.0	1.5

Contact Resistance on Crimped Portion: 5mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Brass
Plating: Tin
Wire Range: 24 to 28 AWG
Insulation Range: 1.50mm dia. max.
Strip Length: 1.70 to 2.30mm





ORDERING INFORMATION

Order No.	Terminal	Automatic Tooling		Hand Tool
		Press	Crimp Die	
5378T	Chain	M15A 57117-4000	57007-3000	57050-5000
5378TL	Loose			

FEATURES AND SPECIFICATIONS

![molex]

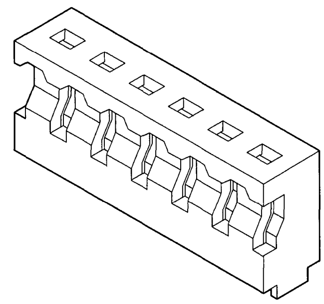
2.00mm (.079") Pitch Board-In Connector Housing

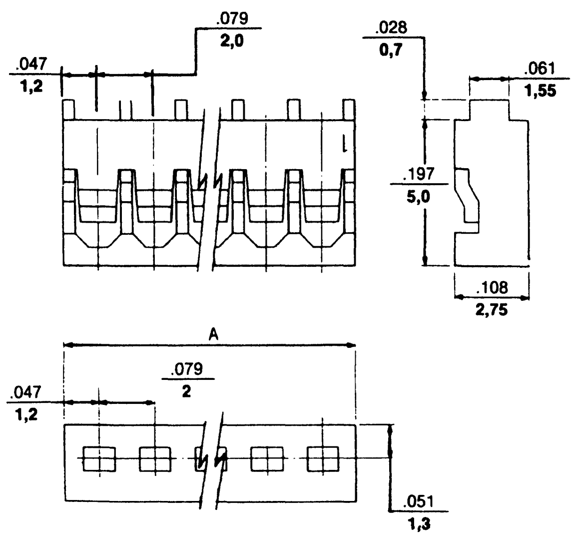
5379

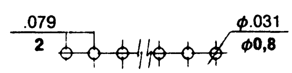
Features and Benefits
- Sizes 2 to 15 circuits

Reference Information
Packaging: Bag
UL File No.: E29179
Use With: 5378
Designed In: Millimeters

Physical
Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C







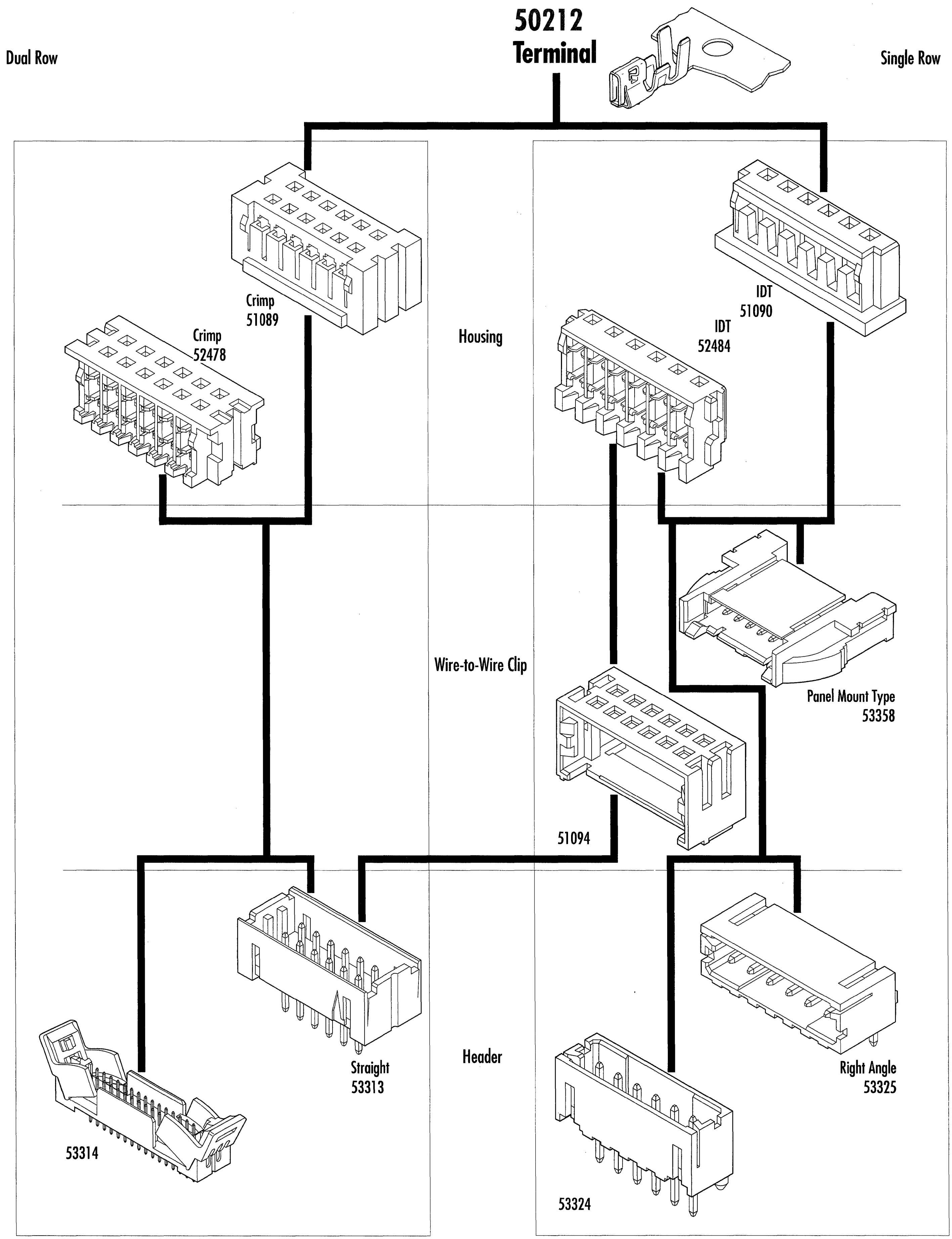
PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

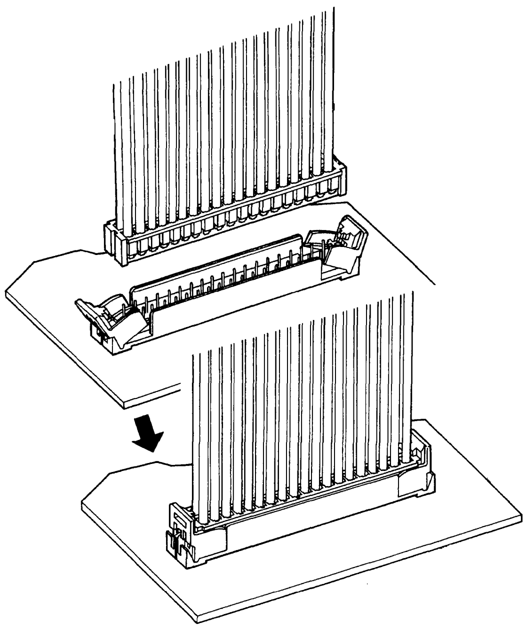
Circuits	Order No.	Dimension A
2	5379-02	4.40 (.173)
3	5379-03	6.40 (.252)
4	5379-04	8.40 (.331)
5	5379-05	10.40 (.409)
6	5379-06	12.40 (.488)
7	5379-07	14.40 (.567)
8	5379-08	16.40 (.646)
9	5379-09	18.40 (.724)
10	5379-10	20.40 (.803)
11	5379-11	22.40 (.882)
12	5379-12	24.40 (.961)
13	5379-13	26.40 (1.039)
14	5379-14	28.40 (1.118)
15	5379-15	30.40 (1.197)

molex® Mill System Chart

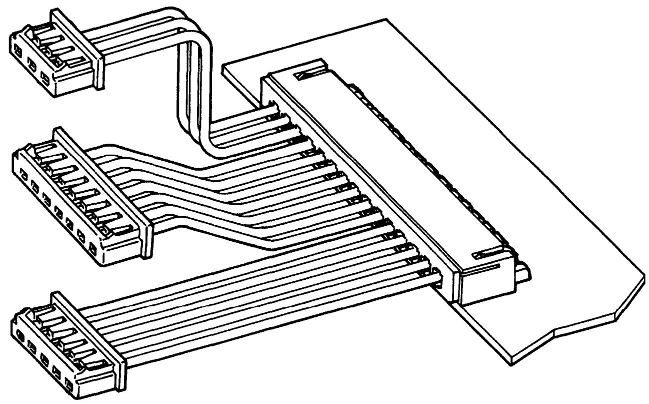


FEATURES

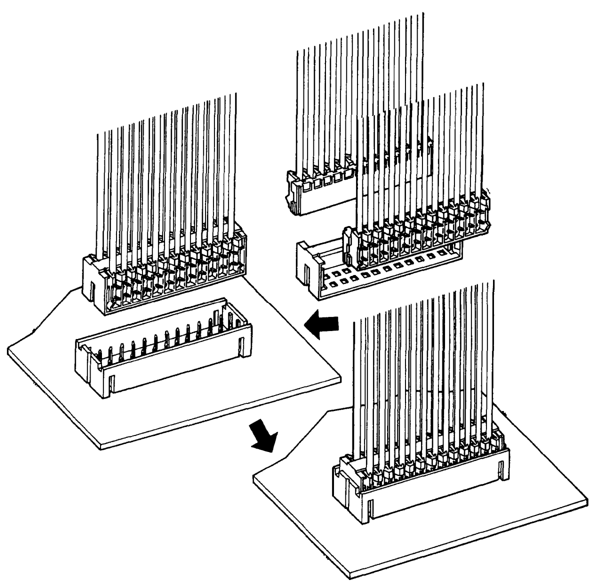
- 2.00mm pitch low profile wire-to-board connector
- Single and dual row, crimp and IDT
- Low insertion force design, locking features and high reliability
- Kinked header pins
- Clip allows back-to-back stacking of single row IDT assemblies
- Application tooling for use in assembling harnesses
- Now, board-in type is available in right angle configuration



Eject Lever Type



Multi Harnesses



With Clip Connection Type

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Board-In Connector

52693

Single Row Right Angle

Features and Benefits
- Low profile height 3.90mm
- IDT Machine XELOM Simple can be used

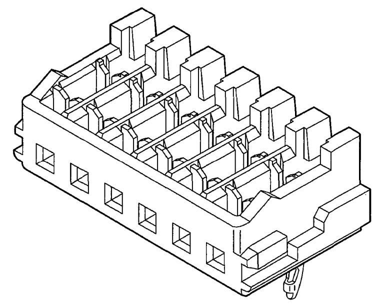
Reference Information
Packaging: Bag
Designed In: Millimeters

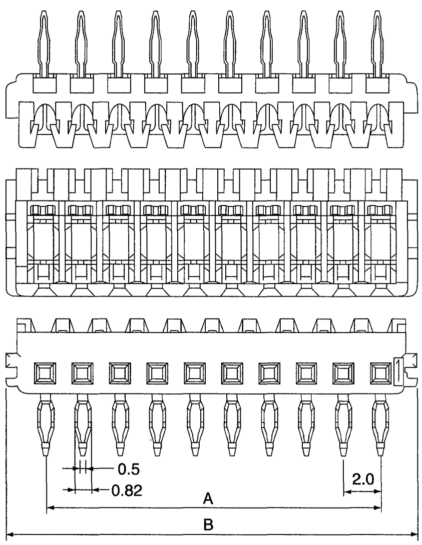
Electrical
Voltage: 125V
Current:

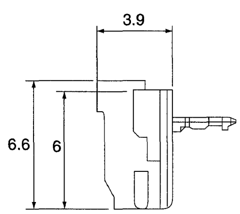
AWG	26	28
Amperes	1.5	1.0

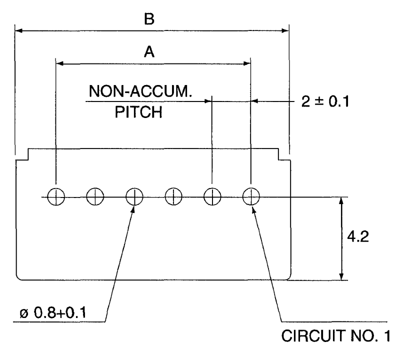
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C









RECOMMENDED P.C. BOARD

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	52693-0214	2.00 (.079)	6.00 (.236)
3	52693-0314	4.00 (.157)	8.00 (.315)
4	52693-0414	6.00 (.236)	10.00 (.394)
5	52693-0514	8.00 (.315)	12.00 (.472)
6	52693-0614	10.00 (.394)	14.00 (.551)
7	52693-0714	12.00 (.472)	16.00 (.630)
8	52693-0814	14.00 (.551)	18.00 (.709)
9	52693-0914	16.00 (.630)	20.00 (.787)
10	52693-1014	18.00 (.709)	22.00 (.866)
11	52693-1114	20.00 (.787)	24.00 (.945)
12	52693-1214	22.00 (.866)	26.00 (1.024)
13	52693-1314	24.00 (.945)	28.00 (1.102)
14	52693-1414	26.00 (1.024)	30.00 (1.181)
15	52693-1514	28.00 (1.102)	32.00 (1.260)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Crimp terminal for all Mill systems
- Both chain or loose terminal toolings are available

Reference Information
Packaging: Chain or loose
Use With: 51089 and 51090
Designed In: Millimeters

Electrical
Voltage: 125V
Current:

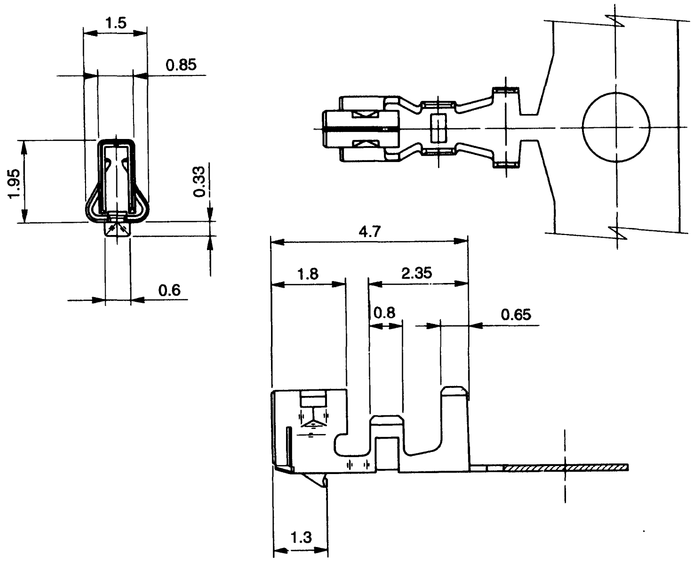
AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Wire Range: 24 to 30 AWG
Insulation Range: 1.40mm dia. max.

2.00mm (.079") Pitch Mill System Crimp Terminal

50212



ORDERING INFORMATION

Order No.	Terminal	Press	Crimp Die	TM-40/42 Applicator	TM-40/42 Spare Tooling Kit	Mini-Mac Applicator	Mini-Mac Spare Tooling Kit	Hand Tool	Extraction Tool
50212-8000	Chain	57117-4000 or M15A	57175-3000	11-40-2255	11-40-3259	11-18-2169	11-18-3160		57105-6000
50212-8100	Loose							57176-5000	

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Receptacle

51090 Single Row Crimp

Features and Benefits
- Sizes 2 to 15 circuits

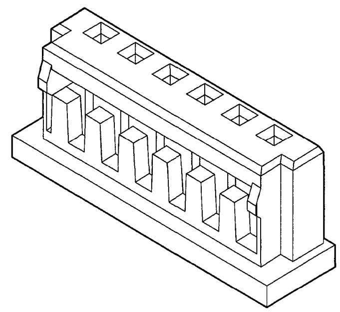
Reference Information
Packaging: Bag
UL File No.: E29179-K
Mates With: 53324 and 53325
Use With: 50212
Designed In: Millimeters

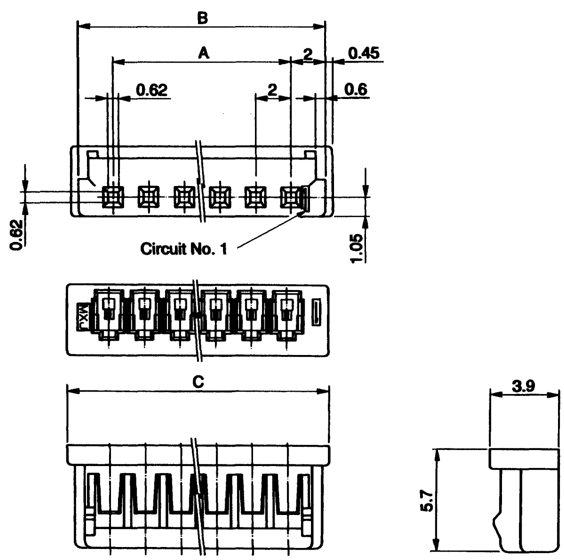
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: PBT, UL 94V-0
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	51090-0200	2.00 (.079)	6.00 (.236)	6.90 (.272)
3	51090-0300	4.00 (.157)	8.00 (.315)	8.90 (.350)
4	51090-0400	6.00 (.236)	10.00 (.394)	10.90 (.429)
5	51090-0500	8.00 (.315)	12.00 (.472)	12.90 (.508)
6	51090-0600	10.00 (.394)	14.00 (.551)	14.90 (.587)
7	51090-0700	12.00 (.472)	16.00 (.630)	16.90 (.665)
8	51090-0800	14.00 (.551)	18.00 (.709)	18.90 (.744)
9	51090-0900	16.00 (.630)	20.00 (.787)	20.90 (.823)
10	51090-1000	18.00 (.709)	22.00 (.866)	22.90 (.902)
11	51090-1100	20.00 (.787)	24.00 (.945)	24.90 (.980)
12	51090-1200	22.00 (.866)	26.00 (1.024)	26.90 (1.059)
13	51090-1300	24.00 (.945)	28.00 (1.102)	28.90 (1.138)
14	51090-1400	26.00 (1.024)	30.00 (1.181)	30.90 (1.217)
15	51090-1500	28.00 (1.102)	32.00 (1.260)	32.90 (1.295)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Receptacle

52484

Single Row IDT

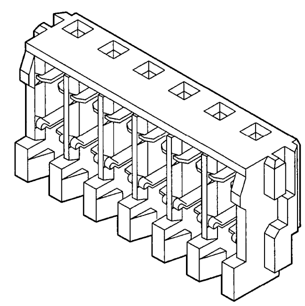
Reference Information
Packaging: Bag
Tooling Information: See page I-125; contact factory for fully automatic IDT machine: IDT Press Order No. 57222-7000 and Die Set Order No. 57220-7000
CSA File No.: LR37272-P20
Mates With: 53324 and 53325
Use With: 51094
Designed In: Millimeters

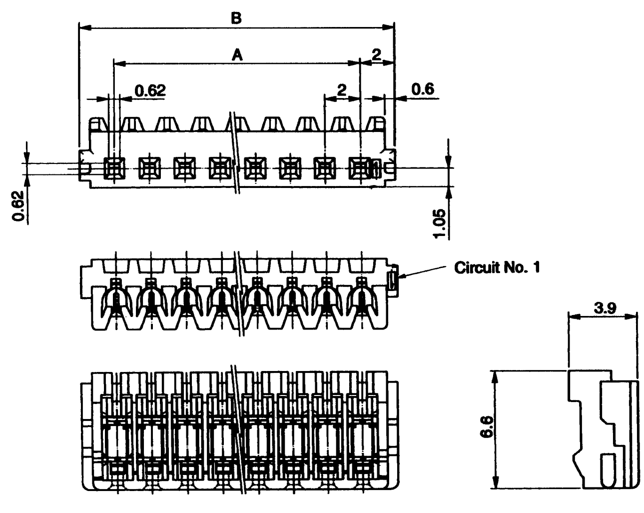
Electrical
Voltage: 125V
Current:

AWG	26	28
Amperes	1.5	1.0

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Wire Range: 26 to 28 AWG
Insulation Range: 0.85 to 1.05mm dia.





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	52484-0210	2.00 (.079)	6.00 (.236)
3	52484-0310	4.00 (.157)	8.00 (.315)
4	52484-0410	6.00 (.236)	10.00 (.394)
5	52484-0510	8.00 (.315)	12.00 (.472)
6	52484-0610	10.00 (.394)	14.00 (.551)
7	52484-0710	12.00 (.472)	16.00 (.630)
8	52484-0810	14.00 (.551)	18.00 (.709)
9	52484-0910	16.00 (.630)	20.00 (.787)
10	52484-1010	18.00 (.709)	22.00 (.866)
11	52484-1110	20.00 (.787)	24.00 (.945)
12	52484-1210	22.00 (.866)	26.00 (1.024)
13	52484-1310	24.00 (.945)	28.00 (1.102)
14	52484-1410	26.00 (1.024)	30.00 (1.181)
15	52484-1510	28.00 (1.102)	32.00 (1.260)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Clip

51094 Dual Row

Features and Benefits

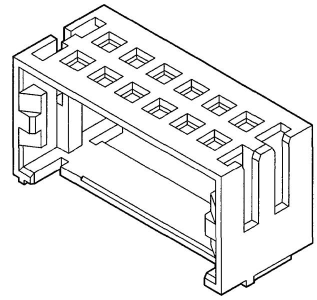
- Sizes 6 to 30 circuits
- Joins 2 single row receptacles (52484) to mate with a dual row header (53313 or 53314)

Physical

Housing: PBT, UL 94V-0

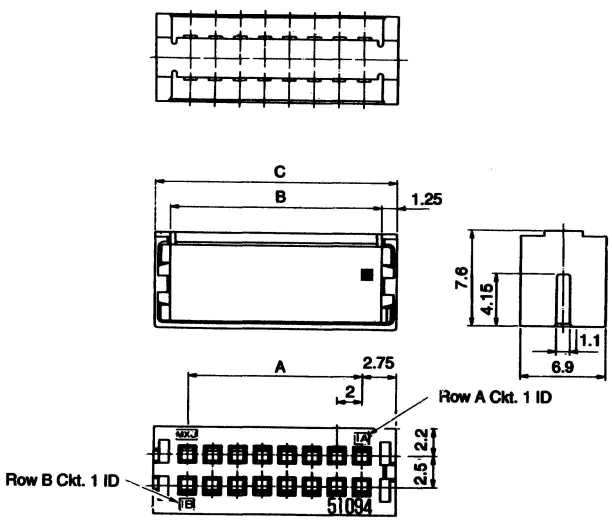
Reference Information

Packaging: Bag
CSA File No.: LR37272-P20
Mates With: 53313 and 53314
Use With: 52484
Designed In: Millimeters



Micro Connectors

I



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
6	51094-0605	4.00 (.157)	7.00 (.275)	9.50 (.374)
8	51094-0805	6.00 (.236)	9.00 (.354)	11.50 (.452)
10	51094-1005	8.00 (.315)	11.00 (.433)	13.50 (.531)
12	51094-1205	10.00 (.394)	13.00 (.511)	15.50 (.610)
14	51094-1405	12.00 (.472)	15.00 (.590)	17.50 (.688)
16	51094-1605	14.00 (.551)	17.00 (.669)	19.50 (.767)
18	51094-1805	16.00 (.630)	19.00 (.748)	21.50 (.846)
20	51094-2005	18.00 (.709)	21.00 (.826)	23.50 (.925)
22	51094-2205	20.00 (.787)	23.00 (.905)	25.50 (1.003)
24	51094-2405	22.00 (.866)	25.00 (.984)	27.50 (1.082)
26	51094-2605	24.00 (.945)	27.00 (1.062)	29.50 (1.161)
28	51094-2805	26.00 (1.024)	29.00 (1.141)	31.50 (1.240)
30	51094-3005	28.00 (1.102)	31.00 (1.220)	33.50 (1.318)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Header

53324 Single Row Straight

Features and Benefits

- Sizes 2 to 15 circuits

Reference Information

Packaging: Tray
UL File No.: E29179-K
CSA File No.: LR37272-P20
Mates With: 51090 and 52484
Designed In: Millimeters

Electrical

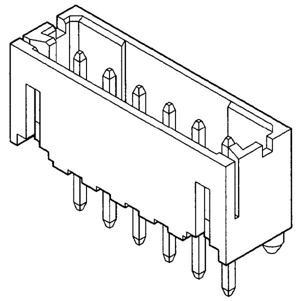
Voltage: 125V
Current:

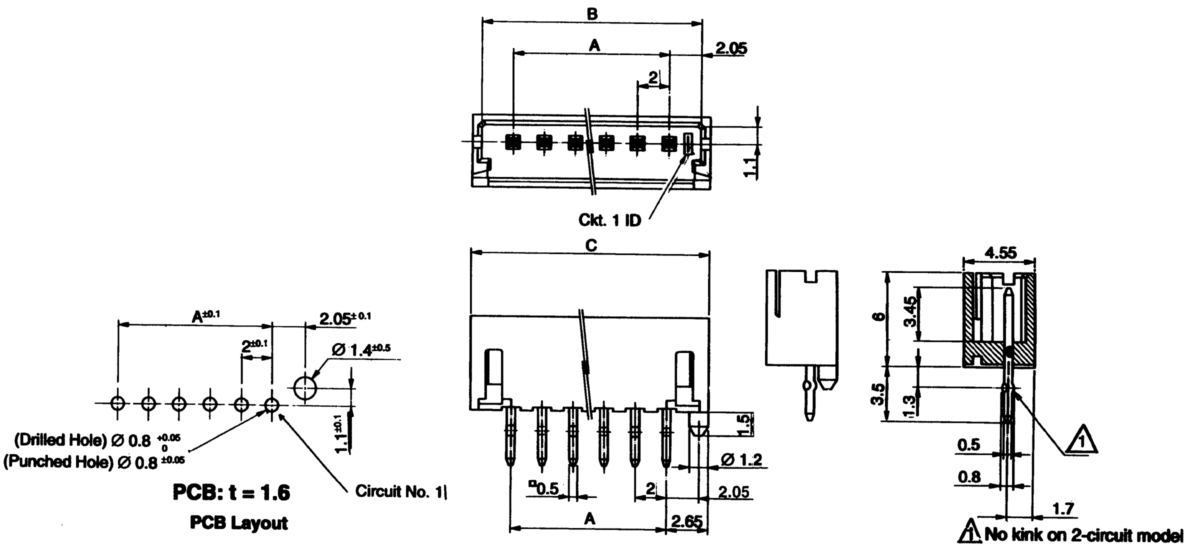
AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	53324-0210	2.00 (.079)	6.10 (.240)	7.30 (.287)
3	53324-0310	4.00 (.157)	8.10 (.319)	9.30 (.366)
4	53324-0410	6.00 (.236)	10.10 (.398)	11.30 (.445)
5	53324-0510	8.00 (.315)	12.10 (.476)	13.30 (.524)
6	53324-0610	10.00 (.394)	14.10 (.555)	15.30 (.602)
7	53324-0710	12.00 (.472)	16.10 (.634)	17.30 (.681)
8	53324-0810	14.00 (.551)	18.10 (.713)	19.30 (.760)
9	53324-0910	16.00 (.630)	20.10 (.791)	21.30 (.839)
10	53324-1010	18.00 (.709)	22.10 (.870)	23.30 (.917)
11	53324-1110	20.00 (.787)	24.10 (.949)	25.30 (.996)
12	53324-1210	22.00 (.866)	26.10 (1.028)	27.30 (1.075)
13	53324-1310	24.00 (.940)	28.10 (1.106)	29.30 (1.154)
14	53324-1410	26.00 (1.024)	30.10 (1.185)	31.30 (1.232)
15	53324-1510	28.00 (1.102)	32.10 (1.264)	33.30 (1.311)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Header

53325

Single Row Right Angle

Features and Benefits
- Sizes 2 to 15 circuits

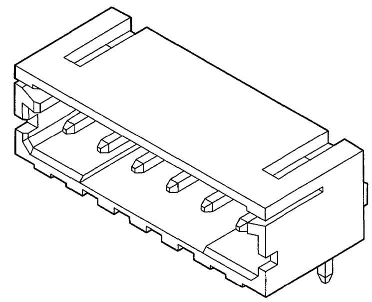
Reference Information
Packaging: Tray
UL File No.: E29179-K
CSA File No.: LR37272-P20
Mates With: 51090 and 52484
Designed In: Millimeters

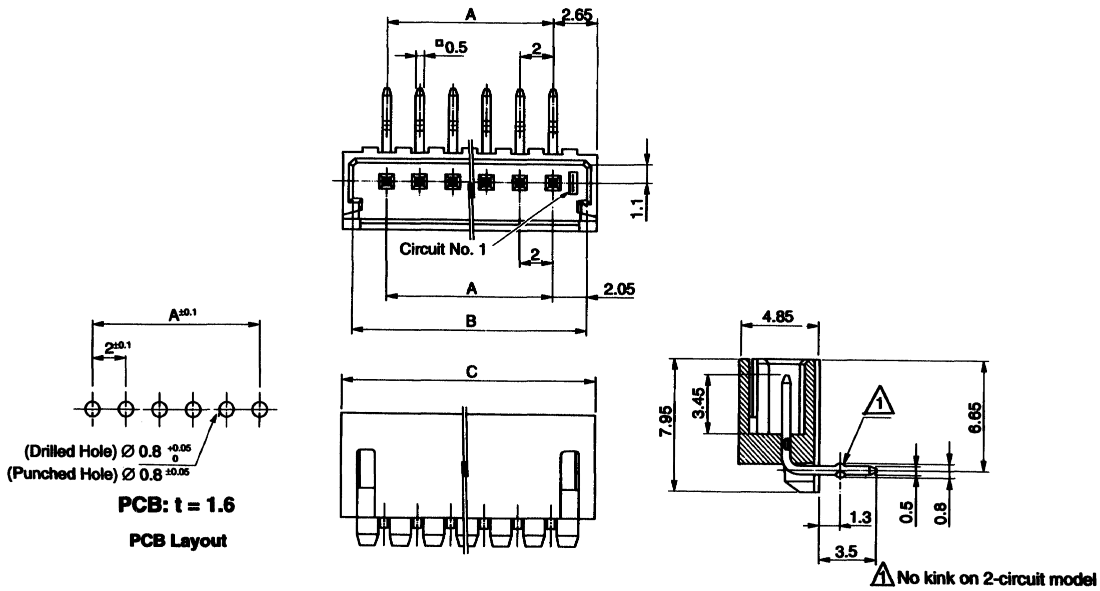
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	53325-0210	2.00 (.079)	6.10 (.240)	7.30 (.287)
3	53325-0310	4.00 (.157)	8.10 (.319)	9.30 (.366)
4	53325-0410	6.00 (.236)	10.10 (.398)	11.30 (.445)
5	53325-0510	8.00 (.315)	12.10 (.476)	13.30 (.524)
6	53325-0610	10.00 (.394)	14.10 (.555)	15.30 (.602)
7	53325-0710	12.00 (.472)	16.10 (.634)	17.30 (.681)
8	53325-0810	14.00 (.551)	18.10 (.713)	19.30 (.760)
9	53325-0910	16.00 (.630)	20.10 (.791)	21.30 (.839)
10	53325-1010	18.00 (.709)	22.10 (.870)	23.30 (.917)
11	53325-1110	20.00 (.787)	24.10 (.949)	25.30 (.996)
12	53325-1210	22.00 (.866)	26.10 (1.028)	27.30 (1.075)
13	53325-1310	24.00 (.940)	28.10 (1.106)	29.30 (1.154)
14	53325-1410	26.00 (1.024)	30.10 (1.185)	31.30 (1.232)
15	53325-1510	28.00 (1.102)	32.10 (1.264)	33.30 (1.311)

molex

2.00mm (.079") Pitch Mill System Wire-to-Board Receptacle

51089

Dual Row Crimp

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 10 to 60 circuits

Reference Information

Packaging: Bag
Mates With: 53313 and 53314
Use With: 50212
Designed In: Millimeters

Electrical

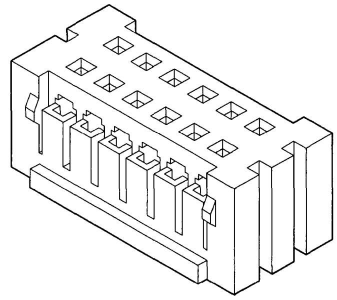
Voltage: 125V
Current:

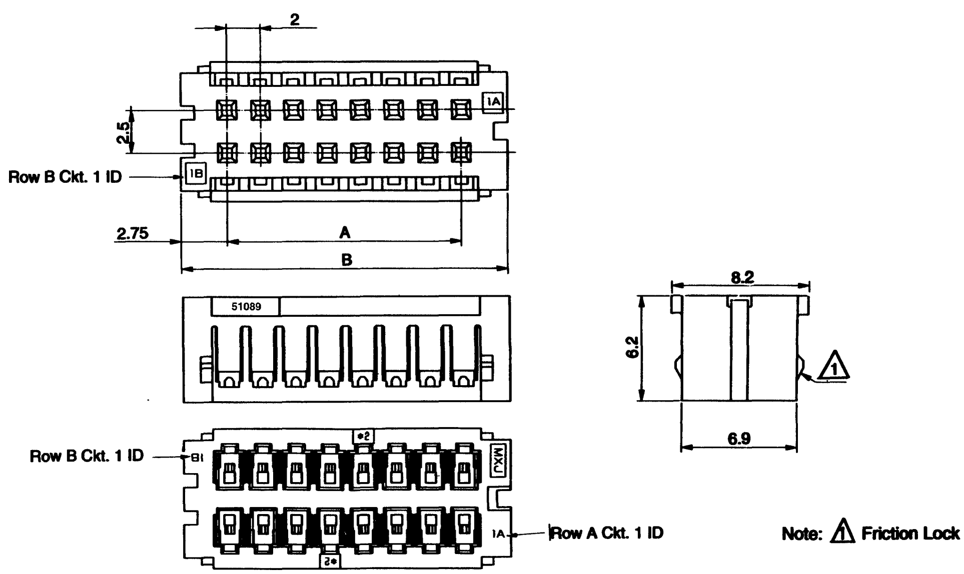
AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled PBT, UL 94V-0
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		Lock
		A	B	
10	51089-1005	8.00 (.315)	13.50 (.531)	Yes
12	51089-1205	10.00 (.394)	15.50 (.610)	Yes
14	51089-1405	12.00 (.472)	17.50 (.689)	Yes
16	51089-1605	14.00 (.551)	19.50 (.768)	Yes
18	51089-1805	16.00 (.630)	21.50 (.846)	Yes
20	51089-2005	18.00 (.709)	23.50 (.925)	Yes
22	51089-2205	20.00 (.787)	25.50 (1.004)	Yes
24	51089-2405	22.00 (.866)	27.50 (1.083)	Yes
26	51089-2605	24.00 (.945)	29.50 (1.161)	Yes
28	51089-2805	26.00 (1.024)	31.50 (1.240)	Yes
30	51089-3005	28.00 (1.102)	33.50 (1.319)	No
34	51089-3405	32.00 (1.260)	37.50 (1.476)	No
40	51089-4005	38.00 (1.496)	43.50 (1.713)	No
50	51089-5005	48.00 (1.890)	53.50 (2.106)	No
60	51089-6005	58.00 (2.283)	63.50 (2.500)	No

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Receptacle

52478

Dual Row IDT

Features and Benefits

- Sizes 10 to 60 circuits

Reference Information

Packaging: Tray
Tooling Information: See page I-125; contact factory for fully automatic IDT machine: IDT Press Order No. 57222-7000 and Die Set Order No. 57219-7000
CSA File No.: LR37272-P20
Mates With: 53313 and 53314
Designed In: Millimeters

Electrical

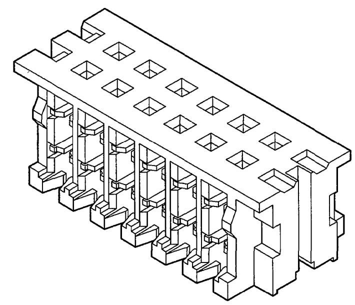
Voltage: 125V
Current:

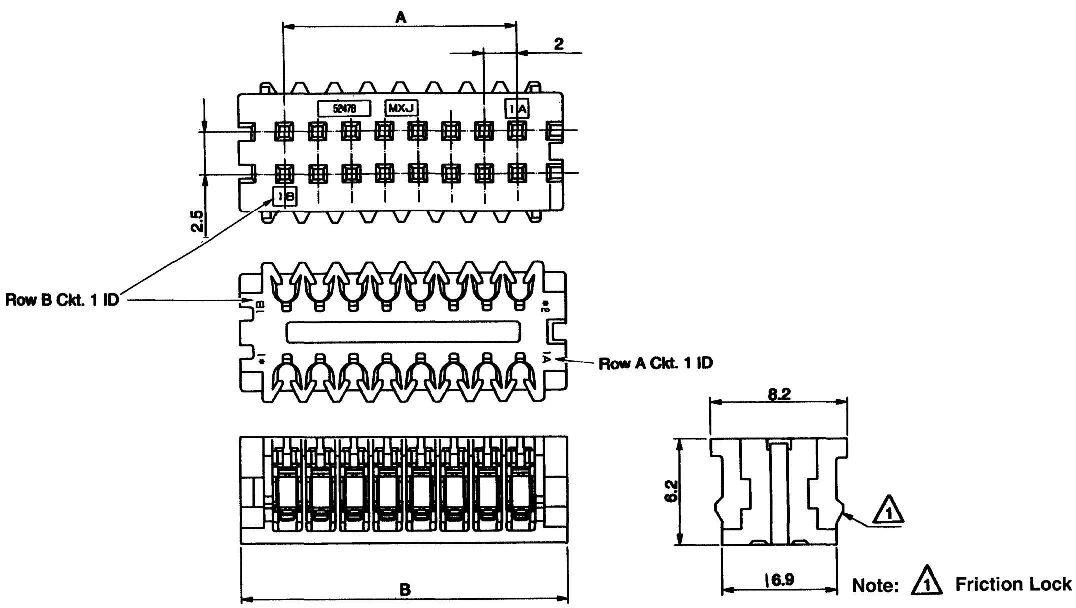
AWG	26	28
Amperes	1.5	1.0

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled PBT, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Wire Range: 26 to 28 AWG
Insulation Range: 0.85 to 1.05mm dia.





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		Lock
		A	B	
10	52478-1015	8.00 (.315)	13.50 (.531)	Yes
12	52478-1215	10.00 (.394)	15.50 (.610)	Yes
14	52478-1415	12.00 (.472)	17.50 (.689)	Yes
16	52478-1615	14.00 (.551)	19.50 (.768)	Yes
18	52478-1815	16.00 (.630)	21.50 (.846)	Yes
20	52478-2015	18.00 (.709)	23.50 (.925)	Yes
22	52478-2215	20.00 (.787)	25.50 (1.004)	Yes
24	52478-2415	22.00 (.866)	27.50 (1.083)	Yes
26	52478-2615	24.00 (.945)	29.50 (1.161)	Yes
28	52478-2815	26.00 (1.024)	31.50 (1.240)	Yes
30	52478-3015	28.00 (1.102)	33.50 (1.319)	No
34	52478-3415	32.00 (1.260)	37.50 (1.476)	No
40	52478-4015	38.00 (1.496)	43.50 (1.713)	No
50	52478-5015	48.00 (1.890)	53.50 (2.106)	No
60	52478-6015	58.00 (2.283)	63.50 (2.500)	No

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Header

53313

Dual Row Straight

Features and Benefits
- Sizes 6 to 60 circuits

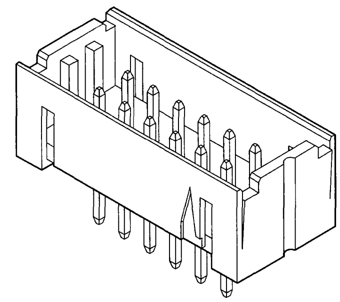
Reference Information
Packaging: Tray
UL File No.: E29179-K
CSA File No.: LR37272-P20
Mates With: 51089 and 52478
Designed In: Millimeters

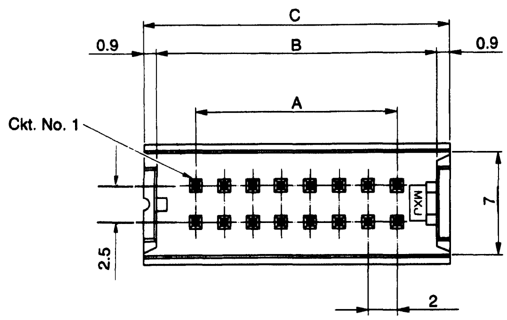
Electrical
Voltage: 125V
Current:

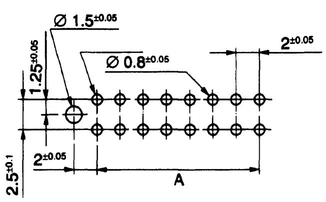
AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

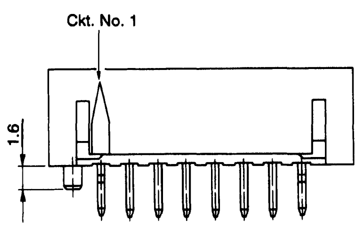
Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C

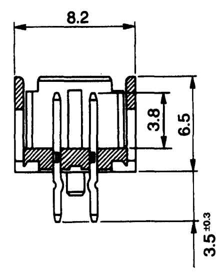






PCB: t = 1.6
PCB Layout





ORDERING INFORMATION AND DIMENSIONS

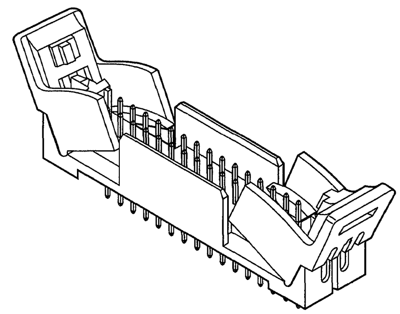
Circuits	Order No.	Dimension		
		A	B	C
6	53313-0615	4.00 (.157)	9.60 (.378)	11.40 (.449)
8	53313-0815	6.00 (.236)	11.60 (.457)	13.40 (.528)
10	53313-1015	8.00 (.315)	13.60 (.535)	15.40 (.606)
12	53313-1215	10.00 (.394)	15.60 (.614)	17.40 (.685)
14	53313-1415	12.00 (.472)	17.60 (.693)	19.40 (.764)
16	53313-1615	14.00 (.551)	19.60 (.772)	21.40 (.843)
18	53313-1815	16.00 (.630)	21.60 (.850)	23.40 (.921)
20	53313-2015	18.00 (.709)	23.60 (.929)	25.40 (1.000)
22	53313-2215	20.00 (.787)	25.60 (1.008)	27.40 (1.079)
24	53313-2415	22.00 (.866)	27.60 (1.087)	29.40 (1.157)
26	53313-2615	24.00 (.945)	29.60 (1.165)	31.40 (1.236)
28	53313-2815	26.00 (1.024)	31.60 (1.244)	33.40 (1.315)
30	53313-3015	28.00 (1.102)	33.60 (1.323)	35.40 (1.394)
34	53313-3415	32.00 (1.260)	37.60 (1.480)	39.40 (1.551)
40	53313-4015	38.00 (1.496)	43.60 (1.717)	45.40 (1.787)
50	53313-5015	48.00 (1.890)	53.60 (2.110)	55.40 (2.181)
60	53313-6015	58.00 (2.283)	63.60 (2.504)	65.40 (2.575)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Mill System Wire-to-Board Header

53314

Dual Row, Straight With Eject Levers



Features and Benefits
- Sizes 30 to 60 circuits

Reference Information
Packaging: Tray
UL File No.: E29179-K
CSA File No.: LR37272-P20
Mates With: 51089 and 52478
Designed In: Millimeters

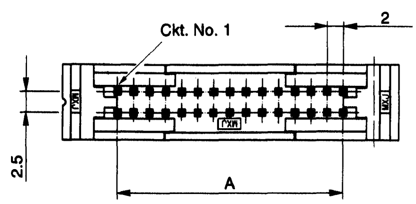
Electrical
Voltage: 125V
Current:

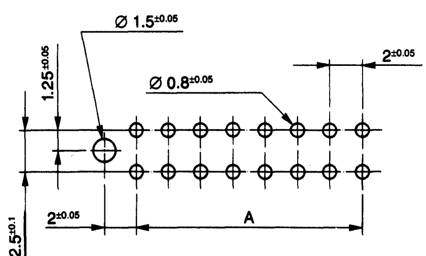
AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

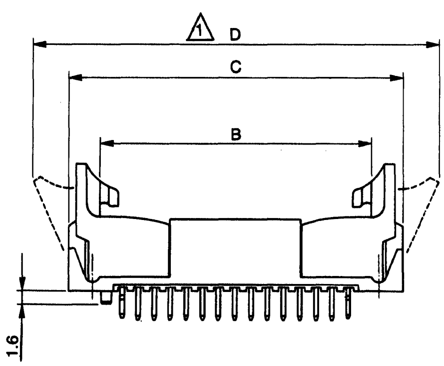
Physical
Housing: Glass-filled PBT, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C

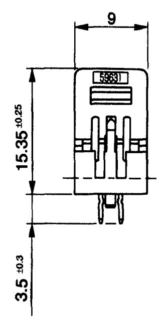
Note: ⚠1 Eject levers in fully open position





PCB: t = 1.6
PCB Layout





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
30	53314-3015	28.00 (1.102)	33.60 (1.323)	41.40 (1.618)	50.40 (1.984)
34	53314-3415	32.00 (1.260)	37.60 (1.480)	45.40 (1.787)	54.40 (2.142)
40	53314-4015	38.00 (1.496)	43.60 (1.717)	51.40 (2.024)	60.40 (2.378)
50	53314-5015	48.00 (1.890)	53.60 (2.110)	61.40 (2.417)	70.40 (2.772)
60	53314-6015	58.00 (2.283)	63.60 (2.504)	71.40 (2.811)	80.40 (3.165)

FEATURES AND SPECIFICATIONS

molex® 2.00mm (.079") Pitch Mill System Wire-to-Wire Panel Adapter

53358 Single Row

Features and Benefits
- Low insertion force
- Locking feature
- Kinked header pins
- Low profile

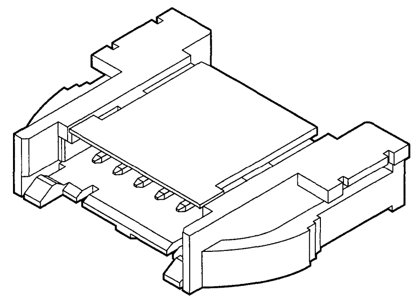
Reference Information
Packaging: Bag
Mates With: 51090 and 52484
Designed In: Millimeters

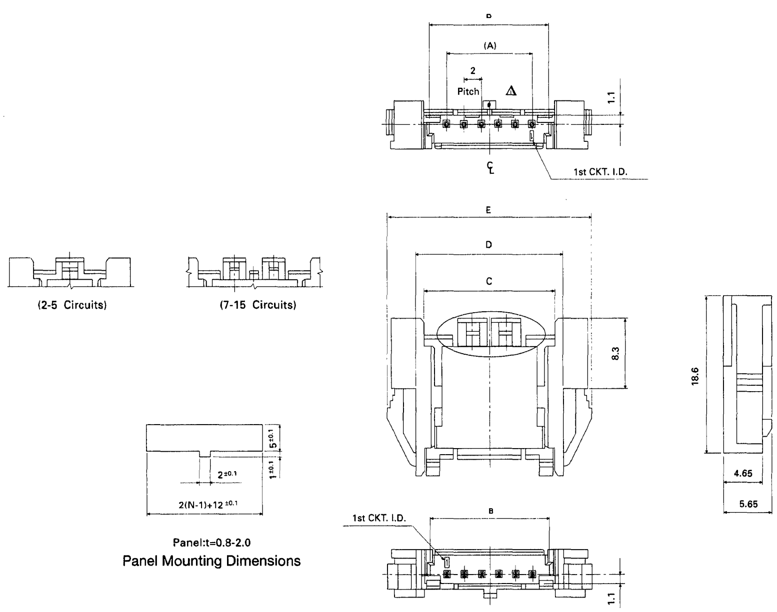
Electrical
Voltage: 125V
Current:

AWG	24	26	28	30
Amperes	2.0	1.5	1.0	0.5

Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: White PBT, UL 94V-0
Contact: Brass
Plating: Tin (0.5 square)
Temperature: -40 to +105°C

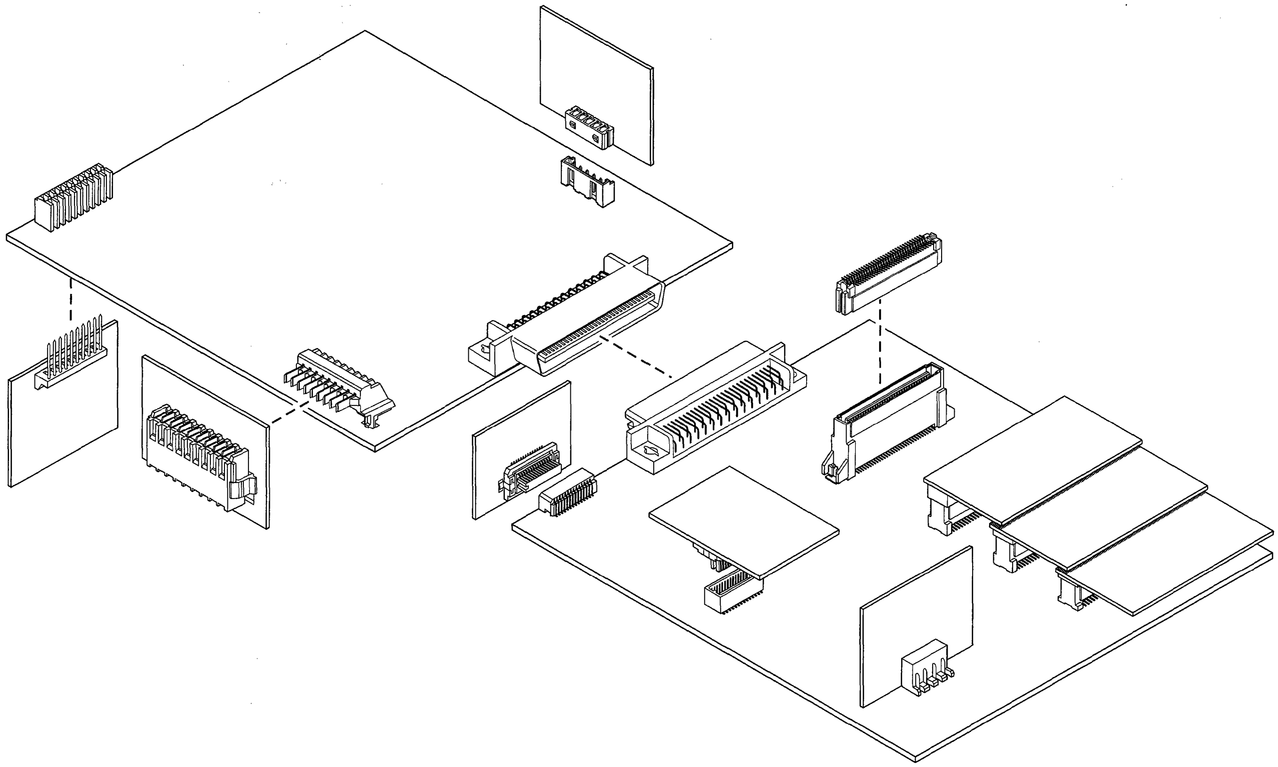




Panel:t=0.8-2.0
Panel Mounting Dimensions

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				
		A	B	C	D	E
2	53358-0210	2.00 (.079)	6.10 (.240)	7.30 (.287)	9.30 (.366)	16.10 (.634)
3	53358-0310	4.00 (.157)	8.10 (.319)	9.30 (.366)	11.30 (.445)	18.10 (.713)
4	53358-0410	6.00 (.236)	10.10 (.398)	11.30 (.445)	13.30 (.524)	20.10 (.791)
5	53358-0510	8.00 (.315)	12.10 (.476)	13.30 (.524)	15.30 (.602)	22.10 (.870)
6	53358-0610	10.00 (.394)	14.10 (.555)	15.30 (.602)	17.30 (.681)	24.10 (.949)
7	53358-0710	12.00 (.472)	16.10 (.634)	17.30 (.681)	19.30 (.760)	26.10 (1.028)
8	53358-0810	14.00 (.551)	18.10 (.713)	19.30 (.760)	21.30 (.839)	28.10 (1.106)
9	53358-0910	16.00 (.630)	20.10 (.791)	21.30 (.839)	23.30 (.917)	30.10 (1.185)
10	53358-1010	18.00 (.709)	22.10 (.870)	23.30 (.917)	25.30 (.996)	32.10 (1.264)
11	53358-1110	20.00 (.787)	24.10 (.949)	25.30 (.996)	27.30 (1.075)	34.10 (1.343)
12	53358-1210	22.00 (.866)	26.10 (1.028)	27.30 (1.075)	29.30 (1.154)	36.10 (1.421)
13	53358-1310	24.00 (.945)	28.10 (1.106)	29.30 (1.154)	31.30 (1.232)	38.10 (1.500)
14	53358-1410	26.00 (1.024)	30.10 (1.185)	31.30 (1.232)	33.30 (1.311)	40.10 (1.579)
15	53358-1510	28.00 (1.102)	32.10 (1.264)	33.30 (1.311)	35.30 (1.390)	42.10 (1.657)



Pages	Pitch	Description	Contact Plating	Circuits	Mating Configuration
I-45/50	0.80mm SMT	Dual Row	Tin	10-40	Right angle or parallel stacking in 4.50, 6.00, 7.00mm heights
I-45/50	0.80mm SMT	Dual Row Floating	Tin	18-30	Right angle or parallel stacking in 5.50, 7.00, 8.00mm heights
I-51/52	1.00mm SMT	Dual Row	Tin	6-30	Right angle
I-82/88	1.00mm SMT	Stacking	Gold	20-140	Parallel stacking in 8.00, 9.00, 10.00, 12.00, 18.00, 20.00mm
I-53/54	1.25mm	Dual Row, Radial Taping	Tin	7-14	Right angle
I-74/76	1.25mm	Hinged	Tin	8-30	Right angle or parallel stacking in 7.40mm
I-89/93	1.27mm	D50-L	Gold	20-100	Right angle, parallel stacking in 14.00mm or horizontal
I-94/98	1.27mm High Temp	EBBI 50D	Gold	30-130	Right angle, parallel stacking in 12.50mm, Ribbon Cable
I-57/58	1.50mm	Single Row	Tin	4-15	Parallel stacking 6.00mm
I-55/56	1.50mm	Dual Row	Tin	6-30	Right angle
I-59/60	2.00mm	Single Row	Tin	3-20	Right angle
I-61/63	2.00mm	Single Row/Dual Row	Tin	4-20	Right angle or parallel stacking in 8.90mm
I-64/66	2.00mm	Dual Row	Tin	6-40	Right angle or parallel stacking in 8.90mm
I-67/70	2.00mm	Single Row, Board Spacer	Tin	5-15	Right angle, parallel stacking in 27.00mm or bottom entry
I-71	2.00mm	Single Row, One Piece	Tin	3-20	Right angle
I-80/81	2.00mm	Floating	Tin	4-20	Right angle
I-77/79	2.00mm	Floating Bottom Entry	Tin	6-15	Right angle
I-99/120	2.00mm SMT	Milli-Grid™ System	Gold	4-50	Right angle, parallel stacking or bottom entry
I-72/73	2.50mm	Single Row	Tin	3-15	Right angle
Contact Factory for the other Board-to-Board Connectors					
	0.635mm SMT	Stacking	Gold	20-240	Parallel stacking in 4.00, 5.00, 6.00, 7.00mm
	0.80mm SMT	Stacking	Gold	40-200	Parallel stacking in 5.00 through 16.00mm
	1.00mm SMT	IEEE-1386	Gold	64	Parallel stacking in 10.00, 13.00mm with more to come
	1.00mm SMT	Zyton	Gold	9-69	Parallel stacking in 4.15, 5.00, 6.00, 7.00mm

FEATURES AND SPECIFICATIONS

0.80mm (.031") Pitch Board-to-Board Receptacle

52465

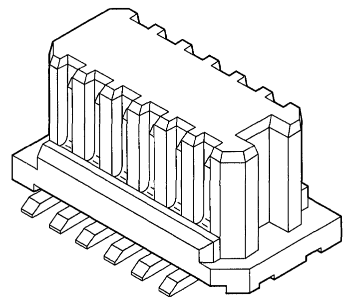
Dual Row SMT

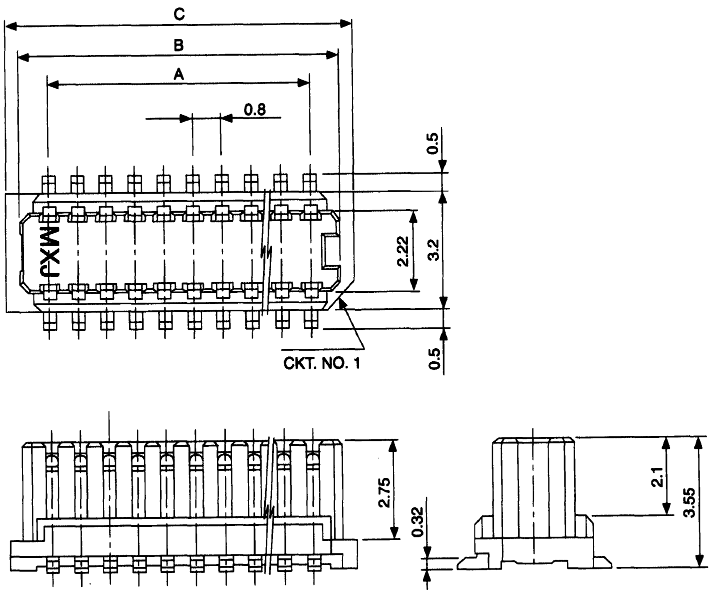
Features and Benefits
- Sizes 10 to 40 circuits

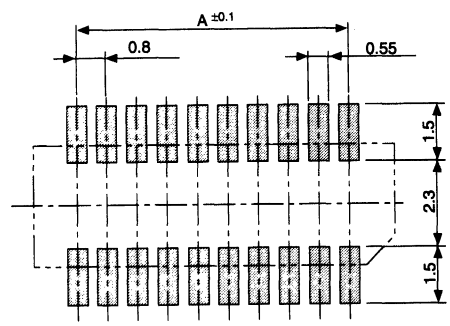
Reference Information
Packaging: Embossed tape
Mates With: 53307, 53309, 53353 and 53364
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPA, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +105°C







PCB LAYOUT

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			Tape Width
		A	B	C	
10	52465-1091	3.20 (.126)	4.85 (.191)	5.60 (.220)	16.00 (.630)
12	52465-1291	4.00 (.157)	5.65 (.222)	6.40 (.252)	
14	52465-1491	4.80 (.189)	6.45 (.254)	7.20 (.283)	
16	52465-1691	5.60 (.220)	7.25 (.285)	8.00 (.315)	
18	52465-1891	6.40 (.252)	8.05 (.317)	8.80 (.346)	
20	52465-2091	7.20 (.283)	8.85 (.348)	9.60 (.378)	24.00 (.945)
22	52465-2291	8.00 (.315)	9.65 (.380)	10.40 (.409)	
24	52465-2491	8.80 (.346)	10.45 (.411)	11.20 (.441)	
26	52465-2691	9.60 (.378)	11.25 (.443)	12.00 (.472)	
28	52465-2891	10.40 (.409)	12.05 (.474)	12.80 (.504)	
30	52465-3091	11.20 (.441)	12.85 (.506)	13.60 (.535)	
32	52465-3291	12.00 (.472)	13.65 (.537)	14.40 (.566)	
34	52465-3491	12.80 (.503)	14.45 (.568)	15.20 (.598)	
36	52465-3691	13.60 (.535)	15.25 (.600)	16.00 (.629)	
38	52465-3891	14.40 (.566)	16.05 (.631)	16.80 (.661)	32.00 (1.259)
40	52465-4091	15.20 (.598)	16.85 (.663)	17.60 (.692)	

FEATURES AND SPECIFICATIONS

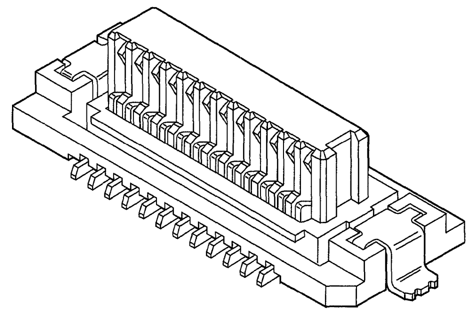
0.80mm (.031") Pitch Board-to-Board Receptacle

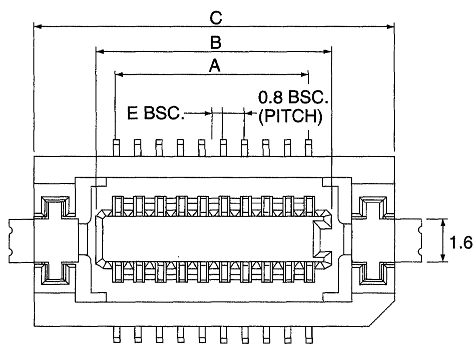
52588 Floating-Type

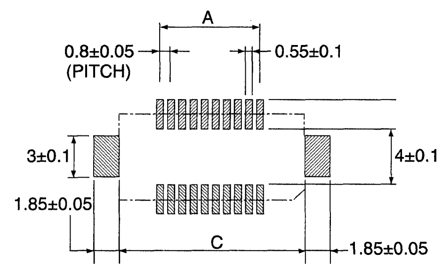
Reference Information
Packaging: Embossed tape
Mates With: 53307, 53309, 53353 and 53364
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

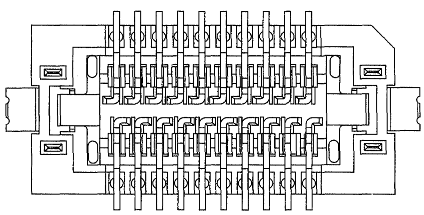
Physical
Housing: PPA, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +105°C

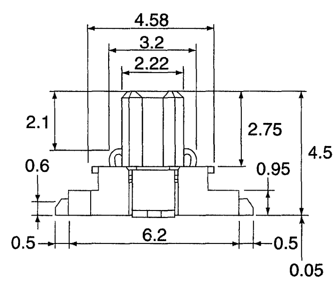


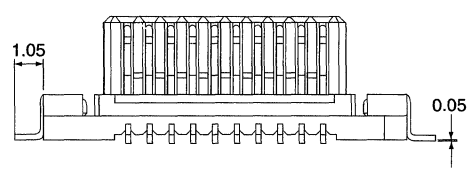




P.C.B. PATTERN LAYOUT (REF.) (MOUNT AREA)







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C	Tape Width
18	52588-1890	6.40 (.251)	8.05 (.316)	12.60 (.496)	24.00 (.944)
20	52588-2090	7.20 (.283)	8.85 (.348)	13.40 (.527)	
28	52588-2890	10.40 (.409)	12.05 (.474)	16.60 (.653)	32.00 (1.259)
30	52588-3090	11.20 (.440)	12.85 (.505)	17.40 (.685)	

FEATURES AND SPECIFICATIONS

0.80mm (.031") Pitch Board-to-Board Header

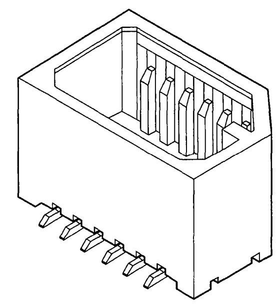
53307 Dual Row, Straight SMT

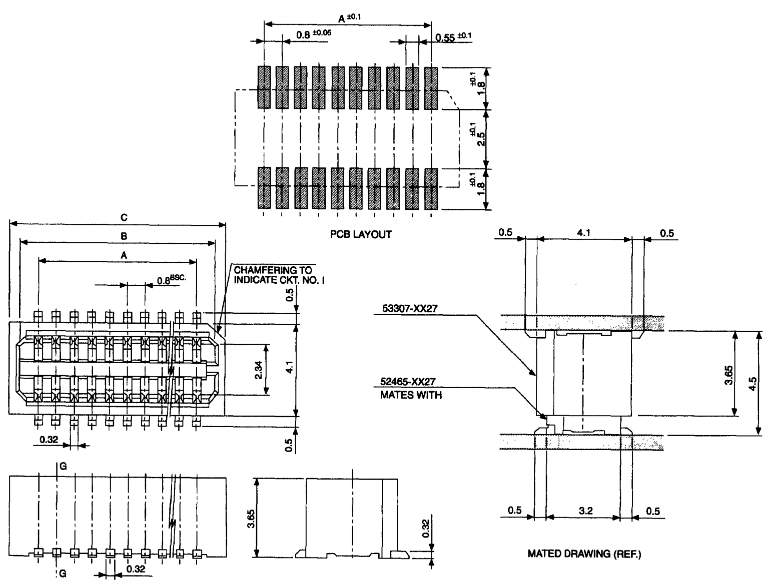
Features and Benefits
- Sizes 10 to 40 circuits

Reference Information
Packaging: Embossed tape
Mates With: 52465 and 52588
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			Tape Width
		A	B	C	
10	53307-1091	3.20 (.125)	4.90 (.192)	5.80 (.228)	16.00 (.630)
12	53307-1291	4.00 (.157)	5.70 (.224)	6.60 (.260)	
14	53307-1491	4.80 (.189)	6.50 (.256)	7.40 (.291)	
16	53307-1691	5.60 (.220)	7.30 (.287)	8.20 (.323)	
18	53307-1891	6.40 (.252)	8.10 (.319)	9.00 (.354)	
20	53307-2091	7.20 (.283)	8.90 (.350)	9.80 (.386)	24.00 (.945)
22	53307-2291	8.00 (.315)	9.70 (.382)	10.60 (.417)	
24	53307-2491	8.80 (.346)	10.50 (.413)	11.40 (.449)	
26	53307-2691	9.60 (.378)	11.30 (.445)	12.20 (.480)	
28	53307-2891	10.40 (.409)	12.10 (.476)	13.00 (.512)	
30	53307-3091	11.20 (.441)	12.90 (.508)	13.80 (.543)	
34	53307-3491	12.80 (.503)	14.50 (.570)	15.40 (.606)	
36	53307-3691	13.60 (.535)	15.30 (.602)	16.20 (.637)	
40	53307-4091	15.20 (.598)	16.90 (.665)	17.80 (.700)	32.00 (1.259)

FEATURES AND SPECIFICATIONS

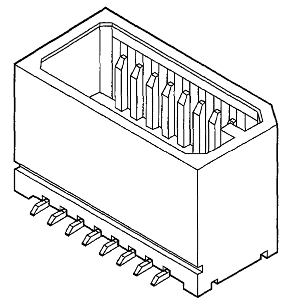
0.80mm (.031") Pitch Board-to-Board Header

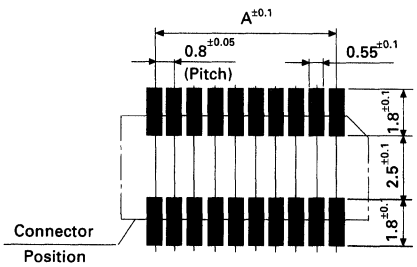
53364 Straight

Reference Information
Packaging: Embossed tape
Mates With: 52465 and 52588
Designed In: Millimeters

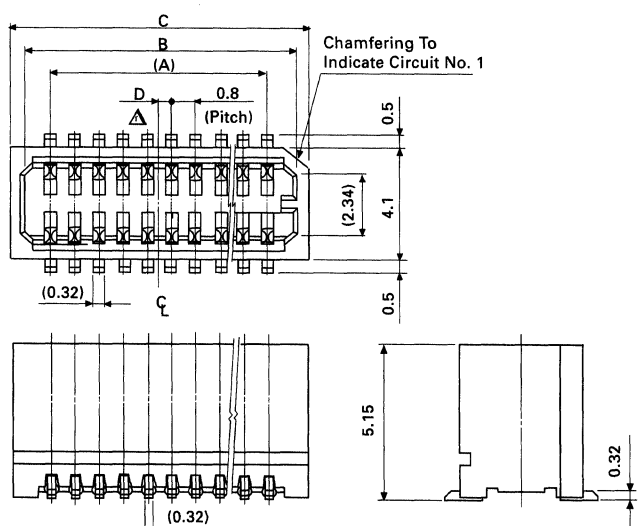
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +105°C





PCB Layout For Surface Mounting



⚠ Show position from centerline of wafer to centerline of adjacent pins.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				Tape Width
		A	B	C	D	
10	53364-1091	3.20 (.125)	4.90 (.192)	5.80 (.228)	0.80 (.031)	16.00 (.629)
12	53364-1291	4.00 (.157)	5.70 (.224)	6.60 (.259)	0.40 (.015)	
20	53364-2091	7.20 (.283)	8.90 (.350)	9.80 (.385)	0.40 (.015)	24.00 (.944)
28	53364-2891	10.40 (.409)	12.10 (.476)	13.00 (.511)	0.40 (.015)	
30	53364-3091	11.20 (.440)	12.90 (.507)	13.80 (.543)	0.80 (.031)	
36	53364-3691	13.60 (.535)	15.30 (.602)	16.20 (.637)	0.40 (.015)	
40	53364-4091	15.20 (.598)	16.90 (.665)	17.80 (.700)	0.40 (.015)	32.00 (1.259)

FEATURES AND SPECIFICATIONS

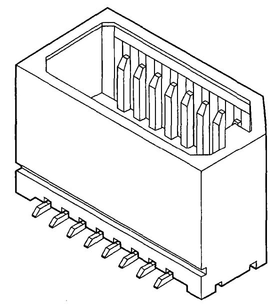
molex® **0.80mm (.031") Pitch Board-to-Board Header**

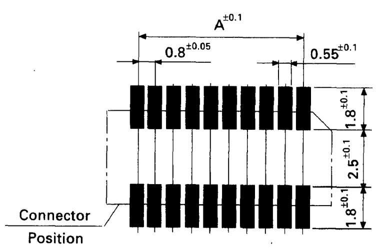
53353 Straight

Reference Information
Packaging: Embossed tape
Mates With: 52465 and 52588
Designed In: Millimeters

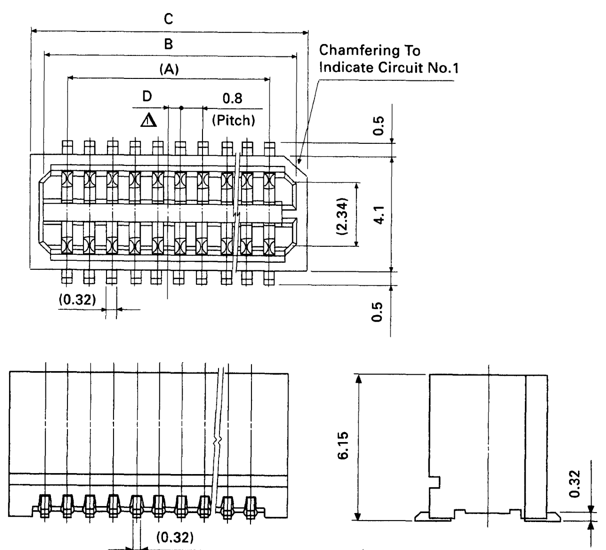
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +105°C





PCB Layout For Surface Mounting



⚠ Show position from centerline of wafer to centerline of adjacent pins.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				Tape Width
		A	B	C	D	
10	53353-1091	3.20 (.125)	4.90 (.192)	5.80 (.228)	0.80 (.031)	16.00 (.629)
16	53353-1691	5.60 (.220)	7.30 (.287)	8.20 (.322)	0.40 (.015)	
28	53353-2891	10.40 (.409)	12.10 (.476)	13.00 (.511)	0.40 (.015)	24.00 (.944)

FEATURES AND SPECIFICATIONS

0.80mm (.031") Pitch Board-to-Board Header

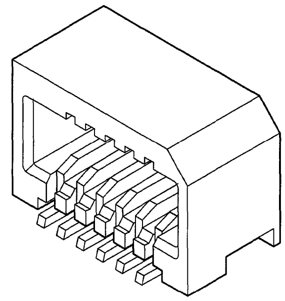
53309 Right Angle SMT

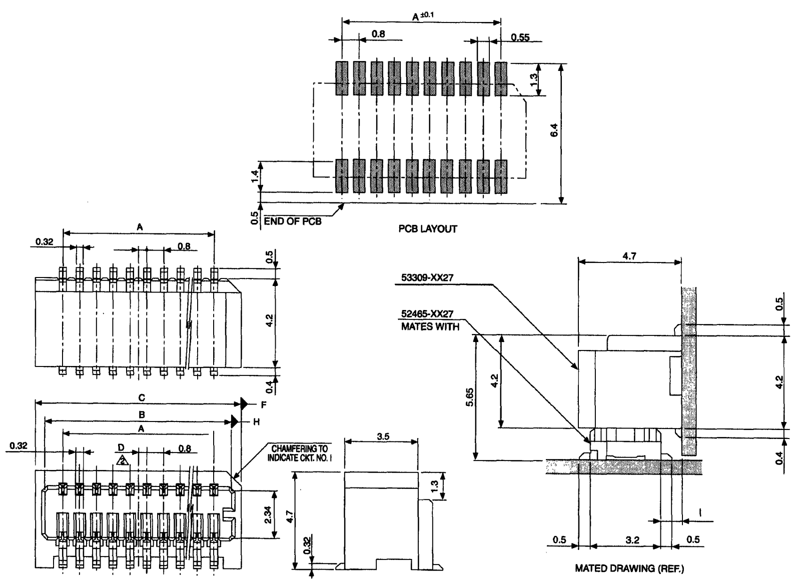
Features and Benefits
- Sizes 10 to 40 circuits

Reference Information
Packaging: Embossed tape
Mates With: 52465 and 52588
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

Physical
Housing: PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -20 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				Tape Width
		A	B	C	D	
10	53309-1091	3.20 (.126)	4.90 (.193)	5.80 (.228)	0.80 (.031)	16.00 (.630)
12	53309-1291	4.00 (.157)	5.70 (.224)	6.60 (.259)	0.40 (.015)	
14	53309-1491	4.80 (.189)	6.50 (.256)	7.40 (.291)	0.80 (.031)	
16	53309-1691	5.60 (.220)	7.30 (.287)	8.20 (.323)	0.40 (.015)	
18	53309-1891	6.40 (.252)	8.10 (.319)	9.00 (.354)	0.80 (.031)	
20	53309-2091	7.20 (.283)	8.90 (.350)	9.80 (.386)	0.40 (.015)	24.00 (.945)
22	53309-2291	8.00 (.315)	9.70 (.382)	10.60 (.417)	0.80 (.031)	
24	53309-2491	8.80 (.346)	10.50 (.413)	11.40 (.449)	0.40 (.015)	
26	53309-2691	9.60 (.377)	11.30 (.444)	12.20 (.480)	0.80 (.031)	
28	53309-2891	10.40 (.409)	12.10 (.476)	13.00 (.512)	0.40 (.015)	
30	53309-3091	11.20 (.441)	12.90 (.508)	13.80 (.543)	0.80 (.031)	
32	53309-3291	12.00 (.472)	13.70 (.539)	14.60 (.570)	0.40 (.015)	
34	53309-3491	12.80 (.503)	14.50 (.570)	15.40 (.606)	0.80 (.031)	
36	53309-3691	13.60 (.535)	15.30 (.602)	16.20 (.637)	0.40 (.015)	
38	53309-3891	14.40 (.566)	16.10 (.633)	17.00 (.669)	0.80 (.031)	32.00 (1.259)
40	53309-4091	15.20 (.598)	16.90 (.665)	17.80 (.700)	0.40 (.015)	

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Receptacle

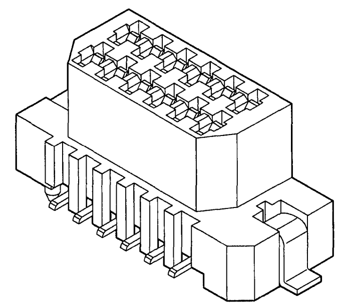
52365 Dual Row SMT

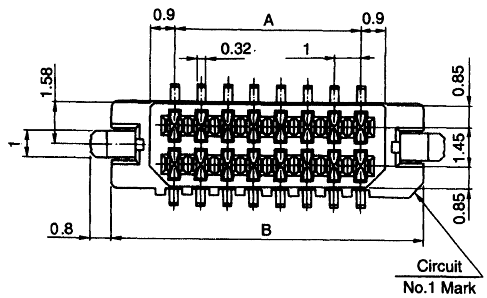
Features and Benefits
- Sizes 6 to 30 circuits

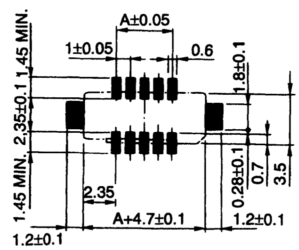
Reference Information
Packaging: Embossed tape
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53268
Designed In: Millimeters

Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

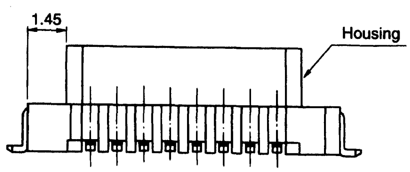
Physical
Housing: Glass-filled 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Solder Tab: Tin-plated Phosphor Bronze
Temperature: -40 to +105°C

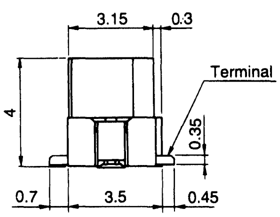






PCB Layout
For Surface Mounting





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Tape Width
6	52365-0691	2.00 (.079)	6.70 (.264)	16.00 (.630)
8	52365-0891	3.00 (.118)	7.70 (.303)	24.00 (.945)
10	52365-1091	4.00 (.157)	8.70 (.343)	
12	52365-1291	5.00 (.197)	9.70 (.382)	
14	52365-1491	6.00 (.236)	10.70 (.421)	
16	52365-1691	7.00 (.276)	11.70 (.461)	
18	52365-1891	8.00 (.315)	12.70 (.500)	
20	52365-2091	9.00 (.354)	13.70 (.539)	
22	52365-2291	10.00 (.394)	14.70 (.579)	
24	52365-2491	11.00 (.433)	15.70 (.618)	32.00 (1.260)
26	52365-2691	12.00 (.472)	16.70 (.657)	
30	52365-3091	14.00 (.551)	18.70 (.736)	

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Header

53268

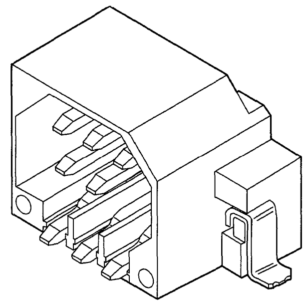
Dual Row SMT

Features and Benefits
- Sizes 6 to 30 circuits

Reference Information
Packaging: Embossed tape
Mates With: 52365
Designed In: Millimeters

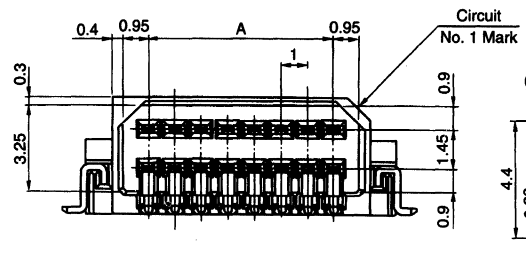
Electrical
Voltage: 50V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 100 MΩ min.

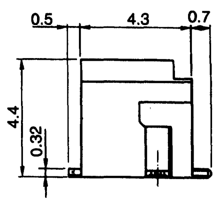
Physical
Housing: Glass-filled 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Solder Tab: Tin-plated Phosphor Bronze
Temperature: -40 to +105°C



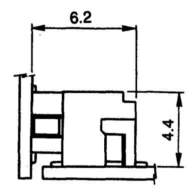
Micro Connectors

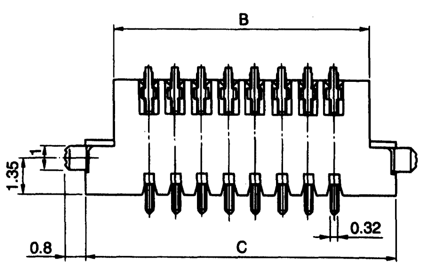
I

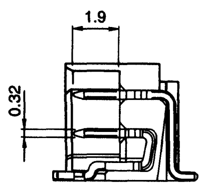


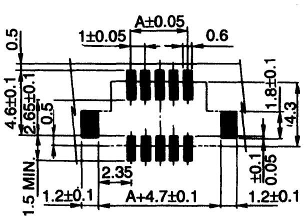


Mating Drawing
53268-XX20 - 53265-XX20









PCB Layout
For Surface Mounting

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			Tape Width
		A	B	C	
6	53268-0691	2.00 (.079)	4.70 (.185)	6.70 (.264)	16.00 (.630)
8	53268-0891	3.00 (.118)	5.70 (.224)	7.70 (.303)	24.00 (.945)
10	53268-1091	4.00 (.157)	6.70 (.264)	8.70 (.343)	
12	53268-1291	5.00 (.197)	7.70 (.303)	9.70 (.382)	
14	53268-1491	6.00 (.236)	8.70 (.343)	10.70 (.421)	
16	53268-1691	7.00 (.276)	9.70 (.382)	11.70 (.461)	
18	53268-1891	8.00 (.315)	10.70 (.421)	12.70 (.500)	
20	53268-2091	9.00 (.354)	11.70 (.461)	13.70 (.539)	
22	53268-2291	10.00 (.394)	12.70 (.500)	14.70 (.551)	
24	53268-2491	11.00 (.433)	13.70 (.539)	15.70 (.618)	32.00 (1.260)
26	53268-2691	12.00 (.472)	14.70 (.578)	16.70 (.657)	
30	53268-3091	14.00 (.551)	16.70 (.657)	18.70 (.736)	

FEATURES AND SPECIFICATIONS

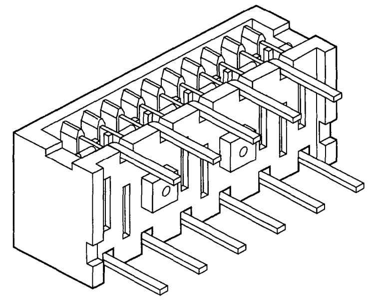
1.25mm (.049") Pitch Board-to-Board Receptacle

52565 Radial Taping

Reference Information
Packaging: Radial tape
Mates With: 53339
Designed In: Millimeters

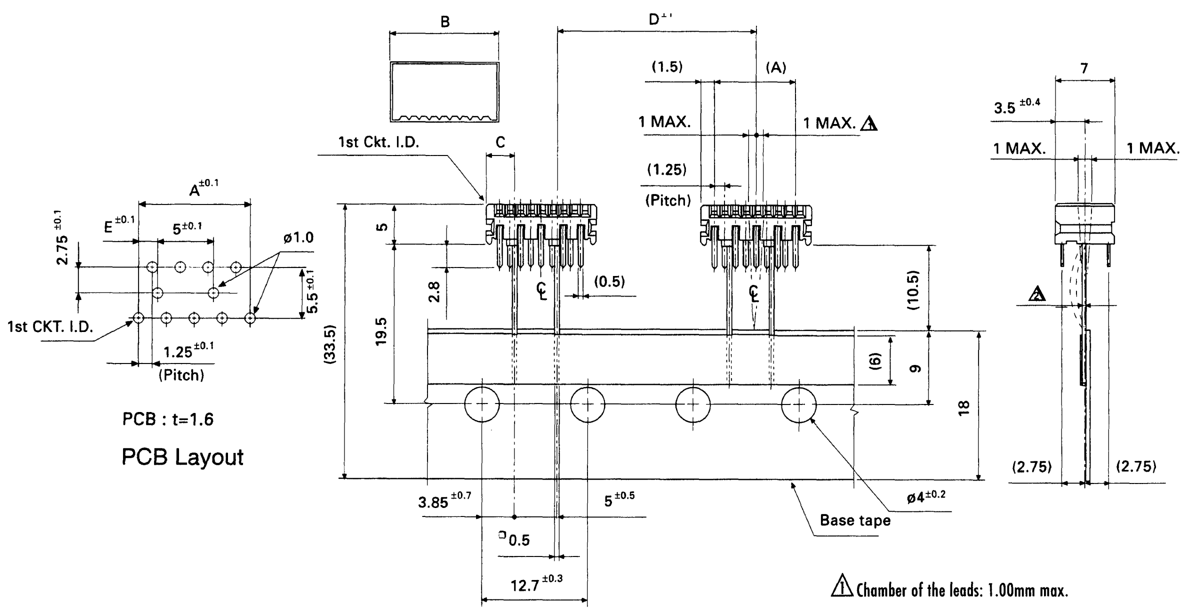
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C



Micro Connectors

I



⚠ Chamber of the leads: 1.00mm max.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				
		A	B	C	D	E
7	52565-0790	7.50 (.295)	10.50 (.413)	3.375 (.132)	12.70 (.499)	1.875 (.073)
8	52565-0890	8.75 (.344)	11.75 (.462)		25.40 (.999)	
9	52565-0990	10.00 (.393)	13.00 (.511)			
10	52565-1090	11.25 (.442)	14.25 (.561)			
11	52565-1190	12.50 (.492)	15.50 (.610)	5.875 (.231)		4.375 (.172)
12	52565-1290	13.75 (.541)	16.75 (.659)			
13	52565-1390	15.00 (.590)	18.00 (.708)			
14	52565-1490	16.25 (.639)	19.25 (.757)			

FEATURES AND SPECIFICATIONS

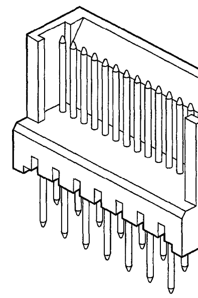
1.25mm (.049") Pitch Board-to-Board Header

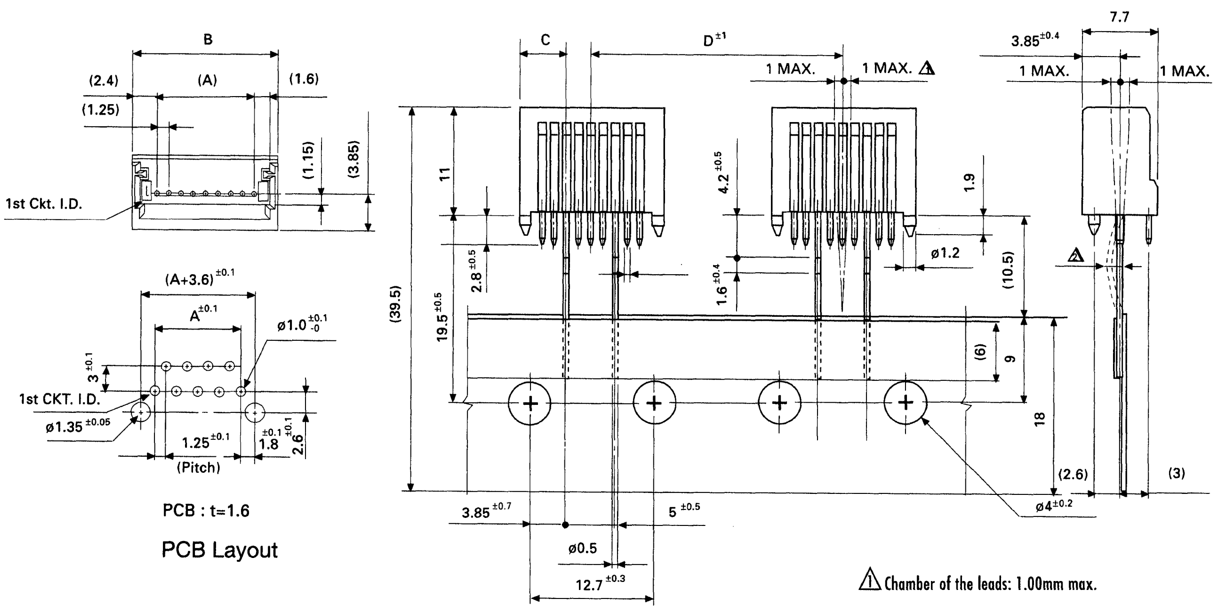
53339 Radial Taping

Reference Information
Packaging: Radial tape
Mates With: 52565
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





Chamber of the leads: 1.00mm max.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
7	53339-0790	7.50 (.295)	12.30 (.484)	2.40 (.094)	25.40 (1.000)
8	53339-0890	8.75 (.344)	13.55 (.533)	4.90 (.192)	
9	53339-0990	10.00 (.393)	14.80 (.582)		
10	53339-1090	11.25 (.442)	16.05 (.631)		
11	53339-1190	12.50 (.492)	17.30 (.681)		
12	53339-1290	13.75 (.541)	18.55 (.730)	7.40 (.291)	
13	53339-1390	15.00 (.590)	19.80 (.779)		
14	53339-1490	16.25 (.639)	21.05 (.828)		

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Board-to-Board Receptacle

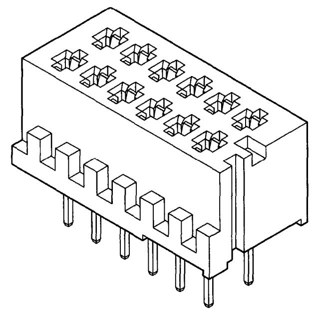
52022 Dual Row Straight

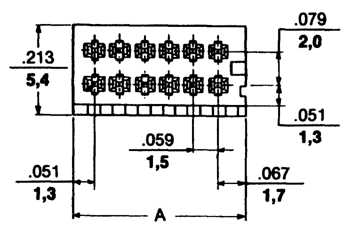
Features and Benefits
- Sizes 6 to 30 circuits
- High pressure tuning fork terminal

Reference Information
Packaging: Tray
Mates With: 53020
Designed In: Millimeters

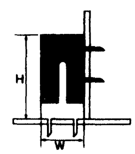
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

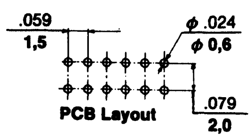
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

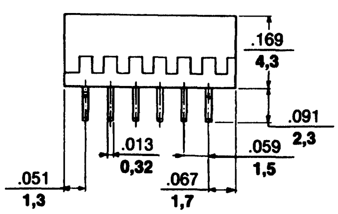


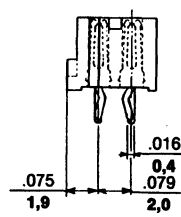


Mating With
52022-XX10 - 53020-XX10
H = 7.3mm W = 5.5mm









End tails kinked for 6 and 8 circuit versions only

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
6	52022-0610	6.00 (.236)
8	52022-0810	7.50 (.295)
10	52022-1010	9.00 (.354)
12	52022-1210	10.50 (.413)
14	52022-1410	12.00 (.472)
16	52022-1610	13.50 (.531)
18	52022-1810	15.00 (.591)
20	52022-2010	16.50 (.650)
22	52022-2210	18.00 (.709)
24	52022-2410	19.50 (.768)
26	52022-2610	21.00 (.827)
28	52022-2810	22.50 (.886)
30	52022-3010	24.00 (.945)

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Board-to-Board Header

53020

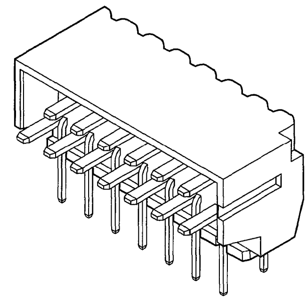
Dual Row Right Angle

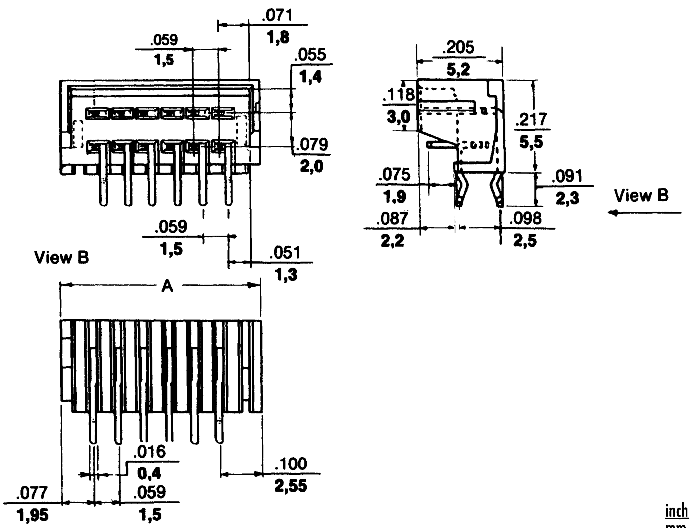
Features and Benefits
- Sizes 6 to 30 circuits

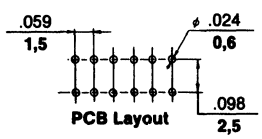
Reference Information
Packaging: Tray
Mates With: 52022
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C







inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
6	53020-0610	7.50 (.295)
8	53020-0810	9.00 (.354)
10	53020-1010	10.50 (.413)
12	53020-1210	12.00 (.472)
14	53020-1410	13.50 (.531)
16	53020-1610	15.00 (.591)
18	53020-1810	16.50 (.650)
20	53020-2010	18.00 (.709)
22	53020-2210	19.50 (.768)
24	53020-2410	21.00 (.827)
26	53020-2610	22.50 (.886)
28	53020-2810	24.00 (.945)
30	53020-3010	25.50 (1.004)

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Board-to-Board Receptacle

52024

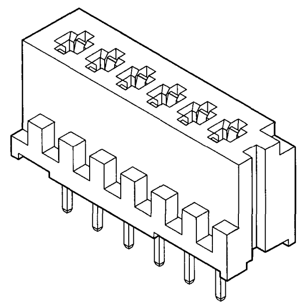
Single Row Straight

Features and Benefits
- Sizes 4 to 15 circuits

Reference Information
Packaging: Tray
Mates With: 53022
Designed In: Millimeters

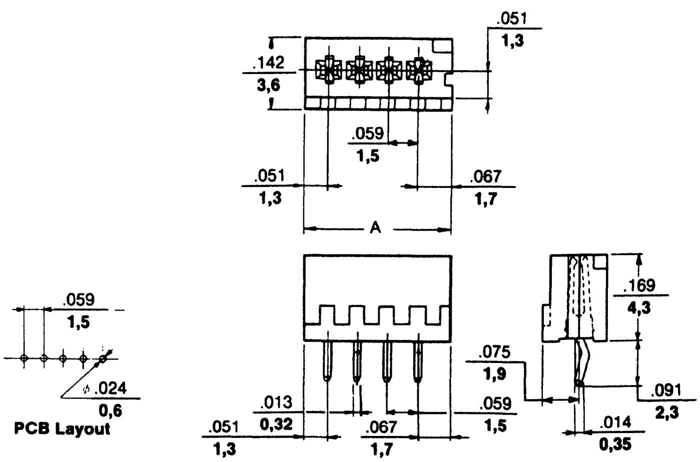
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

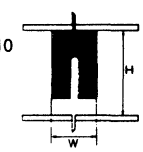


Micro Connectors

I



Mating With
52024-XX10 - 53022-XX10
H = 6mm W = 3.7mm



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
4	52024-0410	7.50 (.295)
5	52024-0510	9.00 (.354)
6	52024-0610	10.50 (.413)
7	52024-0710	12.00 (.472)
8	52024-0810	13.50 (.531)
9	52024-0910	15.00 (.591)
10	52024-1010	16.50 (.650)
11	52024-1110	18.00 (.709)
12	52024-1210	19.50 (.768)
13	52024-1310	21.00 (.827)
14	52024-1410	22.50 (.886)
15	52024-1510	24.00 (.945)

FEATURES AND SPECIFICATIONS

1.50mm (.059") Pitch Board-to-Board Header

53022

Single Row Straight

Features and Benefits

- Sizes 4 to 15 circuits

Reference Information

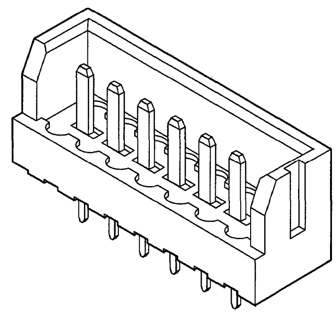
Packaging: Tray
Mates With: 52024
Designed In: Millimeters

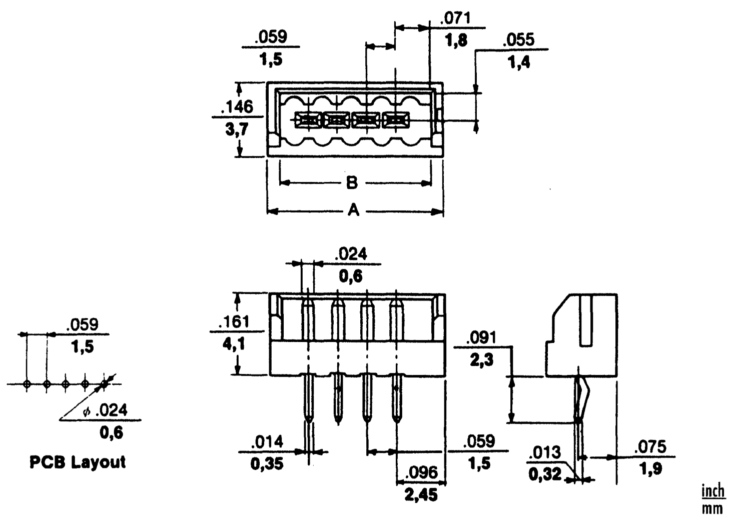
Electrical

Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
4	53022-0410	9.00 (.354)	7.70 (.303)
5	53022-0510	10.50 (.413)	9.20 (.362)
6	53022-0610	12.00 (.472)	10.70 (.421)
7	53022-0710	13.50 (.531)	12.20 (.480)
8	53022-0810	15.00 (.591)	13.70 (.539)
9	53022-0910	16.50 (.650)	15.20 (.598)
10	53022-1010	18.00 (.709)	16.70 (.657)
11	53022-1110	19.50 (.768)	18.20 (.717)
12	53022-1210	21.00 (.827)	19.70 (.776)
13	53022-1310	22.50 (.886)	21.20 (.835)
14	53022-1410	24.00 (.945)	22.70 (.894)
15	53022-1510	25.50 (1.004)	24.20 (.853)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Receptacle

52418

Single Row Right Angle

Features and Benefits

- Sizes 3 to 20 circuits

Reference Information

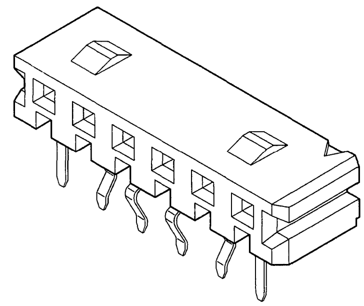
Packaging: Tray
Mates With: 53290
Designed In: Millimeters

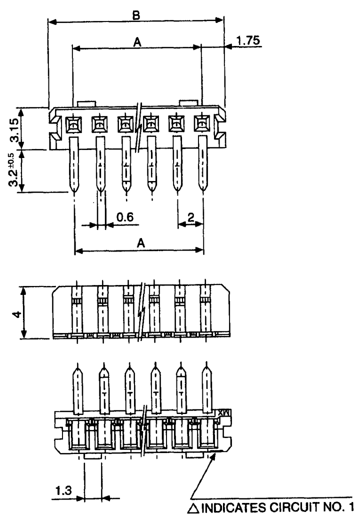
Electrical

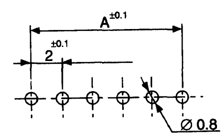
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C







PCB Layout

PCB thickness = 1.6mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	52418-0310	4.00 (.157)	7.50 (.295)
4	52418-0410	6.00 (.236)	9.50 (.374)
5	52418-0510	8.00 (.315)	11.50 (.453)
6	52418-0610	10.00 (.394)	13.50 (.531)
7	52418-0710	12.00 (.472)	15.50 (.610)
8	52418-0810	14.00 (.551)	17.50 (.689)
9	52418-0910	16.00 (.630)	19.50 (.768)
10	52418-1010	18.00 (.709)	21.50 (.846)
11	52418-1110	20.00 (.787)	23.50 (.925)
12	52418-1210	22.00 (.866)	25.50 (1.004)
13	52418-1310	24.00 (.945)	27.50 (1.083)
14	52418-1410	26.00 (1.024)	29.50 (1.161)
15	52418-1510	28.00 (1.102)	31.50 (1.240)
16	52418-1610	30.00 (1.181)	33.50 (1.319)
17	52418-1710	32.00 (1.260)	35.50 (1.398)
18	52418-1810	34.00 (1.339)	37.50 (1.476)
19	52418-1910	36.00 (1.417)	39.50 (1.555)
20	52418-2010	38.00 (1.496)	41.50 (1.634)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Header

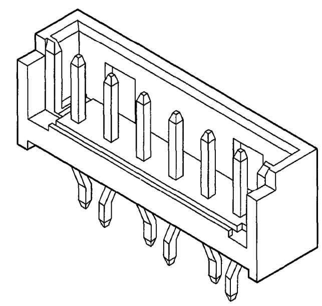
53290 Straight

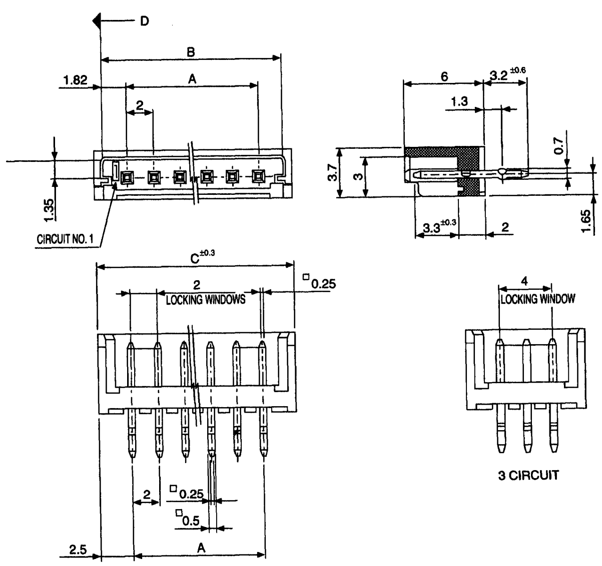
Features and Benefits
- Sizes 3 to 20 circuits

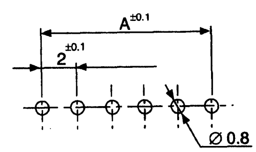
Reference Information
Packaging: Tray
Mates With: 52418
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C







PCB Layout

PCB thickness = 1.6mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
3	53290-0310	4.00 (.157)	7.64 (.300)	9.00 (.354)
4	53290-0410	6.00 (.236)	9.64 (.379)	11.00 (.433)
5	53290-0510	8.00 (.315)	11.64 (.458)	13.00 (.512)
6	53290-0610	10.00 (.394)	13.64 (.537)	15.00 (.591)
7	53290-0710	12.00 (.472)	15.64 (.615)	17.00 (.669)
8	53290-0810	14.00 (.551)	17.64 (.694)	19.00 (.748)
9	53290-0910	16.00 (.630)	19.64 (.773)	21.00 (.827)
10	53290-1010	18.00 (.709)	21.64 (.851)	23.00 (.906)
11	53290-1110	20.00 (.787)	23.64 (.930)	25.00 (.984)
12	53290-1210	22.00 (.866)	25.64 (1.009)	27.00 (1.063)
13	53290-1310	24.00 (.945)	27.64 (1.088)	29.00 (1.142)
14	53290-1410	26.00 (1.024)	29.64 (1.166)	31.00 (1.220)
15	53290-1510	28.00 (1.102)	31.64 (1.245)	33.00 (1.299)
16	53290-1610	30.00 (1.181)	33.64 (1.324)	35.00 (1.378)
17	53290-1710	32.00 (1.260)	35.64 (1.403)	37.00 (1.457)
18	53290-1810	34.00 (1.339)	37.64 (1.481)	39.00 (1.535)
19	53290-1910	36.00 (1.417)	39.64 (1.560)	41.00 (1.614)
20	53290-2010	38.00 (1.496)	41.64 (1.639)	43.00 (1.693)

FEATURES AND SPECIFICATIONS

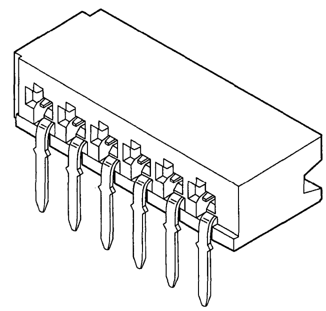
2.00mm (.079") Pitch Board-to-Board Receptacle

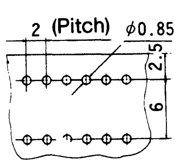
5513-NAPB Straight

Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 5512-NA and 53027
Designed In: Millimeters

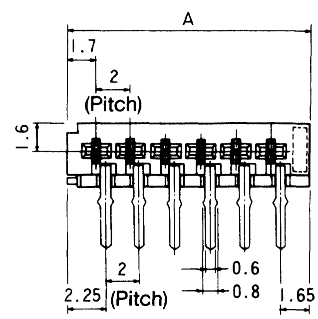
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

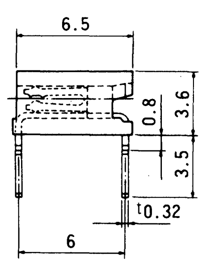
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB Layout





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
4	5513-04APB	9.90 (.389)
5	5513-05APB	11.90 (.468)
6	5513-06APB	13.90 (.547)
7	5513-07APB	15.90 (.625)
8	5513-08APB	17.90 (.704)
9	5513-09APB	19.90 (.783)
10	5513-10APB	21.90 (.862)
11	5513-11APB	23.90 (.940)
12	5513-12APB	25.90 (1.019)
13	5513-13APB	27.90 (1.098)
14	5513-14APB	29.90 (1.177)
15	5513-15APB	31.90 (1.255)
16	5513-16APB	33.90 (1.334)
17	5513-17APB	35.90 (1.413)
18	5513-18APB	37.90 (1.492)
19	5513-19APB	39.90 (1.570)
20	5513-20APB	41.90 (1.649)

FEATURES AND SPECIFICATIONS

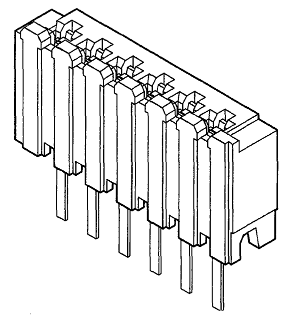
2.00mm (.079") Pitch Board-to-Board Receptacle

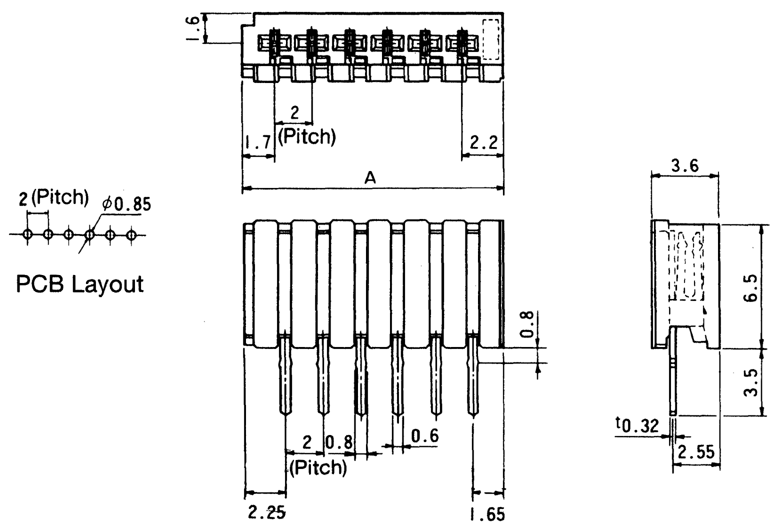
5513-NCPB Right Angle

Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 5512-NA
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
4	5513-04CPB	9.90 (.389)
5	5513-05CPB	11.90 (.468)
6	5513-06CPB	13.90 (.547)
7	5513-07CPB	15.90 (.625)
8	5513-08CPB	17.90 (.704)
9	5513-09CPB	19.90 (.783)
10	5513-10CPB	21.90 (.862)
11	5513-11CPB	23.90 (.940)
12	5513-12CPB	25.90 (1.019)
13	5513-13CPB	27.90 (1.098)
14	5513-14CPB	29.90 (1.177)
15	5513-15CPB	31.90 (1.255)
16	5513-16CPB	33.90 (1.334)
17	5513-17CPB	35.90 (1.413)
18	5513-18CPB	37.90 (1.492)
19	5513-19CPB	39.90 (1.570)
20	5513-20CPB	41.90 (1.649)

FEATURES AND SPECIFICATIONS

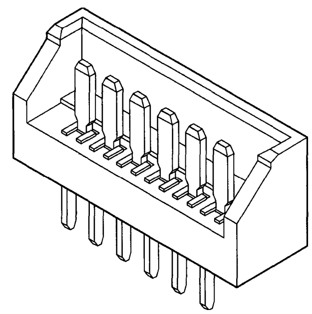
2.00mm (.079") Pitch Board-to-Board Header

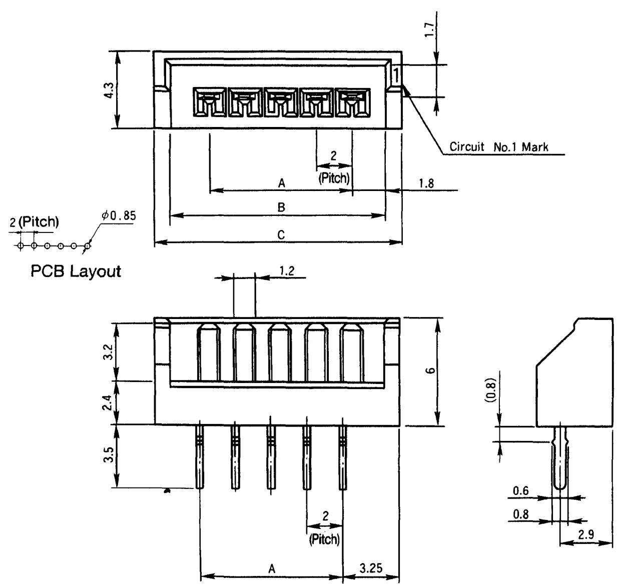
5512-NA

Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 5513-NAPB and 5513-NCPB
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
4	5512-04A	6.00 (.236)	10.10 (.397)	11.90 (.468)
5	5512-05A	8.00 (.314)	12.10 (.476)	13.90 (.547)
6	5512-06A	10.00 (.393)	14.10 (.555)	15.90 (.625)
7	5512-07A	12.00 (.472)	16.10 (.633)	17.90 (.704)
8	5512-08A	14.00 (.551)	18.10 (.712)	19.90 (.783)
9	5512-09A	16.00 (.629)	20.10 (.791)	21.90 (.862)
10	5512-10A	18.00 (.708)	22.10 (.870)	23.90 (.940)
11	5512-11A	20.00 (.787)	24.10 (.948)	25.90 (1.019)
12	5512-12A	22.00 (.866)	26.10 (1.027)	27.90 (1.098)
13	5512-13A	24.00 (.944)	28.10 (1.106)	29.90 (1.177)
14	5512-14A	26.00 (1.023)	30.10 (1.185)	31.90 (1.255)
15	5512-15A	28.00 (1.102)	32.10 (1.263)	33.90 (1.334)
16	5512-16A	30.00 (1.181)	34.10 (1.342)	35.90 (1.413)
17	5512-17A	32.00 (1.259)	36.10 (1.421)	37.90 (1.492)
18	5512-18A	34.00 (1.338)	38.10 (1.499)	39.90 (1.570)
19	5512-19A	36.00 (1.417)	40.10 (1.578)	41.90 (1.649)
20	5512-20A	38.00 (1.496)	42.10 (1.657)	43.90 (1.728)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Receptacle

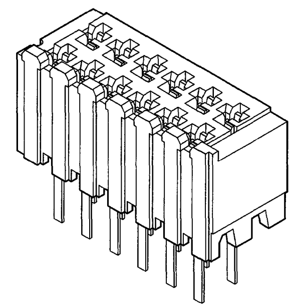
5533-NCPB Dual Row Straight

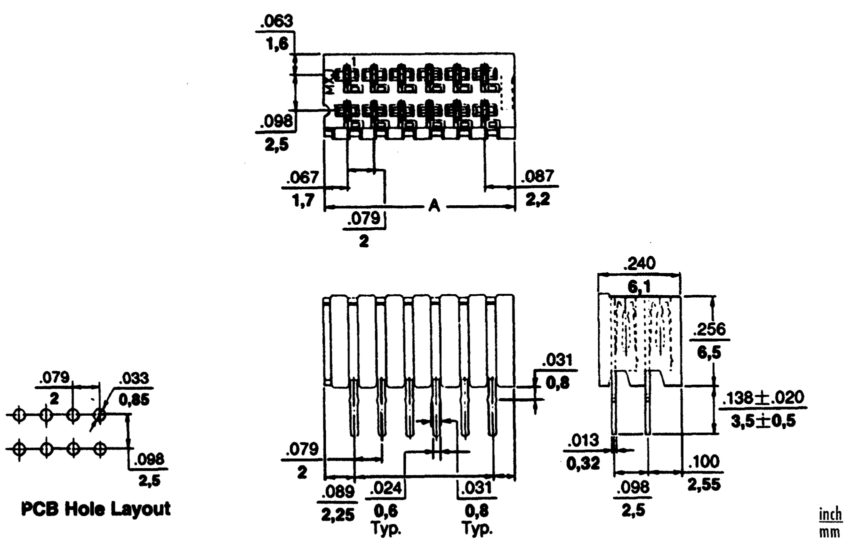
Features and Benefits
- Sizes 6 to 40 circuits

Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 5532-NA
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
6	39-51-3062	7.90 (.311)
8	39-51-3082	9.90 (.390)
10	39-51-3102	11.90 (.469)
12	39-51-3122	13.90 (.547)
14	39-51-3142	15.90 (.626)
16	39-51-3162	17.90 (.705)
18	39-51-3182	19.90 (.783)
20	39-51-3202	21.90 (.862)
22	39-51-3222	23.90 (.941)
24	39-51-3242	25.90 (1.020)
26	39-51-3262	27.90 (1.098)
28	39-51-3282	29.90 (1.177)
30	39-51-3302	31.90 (1.256)
32	39-51-3322	33.90 (1.335)
34	39-51-3342	35.90 (1.413)
36	39-51-3362	37.90 (1.492)
38	39-51-3382	39.90 (1.571)
40	39-51-3402	41.90 (1.650)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Receptacle

5533-NAPB

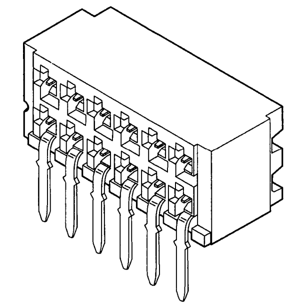
Dual Row Right Angle

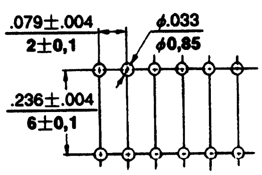
Features and Benefits
- Sizes 6 to 40 circuits

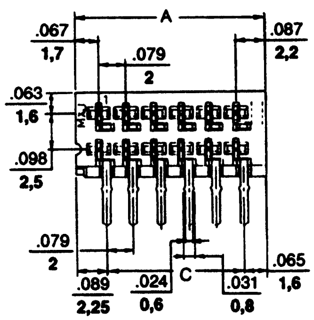
Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 5532-NA
Designed In: Millimeters

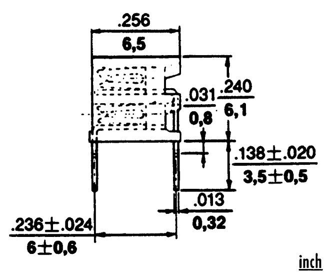
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C









inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
6	39-51-2069	7.90 (.311)
8	39-51-2089	9.90 (.390)
10	39-51-2109	11.90 (.469)
12	39-51-2129	13.90 (.547)
14	39-51-2149	15.90 (.626)
16	39-51-2169	17.90 (.705)
18	39-51-2189	19.90 (.783)
20	39-51-2209	21.90 (.862)
22	39-51-2229	23.90 (.941)
24	39-51-2249	25.90 (1.020)
26	39-51-2269	27.90 (1.098)
28	39-51-2289	29.90 (1.177)
30	39-51-2309	31.90 (1.256)
32	39-51-2329	33.90 (1.335)
34	39-51-2349	35.90 (1.413)
36	39-51-2369	37.90 (1.492)
38	39-51-2389	39.90 (1.571)
40	39-51-2409	41.90 (1.650)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Header

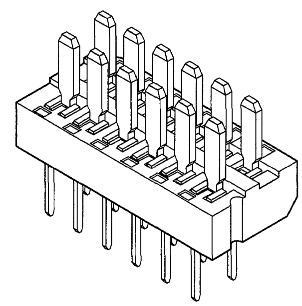
5532-NA Dual Row

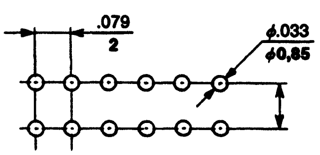
Features and Benefits
- Sizes 6 to 40 circuits

Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 5533-NAPB and 5533-NCPB
Designed In: Millimeters

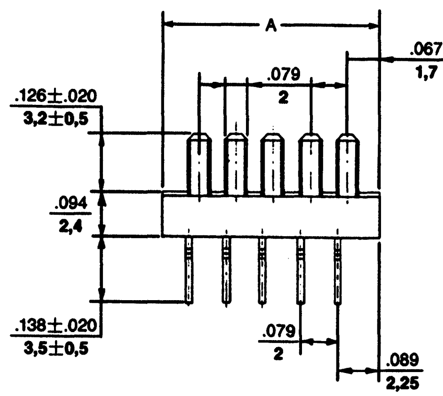
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

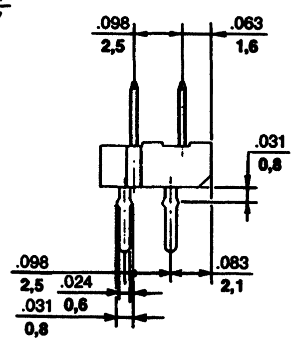
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





PCB Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
6	39-26-9067	7.90 (.311)
8	39-26-9087	9.90 (.390)
10	39-26-9107	11.90 (.469)
12	39-26-9127	13.90 (.547)
14	39-26-9147	15.90 (.626)
16	39-26-9167	17.90 (.705)
18	39-26-9187	19.90 (.783)
20	39-26-9207	21.90 (.862)
22	39-26-9227	23.90 (.941)
24	39-26-9247	25.90 (1.020)
26	39-26-9267	27.90 (1.098)
28	39-26-9287	29.90 (1.177)
30	39-26-9307	31.90 (1.256)
32	39-26-9327	33.90 (1.335)
34	39-26-9347	35.90 (1.413)
36	39-26-9367	37.90 (1.492)
38	39-26-9387	39.90 (1.571)
40	39-26-9407	41.90 (1.650)

FEATURES AND SPECIFICATIONS

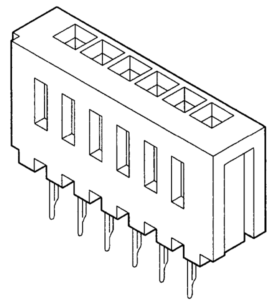
2.00mm (.079") Pitch Board-to-Board Connector

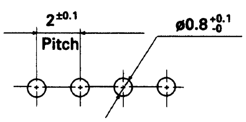
52075 Board Spacer

Reference Information
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 53064
Designed In: Millimeters

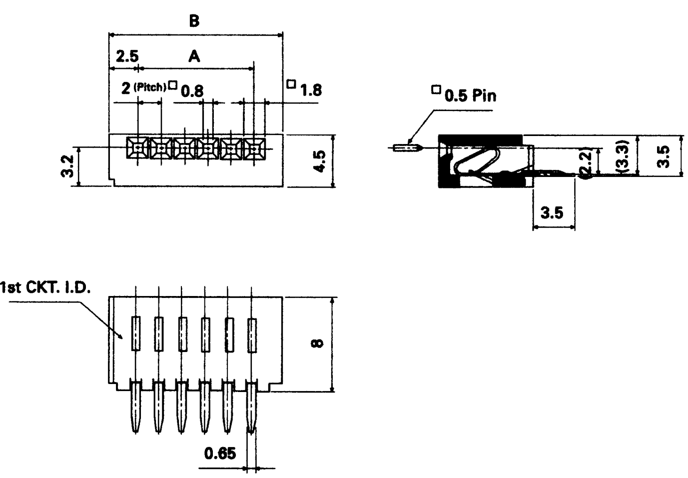
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB : t=1.6
PCB Layout



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
5	52075-0510	8.00 (.314)	13.00 (.511)
6	52075-0610	10.00 (.393)	15.00 (.590)
7	52075-0710	12.00 (.472)	17.00 (.669)
8	52075-0810	14.00 (.551)	19.00 (.748)
9	52075-0910	16.00 (.629)	21.00 (.826)
10	52075-1010	18.00 (.708)	23.00 (.905)
11	52075-1110	20.00 (.787)	25.00 (.984)
12	52075-1210	22.00 (.866)	27.00 (1.062)
13	52075-1310	24.00 (.944)	29.00 (1.141)
14	52075-1410	26.00 (1.023)	31.00 (1.220)
15	52075-1510	28.00 (1.102)	33.00 (1.299)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Connector

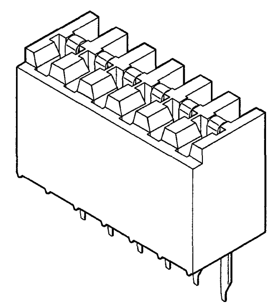
52084 Board Spacer

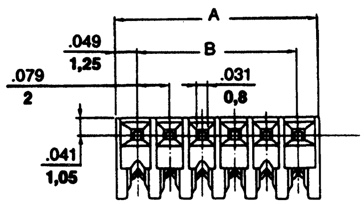
Features and Benefits
- Sizes 5 to 15 circuits

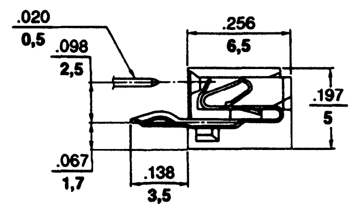
Reference Information
Packaging: Tray
Mates With: 53064 and 53095
Designed In: Millimeters

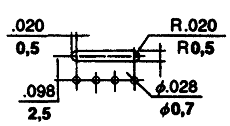
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

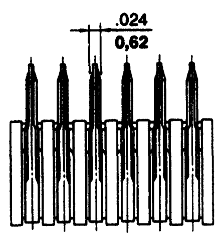








PCB Layout



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
5	52084-0510	10.50 (.413)	8.00 (.315)
6	52084-0610	12.50 (.492)	10.00 (.394)
7	52084-0710	14.50 (.571)	12.00 (.472)
8	52084-0810	16.50 (.650)	14.00 (.551)
9	52084-0910	18.50 (.728)	16.00 (.630)
10	52084-1010	20.50 (.807)	18.00 (.709)
11	52084-1110	22.50 (.886)	20.00 (.787)
12	52084-1210	24.50 (.965)	22.00 (.866)
13	52084-1310	26.50 (1.043)	24.00 (.949)
14	52084-1410	28.50 (1.122)	26.00 (1.024)
15	52084-1510	30.50 (1.201)	28.00 (1.102)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 5 to 10 circuits

Reference Information
Packaging: Bag
Mates With: 52075 and 52084
Designed In: Millimeters

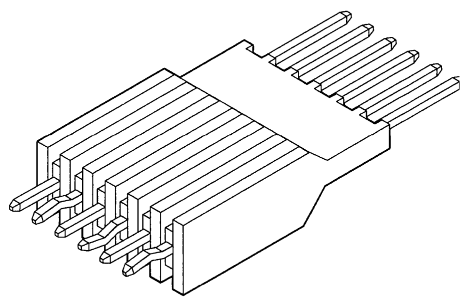
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

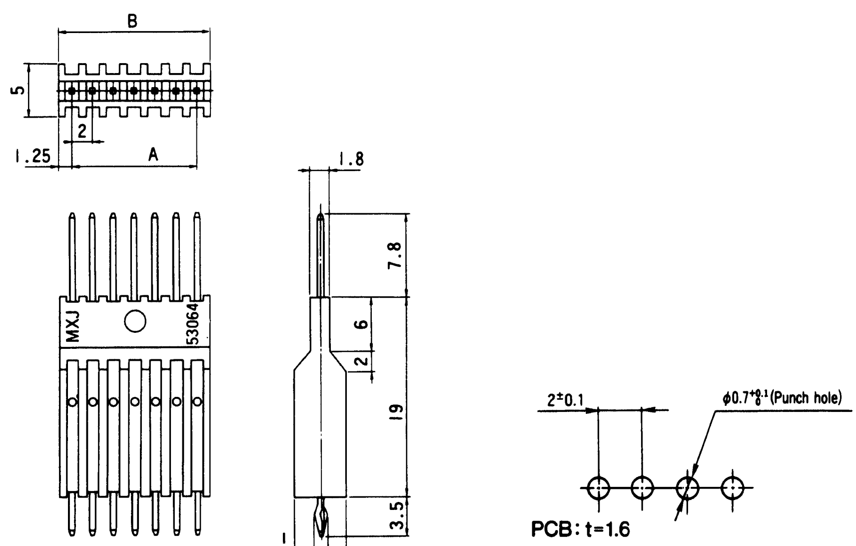
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C

2.00mm (.079") Pitch Board-to-Board Header

53064

Board Spacer Straight





PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
5	53064-0510	8.00 (.315)	10.50 (.413)
6	53064-0610	10.00 (.394)	12.50 (.492)
7	53064-0710	12.00 (.472)	14.50 (.571)
8	53064-0810	14.00 (.551)	16.50 (.650)
9	53064-0910	16.00 (.630)	18.50 (.728)
10	53064-1010	18.00 (.709)	20.50 (.807)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Header

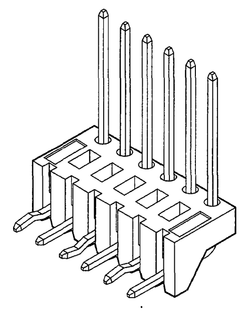
53095 Board Spacer Right Angle

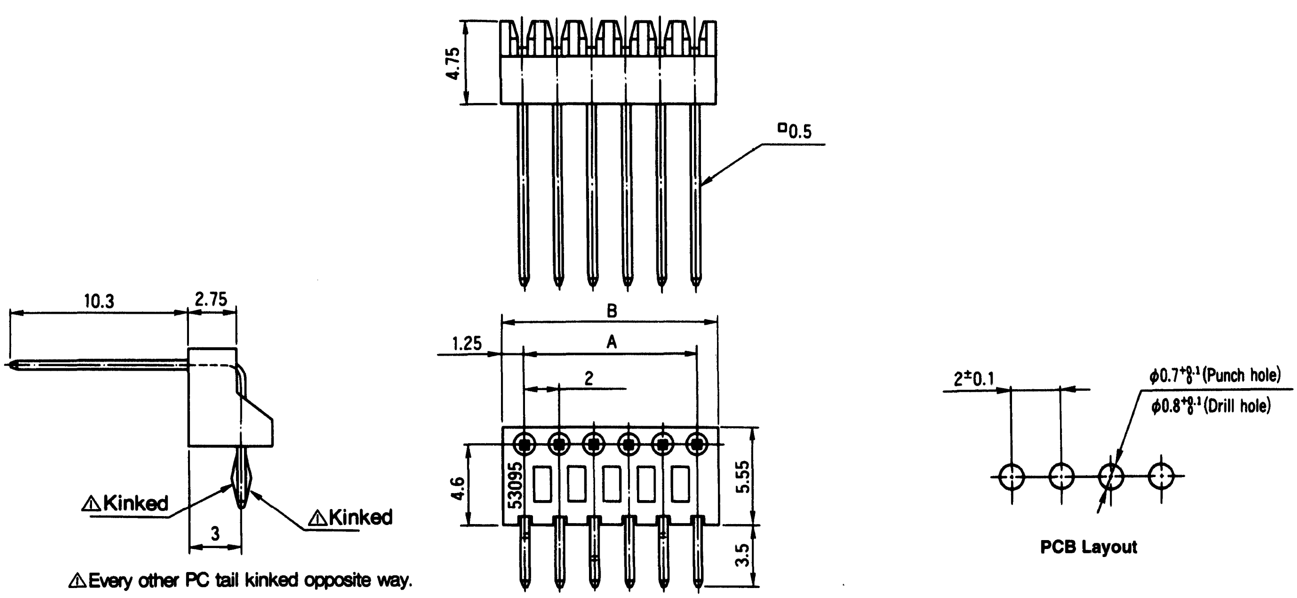
Features and Benefits
- Sizes 5 to 15 circuits

Reference Information
Packaging: Bag
Mates With: 52084
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
5	53095-0510	8.00 (.315)	10.50 (.413)
6	53095-0610	10.00 (.394)	12.50 (.492)
7	53095-0710	12.00 (.472)	14.50 (.571)
8	53095-0810	14.00 (.551)	16.50 (.650)
9	53095-0910	16.00 (.630)	18.50 (.728)
10	53095-1010	18.00 (.709)	20.50 (.807)
11	53095-1110	20.00 (.787)	22.50 (.986)
12	53095-1210	22.00 (.866)	24.50 (.965)
13	53095-1310	24.00 (.945)	26.50 (1.043)
14	53095-1410	26.00 (1.024)	28.50 (1.122)
15	53095-1510	28.00 (1.102)	30.50 (1.201)

FEATURES AND SPECIFICATIONS

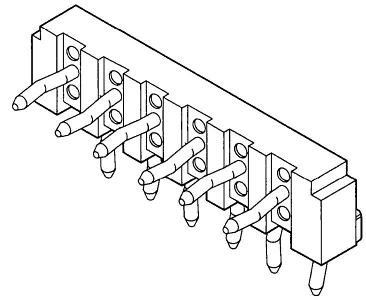
2.00mm (.079") Pitch Board-to-Board Header

5550-NA

Reference Information
Packaging: Bag
Designed In: Millimeters

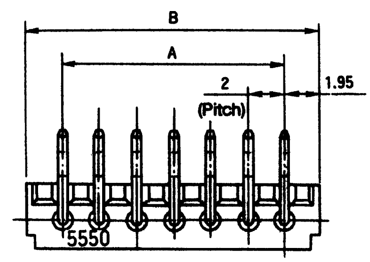
Electrical
Voltage: 125V
Current: 1.0A
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

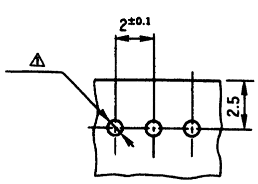
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +85°C



Micro Connectors

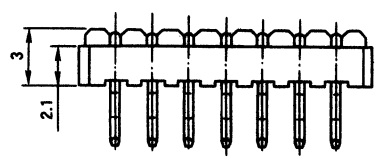
I

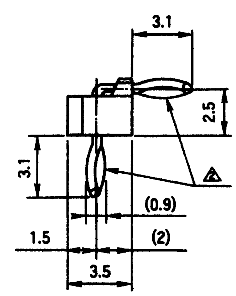




PCB Layout

PCBt = 1.6





1. 3-12 circuits: \0.8 6 0.05
13-20 circuits: \0.85 6 0.05

2. Every other pin is to be kinked in an opposite direction

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	5550-03A	4.00 (.157)	7.90 (.311)
4	5550-04A	6.00 (.236)	9.90 (.389)
5	5550-05A	8.00 (.314)	11.90 (.468)
6	5550-06A	10.00 (.393)	13.90 (.547)
7	5550-07A	12.00 (.472)	15.90 (.625)
8	5550-08A	14.00 (.551)	17.90 (.704)
9	5550-09A	16.00 (.629)	19.90 (.783)
10	5550-10A	18.00 (.708)	21.90 (.862)
11	5550-11A	20.00 (.787)	23.90 (.940)
12	5550-12A	22.00 (.866)	25.90 (1.019)
13	5550-13A	24.00 (.944)	27.90 (1.098)
14	5550-14A	26.00 (1.023)	29.90 (1.177)
15	5550-15A	28.00 (1.102)	31.90 (1.255)
16	5550-16A	30.00 (1.181)	33.90 (1.334)
17	5550-17A	32.00 (1.259)	35.90 (1.413)
18	5550-18A	34.00 (1.388)	37.90 (1.492)
19	5550-19A	36.00 (1.417)	39.90 (1.570)
20	5550-20A	38.00 (1.496)	41.90 (1.649)

FEATURES AND SPECIFICATIONS

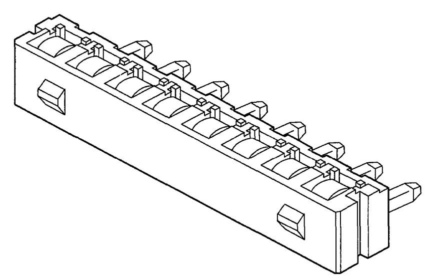
2.50mm (.098") Pitch Receptacle

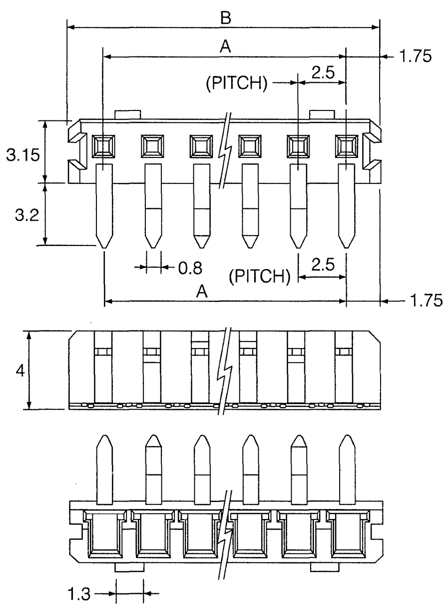
52419

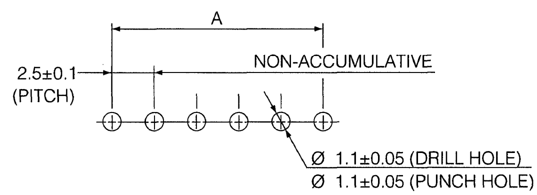
Reference Information
Packaging: Tray
Mates With: 53291
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C







RECOMMENDED P.C. BOARD

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	52419-0310	5.00 (.196)	8.50 (.334)
4	52419-0410	7.50 (.295)	11.00 (.433)
5	52419-0510	10.00 (.393)	13.50 (.531)
6	52419-0610	12.50 (.492)	16.00 (.629)
7	52419-0710	15.00 (.590)	18.50 (.728)
8	52419-0810	17.50 (.688)	21.00 (.826)
9	52419-0910	20.00 (.787)	23.50 (.925)
10	52419-1010	22.50 (.885)	26.00 (1.023)
11	52419-1110	25.00 (.984)	28.50 (1.122)
12	52419-1210	27.50 (1.082)	31.00 (1.220)
13	52419-1310	30.00 (1.181)	33.50 (1.318)
14	52419-1410	32.50 (1.279)	36.00 (1.417)
15	52419-1510	35.00 (1.377)	38.50 (1.515)

FEATURES AND SPECIFICATIONS

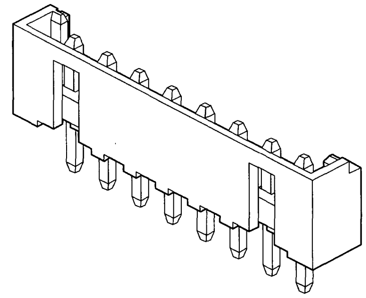
molex® **2.50mm (.098") Pitch Header**

53291

Reference Information
Packaging: Bag
Mates With: 52419
Designed In: Millimeters

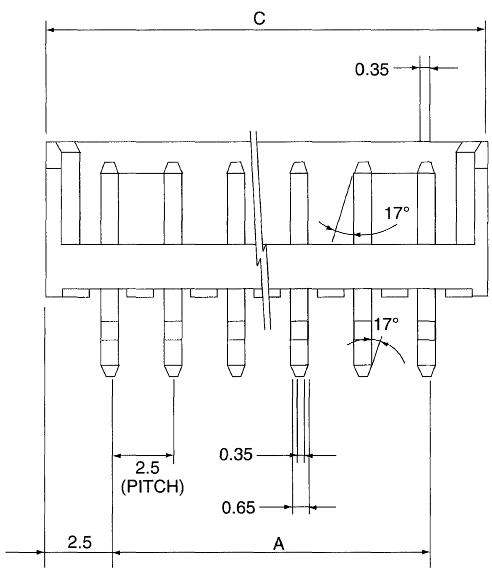
Electrical
Voltage: 250V
Current: 2.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

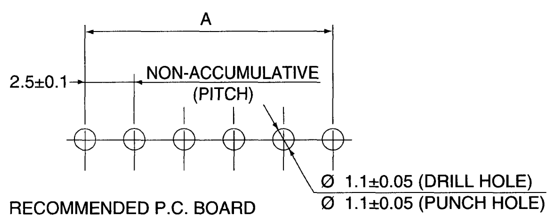
Physical
Housing: PBTP, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C

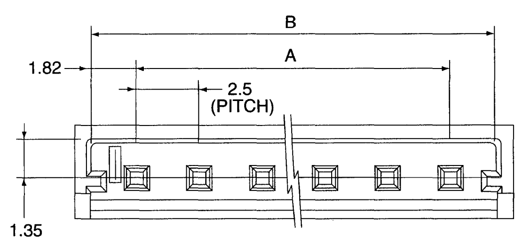


Micro Connectors

I







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
3	53291-0310	5.00 (.196)	8.64 (.340)	10.00 (.393)
4	53291-0410	7.50 (.295)	11.14 (.438)	12.50 (.492)
5	53291-0510	10.00 (.393)	13.64 (.537)	15.00 (.590)
6	53291-0610	12.50 (.492)	16.14 (.635)	17.50 (.688)
7	53291-0710	15.00 (.590)	18.64 (.733)	20.00 (.787)
8	53291-0810	17.50 (.688)	21.14 (.832)	22.50 (.865)
9	53291-0910	20.00 (.787)	23.64 (.930)	25.00 (.984)
10	53291-1010	22.50 (.865)	26.14 (1.029)	27.50 (1.082)
11	53291-1110	25.00 (.984)	28.64 (1.127)	30.00 (1.181)
12	53291-1210	27.50 (1.070)	31.14 (1.225)	32.50 (1.279)
13	53291-1310	30.00 (1.181)	33.64 (1.324)	35.00 (1.377)
14	53291-1410	32.50 (1.279)	36.14 (1.422)	37.50 (1.476)
15	53291-1510	35.00 (1.377)	38.64 (1.521)	40.00 (1.574)

1.25mm (.049") Pitch Board-to-Board Hinged Connectors Introduction

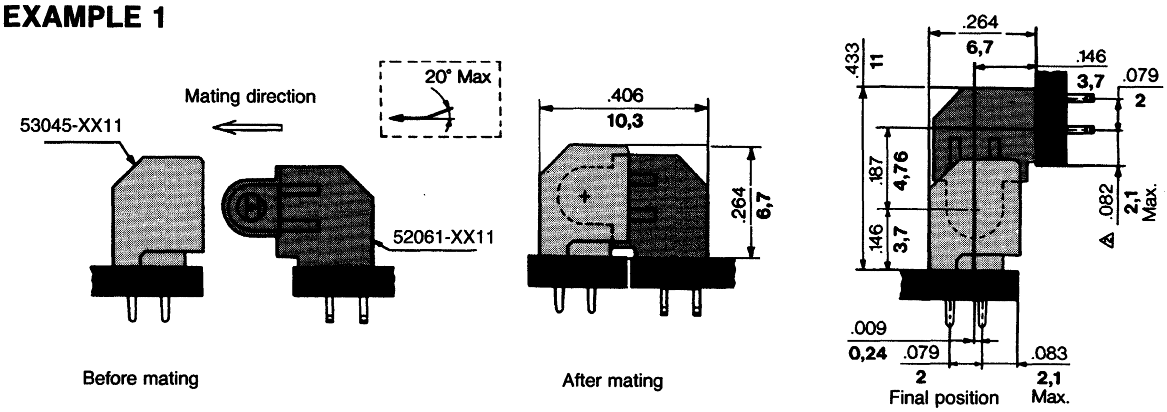
Molex offers a wide variety of very small board-to-board connectors.

Included in this section are 2 of our newest versions on 1.25mm pitch center spacing.

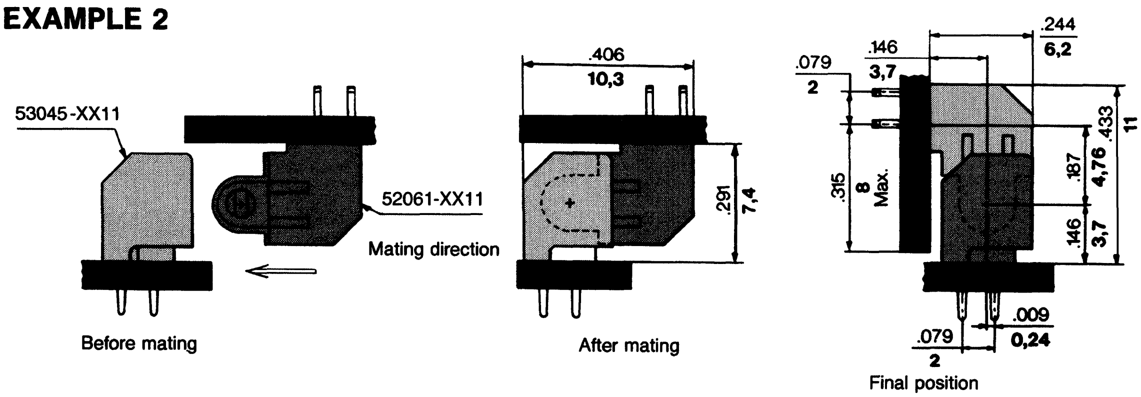
The compact Hinged Connector (shown right) allows for circuit checking and functional adjustments with the PCB positioned at a variety of angles.

Our newest 1.25mm series is available in straight, right angle, dual and single row versions. Connectors in this series offer tremendous space savings. For example, the mating dimensions of our single row right angle version are only 2.80mm (.110") high by 7.00mm (.276") wide.

EXAMPLE 1



EXAMPLE 2



FEATURES AND SPECIFICATIONS

molex

1.25mm (.049") Pitch Board-to-Board Receptacle

52061

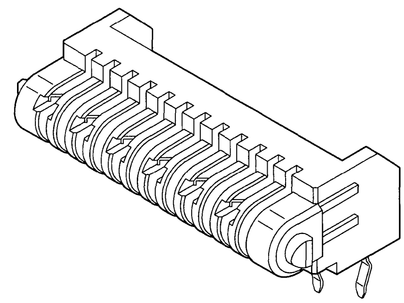
Hinged

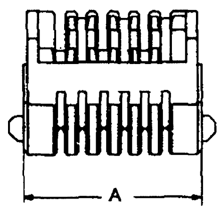
Features and Benefits
- Sizes 8 to 30 circuits

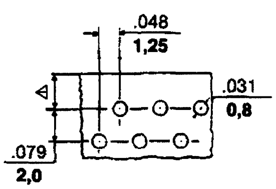
Reference Information
Packaging: Tray
Mates With: 53045
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

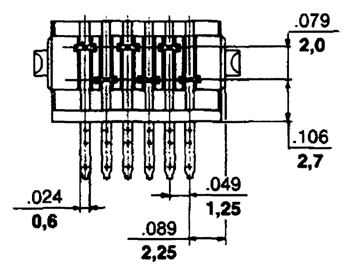
Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

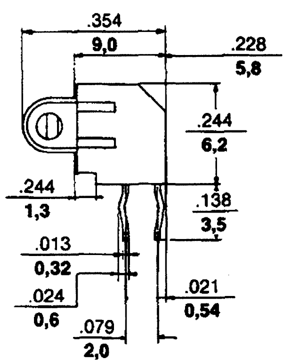






PCB Layout





⚠ See page I-74 for PCB edge reference

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
8	52061-0811	13.25 (.522)
10	52061-1011	15.75 (.620)
12	52061-1211	18.25 (.719)
14	52061-1411	20.75 (.817)
16	52061-1611	23.25 (.915)
18	52061-1811	25.75 (1.014)
20	52061-2011	28.25 (1.112)
22	52061-2211	30.75 (1.210)
24	52061-2411	33.25 (1.309)
26	52061-2611	35.75 (1.407)
28	52061-2811	38.25 (1.505)
30	52061-3011	40.75 (1.604)

FEATURES AND SPECIFICATIONS

molex

1.25mm (.049") Pitch Board-to-Board Header

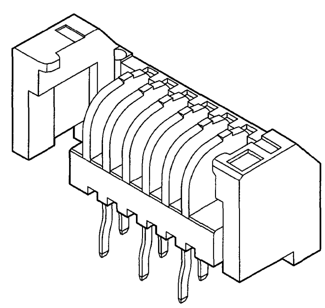
53045 Hinged

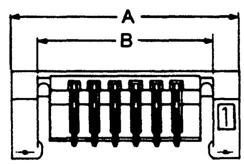
Features and Benefits
- Sizes 8 to 30 circuits

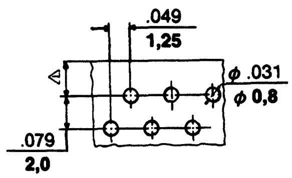
Reference Information
Packaging: Tray
Mates With: 52061
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

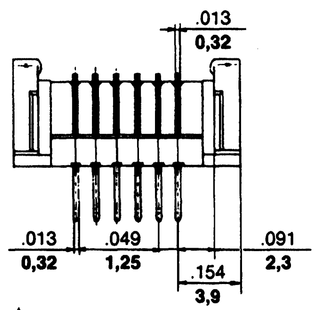
Physical
Housing: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

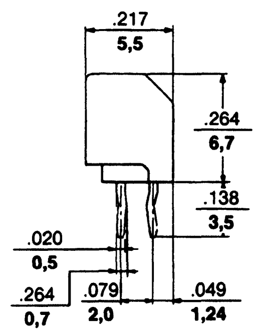






PCB Layout





⚠ See page I-74 for PCB edge reference

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
8	53045-0811	16.55 (.652)	13.35 (.526)
10	53045-1011	19.05 (.745)	15.85 (.624)
12	53045-1211	21.55 (.848)	18.35 (.722)
14	53045-1411	24.05 (.947)	20.85 (.821)
16	53045-1611	26.55 (1.045)	23.35 (.919)
18	53045-1811	29.05 (1.144)	25.85 (1.017)
20	53045-2011	31.55 (1.242)	28.35 (1.116)
22	53045-2211	34.05 (1.304)	30.85 (1.214)
24	53045-2411	36.55 (1.438)	33.35 (1.312)
26	53045-2611	39.05 (1.537)	35.85 (1.411)
28	53045-2811	41.55 (1.635)	38.35 (1.509)
30	53045-3011	44.05 (1.734)	40.85 (1.608)

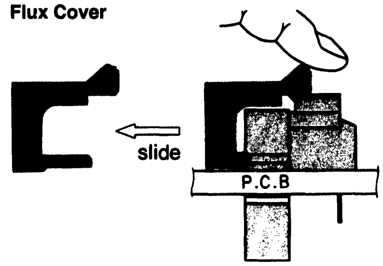
2.00mm (.079") Pitch Board-to-Board Floating Bottom Entry System Introduction

Molex's "floating" board-to-board system is designed to make PCB assembly easier, faster and more economical.

With traditional board-to-board systems it is often difficult to achieve proper alignment in situations using several connectors. Molex's floating system combines specially-tapered lead-ins and strong blade pins with up to 1.00mm (.039") of tolerance in 3 areas (X, Y and Z axis) to help guide connectors and headers together.

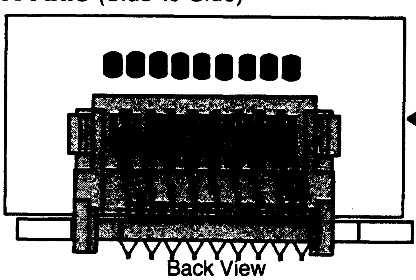
The system is ideally suited for robotic assembly, but also makes manual assembly easier.

Flux Cover



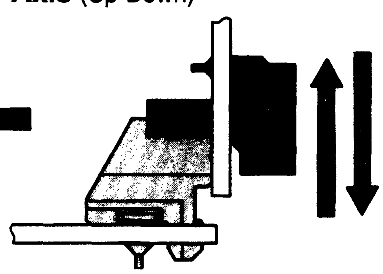
The bottom-entry housing is provided with a plastic cover to protect the contact area during soldering.

X-Axis (Side-to-Side)



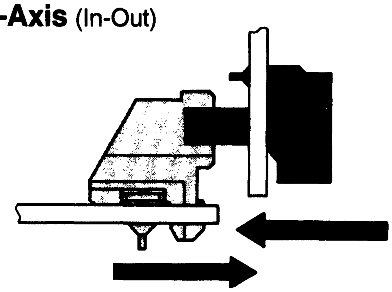
Plastic cut away from the back of the header enables the pins to move from side-to-side without affecting the solder joints. Mounting pegs in expanded slots enable the header itself to move back and forth as well.

Y-Axis (Up-Down)



Insertion is made easier by terminal slots that are longer than the blade-like pins. After assembly, the connector can be moved up and down 1.00mm (.039").

Z-Axis (In-Out)



The 0.60mm pins allow for secure contact with the connector either fully mated or up to 1.00mm (.039") apart.

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Housing

52170 Floating-Type

Features and Benefits

- Sizes 6 to 15 circuits

Reference Information

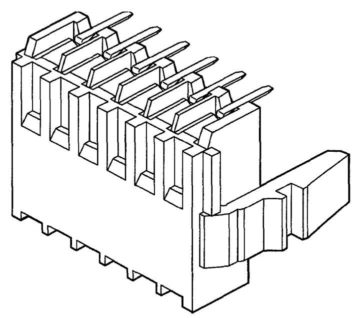
Packaging: Tray
Mates With: 53114
Designed In: Millimeters

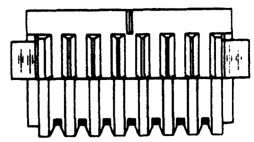
Electrical

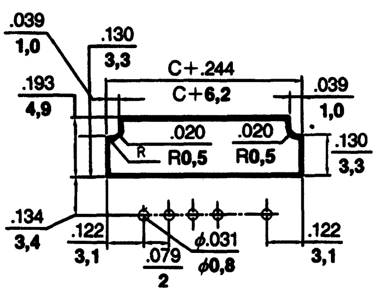
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

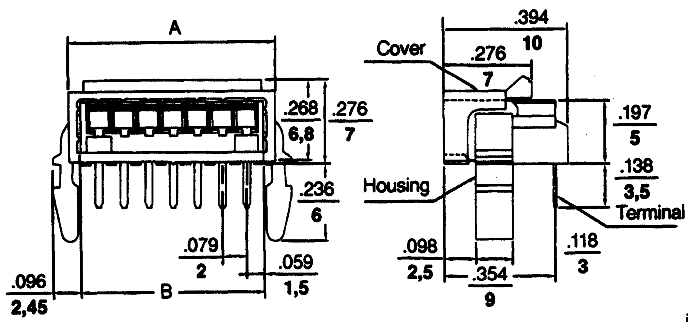
Housing: 6/6 nylon, UL 94V-0
Cover: 6/6 nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C







PCB Layout



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
6	52170-0610	14.90 (.587)	13.00 (.512)	10.00 (.394)
7	52170-0710	16.90 (.665)	15.00 (.590)	12.00 (.472)
8	52170-0810	18.90 (.744)	17.00 (.669)	14.00 (.551)
9	52170-0910	20.90 (.823)	19.00 (.748)	16.00 (.630)
10	52170-1010	22.90 (.902)	21.00 (.826)	18.00 (.709)
11	52170-1110	24.90 (.980)	23.00 (.905)	20.00 (.787)
12	52170-1210	26.90 (1.059)	25.00 (.984)	22.00 (.866)
13	52170-1310	28.90 (1.137)	27.00 (1.062)	24.00 (.944)
14	52170-1410	30.90 (1.216)	29.00 (1.141)	26.00 (1.023)
15	52170-1510	32.90 (1.295)	31.00 (1.220)	28.00 (1.102)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Header

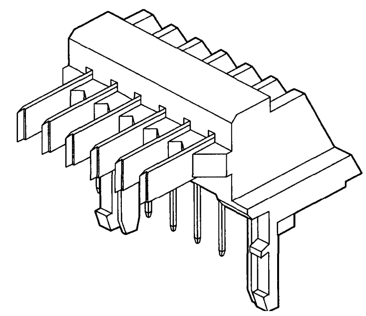
53114 Floating-Type

Features and Benefits
- Sizes 6 to 15 circuits

Reference Information
Packaging: Tray
Mates With: 52170
Designed In: Millimeters

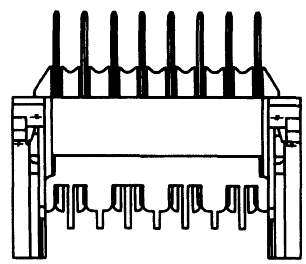
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

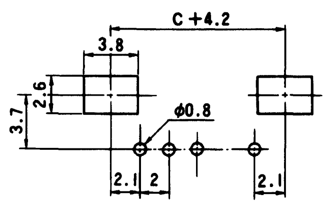
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C



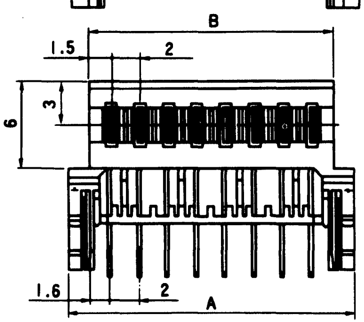
Micro Connectors

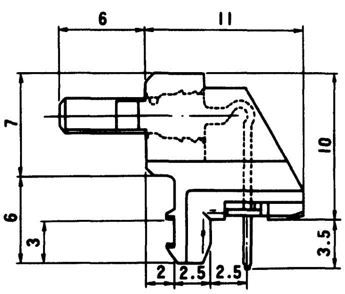
I





PCB Layout





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
6	53114-0610	16.00 (.629)	13.00 (.512)	10.00 (.394)
7	53114-0710	18.00 (.708)	15.00 (.591)	12.00 (.472)
8	53114-0810	20.00 (.787)	17.00 (.669)	14.00 (.551)
9	53114-0910	22.00 (.866)	19.00 (.748)	16.00 (.630)
10	53114-1010	24.00 (.944)	21.00 (.827)	18.00 (.709)
11	53114-1110	26.00 (1.023)	23.00 (.905)	20.00 (.787)
12	53114-1210	28.00 (1.102)	25.00 (.984)	22.00 (.866)
13	53114-1310	30.00 (1.181)	27.00 (1.062)	24.00 (.944)
14	53114-1410	32.00 (1.259)	29.00 (1.141)	26.00 (1.023)
15	53114-1510	34.00 (1.338)	31.00 (1.220)	28.00 (1.102)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Receptacle

52330

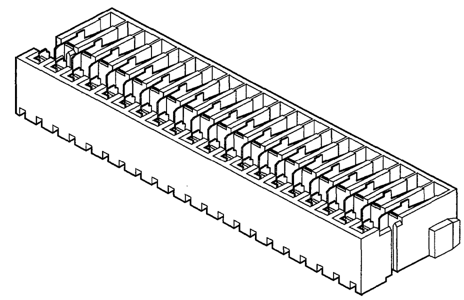
Floating-Type Right Angle

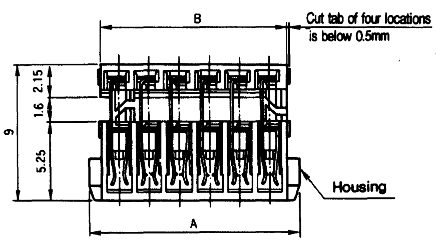
Features and Benefits
- Sizes 4 to 20 circuits

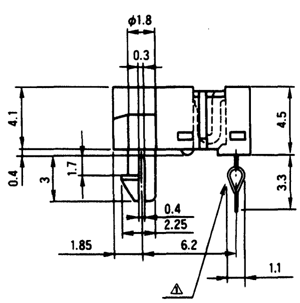
Reference Information
Packaging: Tray
Mates With: 53244
Designed In: Millimeters

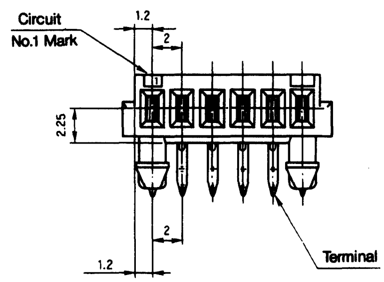
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

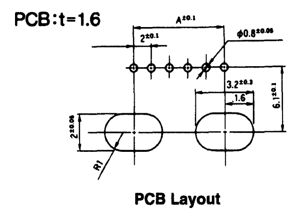
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C











Note: ⚠ All PC tails are kinked.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
4	52330-0417	10.00 (.394)	8.40 (.331)
5	52330-0517	12.00 (.472)	10.40 (.409)
6	52330-0617	14.00 (.551)	12.40 (.488)
7	52330-0717	16.00 (.629)	14.40 (.566)
8	52330-0817	18.00 (.709)	16.40 (.646)
9	52330-0917	20.00 (.787)	18.40 (.724)
10	52330-1017	22.00 (.866)	20.40 (.803)
11	52330-1117	24.00 (.944)	22.40 (.881)
12	52330-1217	26.00 (1.024)	24.40 (.961)
13	52330-1317	28.00 (1.102)	26.40 (1.039)
14	52330-1417	30.00 (1.181)	28.40 (1.118)
15	52330-1517	32.00 (1.259)	30.40 (1.196)
16	52330-1617	34.00 (1.339)	32.40 (1.276)
17	52330-1717	36.00 (1.417)	34.40 (1.354)
18	52330-1817	38.00 (1.496)	36.40 (1.433)
19	52330-1917	40.00 (1.574)	38.40 (1.511)
20	52330-2017	42.00 (1.654)	40.40 (1.591)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Board-to-Board Header

53244 Floating-Type Straight

Features and Benefits

- Sizes 4 to 20 circuits

Reference Information

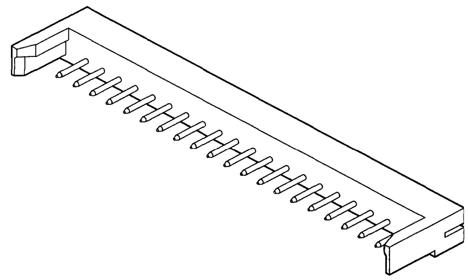
Packaging: Tray
Mates With: 52330
Designed In: Millimeters

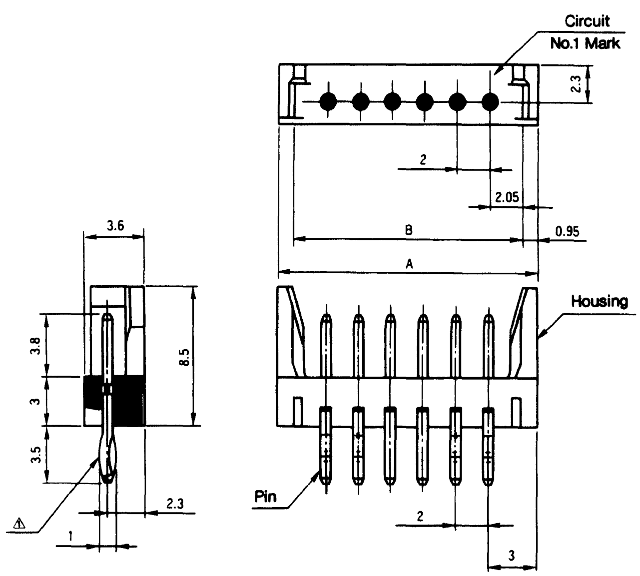
Electrical

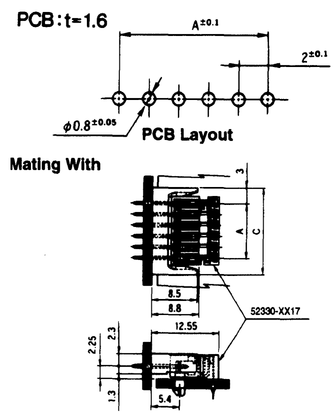
Voltage: 125V
Current: 1.0A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
4	53244-0417	12.00 (.472)	10.10 (.398)
5	53244-0517	14.00 (.551)	12.10 (.476)
6	53244-0617	16.00 (.630)	14.10 (.555)
7	53244-0717	18.00 (.708)	16.10 (.633)
8	53244-0817	20.00 (.787)	18.10 (.713)
9	53244-0917	22.00 (.866)	20.10 (.791)
10	53244-1017	24.00 (.945)	22.10 (.870)
11	53244-1117	26.00 (1.023)	24.10 (.948)
12	53244-1217	28.00 (1.102)	26.10 (1.028)
13	53244-1317	30.00 (1.181)	28.10 (1.106)
14	53244-1417	32.00 (1.260)	30.10 (1.185)
15	53244-1517	34.00 (1.338)	32.10 (1.263)
16	53244-1617	36.00 (1.417)	34.10 (1.343)
17	53244-1717	38.00 (1.496)	36.10 (1.421)
18	53244-1817	40.00 (1.575)	38.10 (1.500)
19	53244-1917	42.00 (1.653)	40.10 (1.578)
20	53244-2017	44.00 (1.732)	42.10 (1.657)

FEATURES AND SPECIFICATIONS

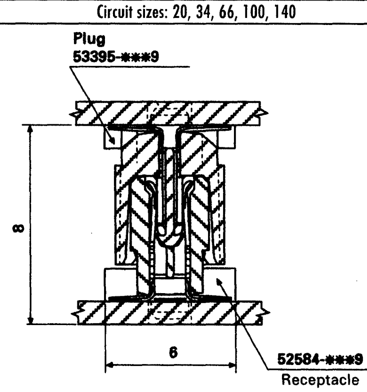
1.00mm (.039") Pitch Board-to-Board Stacking System

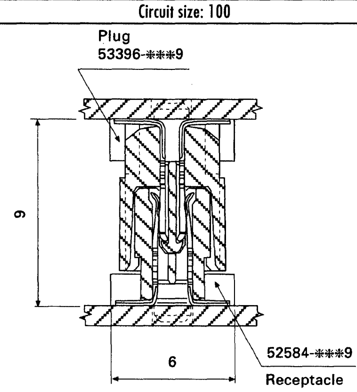
Features and Benefits

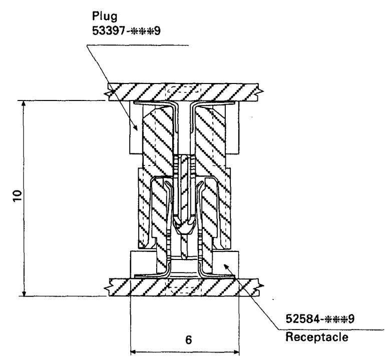
- High-quality engineered miniature SMT Board-to-Board System
- Special antiflux design for PCB assembly processes that do not use washing
- Leaf contact design prevents damage to contacts during mating and unmating
- Uses a low mating force terminal design while maintaining a highly reliable contact interface
- Stacking heights of 8, 9, 10, 12, 18 and 20mm
- High-temperature LCP housing for use with reflow soldering methods

ORDERING INFORMATION AND DIMENSIONS

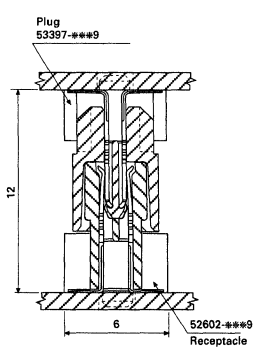
Mated Dimensions		
Mated Height=8mm	**Mated Height=9mm**	**Mated Height=10mm**
Plug—53395-XXX9	Plug—53396-XXX9	Plug—53397-XXX9
Receptacle—52584-XXX9	Receptacle—52584-XXX9	Receptacle—52584-XXX9
Circuit sizes: 20, 34, 66, 100, 140	Circuit size: 100	Circuit sizes: 80, 84, 100, 120, 140

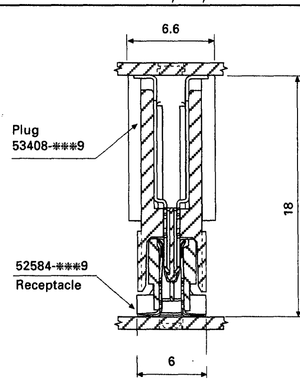


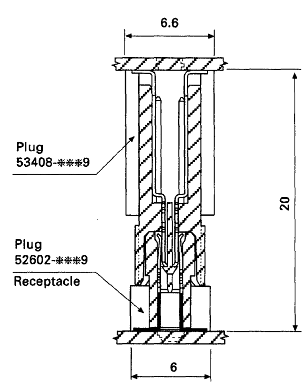




Mated Dimensions		
Mated Height=12mm	**Mated Height=18mm**	**Mated Height=20mm**
Plug—53397-XXX9	Plug—53408-XXX9	Plug—53408-XXX9
Receptacle—52602-XXX9	Receptacle—52584-XXX9	Receptacle—52602-XXX9
Circuit sizes: 50, 120, 140	Circuit sizes: 80, 100, 120	Circuit sizes: 24, 50, 60, 120







FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Receptacle

52584

Dual Row, SMT Stacking-Type, Straight

Features and Benefits
- Sizes 20 to 140 circuits
- Mated heights: 8, 9, 10 and 18mm
- Leaf-style design protects pins
- Antiflux design
- Low insertion force

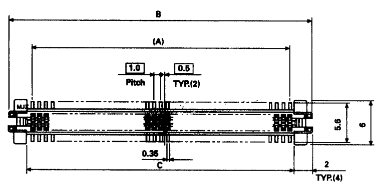
Reference Information
Packaging: Tube
Mates With: 53395, 53396, 53397 and 53408
Designed In: Millimeters

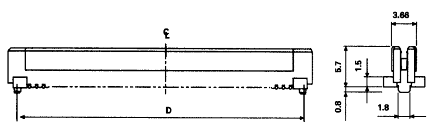
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: Height 8 to 12mm—40mΩ max.
Height 13 to 16mm—55mΩ max.
Height 17 to 20mm—70mΩ max.
Dielectric Withstanding Voltage: 200V AC
Insulation Resistance: 1000 MΩ min.

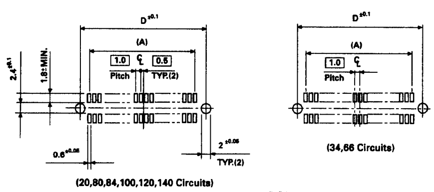
Physical
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold (0.25μm min.) over Tin/Lead over Nickel
Temperature: -55 to +85°C

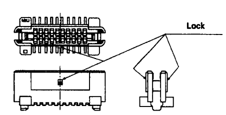
Micro Connectors

I









Lock to be added to 20 and 34 circuits

PCB Layout For Surface Mounting

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
20	52584-0200	9.00 (.354)	15.90 (.626)	10.20 (.402)	13.50 (.531)
34	52584-0340	16.00 (.630)	22.90 (.902)	17.20 (.677)	20.50 (.807)
66	52584-0660	32.00 (1.260)	38.90 (1.531)	33.20 (1.307)	36.50 (1.437)
80	52584-0800	39.00 (1.535)	45.90 (1.807)	40.20 (1.583)	43.50 (1.713)
84	52584-0840	41.00 (1.614)	47.90 (1.886)	42.20 (1.661)	45.50 (1.791)
100	52584-1000	49.00 (1.929)	55.90 (2.201)	50.20 (1.976)	53.50 (2.106)
120	52584-1200	59.00 (2.323)	65.90 (2.594)	60.20 (2.370)	63.50 (2.500)
140	52584-1400	69.00 (2.717)	75.90 (2.988)	70.20 (2.764)	73.50 (2.894)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Receptacle

52602

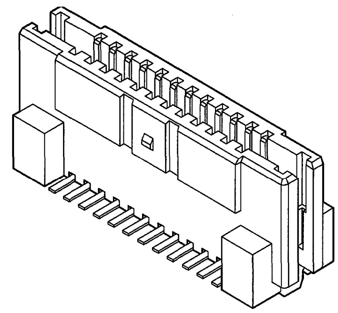
Dual Row, SMT Stacking-Type, Straight

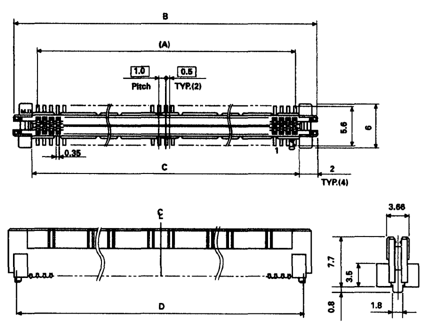
Features and Benefits
- Sizes 24 to 140 circuits
- Stacking heights: 12 and 20mm
- Leaf-style design protects pins
- Antiflux design
- Low insertion force

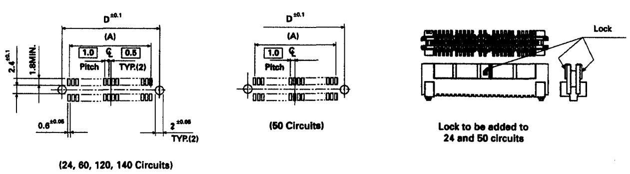
Reference Information
Packaging: Tube
Mates With: 53397 and 53408
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: Height 8 to 12mm—40mΩ max.
Height 13 to 16mm—55mΩ max.
Height 17 to 20mm—70mΩ max.
Dielectric Withstanding Voltage: 200V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold (0.25μm min.) over Tin/Lead over Nickel
Temperature: -55 to +85°C







PCB Layout For Surface Mounting

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
24	52602-0240	11.00 (.433)	17.90 (.705)	12.20 (.480)	15.50 (.610)
50	52602-0500	24.00 (.945)	30.90 (1.217)	25.20 (.992)	28.50 (1.122)
60	52602-0600	29.00 (1.142)	35.90 (1.413)	30.20 (1.189)	33.50 (1.319)
120	52602-1200	59.00 (2.323)	65.90 (2.594)	60.20 (2.370)	63.50 (2.500)
140	52602-1400	69.00 (2.717)	75.90 (2.988)	70.20 (2.764)	73.50 (2.894)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Header

53395

Dual Row, SMT Stacking-Type, Straight

Features and Benefits

- Sizes 20 to 140 circuits
- Mated height: 8mm
- Leaf-style design protects pins
- Antiflux design
- Low insertion force

Reference Information

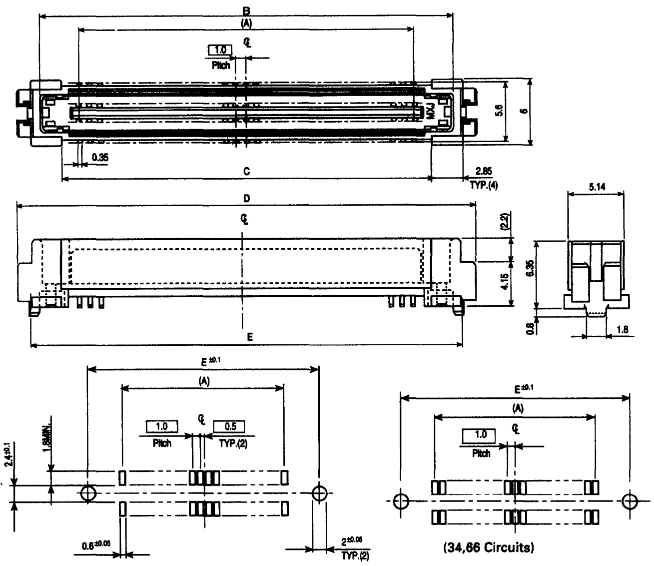
Packaging: Tube
Mates With: 52584
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: Height 8 to 12mm—40mΩ max.
Height 13 to 16mm—55mΩ max.
Height 17 to 20mm—70mΩ max.
Dielectric Withstanding Voltage: 200V AC
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold (0.25μm) over Tin/Lead over Nickel
Temperature: -55 to +85°C



(20,100,140 Circuits)

(34,66 Circuits)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				
		A	B	C	D	E
20	53395-0200	9.00 (.354)	16.02 (.631)	12.40 (.488)	20.80 (.819)	18.40 (.724)
34	53395-0340	16.00 (.630)	23.02 (.906)	19.40 (.764)	27.80 (1.094)	25.40 (1.000)
66	53395-0660	32.00 (1.260)	39.02 (1.536)	35.40 (1.394)	43.80 (1.724)	41.40 (1.630)
100	53395-1000	49.00 (1.929)	56.02 (2.206)	52.40 (2.063)	60.80 (2.394)	58.40 (2.299)
140	53395-1400	69.00 (2.717)	76.02 (2.993)	72.40 (2.850)	80.80 (3.181)	78.40 (3.087)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Header

53396

Dual Row, SMT Stacking-Type, Straight

Features and Benefits

- Size 100 circuits
- Mated height: 9mm
- Leaf-style design protects pins
- Antiflux design
- Low insertion force

Reference Information

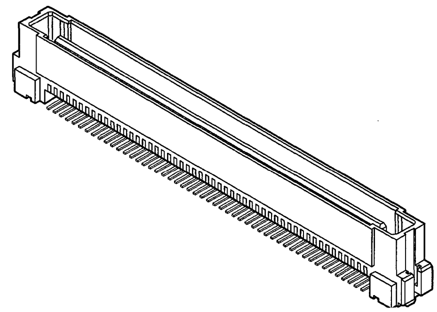
Packaging: Tube
Mates With: 52584
Designed In: Millimeters

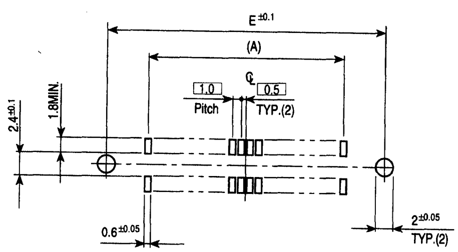
Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: Height 8 to 12mm—40mΩ max.
Height 13 to 16mm—55mΩ max.
Height 17 to 20mm—70mΩ max.
Dielectric Withstanding Voltage: 200V AC
Insulation Resistance: 1000 MΩ min.

Physical

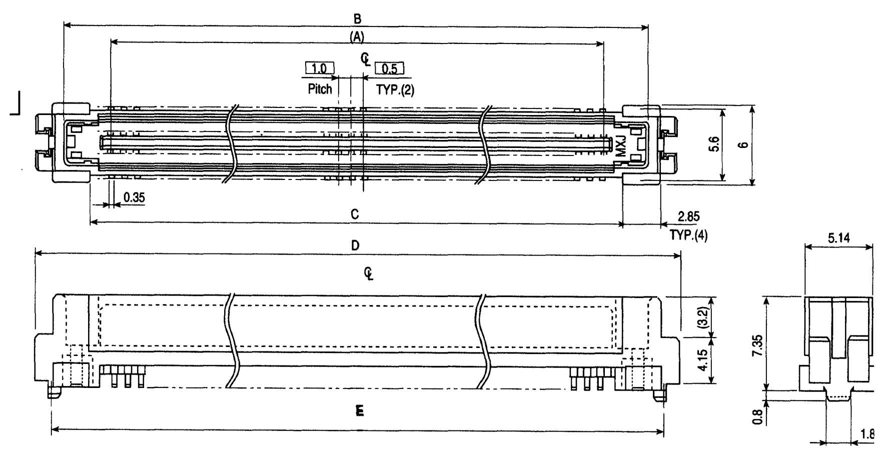
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold (0.25μm) over Tin/Lead over Nickel
Temperature: -55 to +85°C





(100 Circuit)

PCB Layout For
Surface Mounting



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				
		A	B	C	D	E
100	53396-1000	49.00 (1.929)	56.02 (2.206)	52.40 (2.063)	60.80 (2.394)	58.40 (2.299)

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Board-to-Board Header

53397

Dual Row, SMT Stacking-Type, Straight

Features and Benefits

- Sizes 50 to 140 circuits
- Mated heights: 10 and 12mm
- Leaf-style design protects pins
- Antiflux design
- Low insertion force

Reference Information

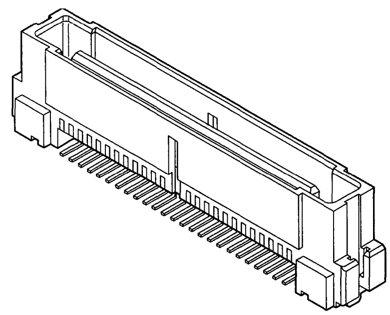
Packaging: Tube
Mates With: 52584
Designed In: Millimeters

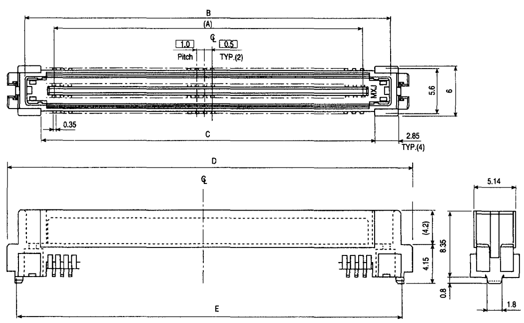
Electrical

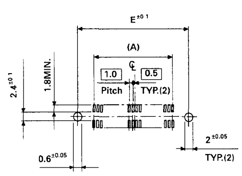
Voltage: 100V
Current: 0.5A
Contact Resistance: Height 8 to 12mm—40mΩ max.
Height 13 to 16mm—55mΩ max.
Height 17 to 20mm—70mΩ max.
Dielectric Withstanding Voltage: 200V AC
Insulation Resistance: 1000 MΩ min.

Physical

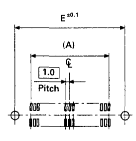
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold (0.25μm) over Tin/Lead over Nickel
Temperature: -55 to +85°C



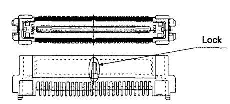




(80,84,100,120,140 Circuits)



(50 Circuits)



Lock to be added to 50 circuits only.

PCB Layout For Surface Mounting

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension				
		A	B	C	D	E
50	53397-0500	24.00 (.945)	31.02 (1.221)	27.40 (1.079)	35.80 (1.409)	33.40 (1.315)
80	53397-0800	39.00 (1.535)	46.02 (1.812)	42.40 (1.669)	50.80 (2.000)	48.40 (1.906)
84	53397-0840	41.00 (1.614)	48.02 (1.891)	44.40 (1.748)	52.80 (2.079)	50.40 (1.984)
100	53397-1000	49.00 (1.929)	56.02 (2.206)	52.40 (2.063)	60.80 (2.394)	58.40 (2.299)
120	53397-1200	59.00 (2.323)	66.02 (2.599)	62.40 (2.457)	70.80 (2.787)	68.40 (2.693)
140	53397-1400	69.00 (2.717)	76.02 (2.993)	72.40 (2.850)	80.80 (3.181)	78.40 (3.087)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 24 to 120 circuits
- Mated heights: 18 and 20mm
- Leaf-style design protects pins
- Antiflux design
- Low insertion force

Reference Information
Packaging: Tube
Mates With: 52584 and 52602
Designed In: Millimeters

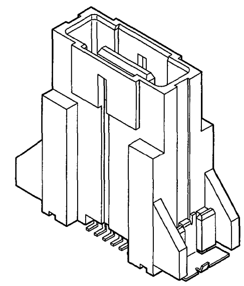
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: Height 8 to 12mm—40mΩ max.
Height 13 to 16mm—55mΩ max.
Height 17 to 20mm—70mΩ max.
Dielectric Withstanding Voltage: 200V AC
Insulation Resistance: 1000 MΩ min.

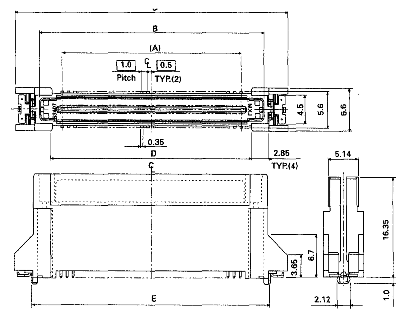
Physical
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold (0.25μm) over Tin/Lead over Nickel
Temperature: -55 to +85°C

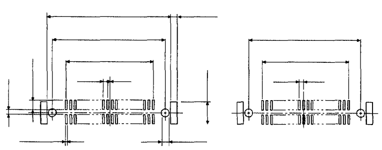
1.00mm (.039") Pitch Board-to-Board Header

53408

Dual Row, SMT Stacking-Type, Straight



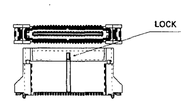




(24,60,80,100,120, Circuits)

(50 Circuits)

PCB Layout For
Surface Mounting



Lock to be added to 24 and 50 circuits.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension					
		A	B	C	D	E	F
24	53408-0240	11.00 (.433)	18.02 (.709)	26.20 (1.031)	14.40 (.567)	20.40 (.803)	22.90 (.902)
50	53408-0500	24.00 (.945)	31.02 (1.221)	39.20 (1.543)	27.40 (1.079)	33.40 (1.315)	35.90 (1.413)
60	53408-0600	29.00 (1.142)	36.02 (1.418)	44.20 (1.740)	32.40 (1.276)	38.40 (1.512)	40.90 (1.610)
80	53408-0800	39.00 (1.535)	46.02 (1.812)	54.20 (2.134)	42.40 (1.669)	48.40 (1.906)	50.90 (2.004)
100	53408-1000	49.00 (1.929)	56.02 (2.206)	64.20 (2.528)	52.40 (2.063)	58.40 (2.299)	60.90 (2.398)
120	53408-1200	59.00 (2.323)	66.02 (2.599)	74.20 (2.921)	62.40 (2.457)	68.40 (2.693)	70.90 (2.791)

1.27mm (.050") Pitch D-50L Introduction

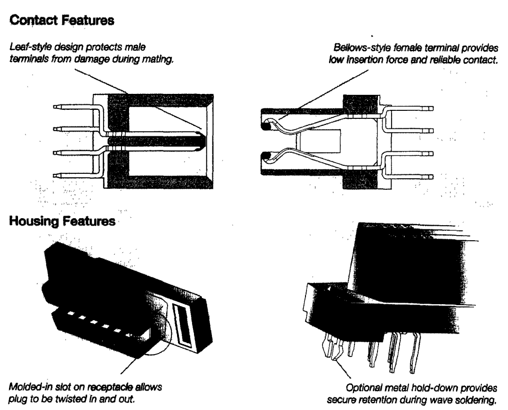
Molex's D-50L leaf-type connector system is the newest addition to our high-density board-to-board connectors. D-50L connectors are available in a variety of styles in 20 to 100 circuits.

The D-50L series includes a plug and receptacle in both straight and right-angle forms. This provides for a full range of board-to-board configurations.

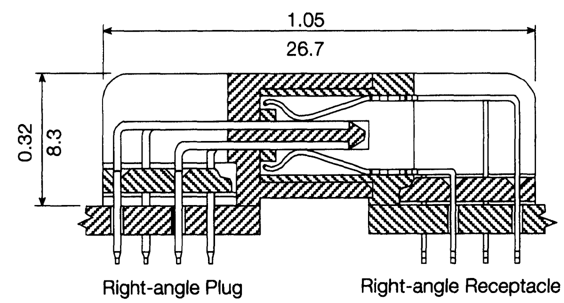
The Molex D-50L system utilizes a leaf-style contact design that offers low insertion force and high mating reliability.

The leaf-style plug design and bellows-style receptacle ensure contact forces are maintained in high pin-count applications. The leaf-style design also holds the male terminals firmly in place and protects them from being bent or misaligned during mating.

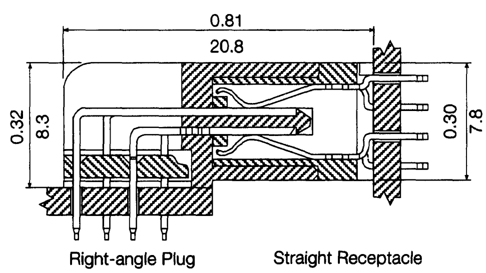
The housing design of the receptacle facilitates mating with molded slots that allow the plug to be twisted in and out. The D-style shroud on the plug assures visual orientation as well as physical polarization.



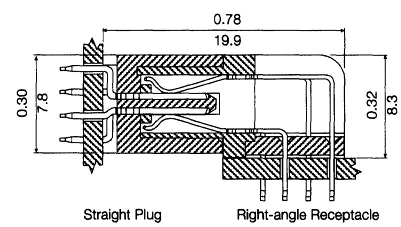
Mating Options



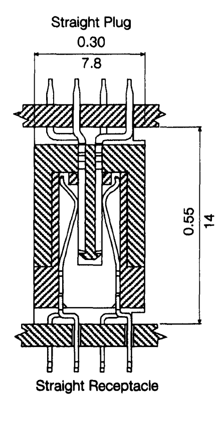
Horizontal



Right Angle



Right Angle



Stacking

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch D-50L Receptacle

52326/52368 Dual Row Straight

Features and Benefits

- Sizes 20 to 100 circuits
- Offered with and without nail
- Leaf-style contact
- DIP-type mounting

Reference Information

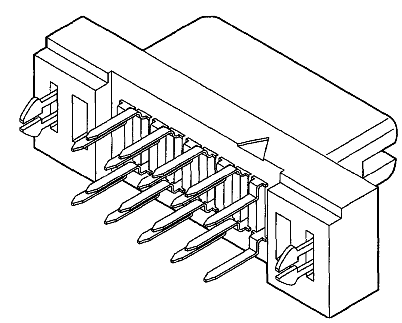
Packaging: Tray
Mates With: 52327, 52340, 52411 and 52412 (does not mate with EBBI 50-D)
Designed In: Millimeters

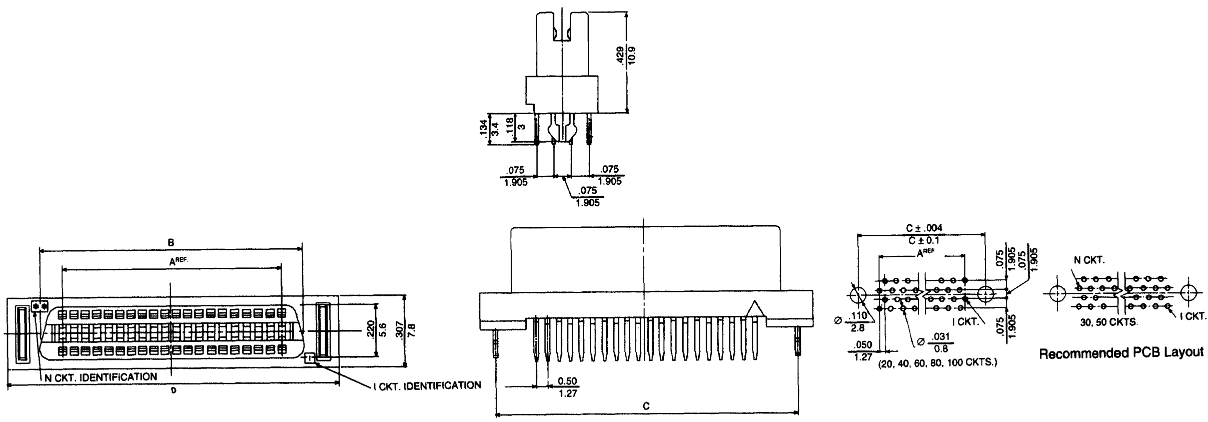
Electrical

Voltage: 125V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled polyester, UL 94V-0
Metal Peg: Phosphor Bronze
Contact: Phosphor Bronze
Plating: Selective Gold flash
Temperature: -55 to +85°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Metal Peg	Without Metal Peg	A	B	C	D
20	52326-0201	52368-0201	11.43 (.450)	16.40 (.646)	20.32 (.800)	23.75 (.935)
30	52326-0301	52368-0301	17.78 (.700)	22.75 (.896)	26.67 (1.050)	30.10 (1.185)
40	52326-0401	52368-0401	24.13 (.950)	29.10 (1.146)	33.02 (1.300)	36.45 (1.435)
50	52326-0501	52368-0501	30.48 (1.200)	35.45 (1.396)	39.37 (1.550)	42.80 (1.685)
60	52326-0601	52368-0601	36.83 (1.450)	41.80 (1.646)	45.72 (1.800)	49.15 (1.935)
80	52326-0801	52368-0801	49.53 (1.950)	54.50 (2.146)	58.42 (2.300)	61.85 (2.435)
100	52326-1001	52368-1001	62.23 (2.450)	67.20 (2.646)	71.12 (2.800)	74.55 (2.935)

FEATURES AND SPECIFICATIONS

molex® **1.27mm (.050") Pitch D-50L Receptacle**

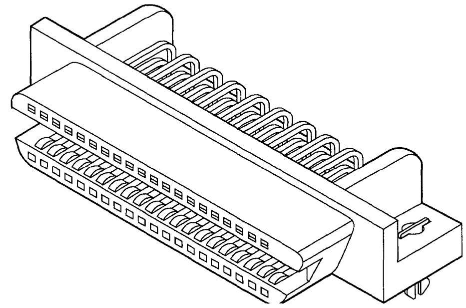
52409/52410 Dual Row Right Angle

Features and Benefits
- Sizes 20 to 100 circuits
- Offered with and without nail
- Leaf-style contact
- DIP-type mounting

Reference Information
Packaging: Tray
Mates With: 52327, 52340, 52411 and 52412
(does not mate with EBBI 50-D)
Designed In: Millimeters

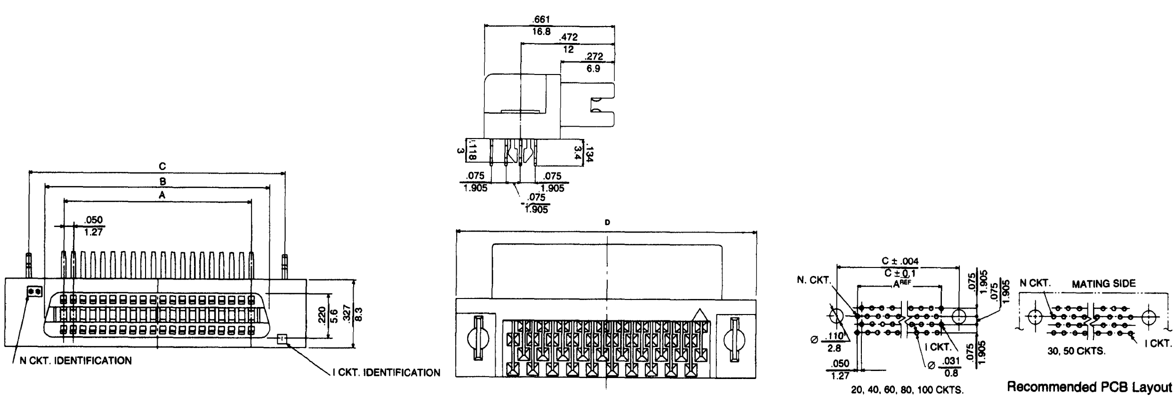
Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled polyester, UL 94V-0
Metal Peg: Phosphor Bronze
Contact: Phosphor Bronze
Plating: Selective Gold flash
Temperature: -55 to +85°C



Micro Connectors

I



inch
mm

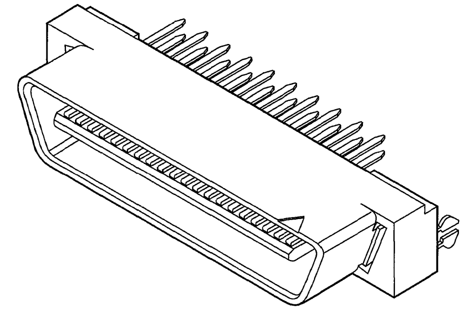
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Metal Peg	Without Metal Peg	A	B	C	D
20	52409-0201	52410-0201	11.43 (.450)	16.40 (.646)	20.32 (.800)	26.00 (1.024)
30	52409-0301	52410-0301	17.78 (.700)	22.75 (.896)	26.67 (1.050)	32.35 (1.274)
40	52409-0401	52410-0401	24.13 (.950)	29.10 (1.146)	33.02 (1.300)	38.70 (1.524)
50	52409-0501	52410-0501	30.48 (1.200)	35.45 (1.396)	39.37 (1.550)	45.05 (1.774)
60	52409-0601	52410-0601	36.83 (1.450)	41.80 (1.646)	45.72 (1.800)	51.40 (2.024)
80	52409-0801	52410-0801	49.53 (1.950)	54.50 (2.146)	58.42 (2.300)	64.10 (2.524)
100	52409-1001	52410-1001	62.23 (2.450)	67.20 (2.646)	71.12 (2.800)	76.80 (3.024)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch D-50L Header

52411/52340 Dual Row Straight



Features and Benefits
- Sizes 20 to 100 circuits
- Offered with and without nail
- Leaf-style contact
- DIP-type mounting

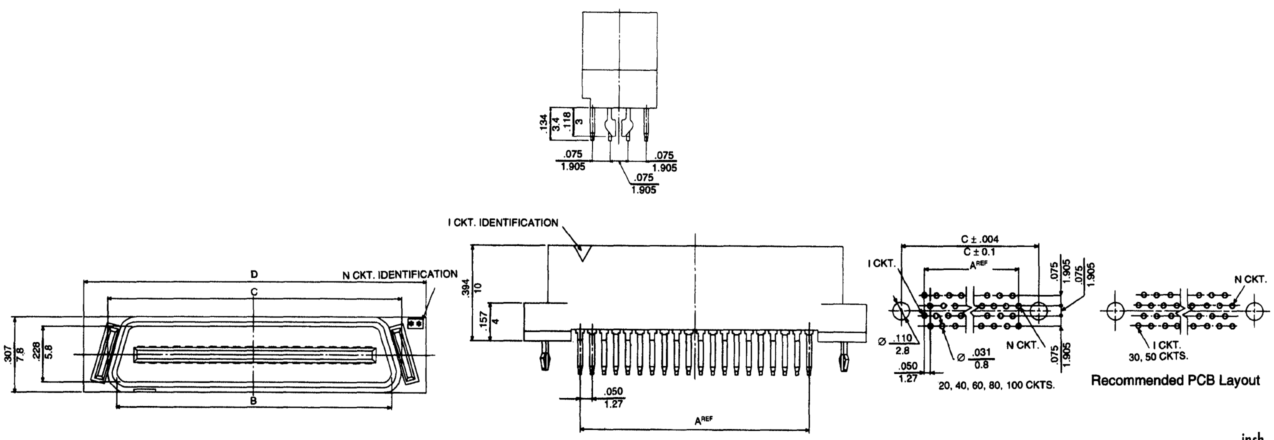
Reference Information
Packaging: Tray
Mates With: 52326, 52368, 52409 and 52410 (does not mate with EBBI 50-D)
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled polyester, UL 94V-0
Metal Peg: Phosphor Bronze
Contact: Brass
Plating: Selective Gold flash
Temperature: -55 to +85°C

Micro Connectors

I



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Metal Peg	Without Metal Peg	A	B	C	D
20	52411-0201	52340-0201	11.43 (.450)	16.56 (.652)	19.05 (.750)	23.75 (.935)
30	52411-0301	52340-0301	17.78 (.700)	22.91 (.902)	25.40 (1.000)	30.10 (1.185)
40	52411-0401	52340-0401	24.13 (.950)	29.26 (1.152)	31.75 (1.250)	36.45 (1.435)
50	52411-0501	52340-0501	30.48 (1.200)	35.61 (1.402)	38.10 (1.500)	42.80 (1.685)
60	52411-0601	52340-0601	36.83 (1.450)	41.96 (1.652)	44.45 (1.750)	49.15 (1.935)
80	52411-0801	52340-0801	49.53 (1.950)	54.66 (2.152)	57.15 (2.250)	61.85 (2.435)
100	52411-1001	52340-1001	62.23 (2.450)	67.36 (2.652)	69.85 (2.750)	74.55 (2.935)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch D-50L Header

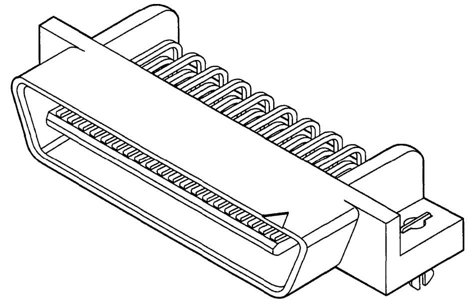
52327/52412 Dual Row Right Angle

Features and Benefits
- Sizes 20 to 100 circuits
- Offered with and without nail
- Leaf-style contact
- DIP-type mounting

Reference Information
Packaging: Tray
Mates With: 52326, 52368, 52409 and 52410 (does not mate with EBBI 50-D)
Designed In: Millimeters

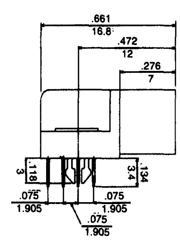
Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

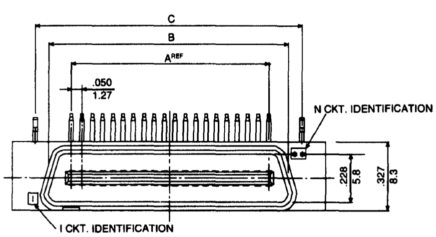
Physical
Housing: Glass-filled polyester, UL 94V-0
Metal Peg: Phosphor Bronze
Contact: Brass
Plating: Selective Gold flash
Temperature: -55 to +85°C

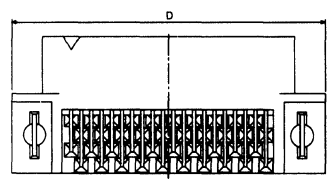


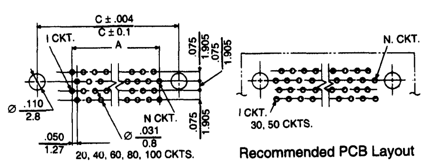
Micro Connectors

I









Recommended PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			
	Metal Peg	Without Metal Peg	A	B	C	D
20	52327-0201	52412-0201	11.43 (.450)	16.56 (.652)	20.32 (.800)	26.00 (1.024)
30	52327-0301	52412-0301	17.78 (.700)	22.91 (.902)	26.67 (1.050)	32.35 (1.274)
40	52327-0401	52412-0401	24.13 (.950)	29.26 (1.152)	33.02 (1.300)	38.70 (1.524)
50	52327-0501	52412-0501	30.48 (1.200)	35.61 (1.402)	39.37 (1.550)	45.05 (1.774)
60	52327-0601	52412-0601	36.83 (1.450)	41.96 (1.652)	45.72 (1.800)	51.40 (2.024)
80	52327-0801	52412-0801	49.53 (1.950)	54.66 (2.152)	58.42 (2.300)	64.10 (2.524)
100	52327-1001	52412-1001	62.23 (2.450)	67.36 (2.652)	71.12 (2.800)	76.80 (3.024)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch EBBI™ 50D Plug

71661 Vertical

Features and Benefits

- Polarized D-shaped leaf-contact connector for parallel board packaging
- SMT compatible, high temperature 94V-0 LCP
- Metal retention clips for mechanical hold down before and after processing
- Low profile — 12.50mm stack height
- Recommended for 1.60mm (.062") PCB
- Meets VESA standards for advanced video and graphics cards (68 and 80 circuits)

Reference Information

Product Specification: PS-71660
Packaging: Tray
UL File No.: 92NK28881 and 92NK28882
CSA File No.: LR19980-239A
Mates With: 71660
Designed In: Inches

Electrical

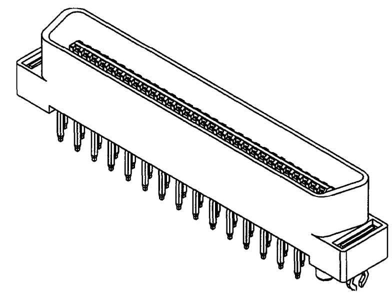
Voltage: 30V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

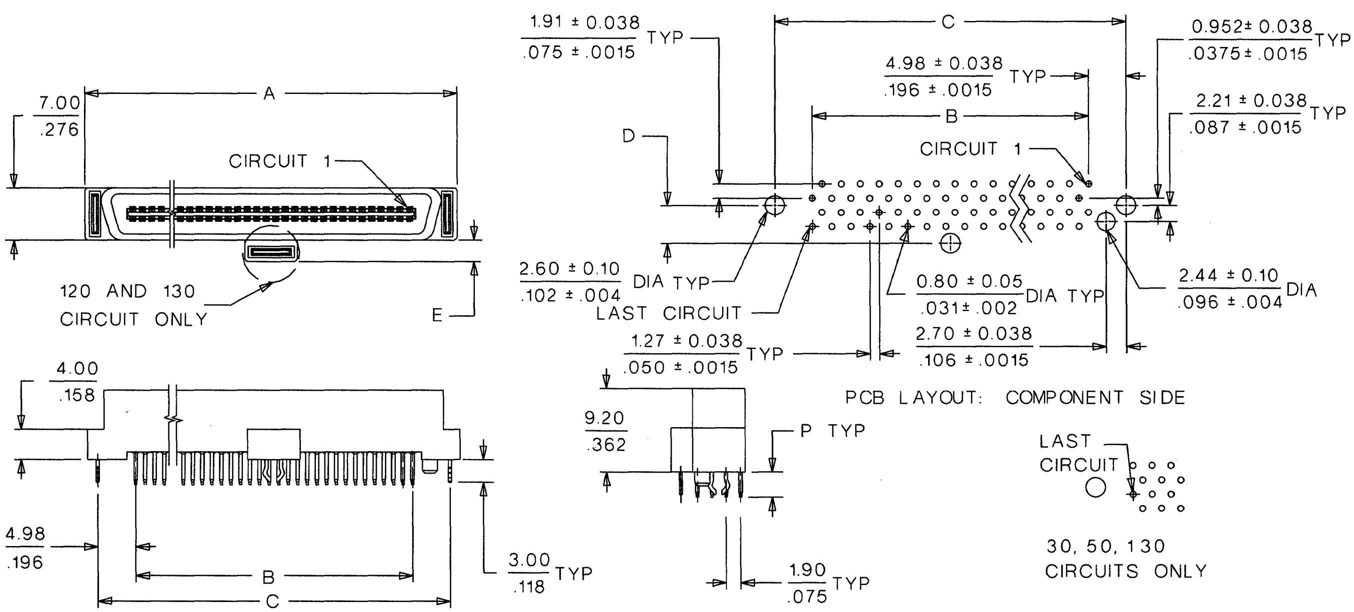
Mechanical

Contact Retention to Housing: 500g min.
Mating Force: 90g max. per contact
Unmating Force: 15g min. per contact
Normal Force: 90g
Durability: 500 cycles min.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Retention Clip: Phosphor Bronze
Contact: Phosphor Bronze
Plating: 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" Nickel on tails
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Dimension P = 3.40mm (.134") Tail Length	Dimension P = 2.79mm (.110") Tail Length	A	B	C	D	E
30	15-92-2030	15-92-2430	30.45 (1.199)	17.78 (.700)	27.75 (1.092)		
40	15-92-2040	15-92-2440	36.80 (1.449)	24.13 (.950)	34.10 (1.342)		
50	15-92-2050	15-92-2450	43.15 (1.699)	30.48 (1.200)	40.45 (1.592)		
60	15-92-2060	15-92-2460	49.50 (1.949)	36.83 (1.450)	46.80 (1.842)		
68	15-92-2068	15-92-2468	54.58 (2.149)	41.91 (1.650)	51.88 (2.042)		
80	15-92-2080	15-92-2480	62.20 (2.449)	49.53 (1.950)	59.50 (2.342)		
100	15-92-2100	15-92-2500	74.90 (2.949)	62.23 (2.450)	72.20 (2.842)		
120	15-92-2120	15-92-2520	87.60 (3.449)	74.93 (2.950)	84.90 (3.342)	5.08 (.200)	2.84 (.112)
130	15-92-2130	15-92-2530	93.95 (3.699)	81.28 (3.200)	91.25 (3.592)		

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch EBBI™ 50D Receptacle

71660 Vertical

Features and Benefits

- Polarized D-shaped leaf-contact connector for parallel board packaging
- SMT compatible, high-temperature 94V-0 LCP
- Chamfered lead-in on tails for PCB mounting
- Metal retention clips for mechanical hold down before and after processing
- Low profile—12.50mm stack height
- Mates to standard .062" PC board card edge

Reference Information

Product Specification: PS-71660
Packaging: Tray
UL File No.: 92NK28881 and 92NK28882
CSA File No.: LR19980-239A
Mates With: 71661
Designed In: Inches

Electrical

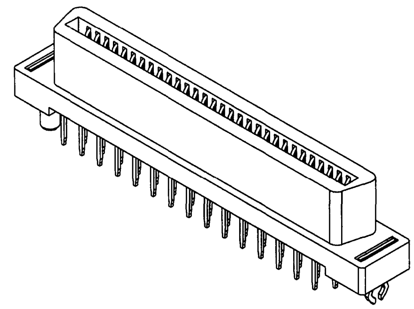
Voltage: 30V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

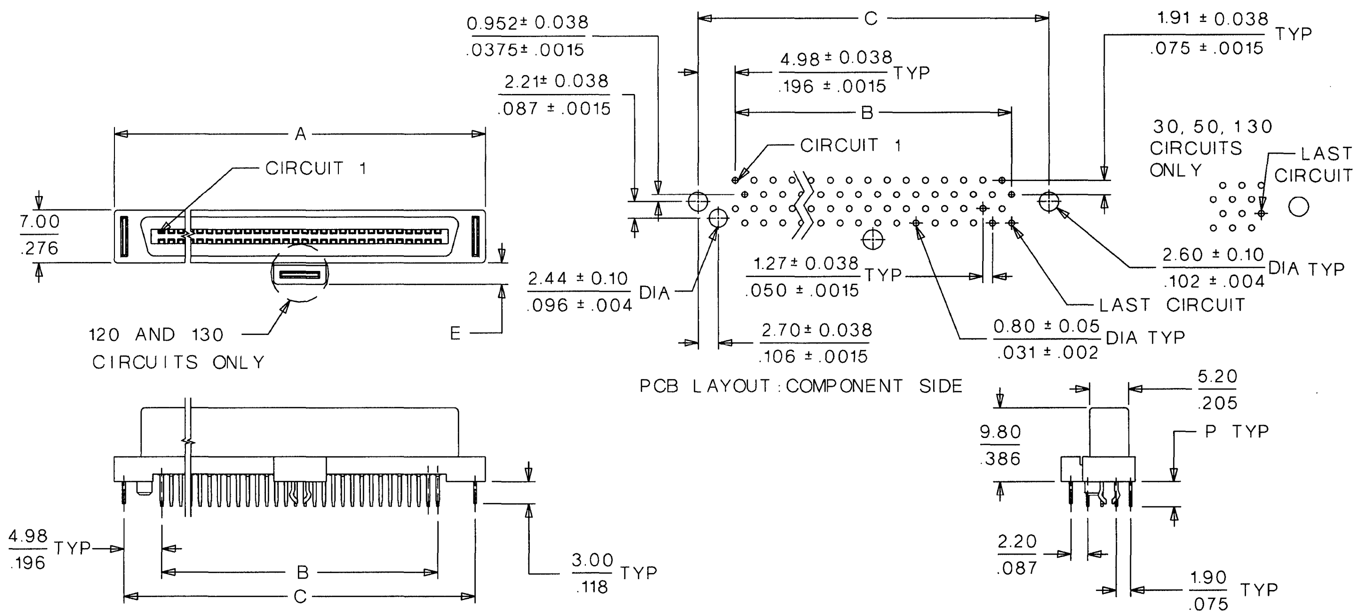
Mechanical

Contact Retention to Housing: 500g min.
Mating Force: 90g max. per contact
Unmating Force: 15g min. per contact
Normal Force: 90g
Durability: 500 cycles min.

Physical

Housing: Black glass-filled LCP, UL 94V-0
Retention Clip: Phosphor Bronze
Contact: Phosphor Bronze
Plating: 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" Nickel on tails
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	Dimension P = 3.40mm (.134") Tail Length	Dimension P = 2.79mm (.110") Tail Length	A	B	C	D	E
30	15-92-1030	15-92-1430	30.45 (1.199)	17.78 (.700)	27.75 (1.092)		
40	15-92-1040	15-92-1440	36.80 (1.449)	24.13 (.950)	34.10 (1.342)		
50	15-92-1050	15-92-1450	43.15 (1.699)	30.48 (1.200)	40.45 (1.592)		
60	15-92-1060	15-92-1460	49.50 (1.949)	36.83 (1.450)	46.80 (1.842)		
68	15-92-1068	15-92-1468	54.58 (2.149)	41.91 (1.650)	51.88 (2.042)		
80	15-92-1080	15-92-1480	62.20 (2.449)	49.53 (1.950)	59.50 (2.342)		
100	15-92-1100	15-92-1500	74.90 (2.949)	62.23 (2.450)	72.20 (2.842)		
120	15-92-1120	15-92-1520	87.60 (3.449)	74.93 (2.950)	84.90 (3.342)	5.08 (.200)	2.84 (.112)
130	15-92-1130	15-92-1530	93.95 (3.699)	81.28 (3.200)	91.25 (3.592)		

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch EBBI™ 50D Plug

71661 Right Angle

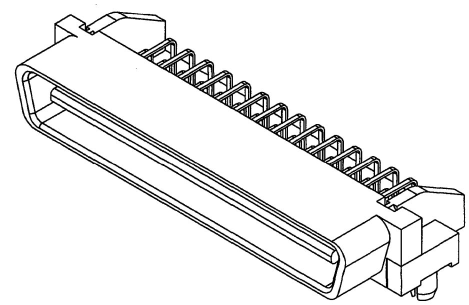
Features and Benefits
- Polarized D-shaped leaf-contact connector for perpendicular board packaging
- SMT compatible, high-temperature 94V-0 LCP
- Chamfered lead-in on tails for PCB mounting
- Press-fit retention pegs for mechanical hold down before and after processing
- Recommended for 1.60mm (.062") PCB
- Meets VESA standards for video and graphics cards (68 and 80 circuits)

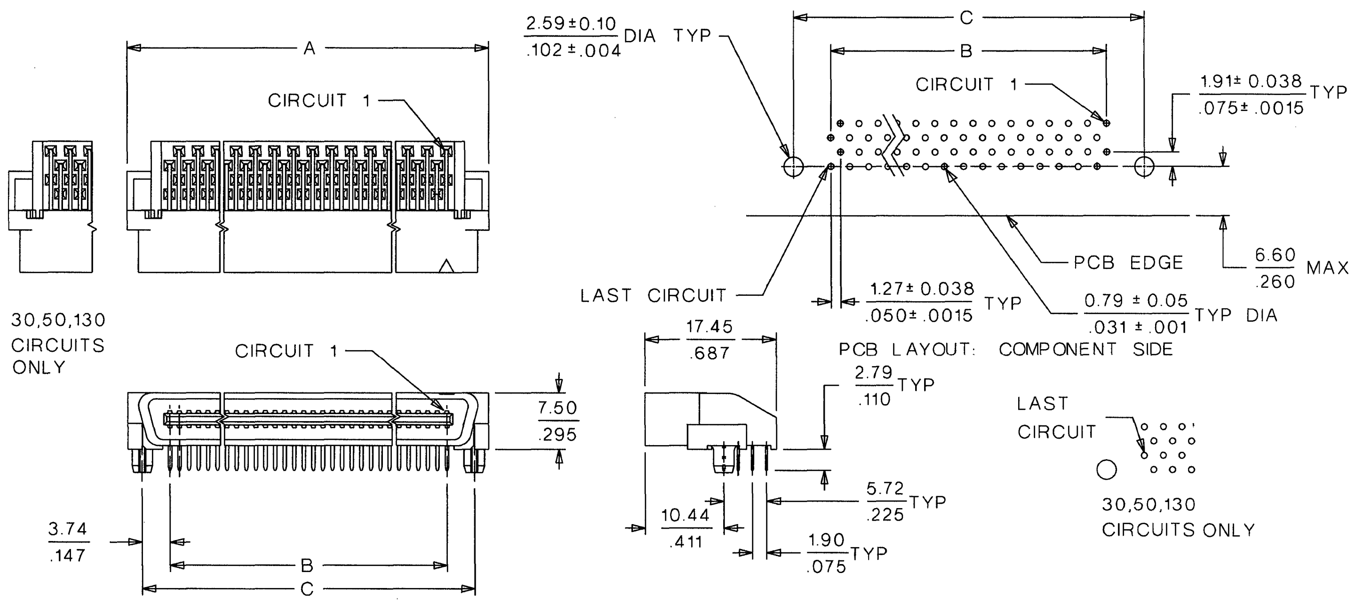
Reference Information
Product Specification: PS-71660
Packaging: Tray
UL File No.: 92NK28881 and 92NK28882
CSA File No.: LR19980-239A
Mates With: 71660
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 500g min.
Mating Force: 90g max. per contact
Unmating Force: 15g min. per contact
Normal Force: 90g
Durability: 500 cycles min.

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Brass
Plating: 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" Nickel on tails
Temperature: -40 to +105°C





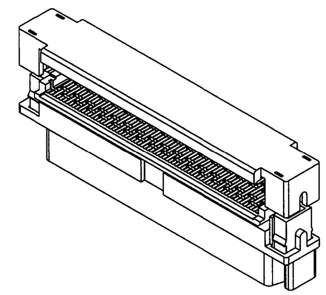
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
30	71661-2030	29.00 (1.142)	17.78 (.700)	25.18 (.991)
40	71661-2040	35.35 (1.392)	24.13 (.950)	31.53 (1.241)
50	71661-2050	41.70 (1.642)	30.48 (1.200)	37.88 (1.491)
60	71661-2060	48.05 (1.892)	36.83 (1.450)	44.23 (1.741)
68	71661-2068	53.13 (2.092)	41.91 (1.650)	49.31 (1.941)
80	71661-2080	60.75 (2.392)	49.53 (1.950)	56.93 (2.241)
100	71661-2100	73.45 (2.892)	62.23 (2.450)	69.63 (2.741)
120	71661-2120	86.15 (3.392)	74.93 (2.950)	82.33 (3.241)
130	71661-2130	92.50 (3.642)	81.28 (3.200)	88.68 (3.491)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch EBBI™ 50D Receptacle

71660 Vertical IDT



Features and Benefits

- Polarized D-shaped leaf-contact connector for wire-to-board packaging
- Terminates to 30 AWG solid or stranded .025" ribbon cable or laminated discrete wire cable
- Card slot accommodates standard .062" PCB
- Polarizing key orients connector to PCB
- Selectively Gold plated to control costs
- Meets VESA standards for connecting advanced video and graphics cards (68 and 80 circuits)

Reference Information

Product Specification: PS-71662
Packaging: Tray (subassembly) and bulk (cover)
Tooling Information: See page I-124
UL File No.: 92NK28881
CSA File No.: LR19980-239A
Mates With: 71661
Designed In: Inches

Electrical

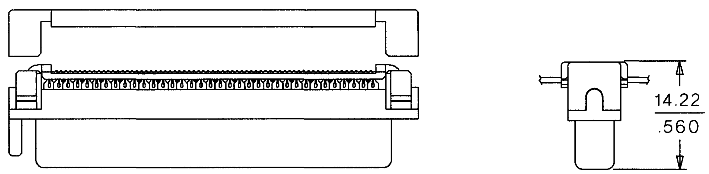
Voltage: 30V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

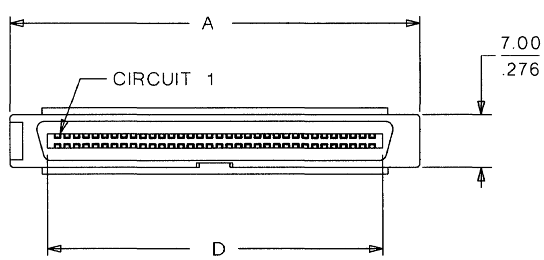
Mechanical

Contact Retention to Housing: 500g min.
Mating Force: 90g max. per contact
Unmating Force: 15g min. per contact
Normal Force: 90g
Durability: 500 cycles min.

Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" Nickel on tails
Temperature: -40 to +105°C
Wire Range: 30 AWG solid or stranded tinned Copper





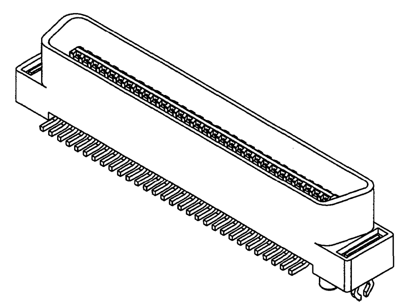
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	D
30	15-92-3030	30.35 (1.195)	19.68 (.775)
40	15-92-3040	36.70 (1.445)	26.04 (1.025)
50	15-92-3050	43.05 (1.695)	32.38 (1.275)
60	15-92-3060	49.40 (1.945)	38.74 (1.525)
68	15-92-3068	54.48 (2.145)	43.81 (1.725)
80	15-92-3080	62.10 (2.445)	51.43 (2.025)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch EBBI™ 50D Plug

71661 Vertical SMT



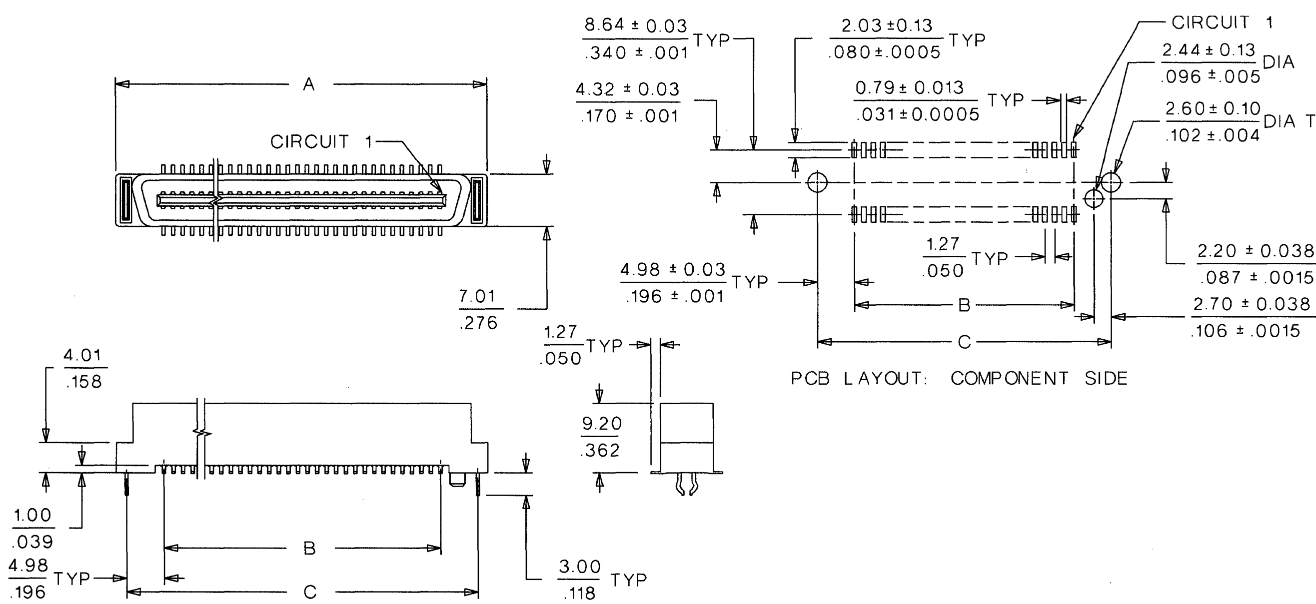
Features and Benefits
- Polarized D-shaped leaf-contact connector for parallel board packaging
- SMT compatible, high-temperature 94V-0 LCP
- Metal retention clips for mechanical hold down before and after processing
- SMT terminals in-line on 1.27mm (.050") spacing for easy processing
- Selectively Gold plated to control costs

Reference Information
Product Specification: PS-71660
Packaging: Tray
UL File No.: 92NK28881 and 92NK28882
CSA File No.: LR19980-239A
Mates With: 71660
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 500g min.
Mating Force: 90g max. per contact
Unmating Force: 15g min. per contact
Normal Force: 90g
Durability: 500 cycles min.

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Brass
Plating: 30µ" min. Gold over 50µ" min. Nickel in contact area, 100µ" min. Tin/Lead over 50µ" Nickel on tails
Temperature: -40 to +105°C



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
30	71661-5030	30.45 (1.199)	17.78 (.700)	27.75 (1.092)
40	71661-5040	36.80 (1.449)	24.13 (.950)	34.10 (1.342)
50	71661-5050	43.15 (1.699)	30.48 (1.200)	40.45 (1.592)
60	71661-5060	49.50 (1.949)	36.83 (1.450)	46.80 (1.842)
68	71661-5068	54.58 (2.149)	41.91 (1.650)	51.88 (2.042)
80	71661-5080	62.20 (2.449)	49.53 (1.950)	59.50 (2.342)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Terminal

50394

Features and Benefits
- Early entry terminal design for superior contact

Reference Information
Product Specification: PS-51110
Packaging: Reel
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pins
Use With: 51110
Designed In: Millimeters

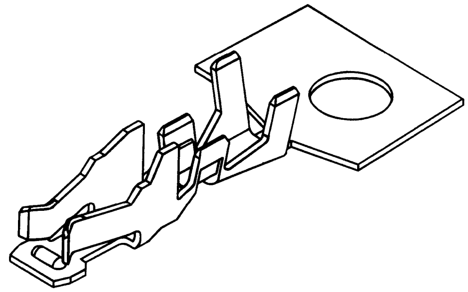
Electrical
Voltage: 125V
Current:

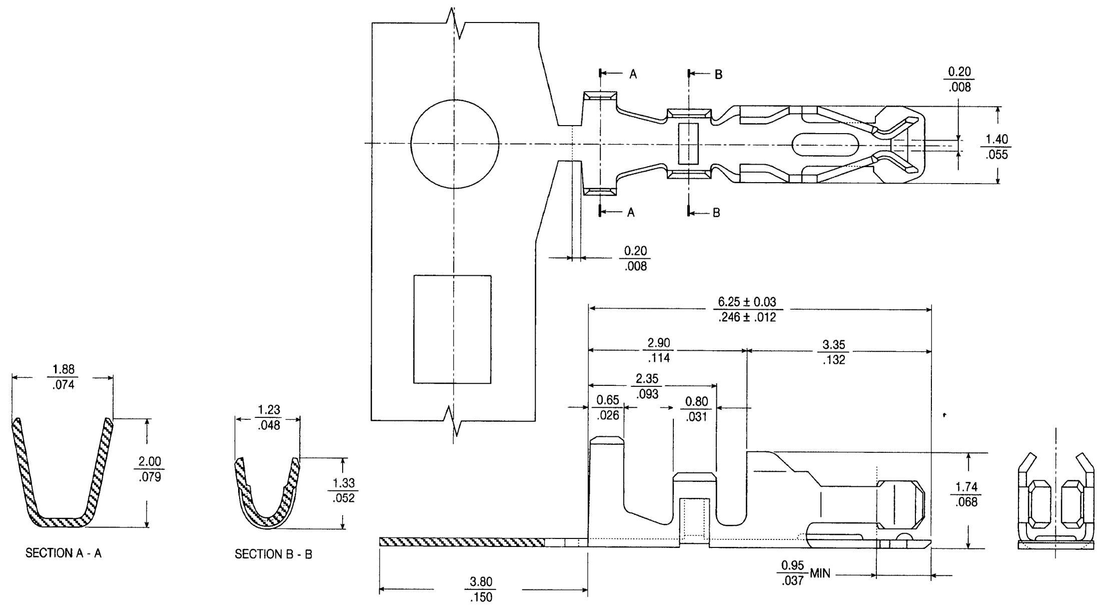
AWG	26	28	30
Amperes	1.5	1.0	0.5

Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 9.8N max.
Mating Force: 1.96N per circuit max.
Unmating Force: 0.392N per circuit min.

Physical
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +105°C
Wire Range: 26 to 30 AWG
Insulation Range: 1.40mm dia. max.





ORDERING INFORMATION

Order No.	AWG	Plating
50394-8051	26 - 30	15μ" min. selective Gold
50394-8052		30μ" min. selective Gold

Application Tooling Information		
Description	**Order No.**	**Engineering No.**
Hand Tool (US)	11-01-0204	CR 60927A
Hand Tool (Europe)	69008-0959	69008-0959
Mini-Mac Applicator (US)	11-18-2197	MA 60837A
Mini-Mac Tool Kit (US)	11-18-3190	K 60837A
Mini-Mac Applicator (Europe)	69037-1163	69037-1163
TM-42 Applicator	11-40-2278	T 63332A
TM-42 Applicator Tool Kit	11-40-3279	K 63332A
Crimping Press	M15A	M15A
Mini-Crimper	57117-4000	57117-4000

FEATURES AND SPECIFICATIONS

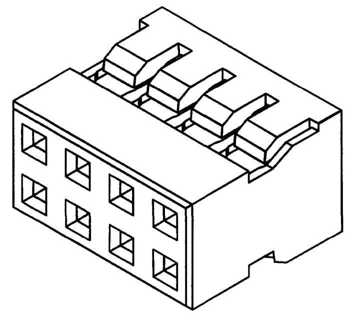
2.00mm (.079") Pitch Milli-Grid™ Crimp Housing

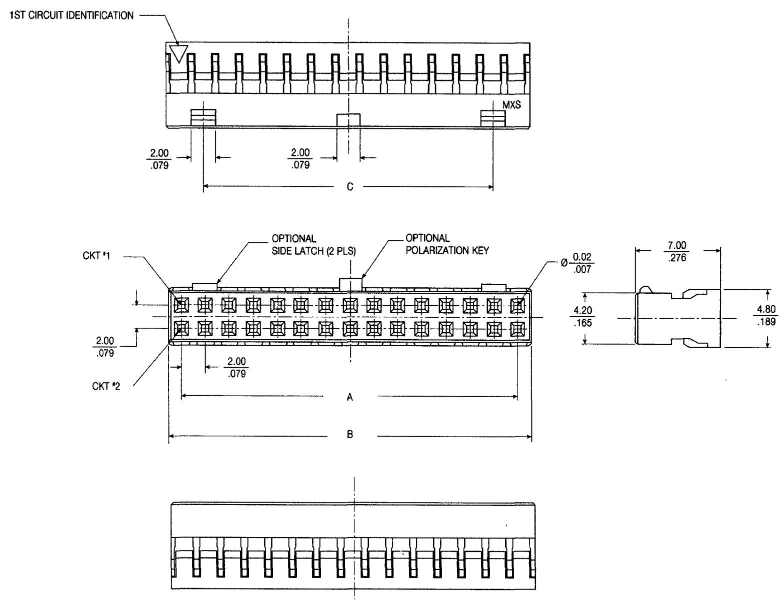
51110

Features and Benefits
- Sizes 4 to 30 circuits
- Side latches for added retention forces after mating
- Options include molded-in void version, center polarization key and side latches version (14 to 30 circuits only), center polarization key only (8 to 12 circuits)

Reference Information
Product Specification: PS-51110
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers
Use With: 50394
Designed In: Millimeters

Physical
Housing: Black glass-filled polyester, UL 94V-0
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	Standard	With Polarization Keys	A	B	C
4	51110-0450		2.00 (.079)	4.20 (.165)	
6	51110-0650		4.00 (.157)	6.20 (.244)	
8	51110-0850		6.00 (.236)	8.20 (.323)	
10	51110-1050		8.00 (.315)	10.20 (.402)	
12	51110-1250		10.00 (.394)	12.20 (.480)	
14	51110-1450	51110-1451	12.00 (.472)	14.20 (.559)	8.00 (.315)
16	51110-1650	51110-1651	14.00 (.551)	16.20 (.638)	10.00 (.394)
18	51110-1850	51110-1851	16.00 (.630)	18.20 (.717)	12.00 (.472)
20	51110-2050	51110-2051	18.00 (.708)	20.20 (.795)	14.00 (.551)
22	51110-2250	51110-2251	20.00 (.787)	22.20 (.874)	16.00 (.630)
24	51110-2450	51110-2451	22.00 (.866)	24.20 (.953)	18.00 (.709)
26	51110-2650	51110-2651	24.00 (.945)	26.20 (1.031)	20.00 (.787)
28	51110-2850	51110-2851	26.00 (1.024)	28.20 (1.110)	22.00 (.866)
30	51110-3050	51110-3051	28.00 (1.102)	30.20 (1.189)	24.00 (.945)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Board-to-Board Receptacle

79107

Vertical, Dual Row Through-Hole

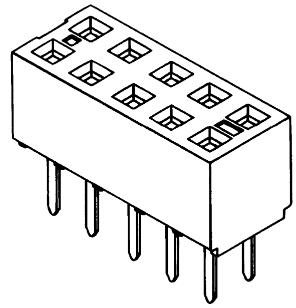
Features and Benefits
- Sizes 4 to 50 circuits
- IR, vapor-phase and wave solder compatible
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- PC tails have tapered lead-in on for ease of insertion into the PC board
- Also available with shortened 1.91mm (.075") tail length for 0.79mm (.031") thick PC boards

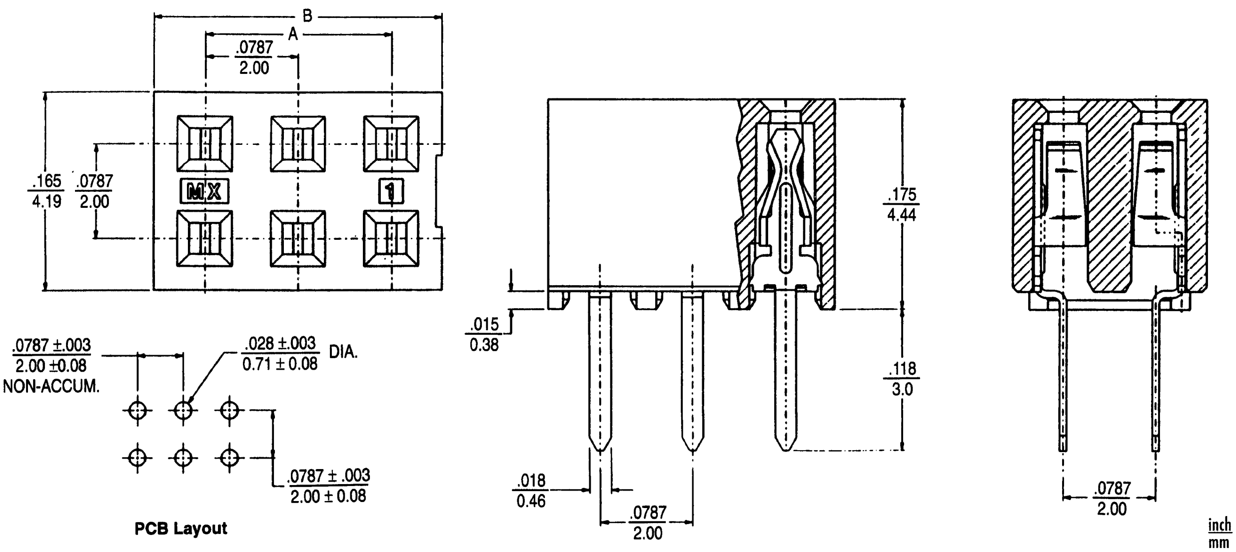
Reference Information
Product Specification: PS-79107
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers 87049, 87089 and 87267
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Mating Force: 8 oz max. per circuit
Unmating Force: 1.5 oz min. per circuit
Normal Force: 100g
Durability: 15µ" Gold contacts—50 cycles min.
30µ" Gold contacts—100 cycles min.

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Dimension A	Dimension B
4	• 79107-0001	1	2.00 (.079)	4.19 (.165)
	• 79107-0051	2		
6	• 79107-0002	1	4.00 (.157)	6.19 (.244)
	• 79107-0052	2		
8	• 79107-0003	1	6.00 (.236)	8.19 (.322)
	• 79107-0053	2		
10	• 79107-0004	1	8.00 (.315)	10.19 (.401)
	• 79107-0054	2		
12	• 79107-0005	1	10.00 (.394)	12.19 (.480)
	• 79107-0055	2		
14	• 79107-0006	1	12.00 (.472)	14.19 (.559)
	• 79107-0056	2		
16	• 79107-0007	1	14.00 (.551)	16.19 (.637)
	• 79107-0057	2		
18	• 79107-0008	1	16.00 (.630)	18.19 (.716)
	• 79107-0058	2		
20	• 79107-0009	1	18.00 (.709)	20.19 (.795)
	• 79107-0059	2		
22	• 79107-0010	1	20.00 (.787)	22.19 (.874)
	• 79107-0060	2		
24	• 79107-0011	1	22.00 (.866)	24.19 (.952)
	• 79107-0061	2		
26	• 79107-0012	1	24.00 (.945)	26.19 (1.031)
	• 79107-0062	2		
28	• 79107-0013	1	26.00 (1.024)	28.19 (1.110)
	• 79107-0063	2		
30	• 79107-0014	1	28.00 (1.102)	30.19 (1.188)
	• 79107-0064	2		
32	• 79107-0015	1	30.00 (1.181)	32.19 (1.267)
	• 79107-0065	2		
34	• 79107-0016	1	32.00 (1.260)	34.19 (1.346)
	• 79107-0066	2		
36	• 79107-0017	1	34.00 (1.338)	36.19 (1.425)
	• 79107-0067	2		
38	• 79107-0018	1	36.00 (1.417)	38.19 (1.504)
	• 79107-0068	2		
40	• 79107-0019	1	38.00 (1.496)	40.19 (1.582)
	• 79107-0069	2		
42	• 79107-0020	1	40.00 (1.575)	42.19 (1.661)
	• 79107-0070	2		
44	• 79107-0021	1	42.00 (1.654)	44.19 (1.740)
	• 79107-0071	2		
46	• 79107-0022	1	44.00 (1.732)	46.19 (1.818)
	• 79107-0072	2		
48	• 79107-0023	1	46.00 (1.811)	48.19 (1.897)
	• 79107-0073	2		
50	• 79107-0024	1	48.00 (1.890)	50.19 (1.976)
	• 79107-0074	2		

• US Standard Product, available through Molex franchised distributors

Plating No. 1: 15µ" min. Gold plate in selected area and 75µ" min. Tin/Lead in selected area, over 50µ" min. Nickel overall

Plating No. 2: 30µ" min. Gold plate in selected area and 75µ" min. Tin/Lead in selected area, over 50µ" min. Nickel overall

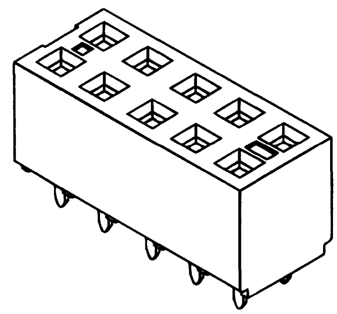
FEATURES AND SPECIFICATIONS

molex®

2.00mm (.079") Pitch Milli-Grid™ Flex-to-Board Receptacle

79108

Vertical, Dual Row FFC/FPC Through-Hole



Features and Benefits

- Sizes 4 to 50 circuits
- Ideal for dense packaging flex-to-board interconnection applications
- IR, vapor-phase and wave solder compatible
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- PC tails have tapered lead-in on for ease of insertion into FFC/FPC

Reference Information

Product Specification: PS-79107
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers 87049, 87089 and 87267
Designed In: Millimeters

Electrical

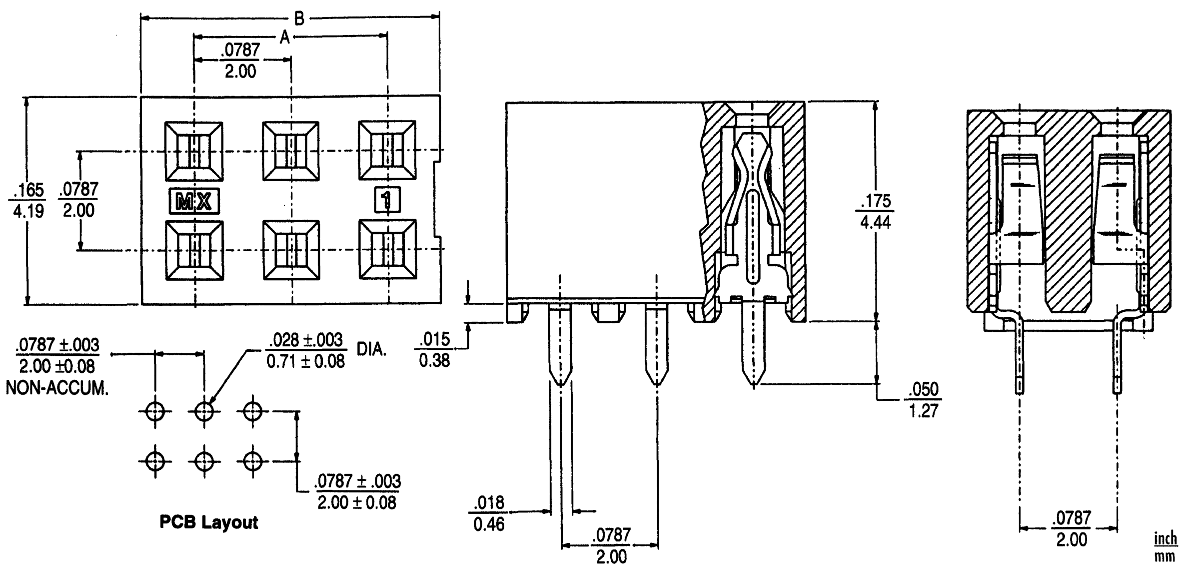
Voltage: 125V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical

Mating Force: 8 oz max. per circuit
Unmating Force: 1.5 oz min. per circuit
Normal Force: 100g
Durability: 15µ" Gold contacts—50 cycles min.
30µ" Gold contacts—100 cycles min.

Physical

Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Dimension A	Dimension B
4	• 79108-0001	1	2.00 (.079)	4.19 (.165)
	• 79108-0051	2		
6	• 79108-0002	1	4.00 (.157)	6.19 (.244)
	• 79108-0052	2		
8	• 79108-0003	1	6.00 (.236)	8.19 (.322)
	• 79108-0053	2		
10	• 79108-0004	1	8.00 (.315)	10.19 (.401)
	• 79108-0054	2		
12	• 79108-0005	1	10.00 (.394)	12.19 (.480)
	• 79108-0055	2		
14	• 79108-0006	1	12.00 (.472)	14.19 (.559)
	• 79108-0056	2		
16	• 79108-0007	1	14.00 (.551)	16.19 (.637)
	• 79108-0057	2		
18	• 79108-0008	1	16.00 (.630)	18.19 (.716)
	• 79108-0058	2		
20	• 79108-0009	1	18.00 (.709)	20.19 (.795)
	• 79108-0059	2		
22	• 79108-0010	1	20.00 (.787)	22.19 (.874)
	• 79108-0060	2		
24	• 79108-0011	1	22.00 (.866)	24.19 (.952)
	• 79108-0061	2		
26	• 79108-0012	1	24.00 (.945)	26.19 (1.031)
	• 79108-0062	2		
28	• 79108-0013	1	26.00 (1.024)	28.19 (1.110)
	• 79108-0063	2		
30	• 79108-0014	1	28.00 (1.102)	30.19 (1.188)
	• 79108-0064	2		
32	• 79108-0015	1	30.00 (1.181)	32.19 (1.267)
	• 79108-0065	2		
34	• 79108-0016	1	32.00 (1.260)	34.19 (1.346)
	• 79108-0066	2		
36	• 79108-0017	1	34.00 (1.338)	36.19 (1.425)
	• 79108-0067	2		
38	• 79108-0018	1	36.00 (1.417)	38.19 (1.504)
	• 79108-0068	2		
40	• 79108-0019	1	38.00 (1.496)	40.19 (1.582)
	• 79108-0069	2		
42	• 79108-0020	1	40.00 (1.575)	42.19 (1.661)
	• 79108-0070	2		
44	• 79108-0021	1	42.00 (1.654)	44.19 (1.740)
	• 79108-0071	2		
46	• 79108-0022	1	44.00 (1.732)	46.19 (1.818)
	• 79108-0072	2		
48	• 79108-0023	1	46.00 (1.811)	48.19 (1.897)
	• 79108-0073	2		
50	• 79108-0024	1	48.00 (1.890)	50.19 (1.976)
	• 79108-0074	2		

• US Standard Product, available through Molex franchised distributors

Plating No. 1: 15µ" min. Gold plate in selected area and 75µ" min. Tin/Lead in selected area, over 50µ" min. Nickel overall

Plating No. 2: 30µ" min. Gold plate in selected area and 75µ" min. Tin/Lead in selected area, over 50µ" min. Nickel overall

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Board-to-Board Receptacle

79109

Vertical, Dual Row Top/Bottom Entry SMT, With Pegs

Features and Benefits

- Sizes 4 to 50 circuits
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- Can be used as either a top or bottom entry receptacle
- Pegs offer press-fit retention to PC board

Reference Information

Product Specification: PS-79107
Packaging: Tube (contact factory for tape and reel)
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers 87049, 87089 and 87267
Designed In: Millimeters

Electrical

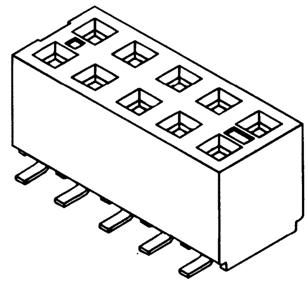
Voltage: 125V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

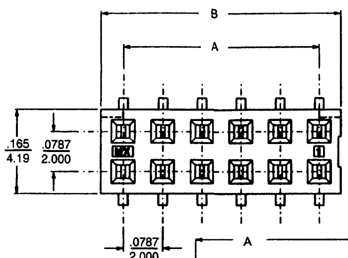
Mechanical

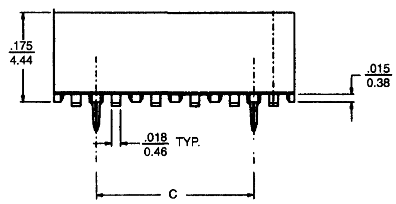
Mating Force: 8 oz max. per circuit
Unmating Force: 1.5 oz min. per circuit
Normal Force: 100g
Durability: 15µ" Gold contacts—50 cycles min.
30µ" Gold contacts—100 cycles min.

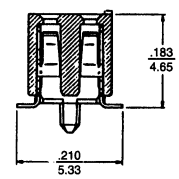
Physical

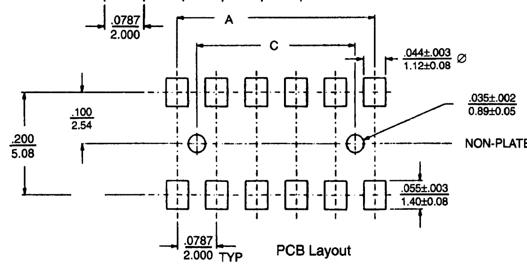
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C



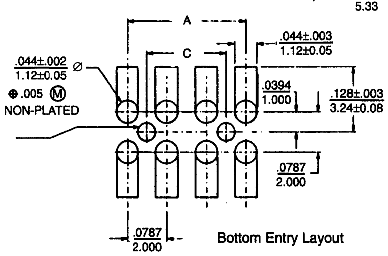








PCB Layout



Bottom Entry Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Dimension A	Dimension B	Dimension C
4	•79109-0201	1	2.00	4.19	
	•79109-0251	2	(.079)	(.165)	
6	•79109-0202	1	4.00	6.19	2.00
	•79109-0252	2	(.157)	(.244)	(.079)
8	•79109-0203	1	6.00	8.19	4.00
	•79109-0253	2	(.236)	(.322)	(.157)
10	•79109-0204	1	8.00	10.19	6.00
	•79109-0254	2	(.315)	(.401)	(.236)
12	•79109-0205	1	10.00	12.19	8.00
	•79109-0255	2	(.394)	(.480)	(.315)
14	•79109-0206	1	12.00	14.19	10.00
	•79109-0256	2	(.472)	(.559)	(.394)

• US Standard Product, available through Molex franchised distributors

Plating No. 1: 15µ" min. Gold plate in selected area and 75µ" min. Tin/Lead in selected area, over 50µ" min. Nickel overall

Plating No. 2: 30µ" min. Gold plate in selected area and 75µ" min. Tin/Lead in selected area, over 50µ" min. Nickel overall

Circuits	Order No.	Plating	Dimension A	Dimension B	Dimension C
16	•79109-0207	1	14.00	16.19	12.00
	•79109-0257	2	(.551)	(.637)	(.472)
18	•79109-0208	1	16.00	18.19	14.00
	•79109-0258	2	(.630)	(.716)	(.551)
20	•79109-0209	1	18.00	20.19	16.00
	•79109-0259	2	(.709)	(.795)	(.630)
22	•79109-0210	1	20.00	22.19	18.00
	•79109-0260	2	(.787)	(.874)	(.709)
24	•79109-0211	1	22.00	24.19	20.00
	•79109-0261	2	(.866)	(.952)	(.787)
26	•79109-0212	1	24.00	26.19	22.00
	•79109-0262	2	(.945)	(1.031)	(.866)
28	•79109-0213	1	26.00	28.19	24.00
	•79109-0263	2	(1.024)	(1.110)	(.945)
30	•79109-0214	1	28.00	30.19	26.00
	•79109-0264	2	(1.102)	(1.188)	(1.024)
32	•79109-0215	1	30.00	32.19	28.00
	•79109-0265	2	(1.181)	(1.267)	(1.102)

Circuits	Order No.	Plating	Dimension A	Dimension B	Dimension C
34	•79109-0216	1	32.00	34.19	30.00
	•79109-0266	2	(1.260)	(1.346)	(1.181)
36	•79109-0217	1	34.00	36.19	32.00
	•79109-0267	2	(1.338)	(1.425)	(1.260)
38	•79109-0218	1	36.00	38.19	34.00
	•79109-0268	2	(1.417)	(1.504)	(1.338)
40	•79109-0219	1	38.00	40.19	36.00
	•79109-0269	2	(1.496)	(1.582)	(1.417)
42	•79109-0220	1	40.00	42.19	38.00
	•79109-0270	2	(1.575)	(1.661)	(1.496)
44	•79109-0221	1	42.00	44.19	40.00
	•79109-0271	2	(1.654)	(1.740)	(1.575)
46	•79109-0222	1	44.00	46.19	42.00
	•79109-0272	2	(1.732)	(1.818)	(1.654)
48	•79109-0223	1	46.00	48.19	44.00
	•79109-0273	2	(1.811)	(1.897)	(1.732)
50	•79109-0224	1	48.00	50.19	46.00
	•79109-0274	2	(1.890)	(1.976)	(1.811)

FEATURES AND SPECIFICATIONS

molex®

2.00mm (.079") Pitch Milli-Grid™ Board-to-Board Receptacle

79109

Vertical, Dual Row Top/Bottom Entry, SMT

Features and Benefits

- Sizes 4 to 50 circuits
- Dual beam contact design ensures reliable electrical performance
- Molded-in void locations offered for polarization to mating connector
- Can be used as either top or bottom entry receptacle

Reference Information

Product Specification: PS-79107
Packaging: Tube (contact factory for tape and reel)
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers 87049, 87089 and 87267
Designed In: Millimeters

Electrical

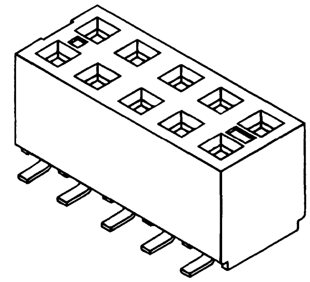
Voltage: 125V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

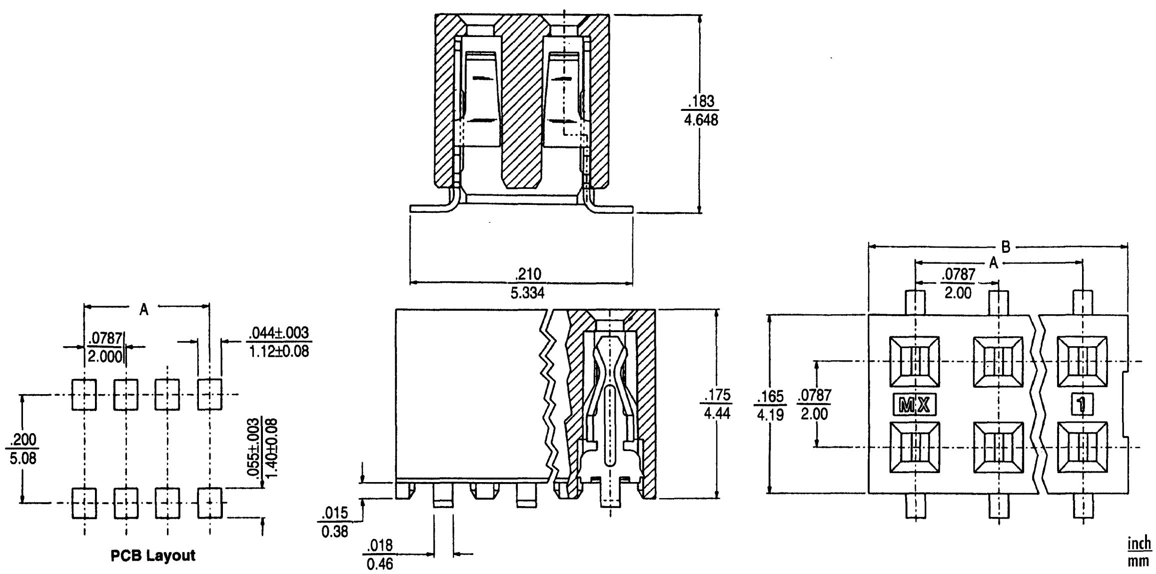
Mechanical

Mating Force: 8 oz max. per circuit
Unmating Force: 1.5 oz min. per circuit
Normal Force: 100g
Durability: 15μ" Gold contacts—50 cycles min.
30μ" Gold contacts—100 cycles min.

Physical

Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Plating	Dimension A	Dimension B
4	• 79109-0001	1	2.00 (.079)	4.19 (.165)
	• 79109-0051	2		
6	• 79109-0002	1	4.00 (.157)	6.19 (.244)
	• 79109-0052	2		
8	• 79109-0003	1	6.00 (.236)	8.19 (.322)
	• 79109-0053	2		
10	• 79109-0004	1	8.00 (.315)	10.19 (.401)
	• 79109-0054	2		
12	• 79109-0005	1	10.00 (.394)	12.19 (.480)
	• 79109-0055	2		
14	• 79109-0006	1	12.00 (.472)	14.19 (.559)
	• 79109-0056	2		

• US Standard Product, available through Molex franchised distributors
Plating No. 1: 15μ" min. Gold plate in selected area and 75μ" min. Tin/Lead in selected area, over 50μ" min. Nickel overall
Plating No. 2: 30μ" min. Gold plate in selected area and 75μ" min. Tin/Lead in selected area, over 50μ" min. Nickel overall

Circuits	Order No.	Plating	Dimension A	Dimension B
16	• 79109-0007	1	14.00 (.551)	16.19 (.637)
	• 79109-0057	2		
18	• 79109-0008	1	16.00 (.630)	18.19 (.716)
	• 79109-0058	2		
20	• 79109-0009	1	18.00 (.709)	20.19 (.795)
	• 79109-0059	2		
22	• 79109-0010	1	20.00 (.787)	22.19 (.874)
	• 79109-0060	2		
24	• 79109-0011	1	22.00 (.866)	24.19 (.952)
	• 79109-0061	2		
26	• 79109-0012	1	24.00 (.945)	26.19 (1.031)
	• 79109-0062	2		
28	• 79109-0013	1	26.00 (1.024)	28.19 (1.110)
	• 79109-0063	2		
30	• 79109-0014	1	28.00 (1.102)	30.19 (1.188)
	• 79109-0064	2		
32	• 79109-0015	1	30.00 (1.181)	32.19 (1.267)
	• 79109-0065	2		

Circuits	Order No.	Plating	Dimension A	Dimension B
34	• 79109-0016	1	32.00 (1.260)	34.19 (1.346)
	• 79109-0066	2		
36	• 79109-0017	1	34.00 (1.338)	36.19 (1.425)
	• 79109-0067	2		
38	• 79109-0018	1	36.00 (1.417)	38.19 (1.504)
	• 79109-0068	2		
40	• 79109-0019	1	38.00 (1.496)	40.19 (1.582)
	• 79109-0069	2		
42	• 79109-0020	1	40.00 (1.575)	42.19 (1.661)
	• 79109-0070	2		
44	• 79109-0021	1	42.00 (1.654)	44.19 (1.740)
	• 79109-0071	2		
46	• 79109-0022	1	44.00 (1.732)	46.19 (1.818)
	• 79109-0072	2		
48	• 79109-0023	1	46.00 (1.811)	48.19 (1.897)
	• 79109-0073	2		
50	• 79109-0024	1	48.00 (1.890)	50.19 (1.976)
	• 79109-0074	2		

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Receptacle

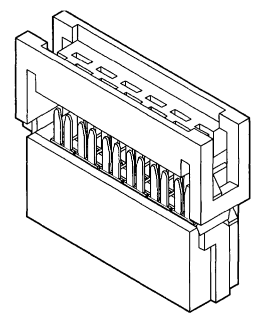
87259 IDT

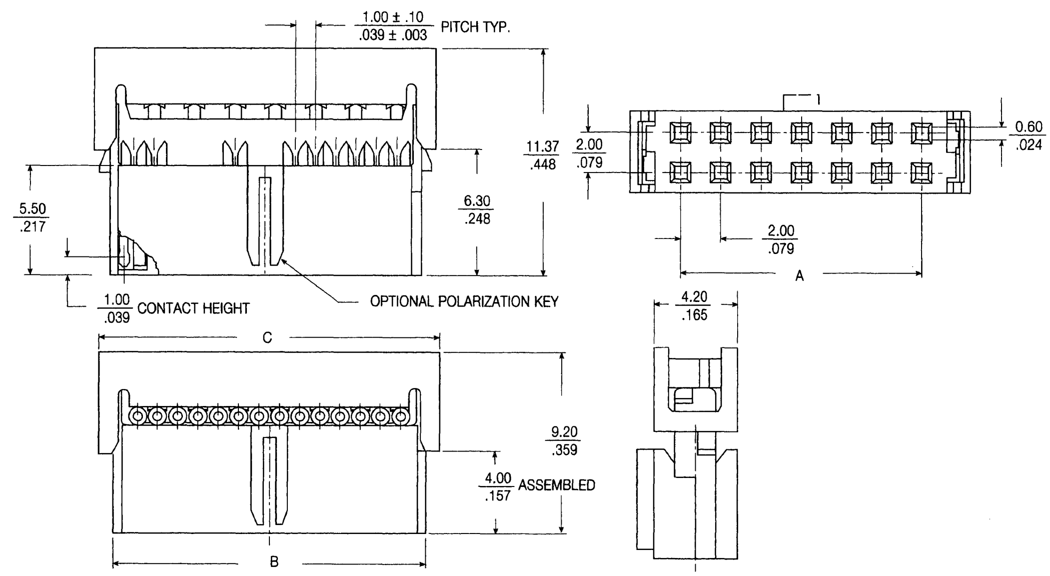
Features and Benefits
- Sizes 10 to 50 circuits
- Built-in strain relief
- Optional polarization key version and molded-in void version

Reference Information
Product Specification: PS-87259
Packaging: Tray
Tooling Information: See page I-126
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 5000 MΩ min.

Physical
Housing: Black PBT, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C
Cable Accommodation: 28 AWG





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension		
	15µ" Select Gold	30µ" Select Gold	With Polarization Keys 15µ" Select Gold	With Polarization Keys 30µ" Select Gold	A	B	C
10	87259-1012	87259-1013	87259-1015	87259-1016	8.00 (.315)	11.45 (.451)	12.86 (.506)
20	87259-2012	87259-2013	87259-2015	87259-2016	18.00 (.709)	21.45 (.844)	22.86 (.900)
24	87259-2412	87259-2413	87259-2415	87259-2416	22.00 (.866)	25.45 (1.002)	26.86 (1.057)
40	87259-4012	87259-4013	87259-4015	87259-4016	38.00 (1.496)	41.45 (1.632)	42.86 (1.687)
44	87259-4412	87259-4413	87259-4415	87259-4416	42.00 (1.654)	45.45 (1.789)	46.86 (1.845)
50	87259-5012	87259-5013	87529-5015	87259-5016	48.00 (1.890)	51.45 (2.026)	52.86 (2.081)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Header

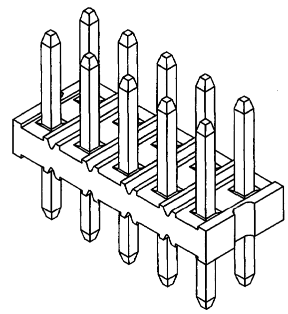
87089 Vertical

Features and Benefits
- Sizes 4 to 50 circuits
- End-to-end stackable
- Optional voided pin version, kinked PC tail and other PC tail lengths

Reference Information
Product Specification: PS-87049
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980-182
Mates With: Milli-Grid 2.00mm Receptacles
Designed In: Millimeters

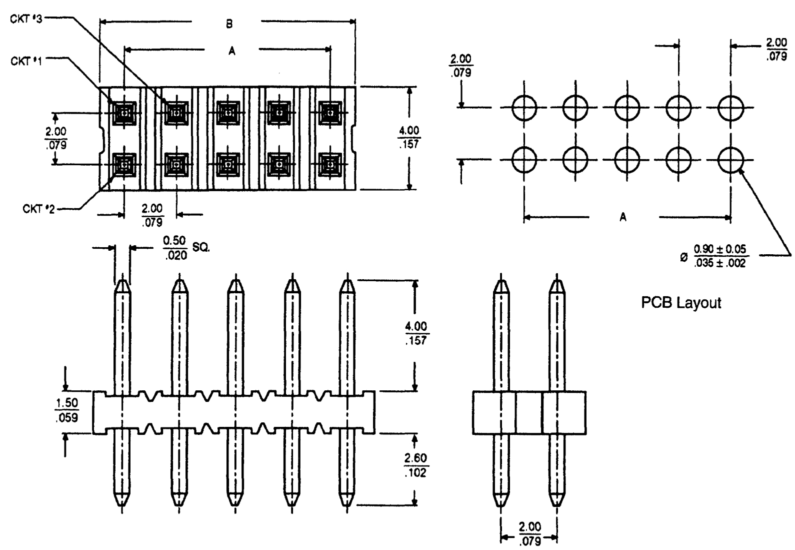
Electrical
Current: 2.0A
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze, 0.50mm square
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 1.60 ± 0.10mm



Micro Connectors

I



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
4	87089-0416	87089-0417	2.00 (.079)	3.90 (.154)
6	87089-0616	87089-0617	4.00 (.157)	5.90 (.232)
8	87089-0816	87089-0817	6.00 (.236)	7.90 (.311)
10	87089-1016	87089-1017	8.00 (.315)	9.90 (.390)
12	87089-1216	87089-1217	10.00 (.394)	11.90 (.469)
14	87089-1416	87089-1417	12.00 (.472)	13.90 (.547)
16	87089-1616	87089-1617	14.00 (.551)	15.90 (.626)
18	87089-1816	87089-1817	16.00 (.630)	17.90 (.705)
20	87089-2016	87089-2017	18.00 (.709)	19.90 (.783)
22	87089-2216	87089-2217	20.00 (.787)	21.90 (.862)
24	87089-2416	87089-2417	22.00 (.866)	23.90 (.941)
26	87089-2616	87089-2617	24.00 (.945)	25.90 (1.020)

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
28	87089-2816	87089-2817	26.00 (1.024)	27.90 (1.098)
30	87089-3016	87089-3017	28.00 (1.102)	29.90 (1.177)
32	87089-3216	87089-3217	30.00 (1.181)	31.90 (1.256)
34	87089-3416	87089-3417	32.00 (1.260)	33.90 (1.335)
36	87089-3616	87089-3617	34.00 (1.339)	35.90 (1.413)
38	87089-3816	87089-3817	36.00 (1.417)	37.90 (1.492)
40	87089-4016	87089-4017	38.00 (1.496)	39.90 (1.571)
42	87089-4216	87089-4217	40.00 (1.575)	41.90 (1.650)
44	87089-4416	87089-4417	42.00 (1.654)	43.90 (1.728)
46	87089-4616	87089-4617	44.00 (1.732)	45.90 (1.807)
48	87089-4816	87089-4817	46.00 (1.811)	47.90 (1.886)
50	87089-5016	87089-5017	48.00 (1.890)	49.90 (1.965)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Header

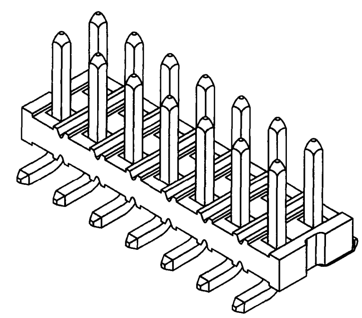
87267 Vertical SMT

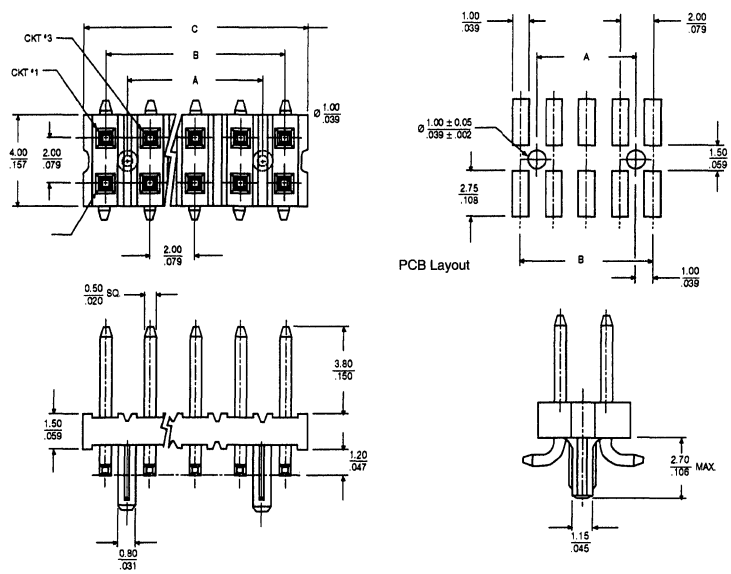
Features and Benefits
- Sizes 8 to 50 circuits
- Locating peg version standard
- Optional voided pin version and without peg version

Reference Information
Product Specification: PS-87049
Packaging: Tube (contact factory for embossed tape)
UL File No.: E29179
CSA File No.: LR19980-202
Mates With: Milli-Grid 2.00mm Receptacles
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 2.0A
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black high-temperature nylon, UL 94V-0
Contact: Phosphor Bronze, 0.50mm square
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 1.60 ± 0.10mm





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	15μ" Select Gold	30μ" Select Gold	A	B	C
8	87267-0850	87267-0851	4.00 (.157)	6.00 (.236)	7.90 (.311)
10	87267-1050	87267-1051	6.00 (.236)	8.00 (.315)	9.90 (.390)
12	87267-1250	87267-1251	8.00 (.315)	10.00 (.394)	11.90 (.469)
14	87267-1450	87267-1451	10.00 (.394)	12.00 (.472)	13.90 (.547)
16	87267-1650	87267-1651	12.00 (.472)	14.00 (.551)	15.90 (.626)
18	87267-1850	87267-1851	14.00 (.551)	16.00 (.630)	17.90 (.709)
20	87267-2050	87267-2051	16.00 (.630)	18.00 (.709)	19.90 (.783)
22	87267-2250	87267-2251	18.00 (.709)	20.00 (.787)	21.90 (.862)
24	87267-2450	87267-2451	20.00 (.787)	22.00 (.866)	23.90 (.941)
26	87267-2650	87267-2651	22.00 (.866)	24.00 (.945)	25.90 (1.020)
28	87267-2850	87267-2851	24.00 (.945)	26.00 (1.024)	27.90 (1.098)

Circuits	Order No.		Dimension		
	15μ" Select Gold	30μ" Select Gold	A	B	C
30	87267-3050	87267-3051	26.00 (1.024)	28.00 (1.102)	29.90 (1.177)
32	87267-3250	87267-3251	28.00 (1.102)	30.00 (1.181)	31.90 (1.256)
34	87267-3450	87267-3451	30.00 (1.181)	32.00 (1.260)	33.90 (1.335)
36	87267-3650	87267-3651	32.00 (1.260)	34.00 (1.339)	35.90 (1.413)
38	87267-3850	87267-3851	34.00 (1.339)	36.00 (1.417)	37.90 (1.492)
40	87267-4050	87267-4051	36.00 (1.417)	38.00 (1.496)	39.90 (1.571)
42	87267-4250	87267-4251	38.00 (1.496)	40.00 (1.575)	41.90 (1.650)
44	87267-4450	87267-4451	40.00 (1.575)	42.00 (1.654)	43.90 (1.728)
46	87267-4650	87267-4651	42.00 (1.654)	44.00 (1.732)	45.90 (1.807)
48	87267-4850	87267-4851	44.00 (1.732)	46.00 (1.811)	47.90 (1.886)
50	87267-5050	87267-5051	46.00 (1.811)	48.00 (1.890)	49.90 (1.965)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Header

87338 Slip-Off Vertical

Features and Benefits

- Sizes 4 to 20 circuits
- Housing is "slipped-off" or removed from header pins after wave soldering
- End-to-end stackable
- Optional voided pin version and other PC tail lengths

Reference Information

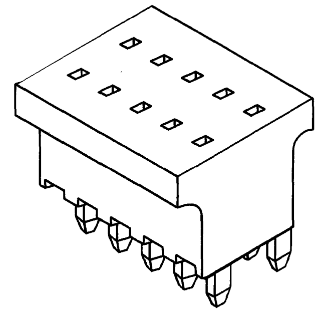
Product Specification: PS-87338
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980-201
Mates With: Milli-Grid 2.00mm Receptacles
Designed In: Millimeters

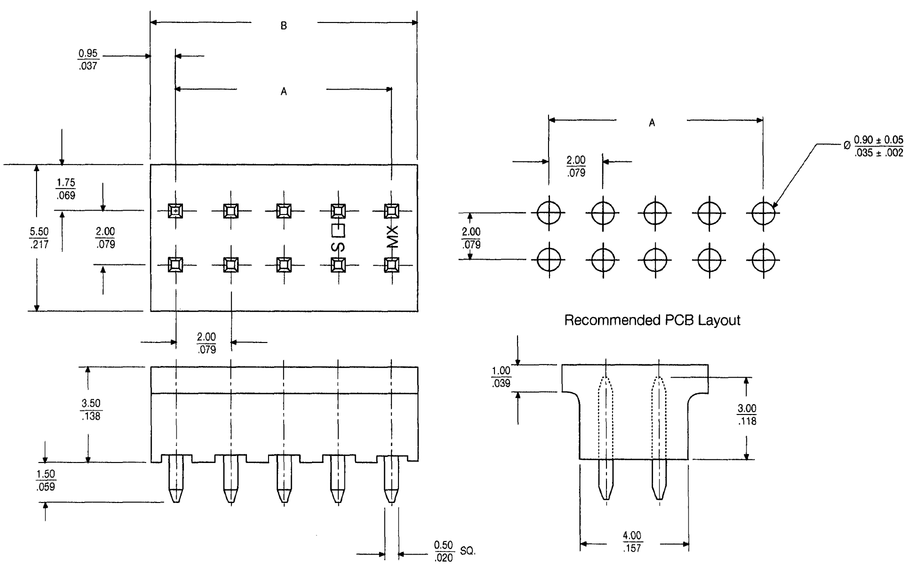
Electrical

Current: 2.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 0.89 ± 0.13mm





Recommended PCB Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15μ" Overall Gold	30μ" Overall Gold	A	B
4	87338-0411	87338-0410	2.00 (.079)	3.90 (.154)
6	87338-0611	87338-0610	4.00 (.157)	5.90 (.232)
8	87338-0811	87338-0810	6.00 (.236)	7.90 (.311)
10	87338-1011	87338-1010	8.00 (.315)	9.90 (.390)
12	87338-1211	87338-1210	10.00 (.394)	11.90 (.469)
14	87338-1411	87338-1410	12.00 (.472)	13.90 (.547)
16	87338-1611	87338-1610	14.00 (.551)	15.90 (.626)
18	87338-1811	87338-1810	16.00 (.630)	17.90 (.705)
20	87338-2011	87338-2010	18.00 (.709)	19.90 (.783)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Header

87049

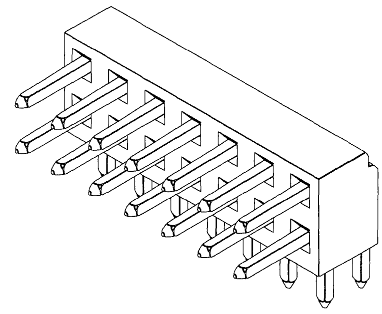
Right Angle

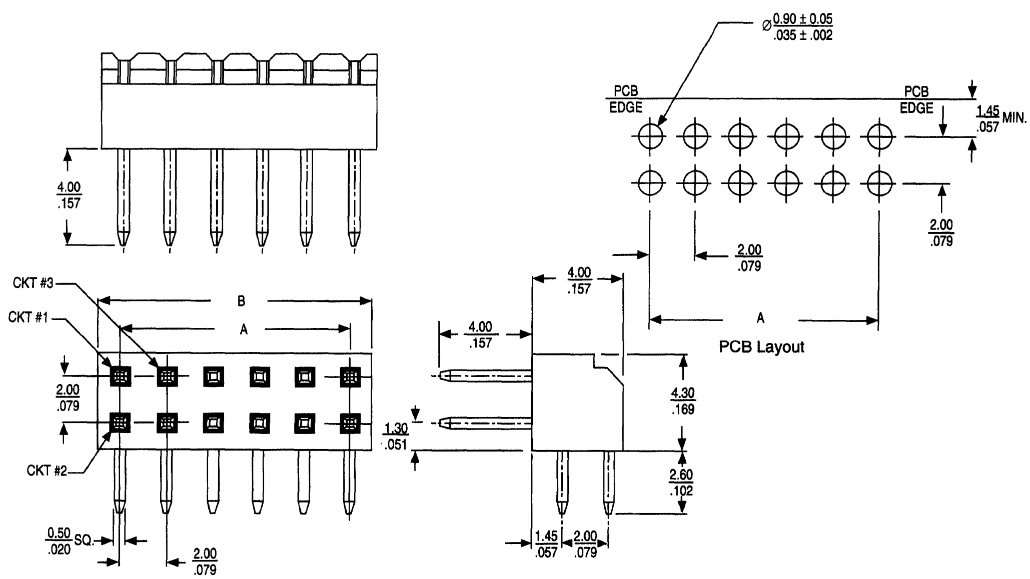
Features and Benefits
- Sizes 4 to 50 circuits
- End-to-end stackable
- Optional voided pin version and kinked PC tail

Reference Information
Product Specification: PS-87049
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980-182
Mates With: Milli-Grid 2.00mm Receptacles
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 2.0A
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze, 0.50mm square
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 1.60 ± 0.10mm





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
4	87049-0416	87049-0417	2.00 (.079)	4.00 (.157)
6	87049-0616	87049-0617	4.00 (.157)	6.00 (.236)
8	87049-0816	87049-0817	6.00 (.236)	8.00 (.315)
10	87049-1016	87049-1017	8.00 (.315)	10.00 (.394)
12	87049-1216	87049-1217	10.00 (.394)	12.00 (.472)
14	87049-1416	87049-1417	12.00 (.472)	14.00 (.551)
16	87049-1616	87049-1617	14.00 (.551)	16.00 (.630)
18	87049-1816	87049-1817	16.00 (.630)	18.00 (.709)
20	87049-2016	87049-2017	18.00 (.709)	20.00 (.787)
22	87049-2216	87049-2217	20.00 (.787)	22.00 (.866)
24	87049-2416	87049-2417	22.00 (.866)	24.00 (.945)
26	87049-2616	87049-2617	24.00 (.945)	26.00 (1.024)

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
28	87049-2816	87049-2817	26.00 (1.024)	28.00 (1.102)
30	87049-3016	87049-3017	28.00 (1.102)	30.00 (1.181)
32	87049-3216	87049-3217	30.00 (1.181)	32.00 (1.260)
34	87049-3416	87049-3417	32.00 (1.260)	34.00 (1.339)
36	87049-3616	87049-3617	34.00 (1.339)	36.00 (1.417)
38	87049-3816	87049-3817	36.00 (1.417)	38.00 (1.496)
40	87049-4016	87049-4017	38.00 (1.496)	40.00 (1.575)
42	87049-4216	87049-4217	40.00 (1.575)	42.00 (1.654)
44	87049-4416	87049-4417	42.00 (1.654)	44.00 (1.732)
46	87049-4616	87049-4617	44.00 (1.732)	46.00 (1.811)
48	87049-4816	87049-4817	46.00 (1.811)	48.00 (1.890)
50	87049-5016	87049-5017	48.00 (1.890)	50.00 (1.969)

FEATURES AND SPECIFICATIONS

molex®

2.00mm (.079") Pitch Milli-Grid™ Header

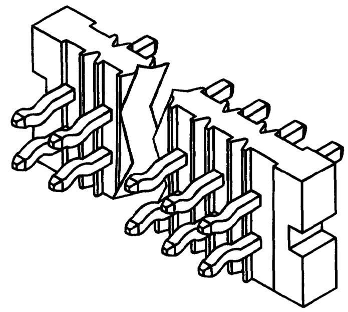
87239 Straddle Mount

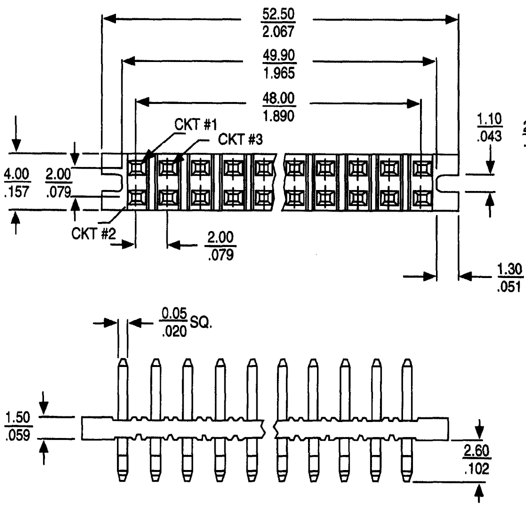
Features and Benefits
- Size 50 circuits
- Optional availability for PCB thickness 1.22 ± 0.13mm (.045 ± .005")

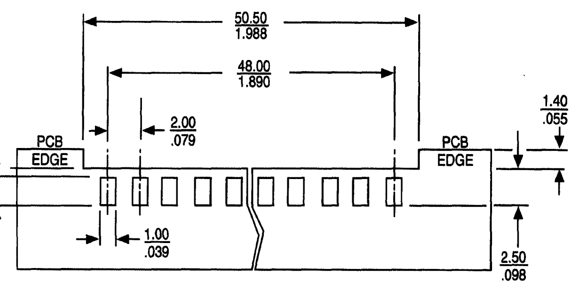
Reference Information
Product Specification: PS-87049
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980-202
Mates With: Milli-Grid 2.00mm Receptacles
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 2.0A
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

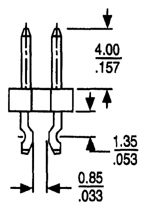
Physical
Housing: Black high-temperature nylon, UL 94V-0
Contact: Phosphor Bronze, 0.50mm square
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 0.89 ± 0.13mm (.035 ± .005")
Option: 1.22 ± 0.13mm PCB thickness







PCB Layout
Pattern Typical Both Sides



ORDERING INFORMATION

Circuits	Void Pin Location	Order No.	
		15μ" Select Gold	30μ" Select Gold
50	None	87239-5001	87239-5011
50	9, 10, 28	87239-5002	87239-5012
50	5, 6, 25	87239-5003	87239-5013
50	5, 6, 26	87239-5004	87239-5014

FEATURES AND SPECIFICATIONS

molex® **2.00mm (.079") Pitch Milli-Grid™ Header**

87354

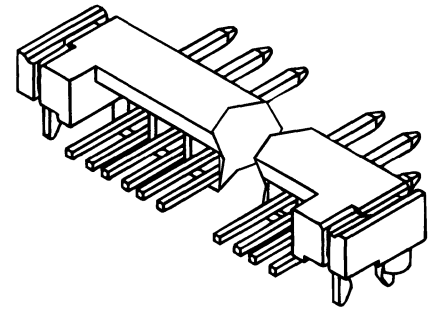
Edge Mount SMT

Features and Benefits
- Size 50 circuits
- Void pin version standard
- Reinforced Phosphor Bronze mounting clips
- Optional fully loaded version and other void pin locations

Reference Information
Product Specification: PS-87354
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: Milli-Grid 2.00mm Receptacles
Designed In: Millimeters

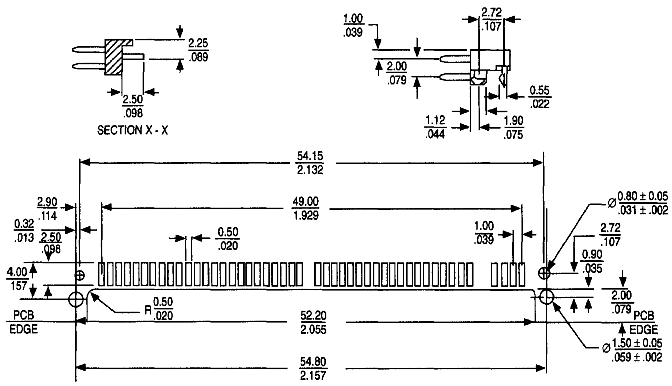
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black high-temperature 4/6 nylon, UL 94V-0
Contact: Brass
Plating: 30μ" select Gold
Temperature: -55 to +105°C
PCB Thickness: 0.80 ± 0.05mm

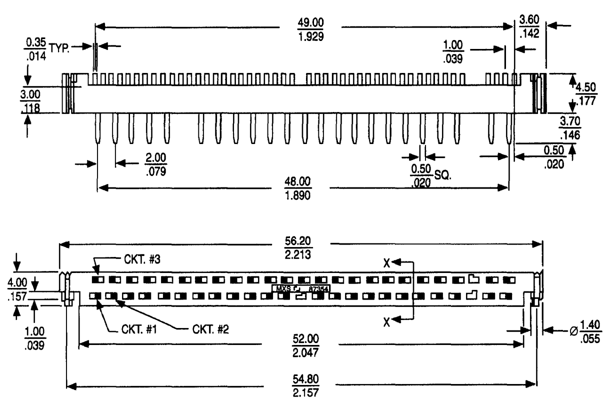


Micro Connectors

I



Recommended PCB Layout



ORDERING INFORMATION

Circuits	Void Pin Location	Order No.
50	25, 45, 46	87354-5012
50	24, 41, 42	87354-5022
50	5, 6, 26	87354-5002
50	9, 10, 27	87354-5032

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Header

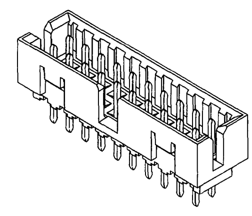
87331 Shrouded Vertical

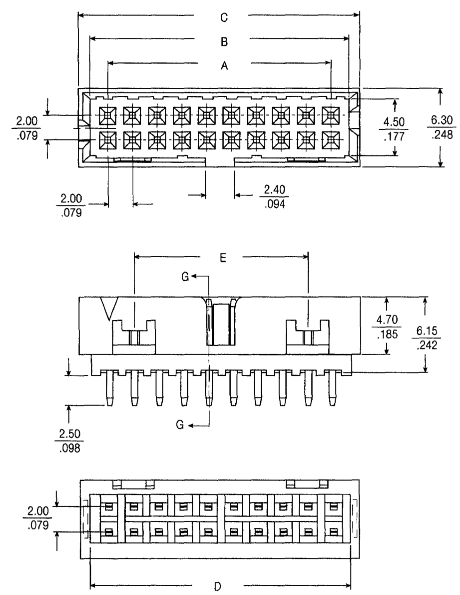
Features and Benefits
- Sizes 4 to 50 circuits
- Fully shrouded to protect pins during mating/unmating
- Center slot for polarization
- Side latches for mechanical locking

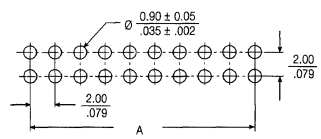
Reference Information
Product Specification: PS-87331
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 50394, 51110 and 87259
Designed In: Millimeters

Electrical
Current: 2.0A
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

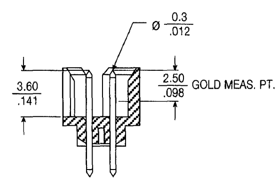
Physical
Housing: Black 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C







Recommended PCB Layout



SECTION G - G

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	15µ" Select Gold	30µ" Select Gold	A	B	C	D	E
4	87331-0420	87331-0421	2.00 (.079)	4.85 (.191)	6.65 (.262)	5.00 (.197)	
6	87331-0620	87331-0621	4.00 (.157)	6.85 (.270)	8.65 (.341)	7.00 (.276)	
8	87331-0820	87331-0821	6.00 (.236)	8.85 (.348)	10.65 (.419)	9.00 (.354)	
10	87331-1020	87331-1021	8.00 (.315)	10.85 (.427)	12.65 (.498)	11.00 (.433)	
12	87331-1220	87331-1221	10.00 (.394)	12.85 (.506)	14.65 (.577)	13.00 (.512)	
14	87331-1420	87331-1421	12.00 (.472)	14.85 (.585)	16.65 (.656)	15.00 (.591)	8.00 (.315)
16	87331-1620	87331-1621	14.00 (.551)	16.85 (.663)	18.65 (.734)	17.00 (.669)	10.00 (.394)
18	87331-1820	87331-0621	16.00 (.630)	18.85 (.742)	20.65 (.813)	19.00 (.748)	12.00 (.472)
20	87331-2020	87331-2021	18.00 (.709)	20.85 (.821)	22.65 (.892)	21.00 (.827)	14.00 (.551)
22	87331-2220	87331-2221	20.00 (.787)	22.85 (.900)	24.65 (.970)	23.00 (.906)	16.00 (.630)
24	87331-2420	87331-2421	22.00 (.866)	24.85 (.978)	26.65 (1.049)	25.00 (.984)	18.00 (.709)
26	87331-2620	87331-2621	24.00 (.945)	26.85 (1.057)	28.65 (1.128)	27.00 (1.063)	20.00 (.787)
28	87331-2820	87331-2821	26.00 (1.024)	28.85 (1.136)	30.65 (1.207)	29.00 (1.142)	22.00 (.866)
30	87331-3020	87331-3021	28.00 (1.102)	30.85 (1.215)	32.65 (1.285)	31.00 (1.220)	24.00 (.945)
32	87331-3220	87331-3221	30.00 (1.181)	32.85 (1.293)	34.65 (1.364)	33.00 (1.299)	26.00 (1.024)
34	87331-3420	87331-3421	32.00 (1.260)	34.85 (1.372)	36.65 (1.443)	35.00 (1.378)	28.00 (1.102)
36	87331-3620	87331-3621	34.00 (1.339)	36.85 (1.451)	38.65 (1.522)	37.00 (1.457)	30.00 (1.181)
38	87331-3820	87331-3821	36.00 (1.417)	38.85 (1.530)	40.65 (1.600)	39.00 (1.535)	32.00 (1.260)
40	87331-4020	87331-4021	38.00 (1.496)	40.85 (1.608)	42.65 (1.679)	41.00 (1.614)	34.00 (1.339)
42	87331-4220	87331-4221	40.00 (1.575)	42.85 (1.687)	44.65 (1.758)	43.00 (1.693)	36.00 (1.417)
44	87331-4420	87331-4421	42.00 (1.654)	44.85 (1.766)	46.65 (1.837)	45.00 (1.771)	38.00 (1.496)
46	87331-4620	87331-4621	44.00 (1.732)	46.85 (1.844)	48.65 (1.915)	47.00 (1.850)	40.00 (1.575)
48	87331-4820	87331-4821	46.00 (1.811)	48.85 (1.923)	50.65 (1.994)	49.00 (1.929)	42.00 (1.654)
50	87331-5020	87331-5021	48.00 (1.890)	50.85 (2.002)	52.65 (2.073)	51.00 (2.008)	44.00 (1.732)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 4 to 50 circuits
- Fully shrouded to protect pins during mating/unmating
- Center slot for polarization
- Side latches for mechanical locking
- Locating pegs for automatic insertion process

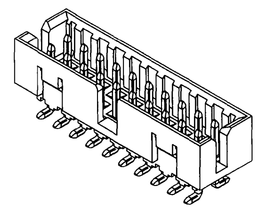
Reference Information
Product Specification: PS-87331
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 50394, 51110 and 87259
Designed In: Millimeters

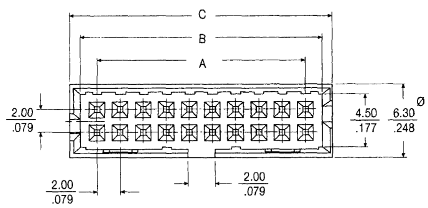
Electrical
Current: 2.0A
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

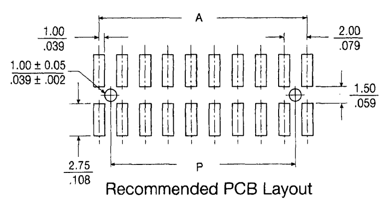
Physical
Housing: Black 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C

molex® 2.00mm (.079") Pitch Milli-Grid™ Header

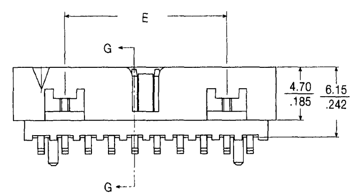
87332 Shrouded SMT

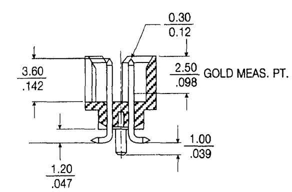




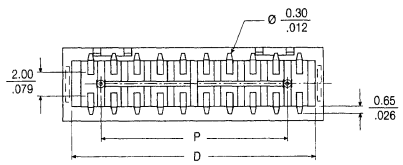


Recommended PCB Layout





SECTION G - G



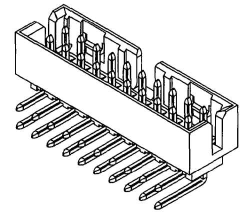
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension					
	15µ" Select Gold	30µ" Select Gold	A	B	C	D	E	P
4	87332-0420	87332-0421	2.00 (.079)	4.85 (.191)	6.65 (.262)	5.00 (.197)		
6	87332-0620	87332-0621	4.00 (.157)	6.85 (.270)	8.65 (.341)	7.00 (.276)		2.00 (.079)
8	87332-0820	87332-0821	6.00 (.236)	8.85 (.348)	10.65 (.419)	9.00 (.354)		4.00 (.157)
10	87332-1020	87332-1021	8.00 (.315)	10.85 (.427)	12.65 (.498)	11.00 (.433)		6.00 (.236)
12	87332-1220	87332-1221	10.00 (.394)	12.85 (.506)	14.65 (.577)	13.00 (.512)		8.00 (.315)
14	87332-1420	87332-1421	12.00 (.472)	14.85 (.585)	16.65 (.656)	15.00 (.591)	8.00 (.315)	10.00 (.394)
16	87332-1620	87332-1621	14.00 (.551)	16.85 (.663)	18.65 (.734)	17.00 (.669)	10.00 (.394)	12.00 (.472)
18	87332-1820	87332-0621	16.00 (.630)	18.85 (.742)	20.65 (.813)	19.00 (.748)	12.00 (.472)	14.00 (.551)
20	87332-2020	87332-2021	18.00 (.709)	20.85 (.821)	22.65 (.892)	21.00 (.827)	14.00 (.551)	16.00 (.630)
22	87332-2220	87332-2221	20.00 (.787)	22.85 (.900)	24.65 (.970)	23.00 (.906)	16.00 (.630)	18.00 (.709)
24	87332-2420	87332-2421	22.00 (.866)	24.85 (.978)	26.65 (1.049)	25.00 (.984)	18.00 (.709)	20.00 (.787)
26	87332-2620	87332-2621	24.00 (.945)	26.85 (1.057)	28.65 (1.128)	27.00 (1.063)	20.00 (.787)	22.00 (.866)
28	87332-2820	87332-2821	26.00 (1.024)	28.85 (1.136)	30.65 (1.207)	29.00 (1.142)	22.00 (.866)	24.00 (.945)
30	87332-3020	87332-3021	28.00 (1.102)	30.85 (1.215)	32.65 (1.285)	31.00 (1.220)	24.00 (.945)	26.00 (1.024)
32	87332-3220	87332-3221	30.00 (1.181)	32.85 (1.293)	34.65 (1.364)	33.00 (1.299)	26.00 (1.024)	28.00 (1.102)
34	87332-3420	87332-3421	32.00 (1.260)	34.85 (1.372)	36.65 (1.443)	35.00 (1.378)	28.00 (1.102)	30.00 (1.181)
36	87332-3620	87332-3621	34.00 (1.339)	36.85 (1.451)	38.65 (1.522)	37.00 (1.457)	30.00 (1.181)	32.00 (1.260)
38	87332-3820	87332-3821	36.00 (1.417)	38.85 (1.530)	40.65 (1.600)	39.00 (1.535)	32.00 (1.260)	34.00 (1.339)
40	87332-4020	87332-4021	38.00 (1.496)	40.85 (1.608)	42.65 (1.679)	41.00 (1.614)	34.00 (1.339)	36.00 (1.417)
42	87332-4220	87332-4221	40.00 (1.575)	42.85 (1.687)	44.65 (1.758)	43.00 (1.693)	36.00 (1.417)	38.00 (1.496)
44	87332-4420	87332-4421	42.00 (1.654)	44.85 (1.766)	46.65 (1.837)	45.00 (1.792)	38.00 (1.496)	40.00 (1.575)
46	87332-4620	87332-4621	44.00 (1.732)	46.85 (1.844)	48.65 (1.915)	47.00 (1.850)	40.00 (1.575)	42.00 (1.654)
48	87332-4820	87332-4821	46.00 (1.811)	48.85 (1.923)	50.65 (1.994)	49.00 (1.929)	42.00 (1.654)	44.00 (1.732)
50	87332-5020	87332-5021	48.00 (1.890)	50.85 (2.002)	52.65 (2.073)	51.00 (2.008)	44.00 (1.732)	46.00 (1.811)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Header

87333 Shrouded Right Angle

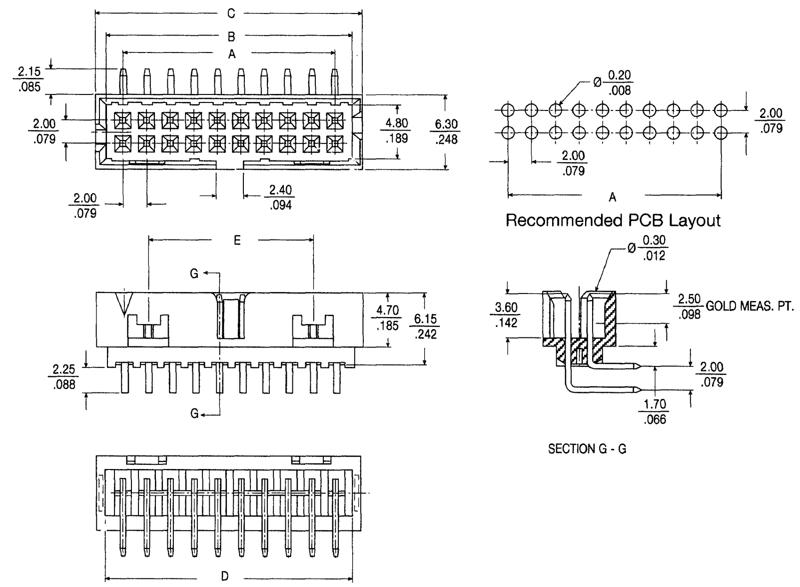


Features and Benefits
- Sizes 4 to 50 circuits
- Fully shrouded to protect pins during mating/unmating
- Center slot for polarization
- Side latches for mechanical locking

Reference Information
Product Specification: PS-87331
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 50394, 51110 and 87259
Designed In: Millimeters

Electrical
Current: 2.0A
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black 4/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension				
	15µ" Select Gold	30µ" Select Gold	A	B	C	D	E
4	87333-0420	87333-0421	2.00 (.079)	4.85 (.191)	6.65 (.262)	5.00 (.197)	
6	87333-0620	87333-0621	4.00 (.157)	6.85 (.270)	8.65 (.341)	7.00 (.276)	
8	87333-0820	87333-0821	6.00 (.236)	8.85 (.348)	10.65 (.419)	9.00 (.354)	
10	87333-1020	87333-1021	8.00 (.315)	10.85 (.427)	12.65 (.498)	11.00 (.433)	
12	87333-1220	87333-1221	10.00 (.394)	12.85 (.506)	14.65 (.577)	13.00 (.512)	
14	87333-1420	87333-1421	12.00 (.472)	14.85 (.585)	16.65 (.656)	15.00 (.591)	8.00 (.315)
16	87333-1620	87333-1621	14.00 (.551)	16.85 (.663)	18.65 (.734)	17.00 (.669)	10.00 (.394)
18	87333-1820	87333-0621	16.00 (.630)	18.85 (.742)	20.65 (.813)	19.00 (.748)	12.00 (.472)
20	87333-2020	87333-2021	18.00 (.709)	20.85 (.821)	22.65 (.892)	21.00 (.827)	14.00 (.551)
22	87333-2220	87333-2221	20.00 (.787)	22.85 (.900)	24.65 (.970)	23.00 (.906)	16.00 (.630)
24	87333-2420	87333-2421	22.00 (.866)	24.85 (.978)	26.65 (1.049)	25.00 (.984)	18.00 (.709)
26	87333-2620	87333-2621	24.00 (.945)	26.85 (1.057)	28.65 (1.128)	27.00 (1.063)	20.00 (.787)
28	87333-2820	87333-2821	26.00 (1.024)	28.85 (1.136)	30.65 (1.207)	29.00 (1.142)	22.00 (.866)
30	87333-3020	87333-3021	28.00 (1.102)	30.85 (1.215)	32.65 (1.285)	31.00 (1.220)	24.00 (.945)
32	87333-3220	87333-3221	30.00 (1.181)	32.85 (1.293)	34.65 (1.364)	33.00 (1.299)	26.00 (1.024)
34	87333-3420	87333-3421	32.00 (1.260)	34.85 (1.372)	36.65 (1.443)	35.00 (1.378)	28.00 (1.102)
36	87333-3620	87333-3621	34.00 (1.339)	36.85 (1.451)	38.65 (1.522)	37.00 (1.457)	30.00 (1.181)
38	87333-3820	87333-3821	36.00 (1.417)	38.85 (1.530)	40.65 (1.600)	39.00 (1.535)	32.00 (1.260)
40	87333-4020	87333-4021	38.00 (1.496)	40.85 (1.608)	42.65 (1.679)	41.00 (1.614)	34.00 (1.339)
42	87333-4220	87333-4221	40.00 (1.575)	42.85 (1.687)	44.65 (1.758)	43.00 (1.693)	36.00 (1.417)
44	87333-4420	87333-4421	42.00 (1.654)	44.85 (1.766)	46.65 (1.837)	45.00 (1.792)	38.00 (1.496)
46	87333-4620	87333-4621	44.00 (1.732)	46.85 (1.844)	48.65 (1.915)	47.00 (1.850)	40.00 (1.575)
48	87333-4820	87333-4821	46.00 (1.811)	48.85 (1.923)	50.65 (1.994)	49.00 (1.929)	42.00 (1.654)
50	87333-5020	87333-5021	48.00 (1.890)	50.85 (2.002)	52.65 (2.073)	51.00 (2.008)	44.00 (1.732)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Receptacle

87380 FPC/PCB Vertical

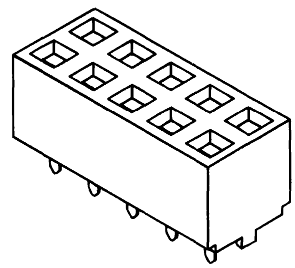
Features and Benefits
- Sizes 4 to 50 circuits
- Low profile height 4.00mm
- Optional locating peg version, 4.50mm height version and SMT version 87381

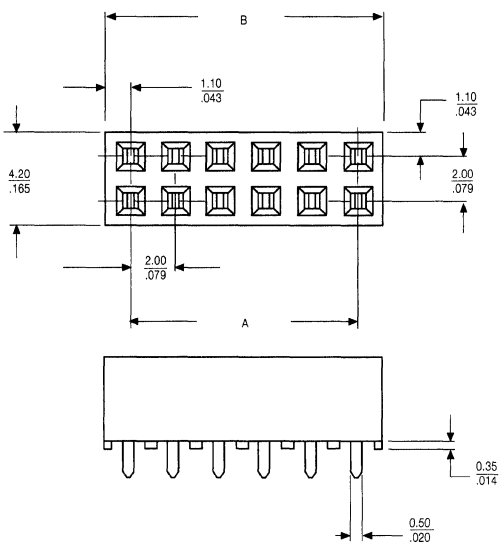
Reference Information
Product Specification: PS-87380
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980-212
Mates With: 0.50mm square pin headers
Designed In: Millimeters

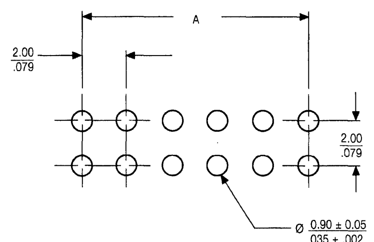
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 180g max.
Normal Force: 50g min.

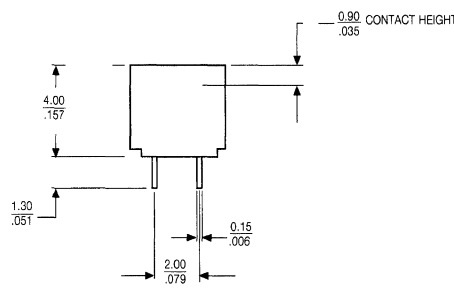
Physical
Housing: Black nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 0.89 ± 0.13mm







Recommended PCB Layout



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
4	87380-0402	87380-0401	2.00 (.079)	4.00 (.157)
6	87380-0602	87380-0601	4.00 (.157)	6.00 (.236)
8	87380-0802	87380-0801	6.00 (.236)	8.00 (.315)
10	87380-1002	87380-1001	8.00 (.315)	10.00 (.394)
12	87380-1202	87380-1201	10.00 (.394)	12.00 (.472)
14	87380-1402	87380-1401	12.00 (.472)	14.00 (.551)
16	87380-1602	87380-1601	14.00 (.551)	16.00 (.630)
18	87380-1802	87380-1801	16.00 (.630)	18.00 (.709)
20	87380-2002	87380-2001	18.00 (.709)	20.00 (.787)
22	87380-2202	87380-2201	20.00 (.787)	22.00 (.866)
24	87380-2402	87380-2401	22.00 (.866)	24.00 (.945)
26	87380-2602	87380-2601	24.00 (.945)	26.00 (1.024)

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
28	87380-2802	87380-2801	26.00 (1.024)	28.00 (1.102)
30	87380-3002	87380-3001	28.00 (1.102)	30.00 (1.181)
32	87380-3202	87380-3201	30.00 (1.181)	32.00 (1.260)
34	87380-3402	87380-3401	32.00 (1.260)	34.00 (1.339)
36	87380-3602	87380-3601	34.00 (1.339)	36.00 (1.417)
38	87380-3802	87380-3801	36.00 (1.417)	38.00 (1.496)
40	87380-4002	87380-4001	38.00 (1.496)	40.00 (1.575)
42	87380-4202	87380-4201	40.00 (1.575)	42.00 (1.654)
44	87380-4402	87380-4401	42.00 (1.654)	44.00 (1.732)
46	87380-4602	87380-4601	44.00 (1.732)	46.00 (1.811)
48	87380-4802	87380-4801	46.00 (1.811)	48.00 (1.890)
50	87380-5002	87380-5001	48.00 (1.890)	50.00 (1.969)

FEATURES AND SPECIFICATIONS

molex®

2.00mm (.079") Pitch Milli-Grid™ Receptacle

87264 Side Entry

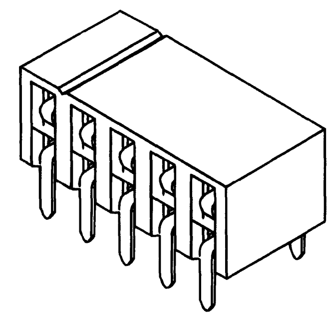
Features and Benefits
- Sizes 6 to 50 circuits

Reference Information
Product Specification: PS-87264
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980-182
Mates With: 0.50mm square pin headers
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

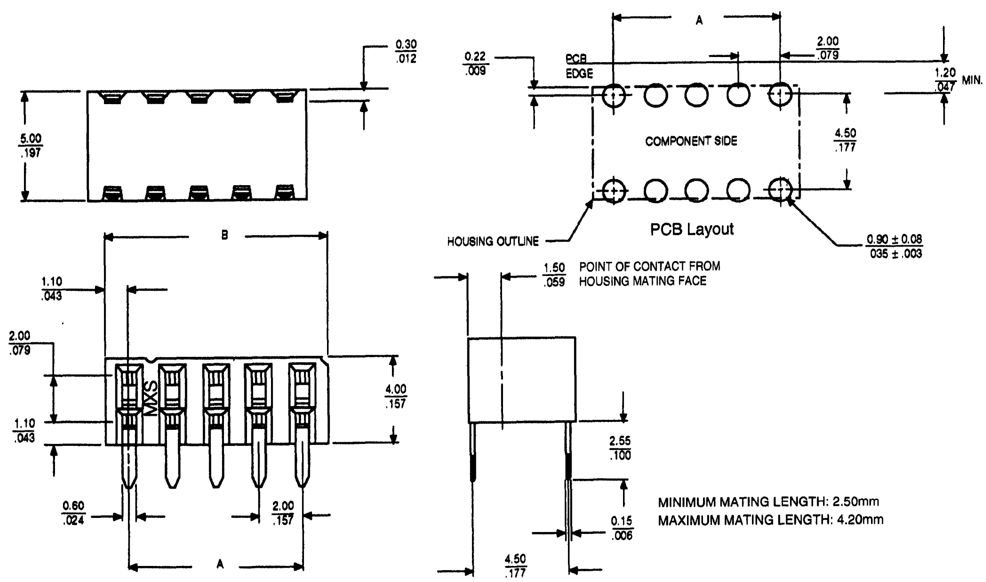
Mechanical
Contact Insertion Force: 180g max.
Normal Force: 50g min.

Physical
Housing: Black high-temperature nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 1.60 ± 0.10mm



Micro Connectors

I



ORDERING INFORMATION AND DIMENSIONS

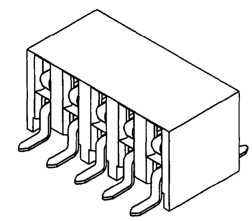
Circuits	Order No.		Dimension	
	15µ" Select Gold	30µ" Select Gold	A	B
6	87264-0650	87264-0651	4.00 (.157)	6.20 (.244)
8	87264-0850	87264-0851	6.00 (.236)	8.20 (.323)
10	87264-1050	87264-1051	8.00 (.315)	10.20 (.402)
12	87264-1250	87264-1251	10.00 (.394)	12.20 (.480)
14	87264-1450	87264-1451	12.00 (.472)	14.20 (.559)
16	87264-1650	87264-1651	14.00 (.551)	16.20 (.638)
18	87264-1850	87264-1851	16.00 (.630)	18.20 (.717)
20	87264-2050	87264-2051	18.00 (.709)	20.20 (.795)
22	87264-2250	87264-2251	20.00 (.787)	22.20 (.874)
24	87264-2450	87264-2451	22.00 (.866)	24.20 (.953)
26	87264-2650	87264-2651	24.00 (.945)	26.20 (1.031)
28	87264-2850	87264-2851	26.00 (1.024)	28.20 (1.110)

Circuits	Order No.		Dimension	
	15µ" Select Gold	30µ" Select Gold	A	B
30	87264-3050	87264-3051	28.00 (1.102)	30.20 (1.189)
32	87264-3250	87264-3251	30.00 (1.181)	32.20 (1.268)
34	87264-3450	87264-3451	32.00 (1.260)	34.20 (1.346)
36	87264-3650	87264-3651	34.00 (1.339)	36.20 (1.425)
38	87264-3850	87264-3851	36.00 (1.417)	38.20 (1.504)
40	87264-4050	87264-4051	38.00 (1.496)	40.20 (1.583)
42	87264-4250	87264-4251	40.00 (1.575)	42.20 (1.661)
44	87264-4450	87264-4451	42.00 (1.654)	44.20 (1.740)
46	87264-4650	87264-4651	44.00 (1.732)	46.20 (1.819)
48	87264-4850	87264-4851	46.00 (1.811)	48.20 (1.898)
50	87264-5050	87264-5051	48.00 (1.890)	50.20 (1.976)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Receptacle

87368 Side Entry SMT



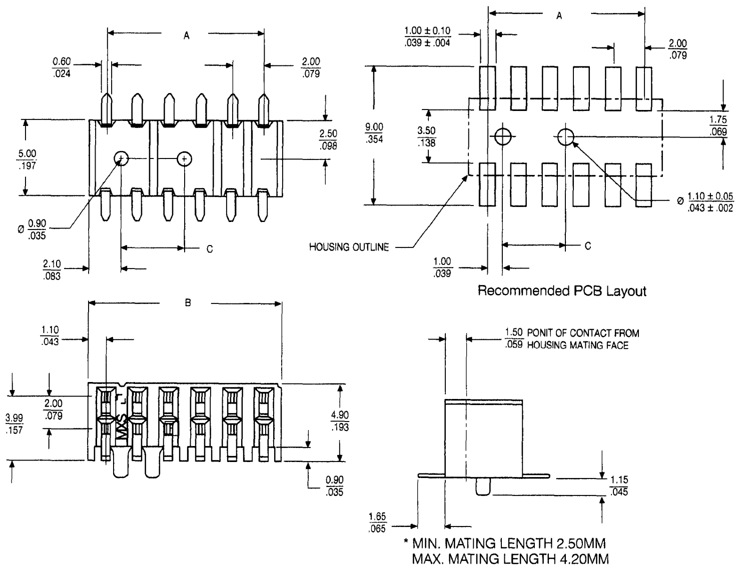
Features and Benefits
- Sizes 10 to 50 circuits
- MCC compatible
- Polarization peg version standard
- Optional without peg version

Reference Information
Product Specification: PS-87264
Packaging: Tube
Mates With: 0.50mm square pin headers
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 180g max.
Normal Force: 50g min.

Physical
Housing: Black nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 1.60 ± 0.10mm



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		
	15µ" Select Gold	30µ" Select Gold	A	B	C
10	87368-1020	87368-1021	8.00 (.315)	10.20 (.402)	4.00 (.157)
12	87368-1220	87368-1221	10.00 (.394)	12.20 (.480)	4.00 (.157)
14	87368-1420	87368-1421	12.00 (.472)	14.20 (.559)	6.00 (.236)
16	87368-1620	87368-1621	14.00 (.551)	16.20 (.638)	8.00 (.315)
18	87368-1820	87368-1821	16.00 (.630)	18.20 (.717)	10.00 (.394)
20	87368-2020	87368-2021	18.00 (.709)	20.20 (.795)	12.00 (.472)
22	87368-2220	87368-2221	20.00 (.787)	22.20 (.874)	14.00 (.551)
24	87368-2420	87368-2421	22.00 (.866)	24.20 (.953)	16.00 (.630)
26	87368-2620	87368-2621	24.00 (.945)	26.20 (1.031)	18.00 (.709)
28	87368-2820	87368-2821	26.00 (1.024)	28.20 (1.110)	20.00 (.787)
30	87368-3020	87368-3021	28.00 (1.102)	30.20 (1.189)	22.00 (.866)
32	87368-3220	87368-3221	30.00 (1.181)	32.20 (1.268)	24.00 (.945)
34	87368-3420	87368-3421	32.00 (1.260)	34.20 (1.346)	26.00 (1.024)
36	87368-3620	87368-3621	34.00 (1.339)	36.20 (1.425)	28.00 (1.102)
38	87368-3820	87368-3821	36.00 (1.417)	38.20 (1.504)	30.00 (1.181)
40	87368-4020	87368-4021	38.00 (1.496)	40.20 (1.583)	32.00 (1.260)
42	87368-4220	87368-4221	40.00 (1.575)	42.20 (1.661)	34.00 (1.339)
44	87368-4420	87368-4421	42.00 (1.654)	44.20 (1.740)	36.00 (1.417)
46	87368-4620	87368-4621	44.00 (1.732)	46.20 (1.819)	38.00 (1.496)
48	87368-4820	87368-4821	46.00 (1.811)	48.20 (1.898)	40.00 (1.575)
50	87368-5020	87368-5021	48.00 (1.890)	50.20 (1.976)	42.00 (1.654)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Receptacle

87286

Bottom Entry

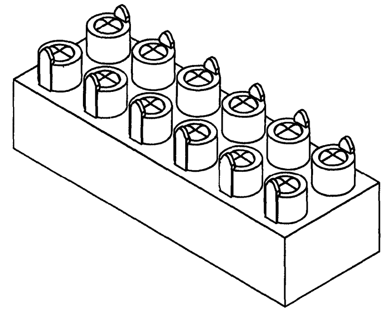
Features and Benefits
- Sizes 4 to 30 circuits

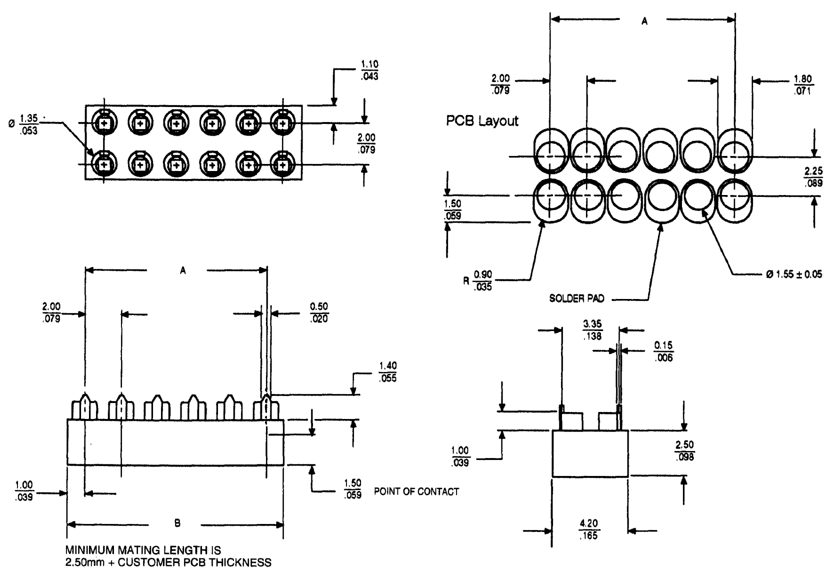
Reference Information
Product Specification: PS-87263
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980-212
Mates With: 0.50mm square pin headers
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 300g max.
Normal Force: 50g min.

Physical
Housing: Black high-temperature nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C
PCB Thickness: 0.80 ± 0.10mm





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15µ" Select Gold	30µ" Select Gold	A	B
4	87286-0401	87286-0402	2.00 (.079)	4.00 (.157)
6	87286-0601	87286-0602	4.00 (.157)	6.00 (.236)
8	87286-0801	87286-0802	6.00 (.236)	8.00 (.315)
10	87286-1001	87286-1002	8.00 (.315)	10.00 (.394)
12	87286-1201	87286-1202	10.00 (.394)	12.00 (.472)
14	87286-1401	87286-1402	12.00 (.472)	14.00 (.551)
16	87286-1601	87286-1602	14.00 (.551)	16.00 (.630)
18	87286-1801	87286-1802	16.00 (.630)	18.00 (.709)
20	87286-2001	87286-2002	18.00 (.709)	20.00 (.787)
22	87286-2201	87286-2202	20.00 (.787)	22.00 (.866)

Circuits	Order No.		Dimension	
	15µ" Select Gold	30µ" Select Gold	A	B
24	87286-2401	87286-2402	22.00 (.866)	24.00 (.945)
26	87286-2601	87286-2602	24.00 (.945)	26.00 (1.024)
28	87286-2801	87286-2802	26.00 (1.024)	28.00 (1.102)
30	87286-3001	87286-3002	28.00 (1.102)	30.00 (1.181)
32	87286-3201	87286-3202	30.00 (1.181)	32.00 (1.259)
34	87286-3401	87286-3402	32.00 (1.259)	34.00 (1.338)
36	87286-3601	87286-3602	34.00 (1.338)	36.00 (1.417)
38	87286-3801	87286-3802	36.00 (1.417)	38.00 (1.496)
40	87286-4001	87286-4002	38.00 (1.496)	40.00 (1.574)
42	87286-4201	87286-4202	40.00 (1.574)	42.00 (1.653)

2.00mm (.079") Pitch Milli-Grid™ Receptacle

87263

Bottom Entry SMT

FEATURES AND SPECIFICATIONS

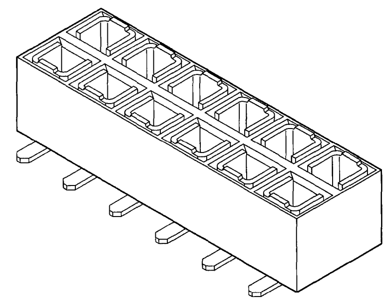
Features and Benefits
- Sizes 4 to 30 circuits
- Locating peg version standard
- Optional without peg version and 4.55mm profile height version

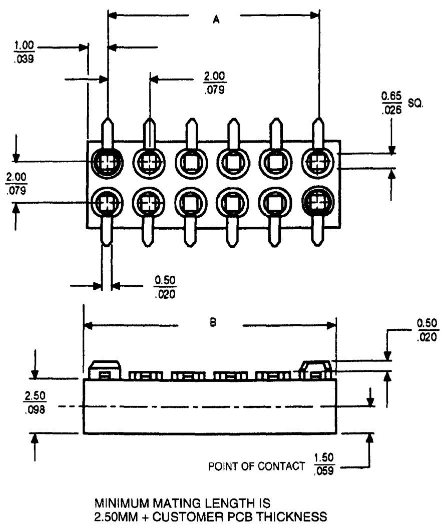
Reference Information
Product Specification: PS-87263
Packaging: Tube (contact factory for embossed tape)
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers
Designed In: Millimeters

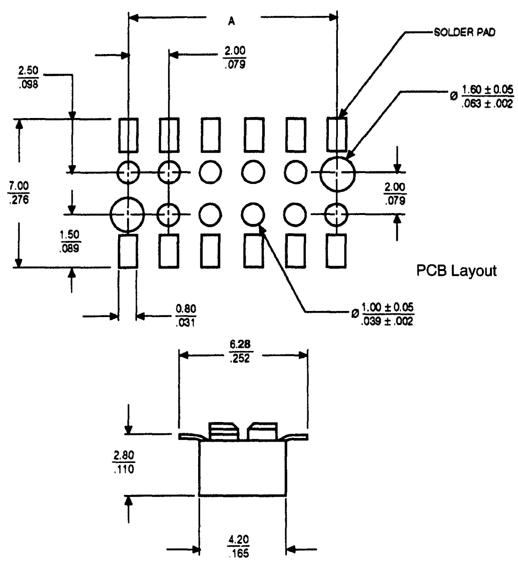
Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 300g max.
Normal Force: 50g min.

Physical
Housing: Black high-temperature nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15µ" Select Gold	30µ" Select Gold	A	B
4	87263-0420	87263-0422	2.00 (.079)	4.00 (.157)
6	87263-0620	87263-0622	4.00 (.157)	6.00 (.236)
8	87263-0820	87263-0822	6.00 (.236)	8.00 (.315)
10	87263-1020	87263-1022	8.00 (.315)	10.00 (.394)
12	87263-1220	87263-1222	10.00 (.394)	12.00 (.472)
14	87263-1420	87263-1422	12.00 (.472)	14.00 (.551)
16	87263-1620	87263-1622	14.00 (.551)	16.00 (.630)
18	87263-1820	87263-1822	16.00 (.630)	18.00 (.709)
20	87263-2020	87263-2022	18.00 (.709)	20.00 (.787)
22	87263-2220	87263-2222	20.00 (.787)	22.00 (.866)

Circuits	Order No.		Dimension	
	15µ" Select Gold	30µ" Select Gold	A	B
24	87263-2420	87263-2422	22.00 (.866)	24.00 (.945)
26	87263-2620	87263-2622	24.00 (.945)	26.00 (1.024)
28	87263-2820	87263-2822	26.00 (1.024)	28.00 (1.102)
30	87263-3020	87263-3022	28.00 (1.102)	30.00 (1.181)
32	87263-3220	87263-3222	30.00 (1.181)	32.00 (1.259)
34	87263-3420	87263-3422	32.00 (1.259)	34.00 (1.338)
36	87263-3220	87263-3622	34.00 (1.338)	36.00 (1.417)
38	87263-3820	87263-3822	36.00 (1.417)	38.00 (1.496)
40	87263-4020	87263-4022	38.00 (1.496)	40.00 (1.574)
42	87263-4220	87263-4222	40.00 (1.574)	42.00 (1.653)

FEATURES AND SPECIFICATIONS

2.00mm (.079") Pitch Milli-Grid™ Receptacle

87340

Top/Bottom Entry SMT (VLPR2)

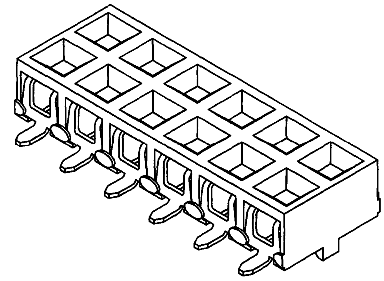
Features and Benefits
- Sizes 4 to 20 circuits
- Locating peg version standard
- Very low profile height 2.15mm
- End-to-end stackable
- Optional without peg version

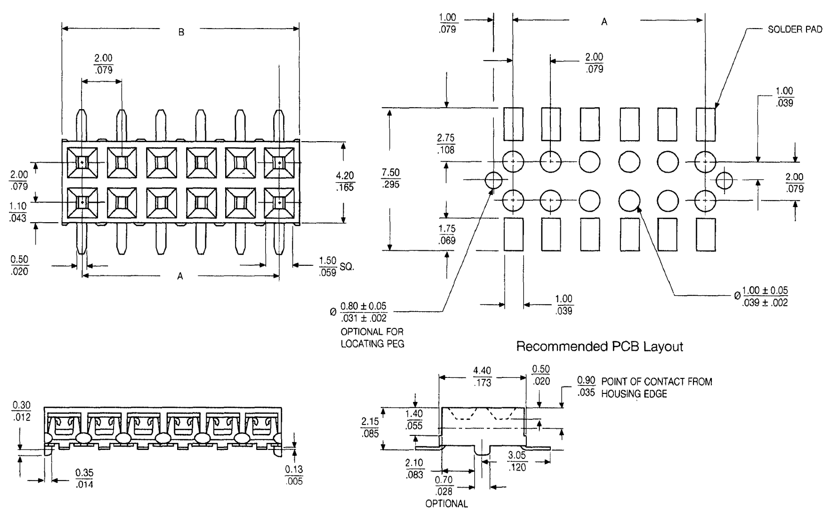
Reference Information
Product Specification: PS-87340
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Mates With: 0.50mm square pin headers
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 180g max.
Contact Retention to Housing: 0.32kg min.
Normal Force: 50g min.

Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C





* MIN. MATING LENGTH IS 1.90MM FOR TOP ENTRY
AND 1.90MM + PCB THICKNESS FOR BOTTOM ENTRY

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	15μ" Select Gold	30μ" Select Gold	A	B
4	87340-0422	87340-0421	2.00 (.079)	4.00 (.157)
6	87340-0622	87340-0621	4.00 (.157)	6.00 (.236)
8	87340-0822	87340-0821	6.00 (.236)	8.00 (.315)
10	87340-1022	87340-1021	8.00 (.315)	10.00 (.394)
12	87340-1222	87340-1221	10.00 (.394)	12.00 (.472)
14	87340-1422	87340-1421	12.00 (.472)	14.00 (.551)
16	87340-1622	87340-1621	14.00 (.551)	16.00 (.630)
18	87340-1822	87340-1821	16.00 (.630)	18.00 (.709)
20	87340-2022	87340-2021	18.00 (.709)	20.00 (.787)

Application Tooling Crimp Tooling for Micro Connectors

Crimp Tooling Molex US

ORDERING INFORMATION *Preferred Version in the US*

Presses	
Description	**Order No.**
TM-44 Press without Mini-Mac (220V)	11-09-2074
TM-42 Press without Dies (110V)	69002-5001
TM-144 Press and Stripper without Mini-Mac (220V)	11-09-2073
TM-7 Press without Mini-Mac (110V)	11-05-0043
TM-7 Press without Mini-Mac (220V)	11-05-0046

Terminal Series No.	Order No.									Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Terminator Die*	Terminator Die* Spare Tooling	Mini-Mac	Mini-Mac Spare Tooling	TM-144†	TM-80		
5378T/T2	57050-5000			11-40-2149	11-40-3143	11-18-2110	11-18-3104			24-28 (0.20-0.08)	1.52 (.060) max.
50011	57032-5000	57105-6000		11-40-2136	11-40-3132	11-18-2090	11-18-3085			24-30 (0.20-0.05)	1.40 (.055) max.
50012/50013	57046-5000			11-40-2141	11-40-3135	11-18-2122	11-18-3115			24-28 (0.20-0.08)	1.15 (.045) max.
50031	57075-5000	57105-6000								30-34 (0.05-0.02)	0.90 (.035) max.
50034	57056-5000	57057-6000		11-40-2156	11-40-3151					26-30 (0.12-0.05)	1.40 (.055) max.
50058	63811-0200	57072-6000		11-40-2245	11-40-3248	11-18-2154	11-18-3145		11-09-2064	28-32 (0.08-0.03)	1.00 (.040) max.
50061	63811-0200	57072-6000		11-40-2280	11-40-3281	11-18-2205	11-18-3199			28-32 (0.08-0.03)	1.00 (.040) max.
50079	63811-0300	57072-6000		11-40-2245	11-40-3248	11-18-2156	11-18-3147			26-28 (0.12-0.08)	1.00 (.040) max.
50080	63811-0300	57072-6000		11-40-2280	11-40-3281	11-18-2206	11-18-3198			26-28 (0.12-0.08)	1.00 (.040) max.
50125	63811-0300	57072-6000		11-40-2244	11-40-3247	11-18-2155	11-18-3146			26-28 (0.12-0.08)	1.00 (.040) max.
50133	63811-0200	57072-6000		11-40-2244	11-40-3247	11-18-2153	11-18-3144			28-32 (0.08-0.03)	1.00 (.040) max.
50212	57176-5000	57105-6000		11-40-2255	11-40-3259	11-18-2169	11-18-3169			24-30 (0.20-0.05)	1.40 (.055) max.
50372	57175-5000	57321-6000		11-40-2284	11-40-3290	11-18-2196	11-18-3189			22-26 (0.35-0.12)	0.93-1.35 (.053-.037) max.
50394	11-01-0204	11-26-7074		11-40-2278	11-40-3279	11-18-2197	11-18-3190			24-30 (0.20-0.05)	0.80-1.40 (.031-.055) max.

ORDERING INFORMATION *Preferred Version in Europe—Not Available in the US*

Crimp Tooling Molex Europe

Terminal Series No.	Order No.							Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Mini-Mac	Mini-Mac Spare Tooling	TM-144†	TM-80		
5378T/T2				69037-1050	69037-2050			24-28 (0.20-0.08)	1.52 (.060) max.
50011				69037-1072	69037-2072			24-30 (0.20-0.05)	1.40 (.055) max.
50012/50013				69037-1078	69037-2078			24-28 (0.20-0.08)	1.15 (.045) max.
50058				69037-1091	69037-2091			28-32 (0.08-0.03)	1.00 (.040) max.
50079				69037-1185	69037-2185			26-28 (0.12-0.08)	1.00 (.040) max.
50125				69037-1186	69037-2186			26-28 (0.12-0.08)	1.00 (.040) max.
50212				69037-1098	60397-2098			24-30 (0.20-0.05)	1.40 (.055) max.
50394	69008-0959			69037-1163	69037-2163			24-30 (0.20-0.05)	0.80-1.40 (.031-.055) max.

ORDERING INFORMATION *Preferred Version for Molex Japan—Not Available in the US*

Crimp Tooling Molex Japan

Presses	
Description	**Order No.**
Press for Modular Crimp Die	M15A
Mini-Press for Modular Crimp Die	57177-4000

Terminal Series No.	Order No.				Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Modular Crimp Die		
5378T/T2	57050-5000			57007-3000	24-28 (0.20-0.08)	1.52 (.060) max.
50011	57032-5000	57105-6000		57030-3000	24-30 (0.20-0.05)	1.40 (.055)max.
50012/50013	57046-5000			57045-3000	24-28 (0.20-0.08)	1.15 (.045) max.
50031	57075-5000	57105-6000		57047-3000	30-34 (0.05-0.02)	0.90 (.035) max.
50034	57056-5000	57057-6000		57055-3000	26-30 (0.12-0.05)	1.40 (.055) max.
50058	57068-5000	57072-6000		57067-3000	28-32 (0.08-0.03)	1.00 (.040) max.
50061	57070-5000	57072-6000		57069-3000	28-32 (0.08-0.03)	1.00 (.040) max.
50079	57177-5000	57072-6000		57067-3000	26-28 (0.12-0.08)	1.00 (.040) max.
50080		57072-6000		57069-3000	26-28 (0.12-0.08)	1.00 (.040) max.
50125	57140-5000	57072-6000		57138-3000	26-28 (0.12-0.08)	1.00 (.040) max.
50133	57139-5000	57072-6000		57138-3000	28-32 (0.08-0.03)	1.00 (.040) max.
50212	57176-5000	57105-6000		57175-3000	24-30 (0.20-0.05)	1.40 (.055) max.
50372	57175-5000	57321-6000		57175-3000	22-26 (0.35-0.12)	0.93-1.35 (.053-.037) max.
50394		55800-0008		57315-3000	24-30 (0.20-0.05)	0.80-1.40 (.031-.055) max.

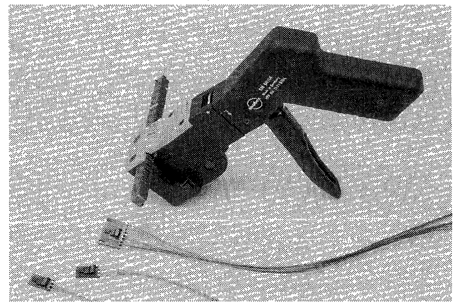
* For use with TM-40, TM-42 or Base Unit

† Includes Mini-Mac

See Application Tooling Section "W" for additional information on these tools

Application Tooling
IDT Termination Tooling for 30452 Series Connectors

Termination Hand Tool for Discrete Wire



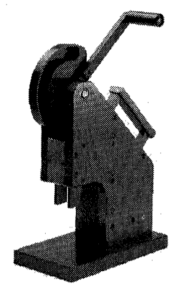
FEATURES

- For low volume, prototype and repair
- Automatic indexing to next position after insertion of discrete wire

ORDERING INFORMATION

Description	Order No.	Connectors
Pistol	11-21-5194	
Module	11-39-0273	30452

Discrete Wire Manual Press



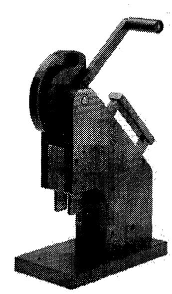
FEATURES

- For prototype and low volume requirements
- Manual index to next position after termination

ORDERING INFORMATION

Description	Order No.	Connector
Press and Tooling	11-20-1298	30452
Tool Kit Only	11-39-0111	30452

Ribbon Cable Manual Press Terminator



FEATURES

- For prototype and low volume requirements
- Mass termination of prepared cable to connector

ORDERING INFORMATION

Description	Order No.	Connector
Press and Tooling	11-20-1327	30452
Tool Kit Only	11-39-0274	30452

See Application Tooling Section "W" for additional information on these tools

FEATURES AND SPECIFICATIONS

Application Tooling IDT Termination Tooling for 30452 Series Connectors

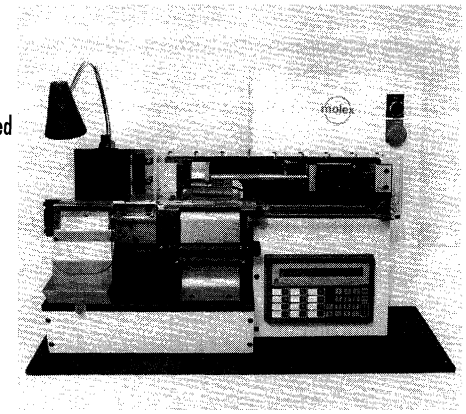
Semi-Automatic "Hawk"™ Terminator

Features

- Assembles either discrete wire or ribbon cable
- Connector packaged in "Ammo Pak" and linked together by terminal carrier strips
- Automatic connector loading
- Programmable void capability
- Foot pedal operated
- Tooled for 4 through 21 circuits
- Discrete wire and cable tooling come with the machine. Two 21 circuit tools supplied should be altered to your application circuit size. Specific circuit size tools available, see your manual for ordering information.

Specifications

Size: Width—965mm (30")
Depth—585mm (19")
Height—480mm (16")
Weight: 70kg (150 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—28L per minute (1 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—2.0A at 120V or 1.0A at 220V
Insulation Diameter: 26 AWG stranded topcoat 1.12mm (.044") max.
Rate: Up to 1200 cycles per hour (discrete wire) and 350 assemblies per hour (cable), dependent on operator speed and wire length



ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Semi-Automatic Terminator for Discrete Wire and Ribbon Cable	11-20-1293	30452

Micro Connectors

I

FEATURES AND SPECIFICATIONS

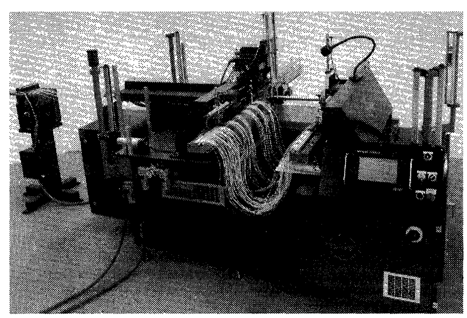
62000-0000 Automatic Harness Assembly Machines

Features

- Dereel system for discrete wire or cable available
- Double- or single-ended harness capabilities without strip
- Single-ended harness capability with strip 38.00mm (1.500") max.; harness length of 76mm (3") min. to 610mm (24") max.
- Full strip for discrete wire available
- Strip and retain for cable available
- Discrete wire with variable wire length capability; harness length of 152mm (6") min. to 2400mm (95") max.
- Up to 56 terminations per cycle, dependent on circuit size
- Missing wire and splice detector
- Carrier strip break off

Specifications

Size: Width—2300mm (91")
Depth—1800mm (71")
Height—1500mm (59")
Weight: 1800kg (4000 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—142L per minute (5 CFM)
Electrical: Voltage—120V AC, 60 Hz or 220V AC, 50 Hz
Current—30A at 120V or 15A at 220V
Rate: 300 cycles per hour average, dependent on harness length



ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable	Contact factory	30452

Note: Due to the special nature of these machines, contact factory for information related to specific harness requirements

See Application Tooling Section "W" for additional information on these tools

Application Tooling
IDT Termination Tooling for EBBI™ 50D

Ribbon Cable Manual Press

FEATURES AND SPECIFICATIONS

Features

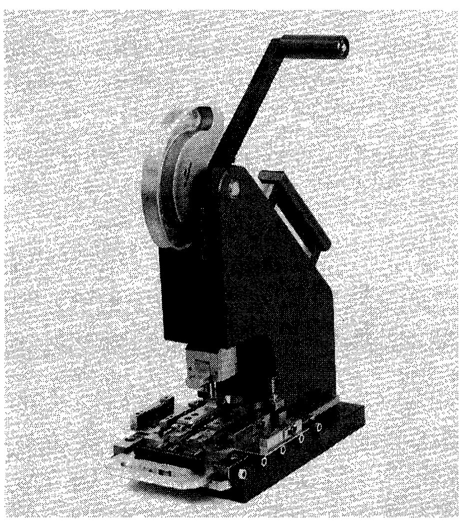
- Accurate cable location and clamping
- Connector accurately nested
- Feed-through or feed-to capability
- Tooling slides out of press to ease plug and cable loading
- Termination has antibackup ratchet to ensure full termination cycle

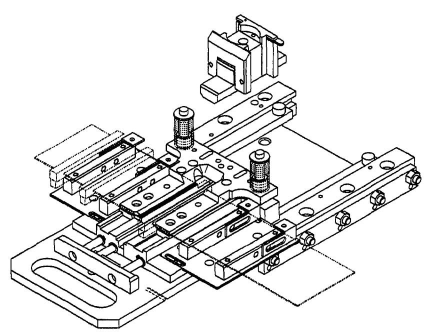
Specifications

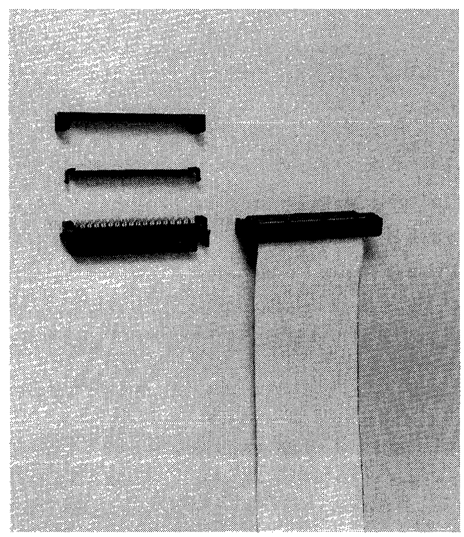
Size: Width—230mm (9")
Depth—457mm (18")
Height—457mm (18")
Weight: 27kg (60 lb)
Rate: Up to 150 assemblies per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
EBBI 50D Ribbon Cable Manual Press	11-20-1307	15-92-3XXX
Tool Kit Only	11-39-0152	15-92-3XXX


Complete Manual Press


Tool Kit



FEATURES

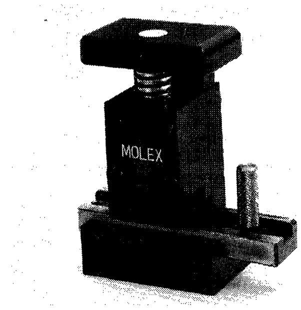
- For low volume, repairs and prototype
- Manual indexing to next position after insertion of discrete wire

Application Tooling
IDT Termination Tooling for 52478 and 52484 Mill Connectors

ORDERING INFORMATION

Description	Order No.	Connector
Hand Tool	57290-5000	52484

Termination Hand Tool for Discrete Wire



ORDERING INFORMATION

Description	Order No.	Connector
Air Press Only	57222-7000	
Die Set for Single Row Receptacle	57220-7000	52478
Die Set for Dual Row Receptacle	57219-7000	52484

Pneumatic Press for Single and Dual Row Connectors

FEATURES

- Fully automatic mass terminators for high volume applications
- User friendly solid state controller
- Modular design
- Self-diagnostic

Fully Automatic Harness Assembly Machine XELOM Mill

Note: Due to the custom nature of these machines, contact factory to order

FEATURES

- For low volume, repairs and prototype
- Full cycle ratchet

Application Tooling IDT Termination Tooling for Milli-Grid™

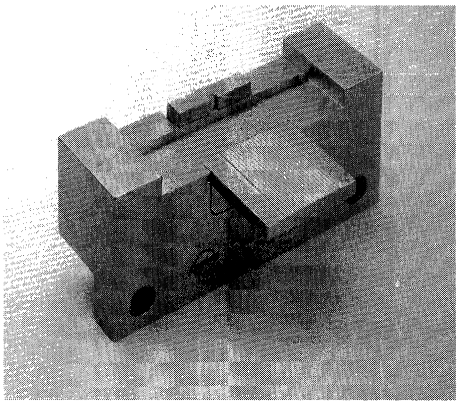
Termination Tool for Ribbon Cable

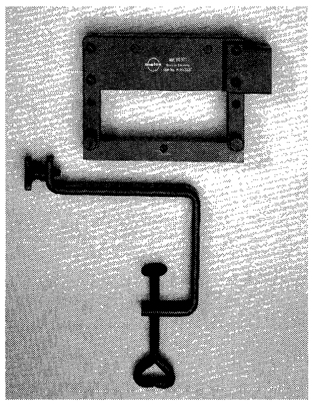
ORDERING INFORMATION

Description	Order No.	Connector
Hand Tool Handle	11-21-5194	
Module	11-32-5759	87259
Power Adapter/Clamp*	11-31-3337	

Complete tool includes the handle, power adapter, clamp and module

* Module power adapter includes 2 bottom bars to accomodate all ribbon cable modules


Module

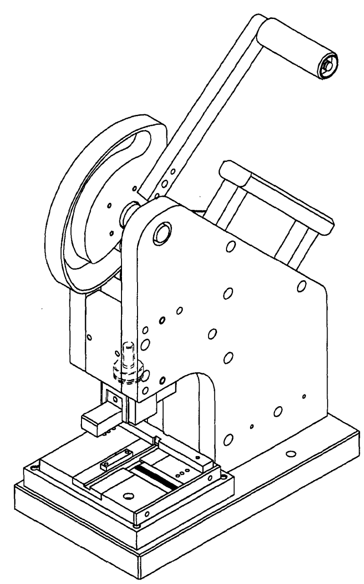

Power Adapter/Clamp


Hand Tool Handle

FEATURES

- Full cycle ratchet
- For low volume and prototype
- Mass termination of prepared cable connector

Ribbon Cable Manual Press



ORDERING INFORMATION

Description	Order No.	Connector
Arbor Press with Tooling	11-39-0049	87259
Tool Kit Only*	11-32-5760	87259
Tool Change Kit Only†	11-32-5761	87259
Universal Adapter Plate	11-32-5762	87259

* Customer has manual press already

† Customer has manual press and MX50 tooling already

Note: Complete press includes press, tooling and universal adapter plate

PCB Connectors

FEATURES AND SPECIFICATIONS

molex® **3.00mm (.118") Pitch Micro-Fit 3.0™ Terminal**

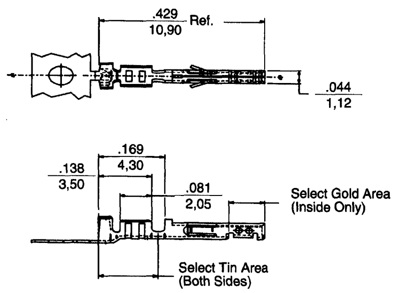
43030/43031

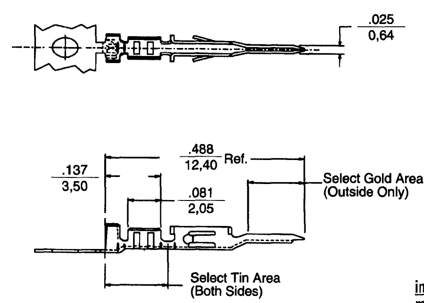
Features and Benefits
- 4 points of contact
- Box-type spring contact

Reference Information
Product Specification: PS-43045
Packaging: Loose or chain
Tooling Information: See Table
Use With: 43025 and 43020
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A max.
Contact Resistance: 10mΩ max.

Physical
Contact: Phosphor Bronze
Plating: Tin or Gold





inch / mm

ORDERING INFORMATION

Wire Size AWG	Plating	Order No.				Application Tooling				
		Chain		Loose		TM-40/42	Mini-Mac	Hand Tool		Extraction Tool
		Female	Male	Female	Male			Female	Male	
20-24	Tin	• 43030-0001	• 43031-0001	• 43030-0007	• 43031-0007	11-40-2259	11-18-2182	11-01-0200	11-01-0201	11-03-0043
26-30	Tin	• 43030-0004	• 43031-0004	• 43030-0010	• 43031-0010	11-40-2258	11-18-2176	11-01-0200	11-01-0201	11-03-0043
20-24	30µ" Gold	• 43030-0003	• 43031-0003	• 43030-0009	• 43031-0009	11-40-2259	11-18-2182	11-01-0200	11-01-0201	11-03-0043
26-30	30µ" Gold	• 43030-0006	• 43031-0006	• 43030-0012	• 43031-0012	11-40-2258	11-18-2176	11-01-0200	11-01-0201	11-03-0043

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

3.00mm (.118") Pitch Micro-Fit 3.0™ Plug

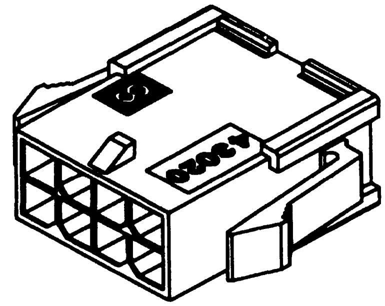
43020 With Ears

Features and Benefits
- Fully isolated contacts
- Fully polarized to mating receptacle
- Integral pull tabs for ease in unmating
- Optional panel mount ears

Reference Information
Product Specification: PS-43045
Packaging: Bulk
Mates With: 43025
Use With: 43031
Designed In: Millimeters

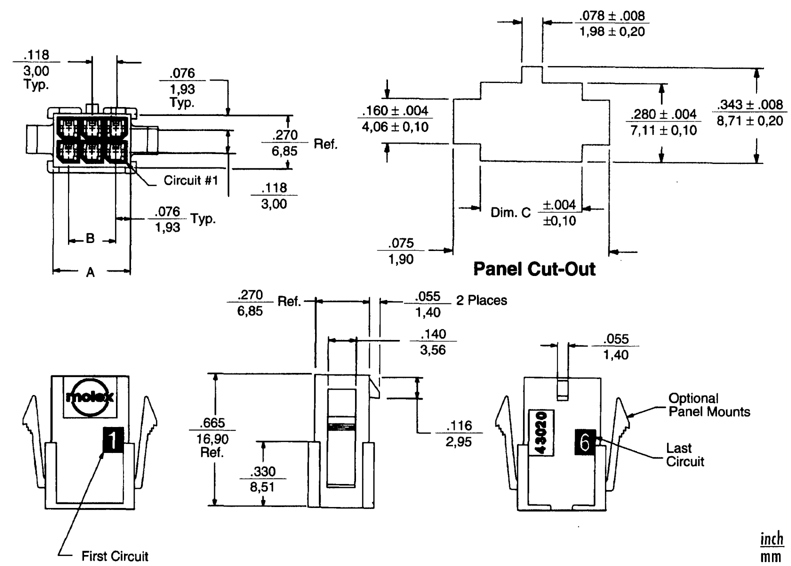
Electrical
Voltage: 250V
Current: 5.0A max.
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin or Gold



PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.*		Dimension		
	Panel Mount	Free Hanging	A	B	C
2	• 43020-0200	• 43020-0201	3.85 (.152)		4.09 (.161)
4	• 43020-0400	• 43020-0401	6.85 (.270)	3.00 (.118)	7.09 (.279)
6	• 43020-0600	• 43020-0601	9.85 (.388)	6.00 (.236)	10.08 (.397)
8	• 43020-0800	• 43020-0801	12.85 (.506)	9.00 (.354)	13.08 (.515)
10	• 43020-1000	• 43020-1001	15.85 (.624)	12.00 (.472)	16.06 (.633)
12	• 43020-1200	• 43020-1201	18.85 (.742)	15.00 (.591)	19.08 (.751)
14	• 43020-1400	• 43020-1401	21.85 (.860)	18.00 (.709)	22.07 (.869)
16	• 43020-1600	• 43020-1601	24.85 (.978)	21.00 (.827)	25.07 (.987)
18	• 43020-1800	• 43020-1801	27.85 (1.096)	24.00 (.945)	26.07 (1.105)
20	• 43020-2000	• 43020-2001	30.85 (1.215)	27.00 (1.063)	31.06 (1.223)
22	• 43020-2200	• 43020-2201	33.85 (1.333)	30.00 (1.181)	34.06 (1.341)
24	• 43020-2400	• 43020-2401	36.85 (1.451)	33.00 (1.299)	37.06 (1.459)

• US Standard Product, available through Molex franchised distributors
* Use male terminal 43031

FEATURES AND SPECIFICATIONS

molex

3.00mm (.118") Pitch Micro-Fit 3.0™ Receptacle

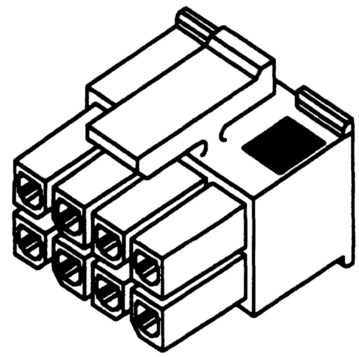
43025

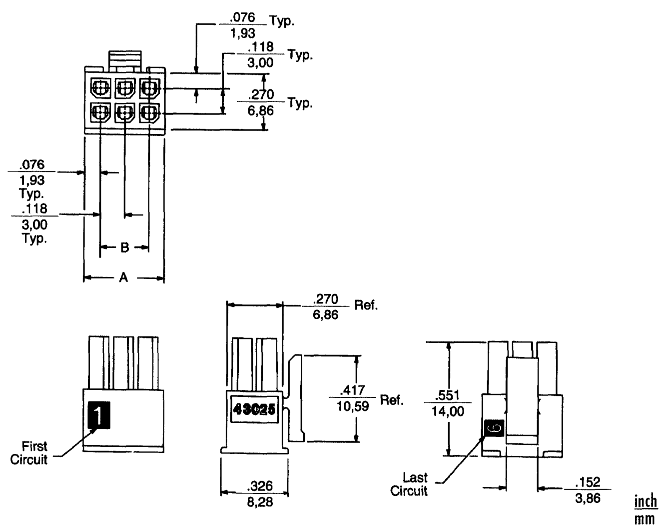
Features and Benefits
- Positive latching to mating headers or plugs
- Fully isolated contacts
- Fully polarized to mating headers and plugs
- Integral pull tabs for ease in unmating

Reference Information
Product Specification: PS-43045
Packaging: Bulk
Mates With: 43020 and 43045
Use With: 43030
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A max.
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin or Gold





ORDERING INFORMATION AND DIMENSIONS

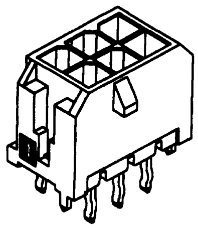
Circuits	Order No.*	Dimension	
		A	B
2	• 43025-0200	3.85 (.152)	
4	• 43025-0400	6.85 (.270)	3.00 (.118)
6	• 43025-0600	9.85 (.388)	6.00 (.236)
8	• 43025-0800	12.85 (.506)	9.00 (.354)
10	• 43025-1000	15.85 (.624)	12.00 (.472)
12	• 43025-1200	18.85 (.742)	15.00 (.591)
14	• 43025-1400	21.85 (.860)	18.00 (.709)
16	• 43025-1600	24.85 (.978)	21.00 (.827)
18	• 43025-1800	27.85 (1.096)	24.00 (.945)
20	• 43025-2000	30.85 (1.215)	27.00 (1.063)
22	• 43025-2200	33.85 (1.333)	30.00 (1.181)
24	• 43025-2400	36.85 (1.451)	33.00 (1.299)

• US Standard Product, available through Molex franchised distributors
* Use female terminal 43030

FEATURES AND SPECIFICATIONS

3.00mm (.118") Pitch Micro-Fit 3.0™ Header

43045 Vertical

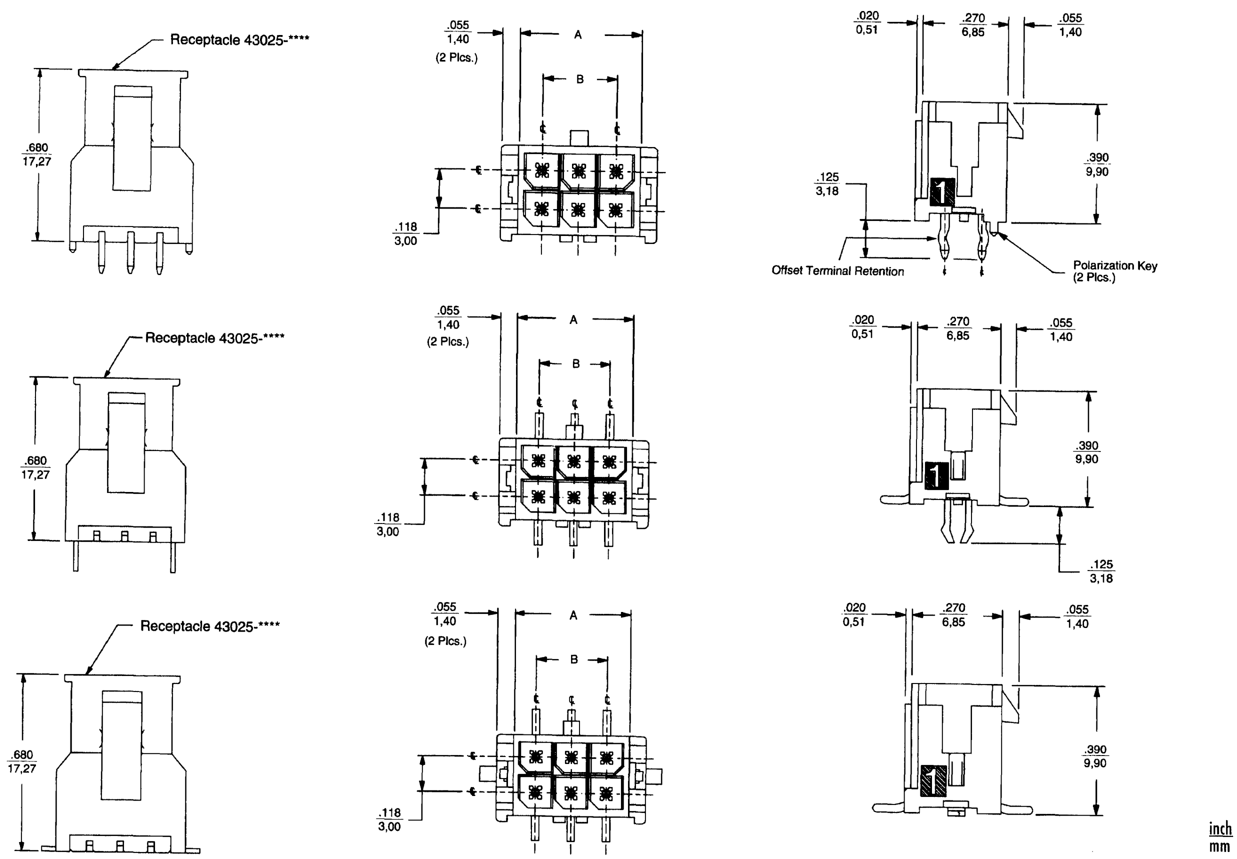


Features and Benefits
- Surface mount compatible or true surface mount available
- Surface mount headers available with optional solderable retention clips or fitting nails
- "Offset Terminal Retention" on through-hole product for retention to PC board during wave soldering

Reference Information
Product Specification: PS-43045
Packaging: Tape and reel (SMT), and bulk (through-hole)
Mates With: 43025
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A max.
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: High temperature LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin or Gold



ORDERING INFORMATION AND DIMENSIONS

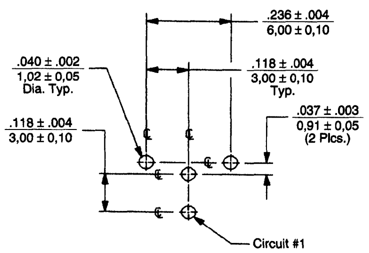
Circuits	Order No.						Dimension				
	Through-Hole with OTR*		SMT with Clip		SMT with Fitting Nail		A	B	C		
	Tin	30µ" Gold	Tin	30µ" Gold	Tin	30µ" Gold			OTR	Clip	Nail
2	• 43045-0212	• 43045-0214	43045-0215	43045-0217	43045-0218	43045-0220	3.85 (.152)		6.00 (.236)	4.30 (.169)	10.70 (.421)
4	• 43045-0412	• 43045-0414	43045-0415	43045-0417	43045-0418	43045-0420	6.85 (.270)	3.00 (.118)	9.00 (.354)	7.30 (.287)	13.70 (.539)
6	• 43045-0612	• 43045-0614	43045-0615	43045-0617	43045-0618	43045-0620	9.85 (.388)	6.00 (.236)	12.00 (.472)	10.30 (.406)	16.70 (.657)
8	• 43045-0812	• 43045-0814	43045-0815	43045-0817	43045-0818	43045-0820	12.85 (.506)	9.00 (.354)	15.00 (.591)	13.30 (.524)	19.70 (.776)
10	• 43045-1012	• 43045-1014	43045-1015	43045-1017	43045-1018	43045-1020	15.85 (.624)	12.00 (.472)	18.00 (.709)	16.30 (.642)	22.70 (.894)
12	• 43045-1212	• 43045-1214	43045-1215	43045-1217	43045-1218	43045-1220	18.85 (.742)	15.00 (.591)	21.00 (.827)	19.30 (.760)	25.70 (1.012)
14	• 43045-1412	• 43045-1414	43045-1415	43045-1417	43045-1418	43045-1420	21.85 (.860)	18.00 (.709)	24.00 (.945)	22.30 (.878)	28.70 (1.130)
16	• 43045-1612	• 43045-1614	43045-1615	43045-1617	43045-1618	43045-1620	24.85 (.978)	21.00 (.827)	27.00 (1.063)	25.30 (.996)	31.70 (1.248)
18	• 43045-1812	• 43045-1814	43045-1815	43045-1817	43045-1818	43045-1820	27.85 (1.096)	24.00 (.945)	30.00 (1.181)	28.30 (1.114)	34.70 (1.366)
20	• 43045-2012	• 43045-2014	43045-2015	43045-2017	43045-2018	43045-2020	30.85 (1.215)	27.00 (1.063)	33.00 (1.299)	31.30 (1.232)	37.70 (1.484)
22	• 43045-2212	• 43045-2214	43045-2215	43045-2217	43045-2218	43045-2220	33.85 (1.333)	30.00 (1.181)	36.00 (1.417)	34.30 (1.350)	70.70 (2.783)
24	• 43045-2412	• 43045-2414	43045-2415	43045-2417	43045-2418	43045-2420	36.85 (1.451)	33.00 (1.299)	39.00 (1.535)	37.30 (1.469)	73.70 (2.902)

• US Standard Product, available through Molex franchised distributors

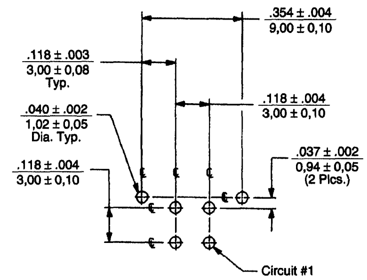
* Offset terminal retention

43045
Vertical
PCB Layouts

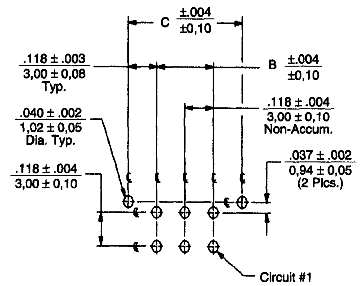
Thru Hole with OTR*



2 Circuit



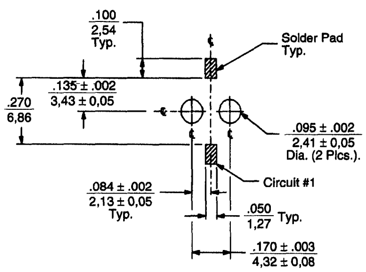
4 Circuit



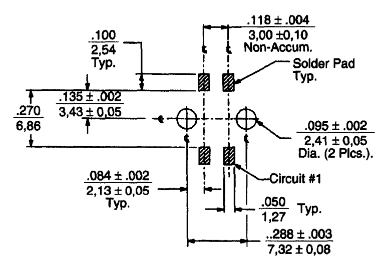
6-24 Circuit

*Offset Terminal Retention

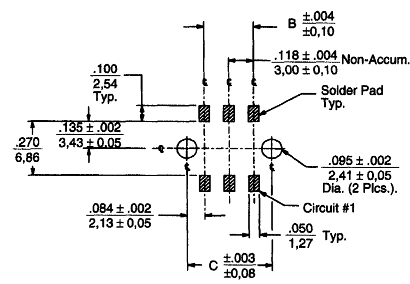
Surface Mount with Clip



2 Circuit

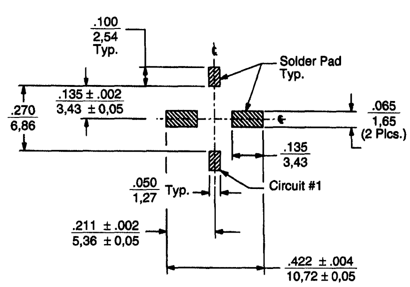


4 Circuit

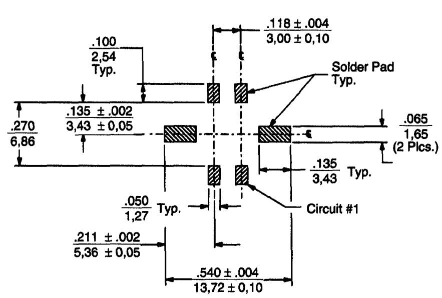


6-24 Circuit

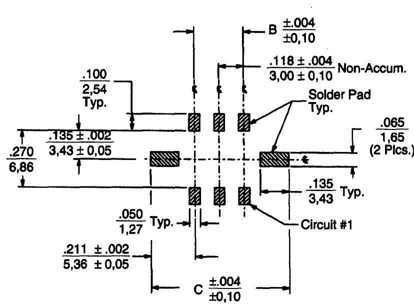
Surface Mount with Fitting Nail



2 Circuit



4 Circuit



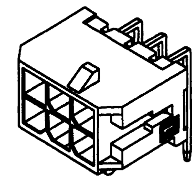
6-24 Circuit

inch
mm

FEATURES AND SPECIFICATIONS

3.00mm (.118") Pitch Micro-Fit 3.0™ Header

43045 Right Angle



Features and Benefits

- Surface mount compatible or true surface mount available
- Surface mount headers available with optional solderable retention clips or fitting nails

Reference Information

Product Specification: PS-43045
Packaging: Tape and reel (SMT), and tray (through-hole)
Mates With: 43025
Designed In: Millimeters

Electrical

Voltage: 250V
Current: 5.0A max.
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

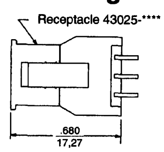
Physical

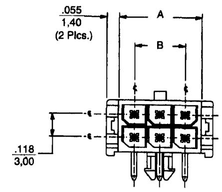
Housing: High temperature LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin or Gold

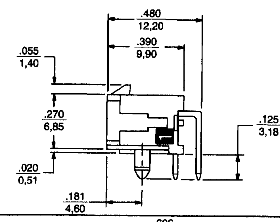
PCB Connectors

J

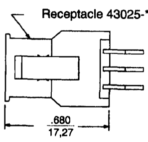
Thru Hole with Peg

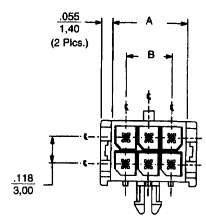


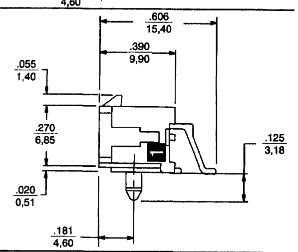




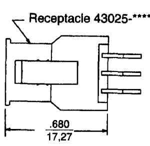
Surface Mount with Peg

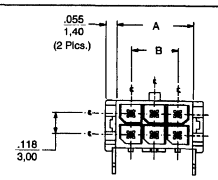


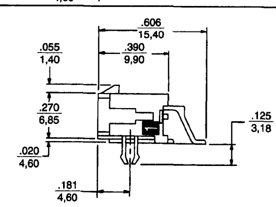




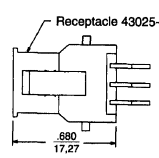
Surface Mount with Clip

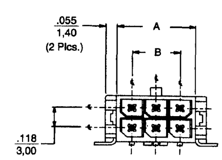


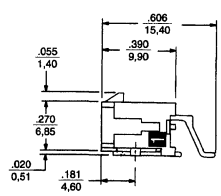




Surface Mount with Fitting Nail







ORDERING INFORMATION AND DIMENSIONS

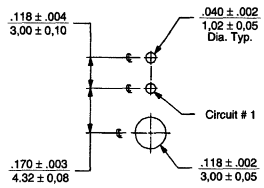
Circuits	Order No.								Dimension				
	Through-Hole		SMT with Peg		SMT with Clip		SMT with Fitting Nail		A	B	C		
	Tin	30µ" Gold	Tin	30µ" Gold	Tin	30µ" Gold	Tin	30µ" Gold			Peg	Clip	Nail
2	• 43045-0200	• 43045-0202	43045-0203	43045-0205	43045-0206	43045-0208	43045-0209	43045-0211	3.85 (.152)			4.30 (.169)	10.70 (.421)
4	• 43045-0400	• 43045-0402	43045-0403	43045-0405	43045-0406	43045-0408	43045-0409	43045-0411	6.85 (.270)	3.00 (.118)		7.30 (.287)	13.70 (.539)
6	• 43045-0600	• 43045-0602	43045-0603	43045-0605	43045-0606	43045-0608	43045-0609	43045-0611	9.85 (.388)	6.00 (.236)		10.30 (.406)	16.70 (.657)
8	• 43045-0800	• 43045-0802	43045-0803	43045-0805	43045-0806	43045-0808	43045-0809	43045-0811	12.85 (.506)	9.00 (.354)	4.70 (.185)	13.30 (.524)	19.70 (.776)
10	• 43045-1000	• 43045-1002	43045-1003	43045-1005	43045-1006	43045-1008	43045-1009	43045-1011	15.85 (.624)	12.00 (.472)	7.70 (.303)	16.30 (.642)	22.70 (.894)
12	• 43045-1200	• 43045-1202	43045-1203	43045-1205	43045-1206	43045-1208	43045-1209	43045-1211	18.85 (.742)	15.00 (.591)	10.70 (.421)	19.30 (.760)	25.70 (1.012)
14	• 43045-1400	• 43045-1402	43045-1403	43045-1405	43045-1406	43045-1408	43045-1409	43045-1411	21.85 (.860)	18.00 (.709)	13.70 (.539)	22.30 (.878)	28.70 (1.130)
16	• 43045-1600	• 43045-1602	43045-1603	43045-1605	43045-1606	43045-1608	43045-1609	43045-1611	24.85 (.978)	21.00 (.827)	16.70 (.657)	25.30 (.996)	31.70 (1.248)
18	• 43045-1800	• 43045-1802	43045-1803	43045-1805	43045-1806	43045-1808	43045-1809	43045-1811	27.85 (1.096)	24.00 (.945)	19.70 (.776)	28.30 (1.114)	34.70 (1.366)
20	• 43045-2000	• 43045-2002	43045-2003	43045-2005	43045-2006	43045-2008	43045-2009	43045-2011	30.85 (1.215)	27.00 (1.063)	22.70 (.894)	31.30 (1.232)	37.70 (1.484)
22	• 43045-2200	• 43045-2202	43045-2203	43045-2205	43045-2206	43045-2208	43045-2209	43045-2211	33.85 (1.333)	30.00 (1.181)	25.70 (1.012)	34.30 (1.350)	70.70 (2.783)
24	• 43045-2400	• 43045-2402	43045-2403	43045-2405	43045-2406	43045-2408	43045-2409	43045-2411	36.85 (1.451)	33.00 (1.299)	28.70 (1.130)	37.30 (1.469)	73.70 (2.902)

• US Standard Product, available through Molex franchised distributors

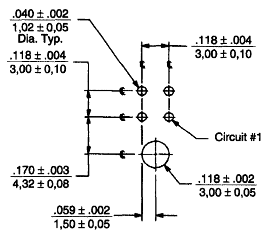
3.00mm (.118") Pitch Micro-Fit 3.0™ Header

43045 Right Angle PCB Layouts

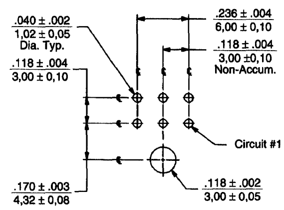
Thru Hole with Peg



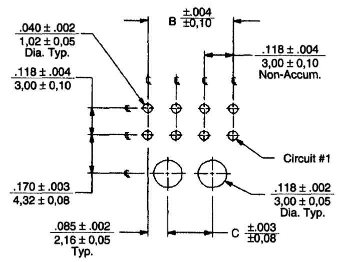
2 Circuit



4 Circuit

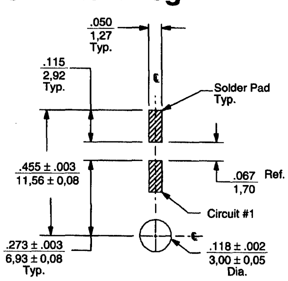


6 Circuit

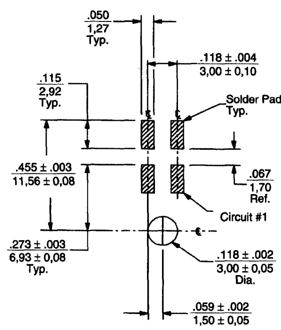


8-24 Circuit

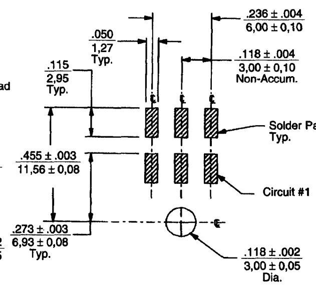
SMT with Peg



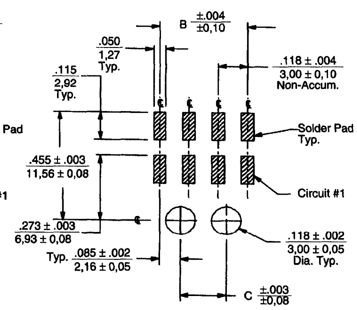
2 Circuit



4 Circuit

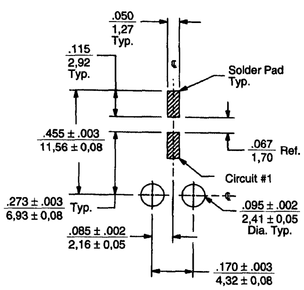


6 Circuit

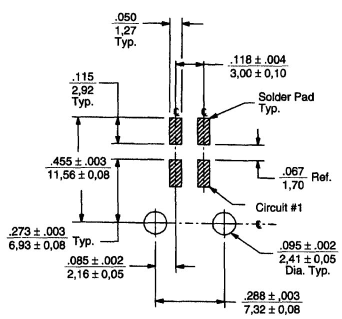


8-24 Circuit

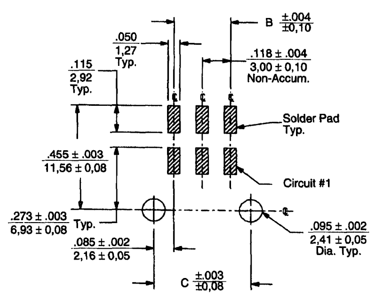
SMT with Clip



2 Circuit

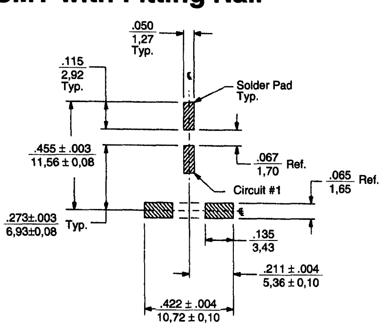


4 Circuit

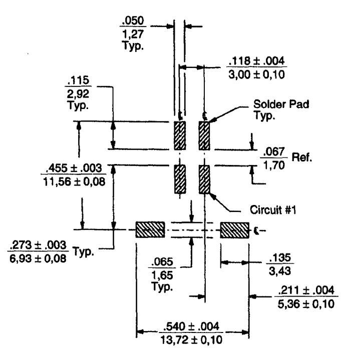


6-24 Circuit

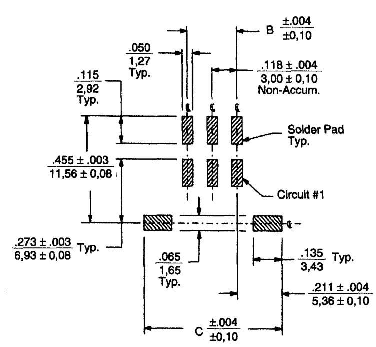
SMT with Fitting Nail



2 Circuit



4 Circuit



6-24 Circuit

inch
mm

KK® Modular Interconnection System

INTRODUCTION

The proven KK system of "building block" connectors can be used to create thousands of different configurations, thereby allowing each user to build a system that is precisely suited to any application on 2.50mm (.098"), 2.54mm (.100"), 3.96mm (.156") and 5.08mm (.200") centers.

The system offers interconnection in a number of modes; cable-to-board, board-to-board, both parallel and perpendicular; and board- or cable-to-chassis. Features include a friction lock to secure connectors to wafer, polarizing wall or location pegs to assure correct assembly. Various methods of securely holding the connectors to a PC board are available.

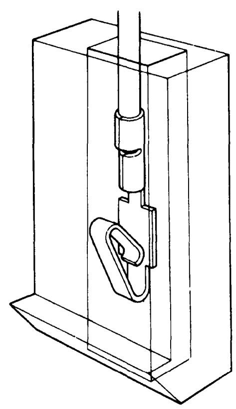
The Molex KK interconnection system can provide all the options necessary to complement PC board interconnection design requirements. For this reason, KK has become known as a versatile interconnecting system developed to meet the challenge of modularization. **For specifications or design information please contact a Molex representative.**

To complement the KK System, Molex has developed a full line of application tooling. This includes both manual and semi-automatic crimp tooling, and also some of the fastest and most economical pin setting equipment in the industry. The Molex Vibrator Multi Pinsetter® can set 12,000 pins in 3 minutes.

MOLEX KK CONCEPT

The Molex KK concept utilizes a **double cantilever contact design** in mating with PC board pins. The proven double cantilever design provides a high uniform contact pressure for a reliable connector interface. The high pressure creates many contact points at a microscopic level, thereby providing a lower contact resistance. The wiping action of the double cantilever design tends to clean oxides and film when the connector is mated.

The Molex KK concept provides a durable connector interface at an affordable price ... a totally engineered product.



FEATURES AND BENEFITS

Crimp Terminal Housings

- Available on 2.50mm (.098"), 2.54mm (.100"), 3.96mm (.156") and 5.08mm (.200") center spacings
- Polarization via insertable keys and pegs, molded voids or pegs, polarizing ribs or polarizing wall headers
- Locking ramp for improved mated retention with locking headers
- Many circuit sizes
- Accepts KK gas tight crimp terminals
- Mates with headers or pins in the board
- Available with Tin, Gold or Select Gold plating

Solder Tail Connectors

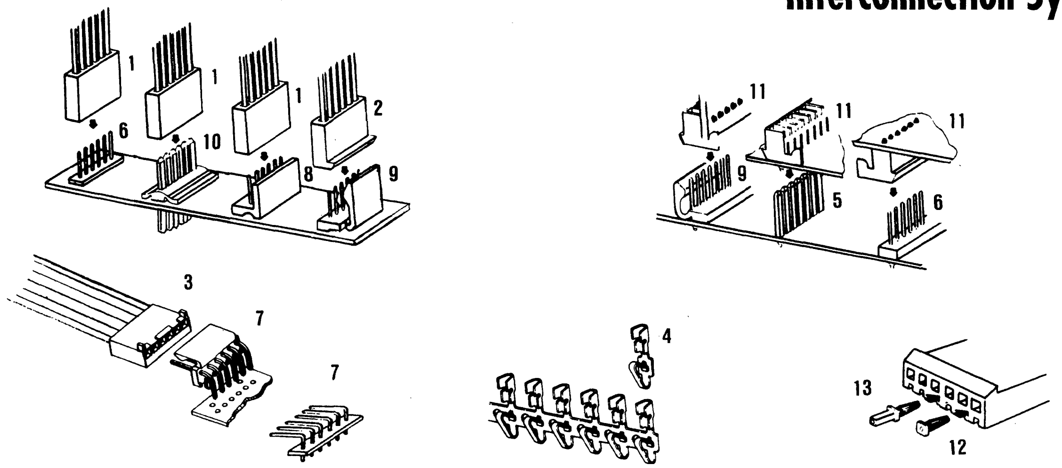
- Versions to accept mating pins vertically, horizontally or through the printed circuit board
- Available on 2.50mm (.098"), 2.54mm (.100"), 3.96mm (.156") and 5.08mm (.200") center spacings
- Mates with headers or pins in the board
- Strain relieving board hooks
- Polarization via insertable keys or pegs
- Locking ramps for improved retention when mated
- Stackable end-to-end
- Pre-assembled with KK gas tight terminals

Headers

- Available on 2.50mm (.098"), 2.54mm (.100"), 3.96mm (.156") and 5.08mm (.200") center spacings
- Polarization via voided positions and polarizing walls, except 2.50mm (.098")
- Locking wall option for improved retention with mating connector
- Industry compatible
- Breakaway and solid styles available

Male Pins

- 0.64mm (.025") square or 1.14mm (.045") square or round
- Press fit and solder to board
- Mates with crimp or solder connector
- Variety of standard platings and lengths
- Range of application tooling available



Description	Pitch			
	2.50mm (.098")	2.54mm (.100")	3.96mm (.156")	5.08mm (.200")
1. Connector housing for use with crimp terminals	5051 3180	2695 6471 7880	2139 6442 41695	3001
2. Connector housing with locking ramp	5051	2695 6471 7880	2139 3069 41695	
3. Connector with polarizing rib and locking ramp	3072	2695	41695	3011
4. Terminals for use with above housings	2759 4809	2759 4809 7879 6459 41572	2478 2578 6838 7258	2478 2578
5. Male pins	2766 4166	2766 4166	2173 2161	2173 2161
6. Straight headers	3022	4030 42375 42152	41661 41701 41741 41771 42441 42471 3192	3003
7. Right angle header	3094 6494	4094 42376 42377 42153	41662 41672 41682 41772 41792* 42472 42492* 3246	2673 3061
8. Polarizing header	3202	42225 42226	41681 41682	
9. Locking header	5045 5046	6410 6373 7478 7395 42227 42228 42009 43009	41671 41672 41761* 41791* 41792* 42461* 42491* 42492* 4042	
10. Chassis mount header			2220	
11. Board-to-board interconnect for parallel and perpendicular PC boards	7534 5124	4455	41815 2145	3002
12. Polarizing key without peg	4161-1	4161-1	2560-1 7580-1 42324-A	2560-1
13. Polarizing key with peg	4161-2	4161-2	2560-2 7580-2	2560-2

* Polarized when mated with 41695 Series .156" crimp housing with polarizing ribs and locking ramp

Insulation Displacement Technology

Molex offers you a complete line of insulation displacement systems for discrete wire and flat cable applications.

Our insulation displacement technology (IDT) connectors offer you a dramatic applied cost savings over equivalent crimp connectors. The reason: With IDT, all contacts are terminated in a single step, the insulation being displaced from the conductor as the wire is pushed into the connector body. The labor intensive steps of wire stripping and terminal crimping are eliminated from the process. And, when our IDT connectors are terminated in mass, your cost savings multiply by the number of circuits used.

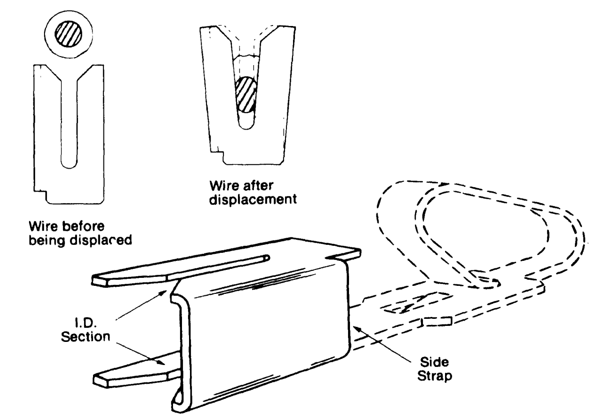
Our broad range of available connector styles and center spacings means that Molex IDT products can be used as drop-in replacements for other less cost effective systems. Locking ramps, polarizing voids and dust covers are available for almost all of our connectors.

To terminate our IDT products, Molex offers a full line of application tooling from hand tools to completely automated harness assembly machines.

IDT Concept

The Molex design features 2 parallel plates with chamfered lead-in slots. These slots displace wire insulation and reshape the conductors by pressure. The result: 4 high pressure points of contact.

To provide a wide conductor path and both horizontal and lateral strength, the insulation displacement section is connected by a large side strap that runs almost the entire length of the plate.

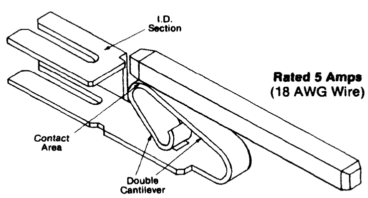


TERMINAL DESIGNS

KK® Double Cantilever Contact

3.96mm (.156") and 5.08mm (.200") Center Connectors

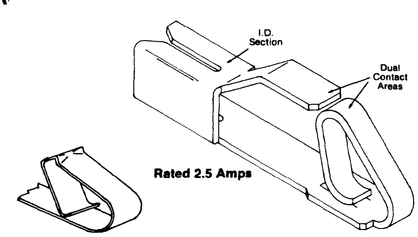
The double cantilever contact provides a high pressure contact area with a square or round post. The 2 cantilevers act in unison to provide a linear force increase as the pin is pushed in the housing.



Dual Contact/with Cat Ears Option

2.50mm (.098") and 2.54mm (.100") Center Connectors

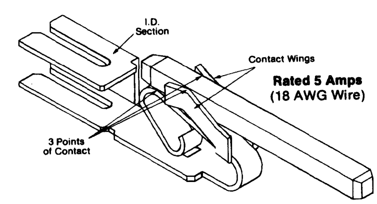
The dual contact utilizes the double cantilever approach and expands upon the design by extending a beam off the insulation displacing sections. The second stationary contact results in 2 independent points of contact on the mating pin.



Trifurcon™ Contact Design

3.96mm (.156") and 5.08mm (.200") Center Connectors

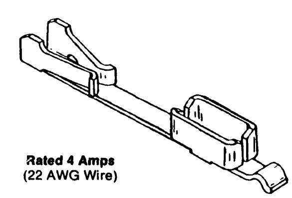
An ideal choice for situations in which flux contamination, shock or vibration exist, this terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at 3 points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling.



In-Line Contact (Euro 250 Series)

2.50mm (.098") Center Connectors

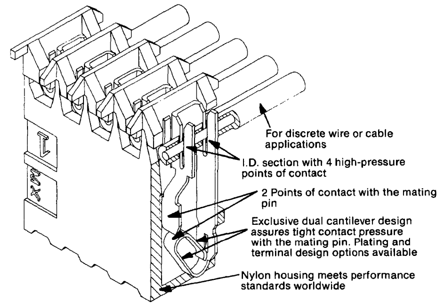
This contact is ideal for in-line wire feed applications, as the dual cantilever and formed slot design provide both a low profile and a reliable interconnection.



STANDARD IDT CONNECTORS

Designed for use with discrete wire or round conductor flat cable, the Molex standard connectors lend themselves to a variety of applications.

- Single-ended discrete wire harnesses
- Double-ended discrete wire harnesses
- Round conductor flat cable daisy chains
- Termination of both flat cable and discrete wires in a single housing



KK® Crimp and PCB Connectors

2.50mm (.098") and 2.54mm (.100") Pitch

Reference Information
UL File No.: E29179
CSA File No.: LR19980

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical
Engagement Force: 199g (7 oz) max.
Disengagement Force: 57g (2 oz) min.
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (Crimp):

AWG	22	24	26	28	30
kg (lb)	4.54 (10)	3.63 (8)	2.72 (6)	1.81 (4)	1.36 (3)

Physical
Storage Temperature: -40 to +105°C
Operating Temperature: 0 to +75°C

3.96mm (.156") and 5.08mm (.200")

Reference Information
UL File No.: E29179
CSA File No.: LR19980

Electrical
Voltage: 250V
Current: 7.0A max. for Phosphor Bronze (18 AWG)
5.0A max. for Brass (18 AWG)
5.0A max. for PCB connector dependent on PCB traces
Initial Contact Resistance: 6mΩ max. nR
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical
Engagement Force: Square pin—1.02kg (2.25 lb)
Round pin—0.73kg (1.60 lb)
Disengagement Force: Square pin—0.38kg (0.84 lb)
Round pin—0.27kg (0.60 lb)
Normal Force: 0.75kg (1.65 lb) for double beam contact mated to .045" pin
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (Crimp):

AWG	18	20	22	24	26
kg (lb)	9.07 (20)	6.81 (15)	5.45 (12)	3.63 (8)	2.27 (5)

Physical
Storage Temperature: -40 to +105°C
Operating Temperature: 0 to +75°C

Insulation Displacement Connectors
Standard, Single Row IDT Connectors

2.54mm (.100") Pitch
7720

Reference Information
UL File No.: E29179
CSA File No.: LR19980

Electrical
Voltage: 250V
Current: 3.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 200K MΩ min.

Mechanical
Engagement Force: 255g (9 oz) max.
Disengagement Force: 85g (3 oz) min.
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (without cap):

AWG	Vertical	Horizontal
24	1.13kg (2.5 lb)	3.62kg (8.0 lb)
26	0.91kg (2.0 lb)	3.17kg (7.0 lb)
28	0.59kg (1.3 lb)	2.04kg (4.5 lb)

Physical
Housing: Nylon, UL 94V-2
Minimum Pin Insertion: 6.10mm (.240")
Recommended Mating Life: 25 cycles
Operating Temperature: 0 to +75°C

3.96mm (.156") Pitch
7674, 7675

Reference Information
UL File No.: E29179
CSA File No.: LR19980

Electrical
Voltage: 250V
Current: 5.0A max.
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 2000V AC
Insulation Resistance: 200K MΩ min.

Mechanical
Engagement Force: 2.5 lb max.
Disengagement Force: 0.23kg (0.5 lb) min.
Terminal Retention to Housing: 3.63kg (8 lb) min.
Wire Pull-Out Force (without cap):

AWG	Vertical	Horizontal
18	2.27kg (5.0 lb)	9.07kg (20.0 lb)
20	1.72kg (3.8 lb)	7.71kg (17.0 lb)
22	1.58kg (3.5 lb)	5.76kg (12.7 lb)
24	1.10kg (2.4 lb)	3.63kg (8.0 lb)

Physical
Housing: Nylon, UL 94V-2
Minimum Pin Insertion: 11.43mm (.450")
Recommended Mating Life: 25 cycles
Operating Temperature: 0 to +75°C

* Detailed product specifications should be requested for approval testing and final specification

WIRE-TO-BOARD APPLICATIONS

2759/5159 KK Terminal	**5051** Housing
5103 SPOX Terminal	**5102** Housing

↔

5045 Straight Header with Friction Lock	**5046** Right Angle Header with Friction Lock
90293 Straight Header with Staggered Tail	Straight Header with In-Line Tail

7795 IDT Housing

↔

3202 Straight Header	**3094** Right Angle Header	**6494** Right Angle Header Pin No. 2 Void

8160 IDT Housing

↔

93610 Straight Header

FEED-THROUGH OPTIONS

2759/5159 KK Terminal	**5131** Housing 2-5 circuits	**3021** Housing 2-15 circuits
5103 SPOX Terminal	**5209** Housing 2-5 circuits	**5207** Housing 6-15 circuits

↔

5129 Feed-Through Header	**5089** Feed-Through Header

5263 SPOX Terminal	**5264** Housing

↔

5267 Straight Header	**5268** Right Angle Header

42219 IDT Housing	**42254** IDT Board-In Housing

↔

42249 Straight Header with Staggered Tail	**42267** Straight Header with In-Line Tail

WIRE-TO-WIRE APPLICATIONS

5103 Female SPOX Terminal	**5241** Male SPOX Terminal
5102 Receptacle Housing	**5240** Plug Housing

BOARD-TO-BOARD APPLICATIONS

5244 Right Angle Receptacle → **5245** Straight Header

5244 Right Angle Receptacle → **5530** Right Angle Header

5224 Straight Receptacle → **3022** Straight Header

3024 Right Angle Receptacle → **3022** Straight Header

5124 Feed-Through Receptacle → **3022** Straight Header

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal

5103

Spring Box

Features and Benefits
- Anti-fishhooking contact design
- 4 points of contact
- Low profile

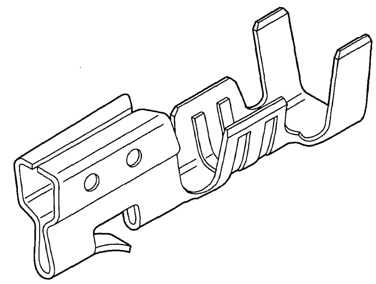
Reference Information
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
Use With: 5102, 5207 and 5209 housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

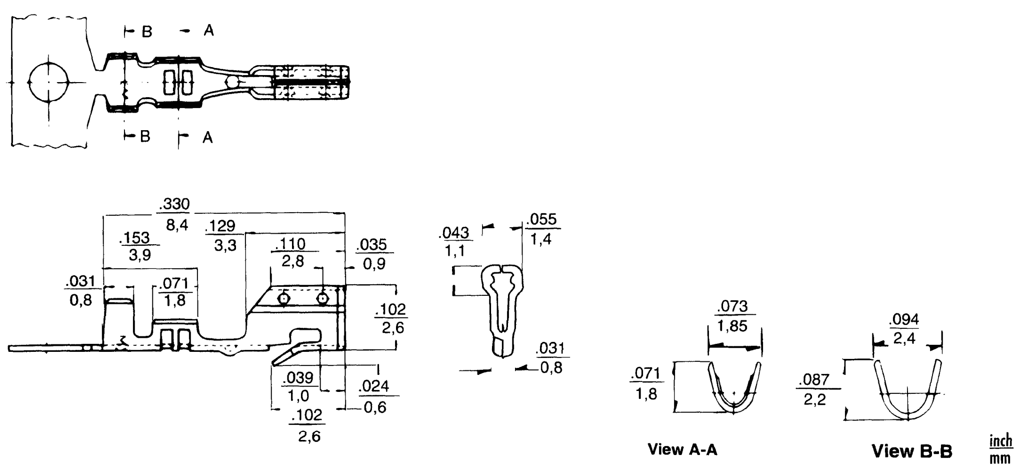
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: See Table
Plating: See Table
Temperature: -40 to +105°C
Wire Range: 22 to 28 AWG



Available Primarily in the Far East



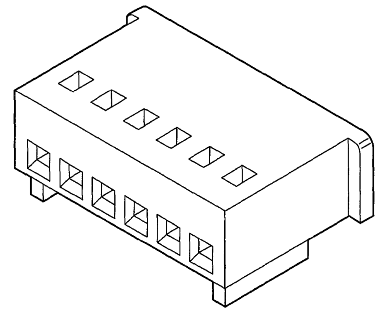
ORDERING INFORMATION AND DIMENSIONS

Order No.	Terminal	Wire Gauge AWG	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling	
						Press	Crimp Die
08-70-0056	Chain	22-28	1.90 max.	Tin-Plated Brass		M15A 11-26-0033	JM5857A 11-26-0023
08-70-0057	Loose				JHTR 5907		
08-70-0058	Chain			Tin-Plated Phosphor Bronze		M15A 11-26-0033	JM5857A 11-26-0023
08-70-0059	Loose				JHTR 5907		

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal Housing

5102



Features and Benefits

- Sizes 2 to 15 circuits
- Low profile
- Molded pull tab
- Friction lock

Reference Information

Packaging: Bulk
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5045 and 5046
Use With: 5103 terminals
Designed In: Millimeters

Electrical

Voltage: 250V
Current:

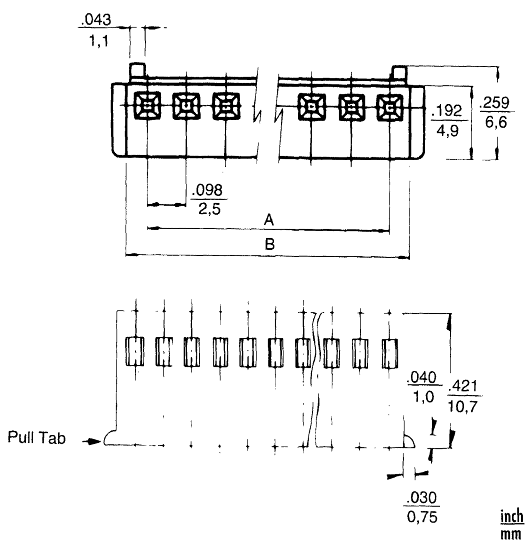
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C

Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	22-01-1024	2.50 (.098)	6.00 (.236)
3	22-01-1034	5.00 (.197)	8.50 (.335)
4	22-01-1044	7.50 (.295)	11.00 (.433)
5	22-01-1054	10.00 (.394)	13.50 (.531)
6	22-01-1064	12.50 (.492)	16.00 (.630)
7	22-01-1074	15.00 (.591)	18.50 (.728)
8	22-01-1084	17.50 (.689)	21.00 (.827)
9	22-01-1094	20.00 (.787)	23.50 (.925)
10	22-01-1104	22.50 (.886)	26.00 (1.024)
11	22-01-1114	25.00 (.984)	28.50 (1.122)
12	22-01-1124	27.50 (1.083)	31.00 (1.220)
13	22-01-1134	30.00 (1.181)	33.50 (1.319)
14	22-01-1144	32.50 (1.280)	36.00 (1.417)
15	22-01-1154	35.00 (1.378)	38.50 (1.516)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Header

5046

Right Angle Friction Lock

Features and Benefits
- Sizes 2 to 15 circuits
- 0.64mm (.025") square wire pins

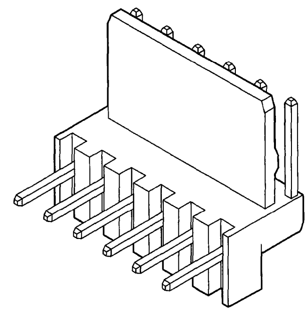
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5051 housings, KK® 2.50mm (.098") and 5102-N
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

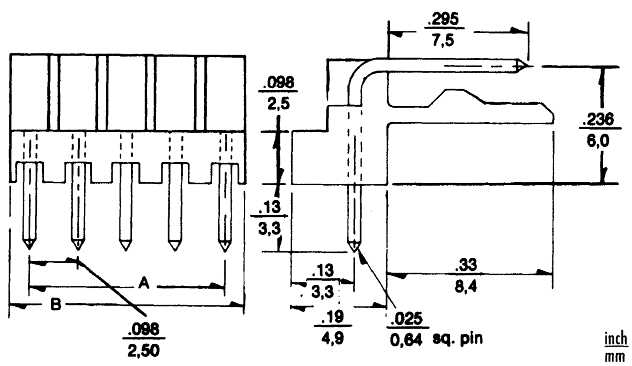
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C



PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 22-05-1022	22-12-1022	2.50 (.098)	4.50 (.177)
3	• 22-05-1032	22-12-1032	5.00 (.197)	7.00 (.276)
4	• 22-05-1042	22-12-1042	7.50 (.295)	9.50 (.374)
5	• 22-05-1052	22-12-1052	10.00 (.394)	12.00 (.472)
6	• 22-05-1062	22-12-1062	12.50 (.492)	14.50 (.571)
7	• 22-05-1072	22-12-1072	15.00 (.591)	17.00 (.669)
8	• 22-05-1082	22-12-1082	17.50 (.689)	19.50 (.768)
9	• 22-05-1092	22-12-1092	20.00 (.787)	22.00 (.866)
10	• 22-05-1102	22-12-1102	22.50 (.886)	24.50 (.964)
11	• 22-05-1112	22-12-1112	25.00 (.984)	27.00 (1.063)
12	• 22-05-1122	22-12-1122	27.50 (1.083)	29.50 (1.161)
13	• 22-05-1132	22-12-1132	30.00 (1.181)	32.00 (1.260)
14	• 22-05-1142	22-12-1142	32.50 (1.279)	34.50 (1.358)
15	• 22-05-1152	22-12-1152	35.00 (1.378)	37.00 (1.457)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Header

5045

Straight Polarizing Lock

Features and Benefits
- Sizes 2 to 15 circuits
- 0.64mm (.025") square wire pins

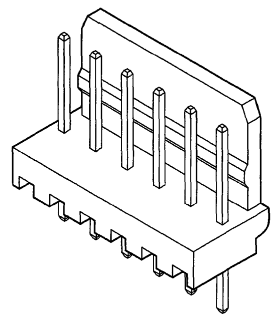
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5051 housings, KK® 2.50mm (.098") and 5102-N
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

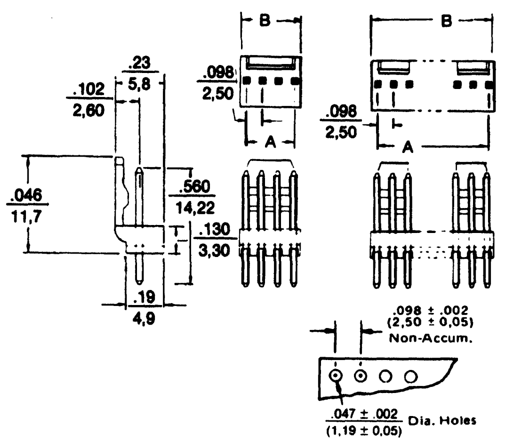
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C



Typical 2 through 5 circuits   Typical 6 through 17 circuits



Recommended P.C. Board Hole Dimensions

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 22-04-1021	22-11-1021	2.50 (.098)	4.50 (.177)
3	• 22-04-1031	22-11-1031	5.00 (.197)	7.00 (.276)
4	• 22-04-1041	22-11-1041	7.50 (.295)	9.50 (.374)
5	• 22-04-1051	22-11-1051	10.00 (.394)	12.00 (.472)
6	• 22-04-1061	22-11-1061	12.50 (.492)	14.50 (.571)
7	• 22-04-1071	22-11-1071	15.00 (.591)	17.00 (.669)
8	• 22-04-1081	22-11-1081	17.50 (.689)	19.50 (.768)
9	• 22-04-1091	22-11-1091	20.00 (.787)	22.00 (.866)
10	• 22-04-1101	22-11-1101	22.50 (.886)	24.50 (.964)
11	• 22-04-1111	22-11-1111	25.00 (.984)	27.00 (1.063)
12	• 22-04-1121	22-11-1121	27.50 (1.083)	29.50 (1.161)
13	• 22-04-1131	22-11-1131	30.00 (1.181)	32.00 (1.260)
14	• 22-04-1141	22-11-1141	32.50 (1.279)	34.50 (1.358)
15	• 22-04-1151	22-11-1151	35.00 (1.378)	37.00 (1.457)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch KK® Crimp Terminal Housing

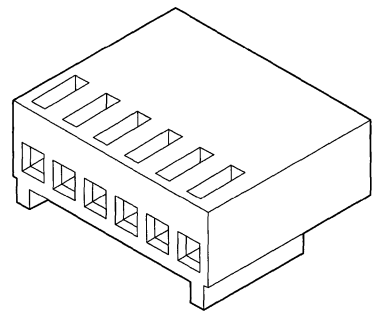
5051-N Polarized

Features and Benefits
- Sizes 2 to 15 circuits
- Molded friction lock
- Optional polarization or locking ramp version
- Stackable end-to-end

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: KK 2.50mm (.098") headers or 0.64mm (.025") staked pins, 5045-NA and 5046-NA
Use With: 2759 and 5159 terminals
Designed In: Millimeters

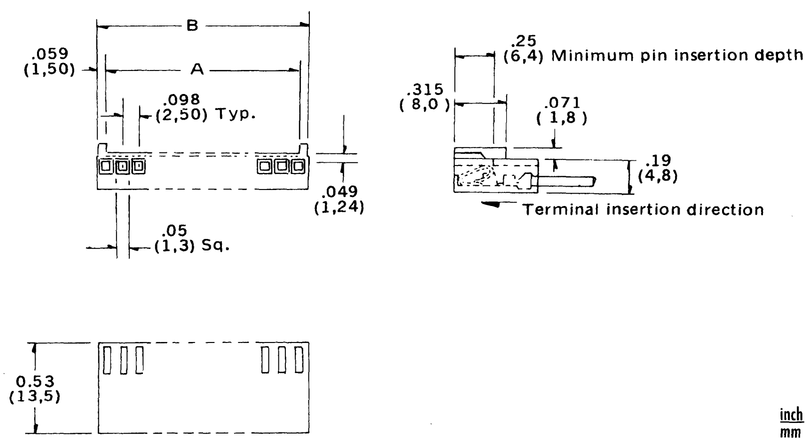
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C



PCB Connectors

J



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	22-01-1022	2.50 (.098)	5.50 (.216)
3	22-01-1032	5.00 (.197)	8.00 (.315)
4	22-01-1042	7.50 (.295)	10.50 (.413)
5	22-01-1052	10.00 (.394)	13.00 (.512)
6	22-01-1062	12.50 (.492)	15.50 (.611)
7	22-01-1072	15.00 (.591)	18.00 (.709)
8	22-01-1082	17.50 (.689)	20.50 (.807)
9	22-01-1092	20.00 (.787)	23.00 (.906)
10	22-01-1102	22.50 (.886)	25.50 (1.004)
11	22-01-1112	25.00 (.984)	28.00 (1.102)
12	22-01-1122	27.50 (1.083)	30.50 (1.201)
13	22-01-1132	30.00 (1.181)	33.00 (1.299)
14	22-01-1142	32.50 (1.280)	35.50 (1.398)
15	22-01-1152	35.00 (1.378)	38.00 (1.496)

FEATURES AND SPECIFICATIONS

molex® **2.50mm (.098") Pitch Connector**

7795S

IDT, High Pressure "Cat Ear" Contact System

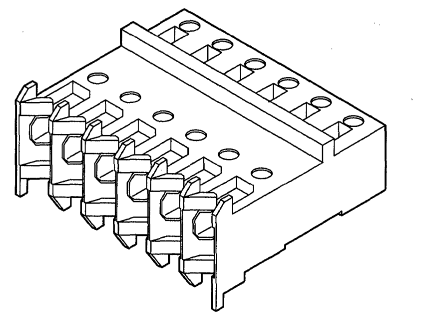
Features and Benefits
- Sizes 2 to 17 circuits
- 2 points of contact
- Locking ramp
- Polarizing key option
- Molded-in strain reliefs

Reference Information
Product Specification: PS-7690
Packaging: Loose
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3022, 3094, 5045, 5046, 90293 and 90298 headers
Use With: 7841 covers
Use Molex Cable: 7234, 7307, 7767, 8896, 24226 and 24241
Designed In: Millimeters

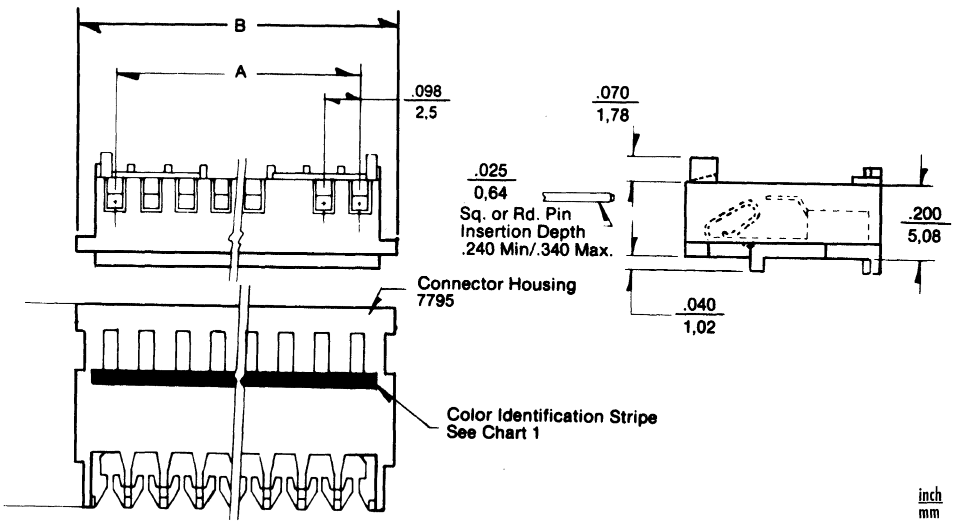
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V/1 min.
Insulation Resistance: 200K MΩ min.

Mechanical
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 1.35 lb min.
Mating Force: 9 oz max.
Unmating Force: 2 oz min.
Normal Force: 6.5 oz min.
Durability: 25 cycles

Physical
Housing: Natural nylon, UL 94V-2
Contact: Brass
Plating: 5µ" min. Tin
Wire Accommodation: Solid, stranded and fused
Wire Diameter: 0.76mm (.030") to 1.52mm (.060") max.



Preferred Version in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Version H	Version J	A	B
2	38-00-3282	38-00-3102	2.50 (.098)	7.36 (.290)
3	38-00-3283	38-00-3103	5.00 (.197)	9.86 (.388)
4	38-00-3284	38-00-3104	7.50 (.295)	12.36 (.487)
5	38-00-3285	38-00-3105	10.00 (.394)	14.86 (.585)
6	38-00-3286	38-00-3106	12.50 (.492)	17.36 (.683)
7	38-00-3287	38-00-3107	15.00 (.591)	19.86 (.782)
8	38-00-3288	38-00-3108	17.50 (.689)	22.36 (.880)
9	38-00-3289	38-00-3109	20.00 (.787)	24.86 (.979)

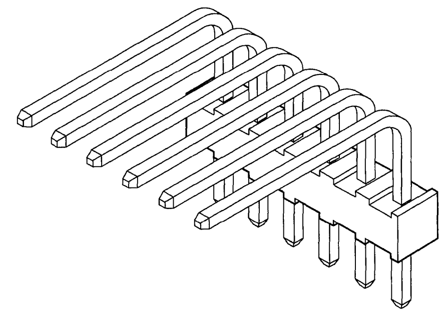
Circuits	Order No.		Dimension	
	Version H	Version J	A	B
10	38-00-3290	38-00-3110	22.50 (.886)	27.36 (1.077)
11	38-00-3291	38-00-3111	25.00 (.984)	29.86 (1.176)
12	38-00-3292	38-00-3112	27.50 (1.083)	32.36 (1.274)
13	38-00-3293	38-00-3113	30.00 (1.181)	34.86 (1.372)
14	38-00-3294	38-00-3114	32.50 (1.280)	37.36 (1.471)
15	38-00-3295	38-00-3115	35.00 (1.378)	39.86 (1.568)
16	38-00-3296	38-00-3116	37.50 (1.476)	42.36 (1.668)
17	38-00-3297	38-00-3117	40.00 (1.575)	44.86 (1.766)

Color Identification Stripe		
ID Slot Version	Color	Type of Wire Terminated [all wires have a maximum insulation diameter of 1.50mm (.060")]
H	Yellow	24 AWG stranded, 26 AWG solid and 28 AWG fused
J	Red	26 and 28 AWG stranded and 28 AWG solid

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Header

3094-NA Right Angle Square Pin

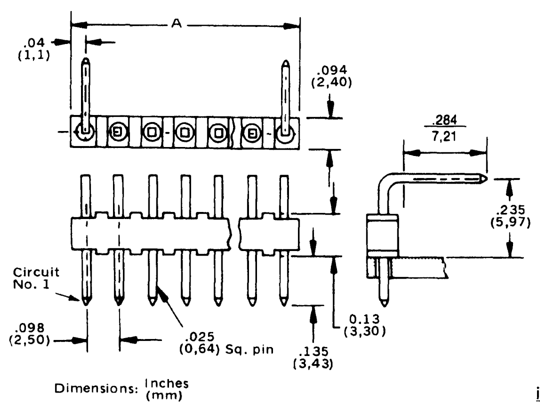


Features and Benefits
- Sizes 2 to 20 circuits
- 0.64 mm (.025") square wire pins
- Stackable side-to-side and end-to-end

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3071, 5051, 7534A and 7534C
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	22-05-1021	22-12-1021	4.90 (.192)
3	22-05-1031	22-12-1031	7.20 (.284)
4	22-05-1041	22-12-1041	9.70 (.382)
5	22-05-1051	22-12-1051	12.20 (.480)
6	22-05-1061	22-12-1061	14.70 (.578)
7	22-05-1071	22-12-1071	17.20 (.677)
8	22-05-1081	22-12-1081	19.70 (.776)
9	22-05-1091	22-12-1091	22.20 (.874)
10	22-05-1101	22-12-1101	24.70 (.972)
11	22-05-1111	22-12-1111	27.20 (1.071)

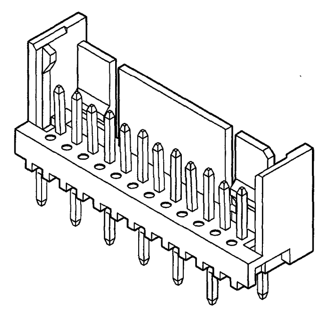
Circuits	Order No.		Dimension A
	Tin	Gold	
12	22-05-1121	22-12-1121	29.70 (1.169)
13	22-05-1131	22-12-1131	32.20 (1.268)
14	22-05-1141	22-12-1141	34.70 (1.367)
15	22-05-1151	22-12-1151	37.20 (1.462)
16	22-05-1161	22-12-1161	39.70 (1.563)
17	22-05-1171	22-12-1171	42.20 (1.662)
18	22-05-1181	22-12-1181	44.70 (1.760)
19	22-05-1191	22-12-1191	47.20 (1.858)
20	22-05-1201	22-12-1201	49.70 (1.957)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Header

90293

Straight, Shrouded Staggered Tail



Features and Benefits

- Sizes 2 to 20 circuits

Reference Information

Packaging: Bulk
Mates With: 5102, 7534 and 7795
Designed In: Millimeters

Electrical

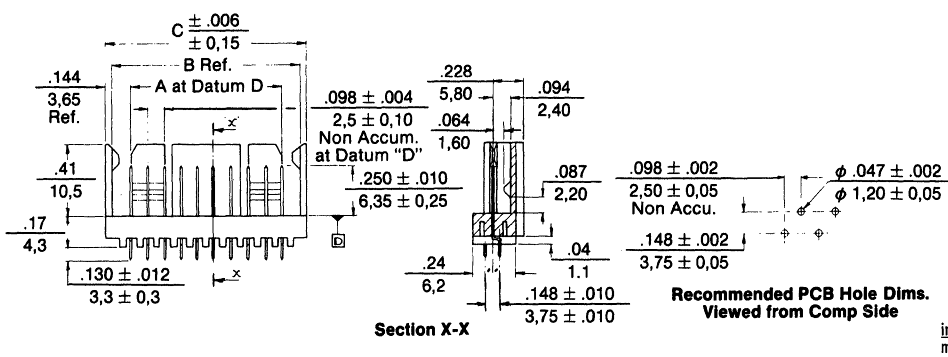
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical

Contact Retention to Housing: 2 lb min.
Mating Force: 9 oz min.
Unmating Force: 3 oz min.
Durability: 25 cycles

Physical

Housing: White polyester, UL 94V-0
Contact: Brass
Plating: Preplated electro-Tin over Copper
PC Board Thickness: 1.50mm (.060")



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C
2	90293-0022	2.50 (.098)	7.80 (.307)	9.80 (.386)
3	90293-0023	5.00 (.187)	10.30 (.406)	12.30 (.484)
4	90293-0024	7.50 (.295)	12.80 (.504)	14.80 (.583)
5	90293-0025	10.00 (.394)	15.30 (.602)	17.30 (.681)
6	90293-0026	12.60 (.492)	17.80 (.701)	19.80 (.780)
7	90293-0027	15.00 (.591)	20.30 (.799)	22.30 (.878)
8	90293-0028	17.50 (.689)	22.80 (.898)	24.80 (.976)
9	90293-0029	20.00 (.787)	25.30 (.996)	27.30 (1.075)
10	90293-0030	22.50 (.886)	27.80 (1.094)	29.80 (1.173)
11	90293-0031	25.00 (.984)	30.30 (1.193)	32.30 (1.272)

Circuits	Order No.	Dimension A	Dimension B	Dimension C
12	90293-0032	27.50 (1.083)	32.80 (1.291)	34.80 (1.370)
13	90293-0033	30.00 (1.181)	35.30 (1.390)	37.30 (1.469)
14	90293-0034	32.50 (1.280)	37.80 (1.488)	39.80 (1.567)
15	90293-0035	35.00 (1.378)	40.30 (1.587)	42.30 (1.665)
16	90293-0036	37.50 (1.476)	42.80 (1.685)	44.80 (1.764)
17	90293-0037	40.00 (1.575)	45.30 (1.783)	47.30 (1.862)
18	90293-0038	42.50 (1.673)	47.80 (1.882)	49.80 (1.961)
19	90293-0039	45.00 (1.772)	50.30 (1.980)	52.30 (2.059)
20	90293-0040	47.50 (1.870)	52.80 (2.079)	54.80 (2.157)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Header

90298

Right Angle, Shrouded Staggered Tail

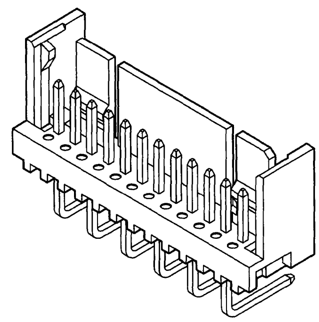
Features and Benefits
- Sizes 2 to 20 circuits

Reference Information
Packaging: Loose
Mates With: 5102, 7534 and 7795
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

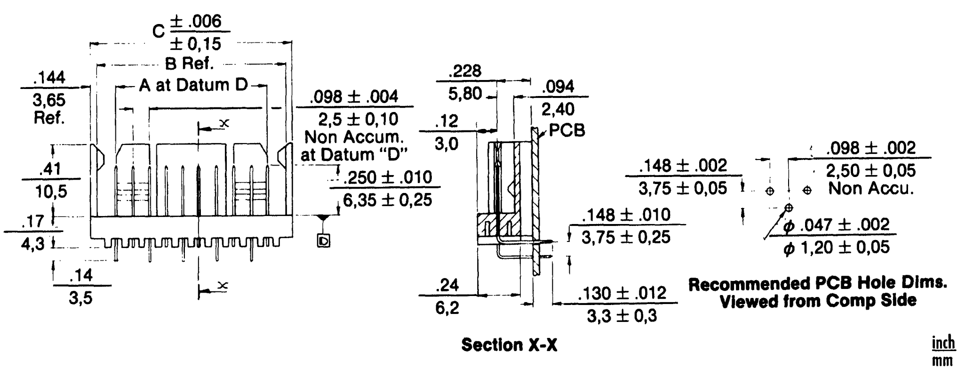
Mechanical
Contact Retention to Housing: 2 lb min.
Mating Force: 9 oz min.
Unmating Force: 3 oz min.
Durability: 25 cycles

Physical
Housing: White polyester, UL 94V-0
Contact: Brass
Plating: Preplated electro-Tin over Copper
PC Board Thickness: 1.50mm (.060")



PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C
2	90298-0002	2.50 (.098)	7.80 (.307)	9.80 (.386)
3	90298-0003	5.00 (.187)	10.30 (.406)	12.30 (.484)
4	90298-0004	7.50 (.295)	12.80 (.504)	14.80 (.583)
5	90298-0005	10.00 (.394)	15.30 (.602)	17.30 (.681)
6	90298-0006	12.60 (.492)	17.80 (.701)	19.80 (.780)
7	90298-0007	15.00 (.591)	20.30 (.799)	22.30 (.878)
8	90298-0008	17.50 (.689)	22.80 (.898)	24.80 (.976)
9	90298-0009	20.00 (.787)	25.30 (.996)	27.30 (1.075)
10	90298-0010	22.50 (.886)	27.80 (1.094)	29.80 (1.173)
11	90298-0011	25.00 (.984)	30.30 (1.193)	32.30 (1.272)

Circuits	Order No.	Dimension A	Dimension B	Dimension C
12	90298-0012	27.50 (1.083)	32.80 (1.291)	34.80 (1.370)
13	90298-0013	30.00 (1.181)	35.30 (1.390)	37.30 (1.469)
14	90298-0014	32.50 (1.280)	37.80 (1.488)	39.80 (1.567)
15	90298-0015	35.00 (1.378)	40.30 (1.587)	42.30 (1.665)
16	90298-0016	37.50 (1.476)	42.80 (1.685)	44.80 (1.764)
17	90298-0017	40.00 (1.575)	45.30 (1.783)	47.30 (1.862)
18	90298-0018	42.50 (1.673)	47.80 (1.882)	49.80 (1.961)
19	90298-0019	45.00 (1.772)	50.30 (1.980)	52.30 (2.059)
20	90298-0020	47.50 (1.870)	52.80 (2.079)	54.80 (2.157)

2.50mm (.098") Pitch Connector

8160-NG
Euro 250 Series
In-Line Wire Exit

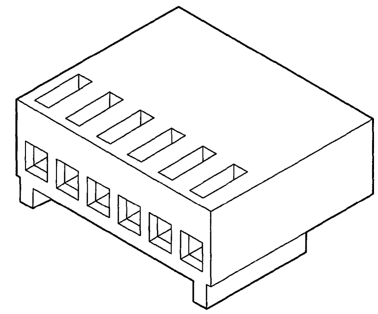
Features and Benefits
- Sizes 2 to 20 circuits
- 4-point IDT contact
- 2-point interface pin contact

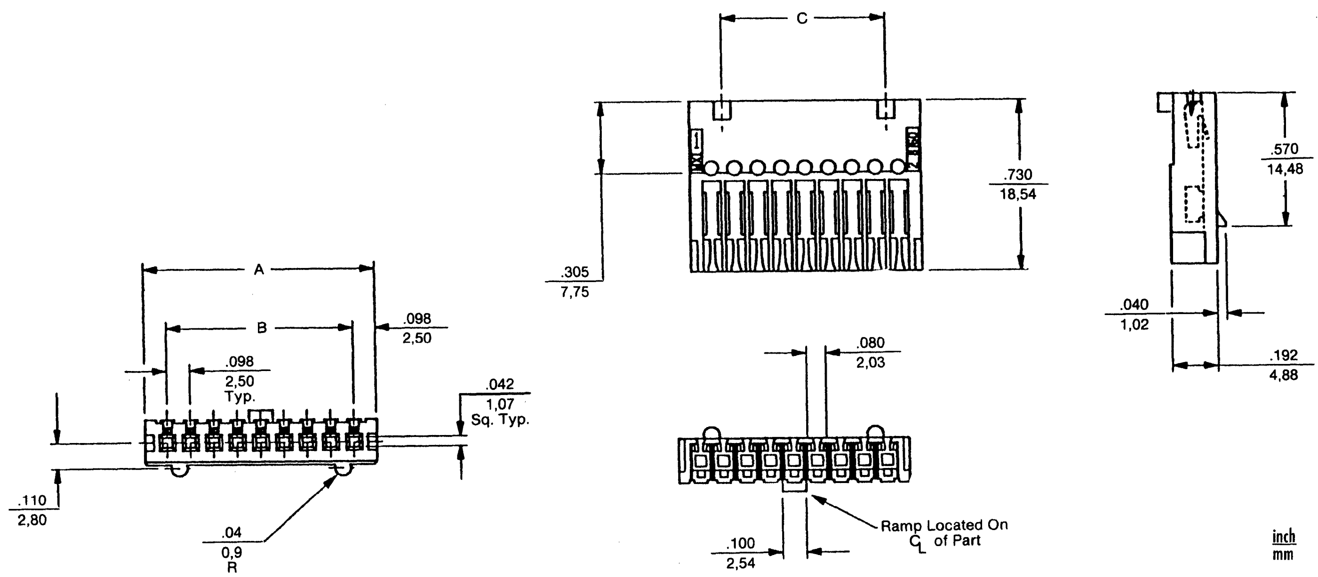
Reference Information
Product Specification: PS-8160
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
Mates With: 3022, 3094 and 93610
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 8mΩ max.
Dielectric Withstanding Voltage: 3000V AC
Insulation Resistance: 200K MΩ min.

Mechanical
Contact Retention to Housing: 28N min.
Wire Pull-Out Force: Vertical—28.9N min.
Horizontal— 8.9N min.
Mating Force: 2.5N max.
Unmating Force: 1.8N min.
Durability: 10 cycles

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin over Copper
Wire Accommodation: 24 AWG solid discrete wire and cable
Insulation Diameter: 1.00mm (.039") to 1.52mm (.060") max.





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B	Dimension C
2	38-00-6132	7.50 (.295)	2.50 (.098)	
3	38-00-6133	10.00 (.394)	5.00 (.197)	2.50 (.098)
4	38-00-6134	12.50 (.492)	7.50 (.295)	5.00 (.197)
5	38-00-6135	15.00 (.591)	10.00 (.394)	7.50 (.295)
6	38-00-6136	17.50 (.689)	12.50 (.492)	10.00 (.394)
7	38-00-6137	20.00 (.787)	15.00 (.591)	12.50 (.492)
8	38-00-6138	22.50 (.886)	17.50 (.689)	15.00 (.591)
9	38-00-6139	25.00 (.984)	20.00 (.787)	17.50 (.689)
10	38-00-6140	27.50 (1.083)	22.50 (.886)	20.00 (.787)
11	38-00-6141	30.00 (1.181)	25.00 (.984)	22.50 (.886)

Circuits	Order No.	Dimension A	Dimension B	Dimension C
12	38-00-6142	32.50 (1.280)	27.50 (1.083)	25.00 (.984)
13	38-00-6143	35.00 (1.378)	30.00 (1.181)	27.50 (1.083)
14	38-00-6144	37.50 (1.476)	32.50 (1.280)	30.00 (1.181)
15	38-00-6145	40.00 (1.575)	35.00 (1.378)	32.50 (1.280)
16	38-00-6146	42.50 (1.673)	37.50 (1.476)	35.00 (1.378)
17	38-00-6147	45.00 (1.772)	40.00 (1.575)	37.50 (1.476)
18	38-00-6148	47.50 (1.870)	42.50 (1.673)	40.00 (1.575)
19	38-00-6149	50.00 (1.969)	45.00 (1.772)	42.50 (1.673)
20	38-00-6150	52.50 (2.067)	47.50 (1.870)	45.00 (1.772)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal Housing

5207

Features and Benefits
- Sizes 6 to 15 circuits
- Low profile
- Molded pull tabs

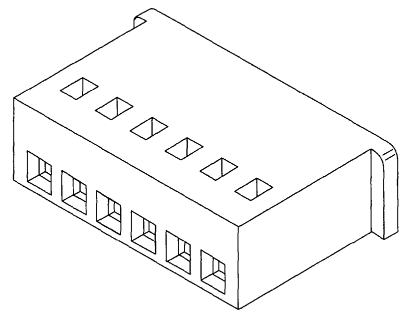
Reference Information
Packaging: Bulk
UL File No.: E29179
Mates With: 5089 headers
Use With: 5103
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

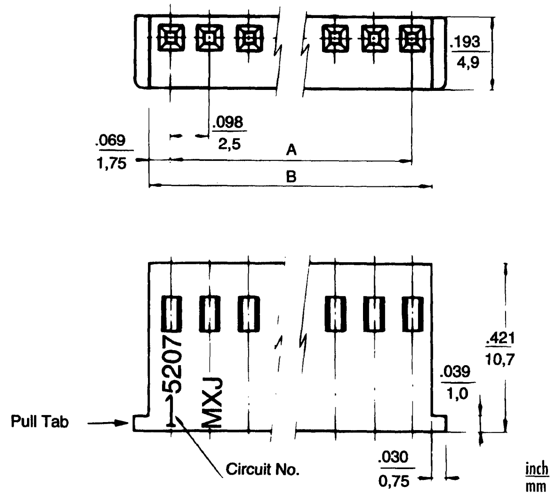
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
6	10-30-8061	12.50 (.492)	16.00 (.630)
7	10-30-8071	15.00 (.591)	18.50 (.728)
8	10-30-8081	17.50 (.689)	21.00 (.827)
9	10-30-8091	20.00 (.787)	23.50 (.925)
10	10-30-8101	22.50 (.886)	26.00 (1.024)
11	10-30-8111	25.00 (.984)	28.50 (1.122)
12	10-30-8121	27.50 (1.083)	31.00 (1.220)
13	10-30-8131	30.00 (1.181)	33.50 (1.319)
14	10-30-8141	32.50 (1.280)	36.00 (1.417)
15	10-30-8151	35.00 (1.378)	38.50 (1.516)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

5089-NA Feed-Through Polarized

Features and Benefits
- Sizes 6 to 15 circuits
- Bottom entry mount
- 0.64mm (.025") square pins
- Housing wall polarized to prevent misassembly
- Plating options available

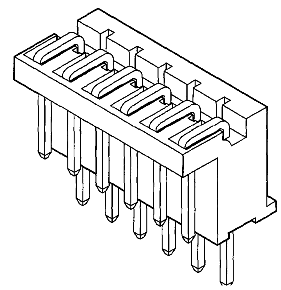
Reference Information
Packaging: Bulk
UL File No.: E29179
Mates With: 5207 housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

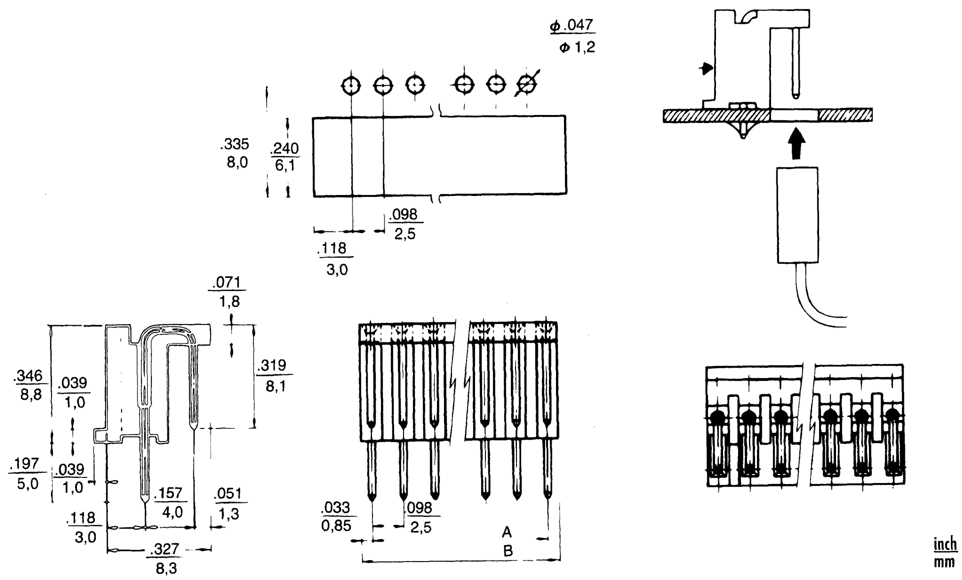
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
6	22-21-1061	12.50 (.492)	14.20 (.559)
7	22-21-1071	15.00 (.591)	16.70 (.657)
8	22-21-1081	17.50 (.689)	19.20 (.756)
9	22-21-1091	20.00 (.787)	21.70 (.854)
10	22-21-1101	22.50 (.886)	24.20 (.953)
11	22-21-1111	25.00 (.984)	26.70 (1.051)
12	22-21-1121	27.50 (1.083)	29.20 (1.150)
13	22-21-1131	30.00 (1.181)	31.70 (1.248)
14	22-21-1141	32.50 (1.280)	34.20 (1.346)
15	22-21-1151	35.00 (1.378)	36.70 (1.445)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal Housing

5209

Features and Benefits
- Sizes 2 to 5 circuits
- Low profile
- Molded pull tabs
- Locking ramp

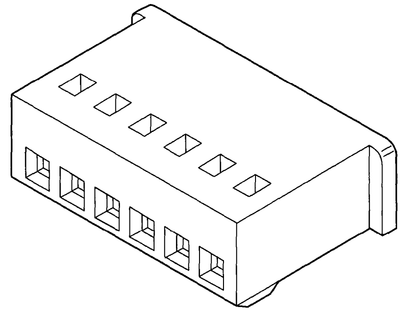
Reference Information
Packaging: Bulk
UL File No.: E29179
Mates With: 5129
Use With: 5103
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

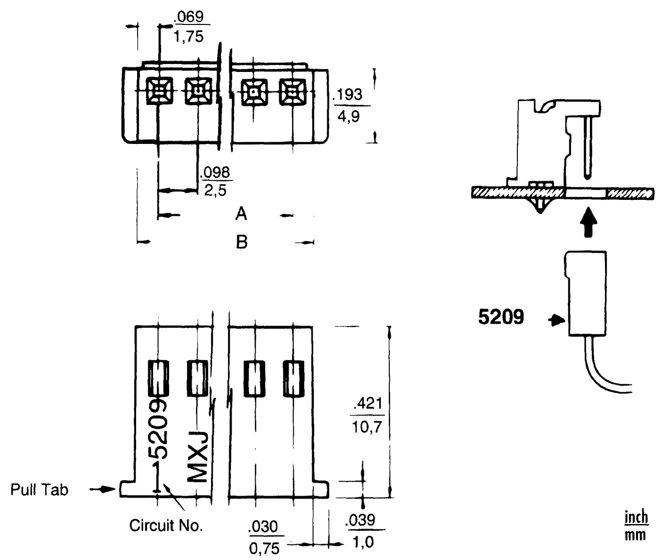
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-30-8023	2.50 (.098)	6.00 (.236)
3	10-30-8033	5.00 (.197)	8.50 (.335)
4	10-30-8043	7.50 (.295)	11.00 (.433)
5	10-30-8053	10.00 (.394)	13.50 (.531)

FEATURES AND SPECIFICATIONS

molex®

2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

5129-NA Feed-Through Friction Lock

Features and Benefits
- Sizes 2 to 5 circuits
- Friction lock for bottom entry wire-to-board connections
- 0.64mm (.025") square wire pins
- Plating options available

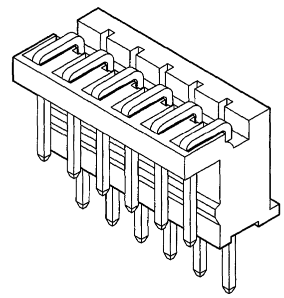
Reference Information
Packaging: Bulk
UL File No.: E29179
Mates With: 5209 housings and 5131-N
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

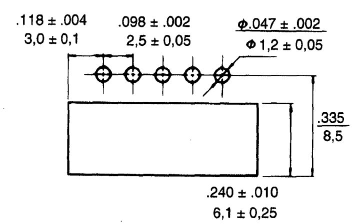
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

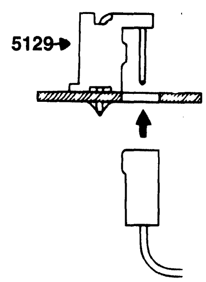
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

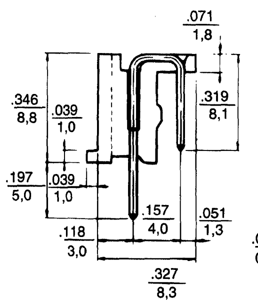
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C

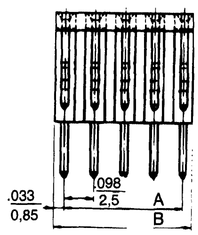


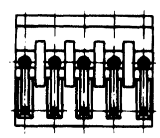
Available Primarily in the Far East











inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	29-04-1028	2.50 (.098)	4.20 (.165)
3	29-04-1038	5.00 (.197)	6.70 (.264)
4	29-04-1048	7.50 (.295)	9.20 (.362)
5	29-04-1058	10.00 (.394)	11.70 (.461)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Wire Male Crimp Terminal

5241

Features and Benefits
- Rigid contact

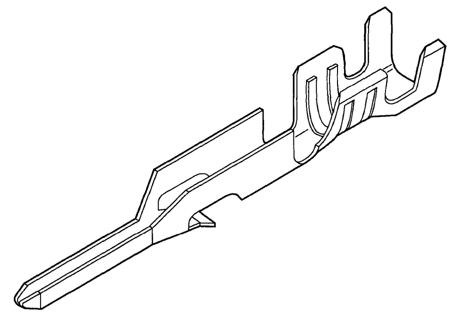
Reference Information
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
Mates With: 5103 terminals
Use With: 5240 housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

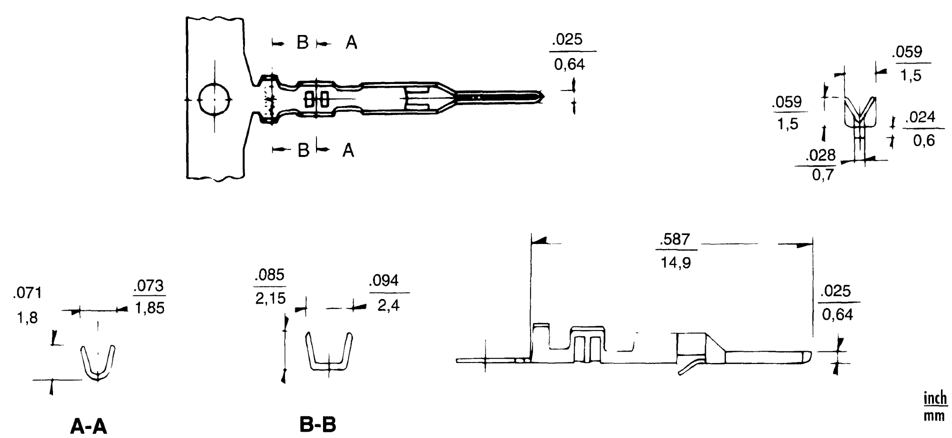
Physical
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C
Wire Range: 22 to 28 AWG



Available Primarily in the Far East

PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Order No.	Terminal	Wire Gauge AWG	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling Press	Automatic Tooling Crimp Die	Extraction Tool
08-70-0102	Chain	22-28	1.90mm max.	Tin-Plated Brass		11-26-0033 M15A	11-26-0050 JM5860A	J5800-005 11-26-0060
08-70-0103	Loose				22-26 AWG JHTR2262A 11-26-0009 26-28 AWG JHTR2262J 11-26-0025			

Recommended wire range assumes stranded wire

FEATURES AND SPECIFICATIONS

molex® **2.50mm (.098") Pitch SPOX™ Wire-to-Wire Plug Housing**

5240

Features and Benefits
- Sizes 2 to 12 circuits
- With and without mounting ears

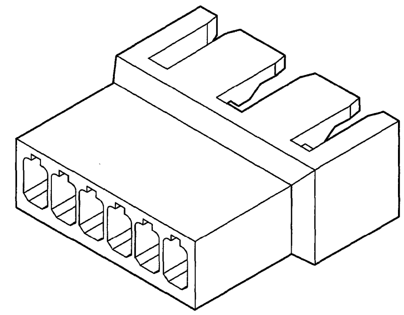
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5102 housings
Use With: 5241 terminals
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

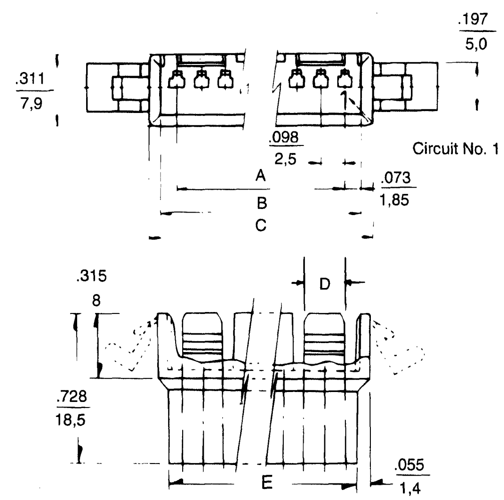
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

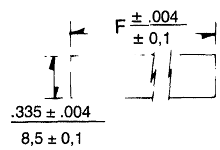
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C



Available Primarily in the Far East





Recommended Panel Slot

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension					
	With Ears	Without Ears	A	B	C	D	E	F
2	29-11-0022	29-11-0023	2.50 (.098)	6.20 (.244)	8.60 (.338)	2.50 (.098)	5.80 (.228)	12.40 (.488)
3	29-11-0032	29-11-0033	5.00 (.197)	8.70 (.342)	11.10 (.437)	5.00 (.197)	8.30 (.327)	14.90 (.587)
4	29-11-0042	29-11-0043	7.50 (.295)	11.20 (.440)	13.60 (.535)	7.50 (.295)	10.80 (.425)	17.40 (.685)
5	29-11-0052	29-11-0053	10.00 (.393)	13.70 (.539)	16.10 (.633)	3.75 (.147)	13.30 (.524)	19.90 (.783)
6	29-11-0062	29-11-0063	12.50 (.492)	16.20 (.637)	18.60 (.732)	5.00 (.197)	15.80 (.622)	22.40 (.882)
7	29-11-0072	29-11-0073	15.00 (.591)	18.70 (.736)	21.10 (.830)	5.00 (.197)	18.30 (.720)	24.90 (.980)
8	29-11-0082	29-11-0083	17.50 (.689)	21.20 (.834)	23.60 (.929)	5.00 (.197)	20.80 (.819)	27.40 (1.079)
9	29-11-0092	29-11-0093	20.00 (.787)	23.70 (.933)	26.10 (1.027)	5.00 (.197)	23.30 (.917)	29.90 (1.177)
10	29-11-0102	29-11-0103	22.50 (.886)	26.20 (1.031)	28.60 (1.125)	5.00 (.197)	25.80 (1.016)	32.40 (1.276)
11	29-11-0112	29-11-0113	25.00 (.984)	28.70 (1.130)	31.10 (1.224)	5.00 (.197)	28.30 (1.114)	34.90 (1.374)
12	29-11-0122	29-11-0123	27.50 (1.083)	31.20 (1.228)	33.60 (1.323)	5.00 (.197)	30.80 (1.213)	37.40 (1.472)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Wire-to-Wire Plug Housing

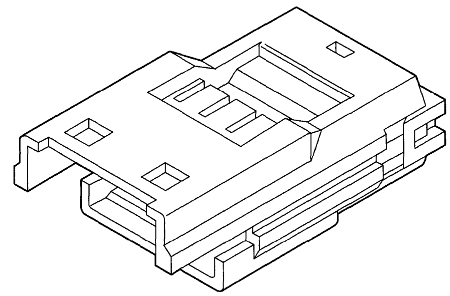
52116

Features and Benefits
- Sizes 2 to 4 circuits
- Other colors available, contact factory

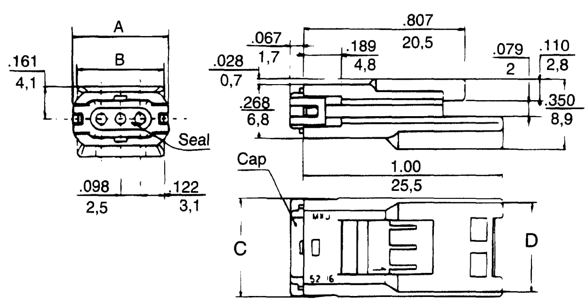
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 MΩ min.

Physical
Housing: Glass-filled PBTP
Cap: Glass-filled PBTP
Seal: Silicon
Temperature: -40 to +105°C
Wire Accommodation: 20 to 22 AWG, AVS 0.3



Available Primarily in the Far East



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
2	52116-0240	12.40 (.488)	11.20 (.441)	12.40 (.488)	11.20 (.441)
3	52116-0340	12.40 (.488)	11.20 (.441)	12.40 (.488)	11.20 (.441)
4	52116-0410	14.90 (.587)	13.70 (.539)	14.90 (.587)	13.70 (.539)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Wire-to-Wire Receptacle Housing

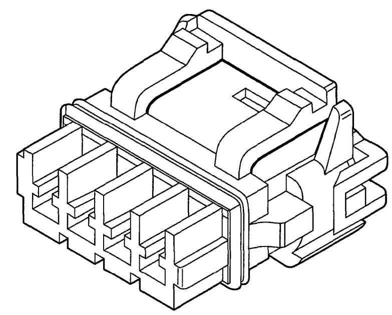
52117

Features and Benefits
- Sizes 2 to 4 circuits
- Other colors available, contact factory

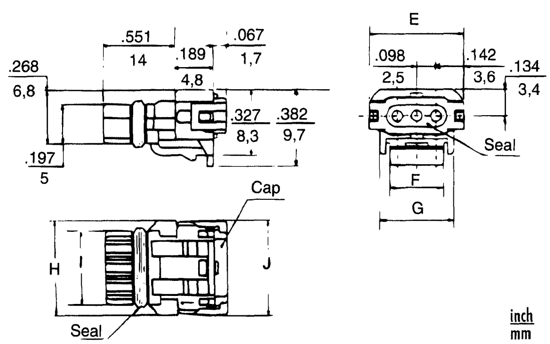
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 MΩ min.

Physical
Housing: Glass-filled PBTP
Cap: Glass-filled PBTP
Seal: Silicon
Temperature: -40 to +105°C
Wire Accommodation: 20 to 22 AWG, AVS 0.3



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension					
		E	F	G	H	I	J
2	52117-0240	12.20 (.480)	7.00 (.276)	9.60 (.378)	12.40 (.488)	9.60 (.378)	12.20 (.480)
3	52117-0340	12.20 (.480)	7.00 (.276)	9.60 (.378)	12.40 (.488)	9.60 (.378)	12.20 (.480)
4	52117-0410	14.70 (.578)	9.50 (.374)	12.10 (.476)	14.90 (.586)	12.10 (.476)	14.70 (.578)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Wire-to-Wire Crimp Terminal

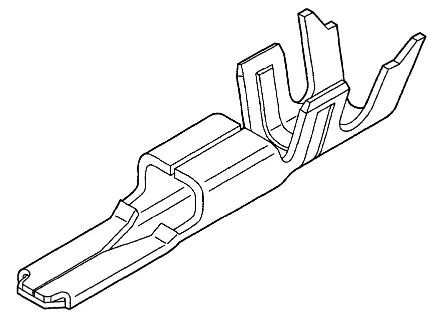
50038/50039 Male and Female

Features and Benefits
- 50038 male terminal for use with 52116
- 50039 female terminal for use with 52117

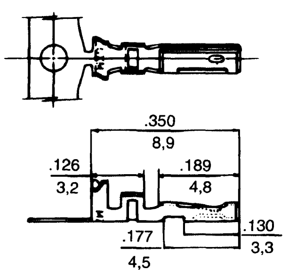
Reference Information
Packaging: Chain or loose
Designed In: Millimeters

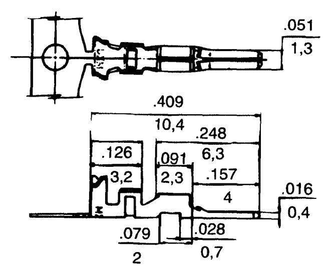
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 250 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Wire Range: 20 to 22 AWG, AVS 0.3
Insulation Diameter: 1.90mm max.
Strip Length: 2.00 to 2.50mm



Available Primarily in the Far East





inch
mm

ORDERING INFORMATION

Order No.	Terminal	Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
		Press	Crimp Die			
50038-8000	Chain	M15A 57117-4000	57084-3000			
50039-8000						
50038-8100	Loose			57085-5000 57086-5000		
50039-8100						

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Board-to-Board Receptacle

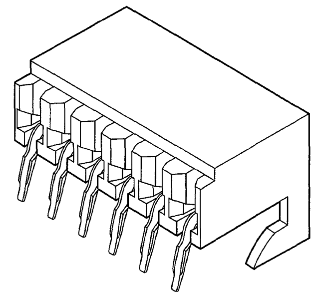
3024-NAHPB Single Row Right Angle

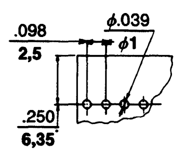
Features and Benefits
- Sizes 3 to 15 circuits

Reference Information
Packaging: Tray
UL File No.: E29179
Mates With: 3022-NA
Designed In: Millimeters

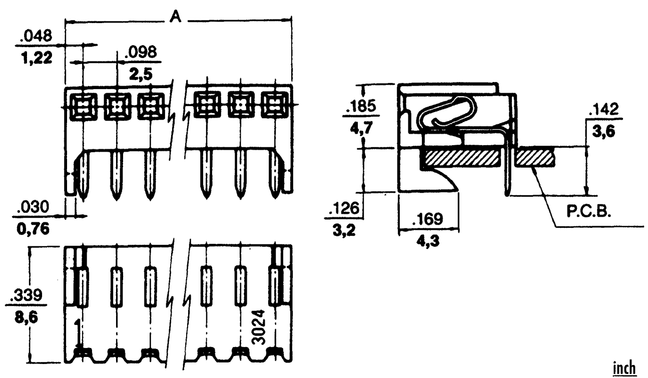
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB Layout



inch
mm

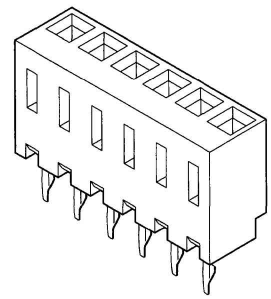
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	22-15-1032	7.44 (.293)
4	22-15-1042	9.94 (.391)
5	22-15-1052	12.44 (.490)
6	22-15-1062	14.94 (.588)
7	22-15-1072	17.44 (.687)
8	22-15-1082	19.94 (.785)
9	22-15-1092	22.44 (.883)
10	22-15-1102	24.94 (.982)
11	22-15-1112	27.44 (1.080)
12	22-15-1122	29.94 (1.179)
13	22-15-1132	32.44 (1.277)
14	22-15-1142	34.94 (1.376)
15	22-15-1152	37.44 (1.474)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Board-to-Board Receptacle

5224-NCHPB Single Row



Features and Benefits
- Sizes 3 to 15 circuits

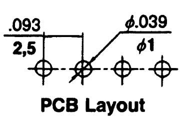
Reference Information
Packaging: Tray
Mates With: 3022-NA
Mated Height: 11.90mm (.469")
Mated Width: 4.70mm (.185")
Designed In: Millimeters

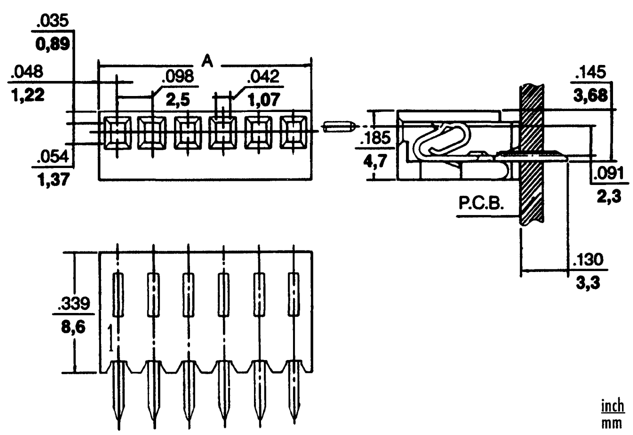
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

PCB Connectors

J





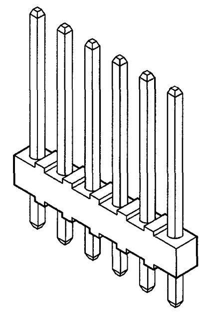
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	22-02-3034	7.44 (.293)
4	22-02-3044	9.94 (.391)
5	22-02-3054	12.44 (.490)
6	22-02-3064	14.94 (.588)
7	22-02-3074	17.44 (.687)
8	22-02-3084	19.94 (.785)
9	22-02-3094	22.44 (.883)
10	22-02-3104	24.94 (.982)
11	22-02-3114	27.44 (1.080)
12	22-02-3124	29.94 (1.179)
13	22-02-3134	32.44 (1.277)
14	22-02-3144	34.94 (1.376)
15	22-02-3154	37.44 (1.474)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Board-to-Board Header

3022-NA Single Row

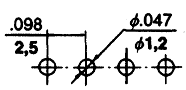


Features and Benefits
- Sizes 3 to 15 circuits

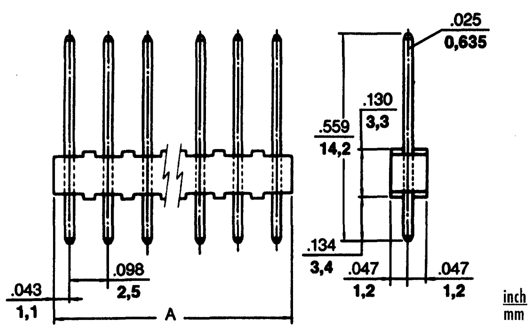
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3024-NAHPB and 5224-NCHPB
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C



PCB Layout



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	22-03-1031	7.20 (.283)
4	22-03-1041	9.70 (.382)
5	22-03-1051	12.20 (.480)
6	22-03-1061	14.70 (.579)
7	22-03-1071	17.20 (.677)
8	22-03-1081	19.70 (.776)
9	22-03-1091	22.20 (.874)
10	22-03-1101	24.70 (.972)
11	22-03-1111	27.20 (1.071)
12	22-03-1121	29.70 (1.169)
13	22-03-1131	32.20 (1.268)
14	22-03-1141	34.70 (1.366)
15	22-03-1151	37.20 (1.465)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 3 to 15 circuits

Reference Information
Packaging: Bulk or tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3022-NB
Mated Height: 14.40mm (.567")
Mated Width: 7.90mm (.311")
Designed In: Millimeters

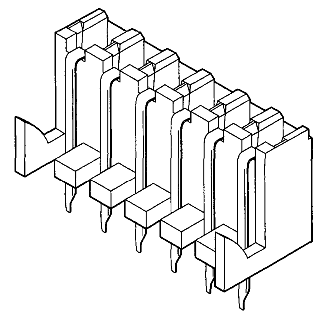
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

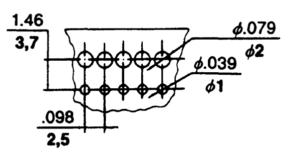
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

2.50mm (.098") Pitch Board-to-Board Connector

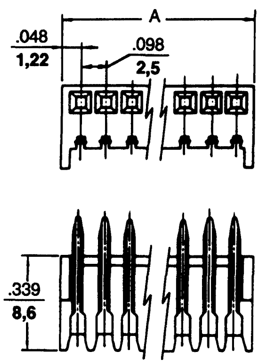
5124-NBHPB

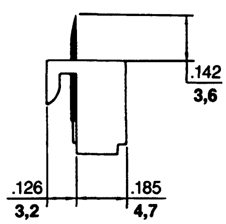
Bottom Entry Single Row





PCB Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	10-07-2035	7.44 (.293)
4	10-07-2045	9.94 (.391)
5	10-07-2055	12.44 (.490)
6	10-07-2065	14.94 (.588)
7	10-07-2075	17.44 (.687)
8	10-07-2085	19.94 (.785)
9	10-07-2095	22.44 (.883)
10	10-07-2105	24.94 (.982)
11	10-07-2115	27.44 (1.080)
12	10-07-2125	29.94 (1.179)
13	10-07-2135	32.44 (1.277)
14	10-07-2145	34.94 (1.376)
15	10-07-2155	37.44 (1.474)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Board-to-Board Header

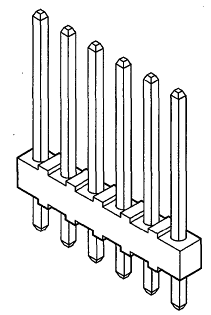
3022-NB Single Row

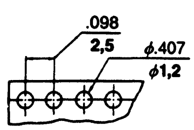
Features and Benefits
- Sizes 3 to 15 circuits

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5124-NBHPB
Designed In: Millimeters

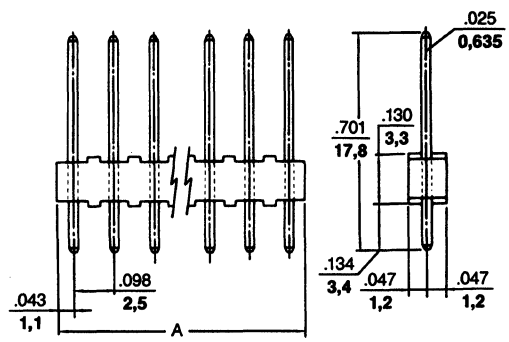
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





PCB Layout



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	22-03-1032	7.20 (.283)
4	22-03-1042	9.70 (.382)
5	22-03-1052	12.20 (.480)
6	22-03-1062	14.70 (.579)
7	22-03-1072	17.20 (.677)
8	22-03-1082	19.70 (.776)
9	22-03-1092	22.20 (.874)
10	22-03-1102	24.70 (.972)
11	22-03-1112	27.20 (1.071)
12	22-03-1122	29.70 (1.169)
13	22-03-1132	32.20 (1.268)
14	22-03-1142	34.70 (1.366)
15	22-03-1152	37.20 (1.465)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Board-to-Board Receptacle

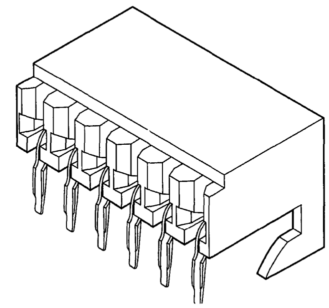
5244-NAHPB Single Row

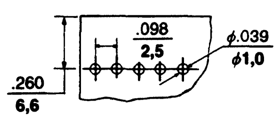
Features and Benefits
- Sizes 3 to 15 circuits

Reference Information
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5245-NA
Mated Height: 12.00mm (.472")
Mated Width: 9.10mm (.358")
Designed In: Millimeters

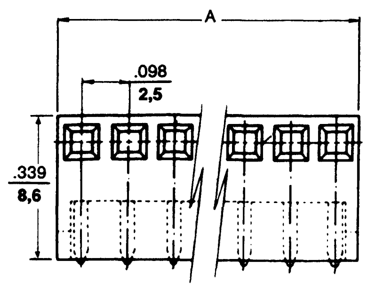
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

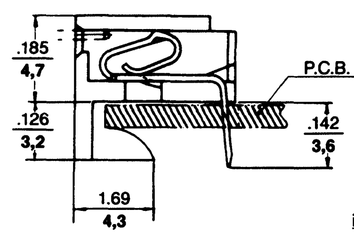
Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C





PCB Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	22-15-3032	7.44 (.293)
4	22-15-3042	9.94 (.391)
5	22-15-3052	12.44 (.490)
6	22-15-3062	14.94 (.588)
7	22-15-3072	17.44 (.687)
8	22-15-3082	19.94 (.785)
9	22-15-3092	22.44 (.883)
10	22-15-3102	24.94 (.982)
11	22-15-3112	27.44 (1.080)
12	22-15-3122	29.94 (1.179)
13	22-15-3132	32.44 (1.277)
14	22-15-3142	34.94 (1.376)
15	22-15-3152	37.44 (1.474)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch Board-to-Board Backwall Header

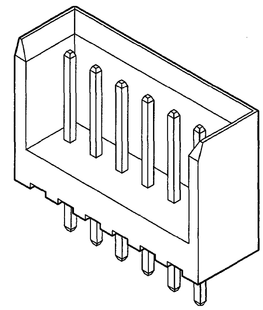
5245-NA Single Row

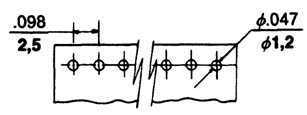
Features and Benefits
- Sizes 3 to 15 circuits

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5244-NAHPB
Designed In: Millimeters

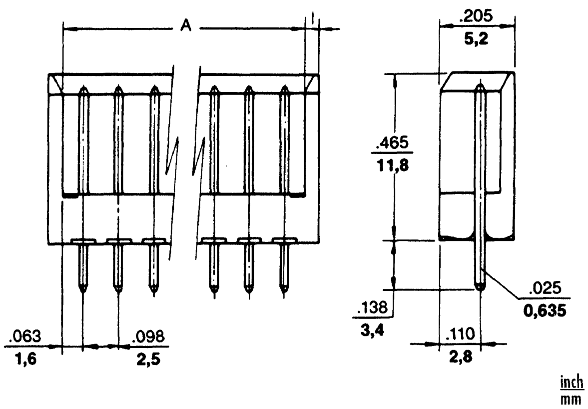
Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





PCB Layout



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
3	22-03-5034	8.20 (.323)
4	22-03-5044	10.70 (.421)
5	22-03-5054	13.20 (.520)
6	22-03-5064	15.70 (.618)
7	22-03-5074	18.20 (.717)
8	22-03-5084	20.70 (.815)
9	22-03-5094	23.20 (.913)
10	22-03-5104	25.70 (1.012)
11	22-03-5114	28.20 (1.110)
12	22-03-5124	30.70 (1.209)
13	22-03-5134	33.20 (1.307)
14	22-03-5144	35.70 (1.406)
15	22-03-5154	38.20 (1.504)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch PC Board Connector

7534

Right Angle

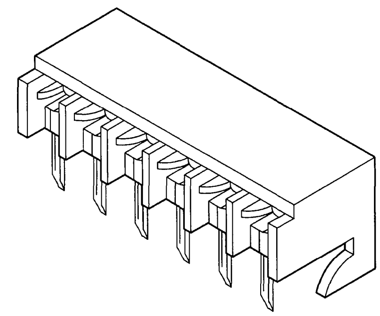
Features and Benefits
- Sizes 3 to 15 circuits
- PC board locking hooks and standoffs

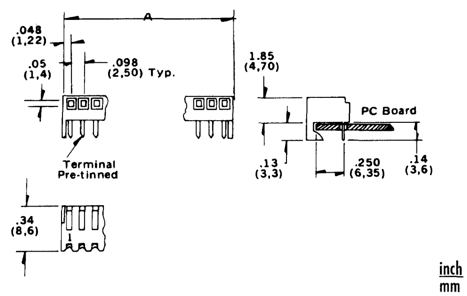
Reference Information
Product Specification: PS-10-07
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3022, 3094, 3202, 6494 and 0.64mm (.025") pins
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 199g max.
Unmating Force: 57g min.
Normal Force: 300g
Durability: 50 cycles Gold and 25 cycles Tin

Physical
Housing: White nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: 1.00μ (40μ") Tin/Lead and 2.00μ (80μ") Copper min. or 0.50μ (20μ") Gold and 0.75μ (30μ") Nickel min.
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
3	22-02-1034	22-16-1033	7.44 (.293)
4	22-02-1044	22-16-1043	9.94 (.392)
5	22-02-1054	22-16-1053	12.44 (.490)
7	22-02-1074	22-16-1073	17.44 (.687)
8	22-02-1084	22-16-1083	19.94 (.785)
9	22-02-1094	22-16-1093	22.44 (.884)
10	22-02-1104	22-16-1103	24.94 (.982)
11	22-02-1114	22-16-1113	27.44 (1.081)
12	22-02-1124	22-16-1123	29.94 (1.179)
13	22-02-1134	22-16-1133	32.44 (1.278)
14	22-02-1144	22-16-1143	34.94 (1.376)
15	22-02-1154	22-16-1153	37.44 (1.475)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch PC Board Connector

7534 Top Entry

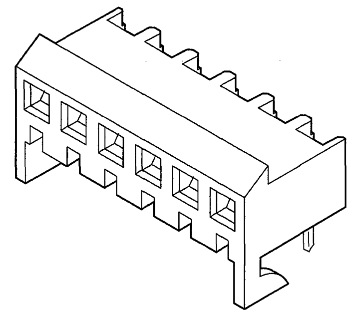
Features and Benefits
- Sizes 3 to 15 circuits
- PC board locking hooks and standoffs

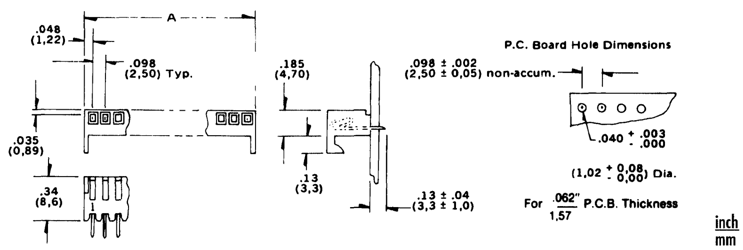
Reference Information
Product Specification: PS-10-07
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3022, 3094, 3202 and 0.64mm (.025") pins
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 199g max.
Unmating Force: 57g min.
Normal Force: 300g
Durability: 50 cycles Gold and 25 cycles Tin

Physical
Housing: White nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: 1.00μ (40μ") Tin/Lead and 2.00μ (80μ") Copper min.
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Tin Order No.	Dimension A
3	22-02-1035	7.44 (.293)
4	22-02-1045	9.94 (.392)
5	22-02-1055	12.44 (.490)
7	22-02-1075	17.44 (.687)
8	22-02-1085	19.94 (.785)
9	22-02-1095	22.44 (.884)
10	22-02-1105	24.94 (.982)
11	22-02-1115	27.44 (1.081)
12	22-02-1125	29.94 (1.179)
13	22-02-1135	32.44 (1.278)
14	22-02-1145	34.94 (1.376)
15	22-02-1155	37.44 (1.475)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal

5263 Spring Box

Features and Benefits
- Very low profile
- Anti-fishhooking design
- Box protects pin contact area from contamination during handling

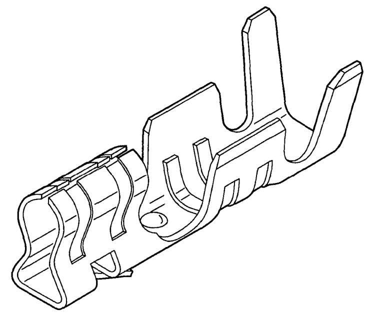
Reference Information
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
Use With: 5264 housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current:

AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

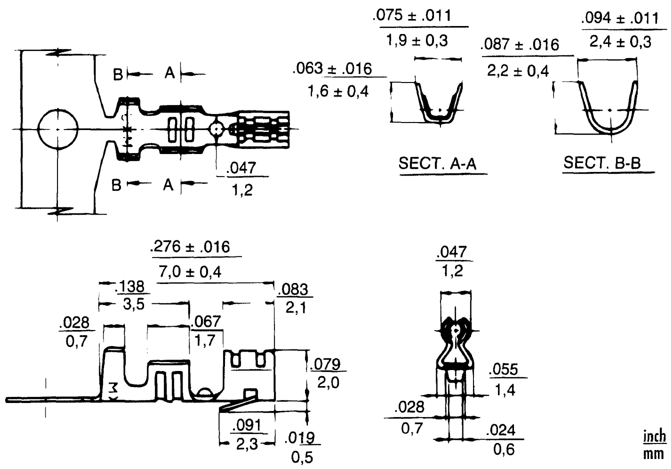
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C



PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Order No.	Terminal	Engineering No.	Wire Range AWG	Insulation Diameter	Hand Tool	Automatic Tooling	
						Press	Crimp Die
08-70-1039	Chain	5263PBT	22-28	1.90 (.075) max.		11-26-0033 M15A or 57117-4000	JM5996A 11-26-0117
08-70-1040	Loose	5263PBTL			11-26-0167 JHTR5974		

FEATURES AND SPECIFICATIONS

molex

2.50mm (.098") Pitch SPOX™ Wire-to-Board Crimp Terminal Housing

5264-N Shrouded

Features and Benefits
- Sizes 2 to 15 circuits
- Very low profile
- Molded-in pull tabs
- Friction lock

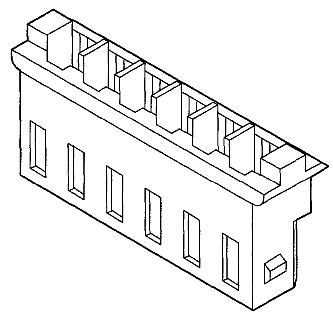
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5267-NA-X and 5268-NA
Use With: 5263 terminals
Designed In: Millimeters

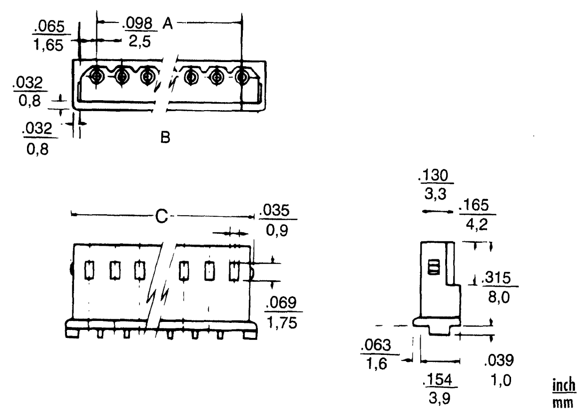
Electrical
Voltage: 250V
Current:

AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	50-37-5023	2.50 (.098)	5.80 (.228)	6.40 (.252)
3	50-37-5033	5.00 (.197)	8.30 (.327)	8.90 (.350)
4	50-37-5043	7.50 (.295)	10.80 (.425)	11.40 (.449)
5	50-37-5053	10.00 (.394)	13.30 (.524)	13.90 (.547)
6	50-37-5063	12.50 (.492)	15.80 (.622)	16.40 (.646)
7	50-37-5073	15.00 (.591)	18.30 (.720)	18.90 (.744)
8	50-37-5083	17.50 (.689)	20.80 (.819)	21.40 (.843)
9	50-37-5093	20.00 (.787)	23.30 (.917)	
10	50-37-5103	22.50 (.886)	25.80 (1.016)	
11	50-37-5113	25.00 (.984)	28.30 (1.114)	
12	50-37-5123	27.50 (1.083)	30.80 (1.213)	
13	50-37-5133	30.00 (1.181)	33.30 (1.311)	
14	50-37-5143	32.50 (1.280)	35.80 (1.409)	
15	50-37-5153	35.00 (1.378)	38.30 (1.508)	

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Connector

42219 IDT Spring Box

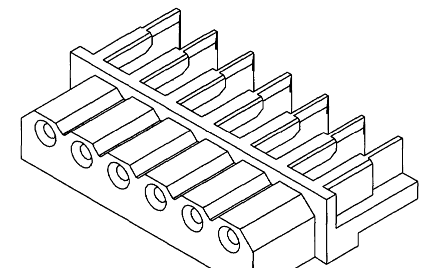
Features and Benefits
- In-line IDT termination
- Integral crimped strain relief
- Available in standard white or 4 optional colors
- Connections supplied on terminal carrier strip for application tooling

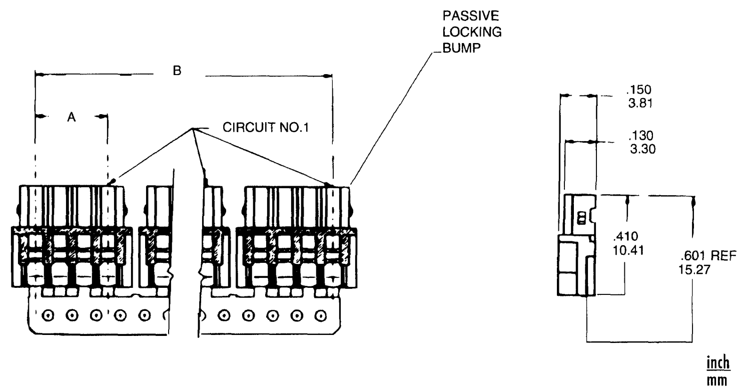
Reference Information
Product Specification: PS-42219
Packaging: Strip
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5267, 5268, 42249 and 42267 headers
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Pull-Out Force: Horizontal—2.3kg min.
Vertical—1.8kg min.
Mating Force: 1.8kg max. per contact
Unmating Force: 0.15kg min. per contact
Durability: 25 cycles

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin/Lead
Temperature: -40 to +105°C
Wire Accommodation: 24 AWG solid or stranded with topcoat or 26 AWG stranded with topcoat





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.					Dimension	
	Natural (White)	Red	Yellow	Orange	Green	A	B
2	• 22-43-3020	22-44-6022	22-44-6021	22-44-6024	22-44-6023	2.50 (.098)	70.00 (2.756)
3	• 22-43-3030	22-44-6032	22-44-6031	22-44-6034	22-44-6033	5.00 (.197)	75.00 (2.953)
4	• 22-43-3040	22-44-6042	22-44-6041	22-44-6044	22-44-6043	7.50 (.295)	70.00 (2.756)
5	• 22-43-3050	22-44-6052	22-44-6051	22-44-6054	22-44-6053	10.00 (.394)	70.00 (2.756)
6	• 22-43-3060	22-44-6062	22-44-6061	22-44-6064	22-44-6063	12.50 (.492)	65.00 (2.556)
7	• 22-43-3070	22-44-6072	22-44-6071	22-44-6074	22-44-6073	15.00 (.591)	75.00 (2.952)
8	• 22-43-3080	22-44-6082	22-44-6081	22-44-6084	22-44-6083	17.50 (.689)	62.50 (2.461)
9	• 22-43-3090	22-44-6092	22-44-6091	22-44-6094	22-44-6093	20.00 (.787)	70.00 (2.756)
10	• 22-43-3100	22-44-6102	22-44-6101	22-44-6104	22-44-6103	22.50 (.886)	50.00 (1.969)
11	• 22-43-3110	22-44-6112	22-44-6111	22-44-6114	22-44-6113	25.00 (.984)	55.00 (2.165)
12	• 22-43-3120	22-44-6122	22-44-6121	22-44-6124	22-44-6123	27.50 (1.082)	60.00 (2.362)
13	• 22-43-3130	22-44-6132	22-44-6131	22-44-6134	22-44-6133	30.00 (1.181)	65.00 (2.559)
14	• 22-43-3140	22-44-6142	22-44-6141	22-44-6144	22-44-6143	32.50 (1.279)	70.00 (2.756)
15	• 22-43-3150	22-44-6152	22-44-6151	22-44-6154	22-44-6153	35.00 (1.378)	75.00 (2.952)

Pistol Module*	Manual Discrete Wire	Manual Ribbon Cable	Semi-auto	Notching Die for Ribbon Cable
11-31-8939	11-20-1278	11-31-8785	11-20-1252	11-20-1258

• US Standard Product, available through Molex franchised distributors
* Fits Pistol Handgrip AM-60114

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Connector

42254 IDT Board-In

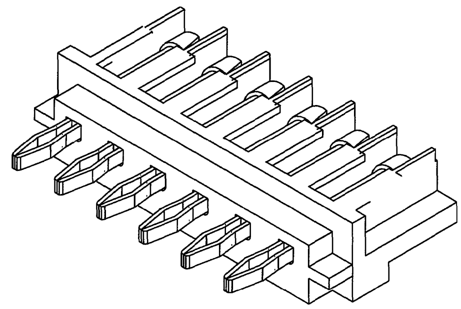
Features and Benefits
- Solders directly to PCB
- In-line IDT termination
- Integral crimped strain relief
- Low profile, eliminates headers
- Connectors supplied on terminal carrier strip for application tooling

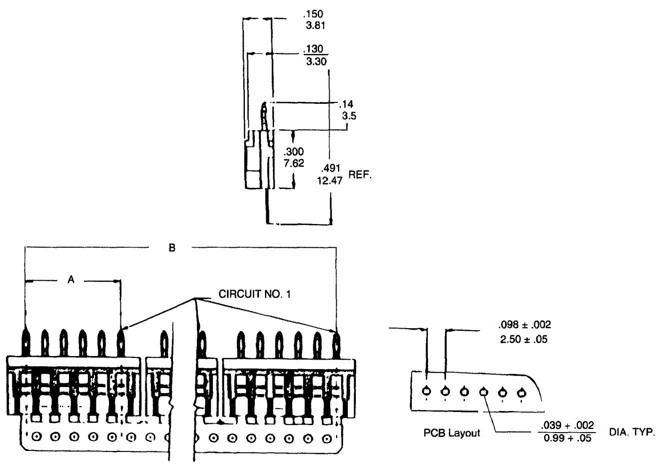
Reference Information
Packaging: Strip
UL File No.: E29179
CSA File No.: LR19980
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Pull-Out Force: Horizontal—2.3kg min.
Vertical—1.8kg min.
Insertion Force to PCB: 1kg max.

Physical
Housing: Polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin/Lead
Temperature: -40 to +105°C
Wire Accommodation: 24 AWG solid or stranded with topcoat or 26 AWG stranded with topcoat





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	• 22-43-2020	2.50 (.098)	70.00 (2.756)
3	• 22-43-2030	5.00 (.197)	75.00 (2.953)
4	• 22-43-2040	7.50 (.295)	70.00 (2.756)
5	• 22-43-2050	10.00 (.394)	70.00 (2.756)
6	• 22-43-2060	12.50 (.492)	65.00 (2.556)
7	• 22-43-2070	15.00 (.591)	75.00 (2.952)
8	• 22-43-2080	17.50 (.689)	62.50 (2.461)
9	• 22-43-2090	20.00 (.787)	70.00 (2.756)
10	• 22-43-2100	22.50 (.886)	50.00 (1.969)
11	• 22-43-2110	25.00 (.984)	55.00 (2.165)
12	• 22-43-2120	27.50 (1.082)	60.00 (2.362)
13	• 22-43-2130	30.00 (1.181)	65.00 (2.559)
14	• 22-43-2140	32.50 (1.279)	70.00 (2.756)
15	• 22-43-2150	35.00 (1.378)	75.00 (2.952)

Pistol Module*	Manual Discrete Wire	Manual Ribbon Cable	Semi-auto	Notching Die for Ribbon Cable
11-31-8939	11-20-1278	11-31-8785	11-20-1252	11-20-1258

• US Standard Product, available through Molex franchised distributors
* Fits Pistol Handgrip AM-60114

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

5267-NA Straight Fully Shrouded

Features and Benefits
- Sizes 2 to 15 circuits
- 0.70mm (.027") round pins
- Polarized
- Friction lock

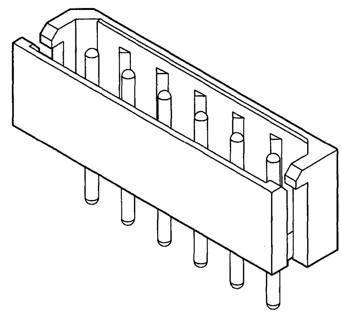
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5264-N and 42219
Designed In: Millimeters

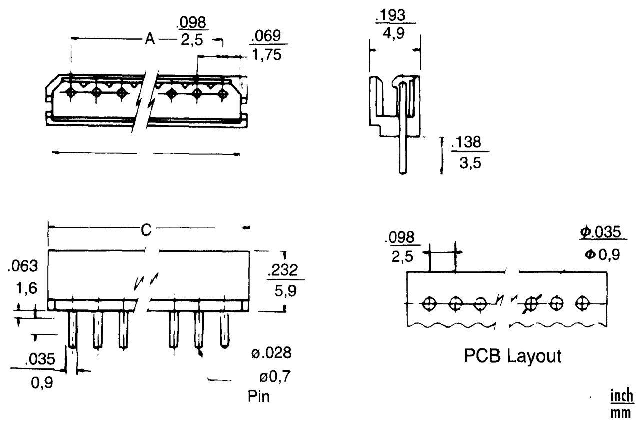
Electrical
Voltage: 250V
Current:

AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	22-03-5025	2.50 (.098)	6.00 (.236)	7.40 (.291)
3	22-03-5035	5.00 (.197)	8.50 (.335)	9.90 (.390)
4	22-03-5045	7.50 (.295)	11.00 (.433)	12.40 (.488)
5	22-03-5055	10.00 (.394)	13.50 (.531)	14.90 (.587)
6	22-03-5065	12.50 (.492)	16.00 (.630)	17.40 (.685)
7	22-03-5075	15.00 (.591)	18.50 (.728)	19.90 (.783)
8	22-03-5085	17.50 (.689)	21.00 (.827)	22.40 (.882)
9	22-03-5095	20.00 (.787)	23.50 (.925)	24.90 (.980)
10	22-03-5105	22.50 (.886)	26.00 (1.024)	27.40 (1.079)
11	22-03-5115	25.00 (.984)	28.50 (1.122)	29.90 (1.117)
12	22-03-5125	27.50 (1.083)	31.00 (1.220)	32.40 (1.276)
13	22-03-5135	30.00 (1.181)	33.50 (1.319)	34.90 (1.374)
14	22-03-5145	32.50 (1.280)	36.00 (1.417)	37.40 (1.472)
15	22-03-5155	35.00 (1.378)	38.50 (1.516)	39.90 (1.571)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

5268-NA Right Angle Fully Shrouded

Features and Benefits

- Sizes 2 to 15 circuits
- 0.70mm (.027") round pins
- Polarized
- Friction lock

Reference Information

Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5264-N and 42219
Designed In: Millimeters

Electrical

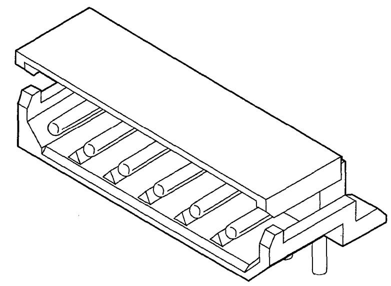
Voltage: 250V
Current:

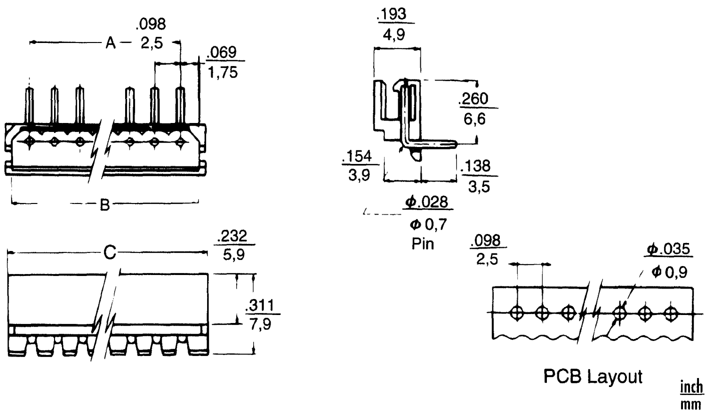
AWG	22	24	26	28
Amperes	3.0	2.5	2.0	1.5

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: 6/6 nylon, UL 94V-0
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension		
		A	B	C
2	22-05-7025	2.50 (.098)	6.00 (.236)	7.40 (.291)
3	22-05-7035	5.00 (.197)	8.50 (.335)	9.90 (.390)
4	22-05-7045	7.50 (.295)	11.00 (.433)	12.40 (.488)
5	22-05-7055	10.00 (.394)	13.50 (.531)	14.90 (.587)
6	22-05-7065	12.50 (.492)	16.00 (.630)	17.40 (.685)
7	22-05-7075	15.00 (.591)	18.50 (.728)	19.90 (.783)
8	22-05-7085	17.50 (.689)	21.00 (.827)	22.40 (.882)
9	22-05-7095	20.00 (.787)	23.50 (.925)	24.90 (.980)
10	22-05-7105	22.50 (.886)	26.00 (1.024)	27.40 (1.079)
11	22-05-7115	25.00 (.984)	28.50 (1.122)	29.90 (1.117)
12	22-05-7125	27.50 (1.083)	31.00 (1.220)	32.40 (1.276)
13	22-05-7135	30.00 (1.181)	33.50 (1.319)	34.90 (1.374)
14	22-05-7145	32.50 (1.280)	36.00 (1.417)	37.40 (1.472)
15	22-05-7155	35.00 (1.378)	38.50 (1.516)	39.90 (1.571)

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

42249 Shrouded Staggered Footprint

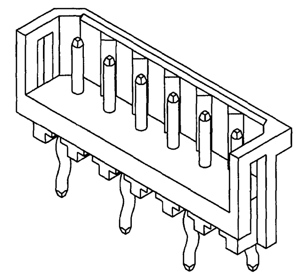
Features and Benefits
- Polarized to mating connector
- Staggered footprint prevents solder bridging
- Standard kinked PC tails for retention to PC board
- Available in standard white or 4 optional colors

Reference Information
Product Specification: PS-42219
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 42219 connectors
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

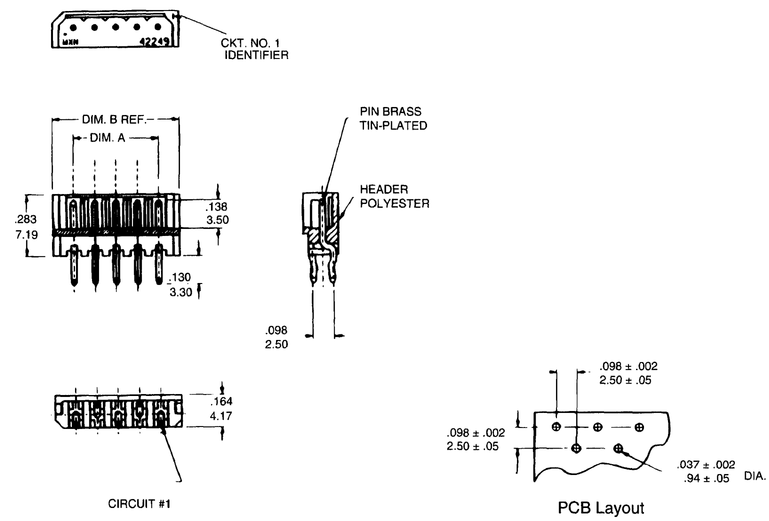
Mechanical
Mating Force: 1.8kg max.
Unmating Force: 0.15kg min.
Durability: 25 cycles

Physical
Housing: Polyester, UL 94V-0
Contact: Brass .027" diameter
Plating: Tin
Temperature: -40 to +105°C



PCB Connectors

J



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.					Dimension	
	Natural (White)	Red	Yellow	Orange	Green	A	B
2	• 22-43-6020	22-44-7022	22-44-7021	22-44-7024	22-44-7023	2.50 (.098)	7.40 (.291)
3	• 22-43-6030	22-44-7032	22-44-7031	22-44-7034	22-44-7033	5.00 (.197)	9.90 (.390)
4	• 22-43-6040	22-44-7042	22-44-7041	22-44-7044	22-44-7043	7.50 (.295)	12.40 (.488)
5	• 22-43-6050	22-44-7052	22-44-7051	22-44-7054	22-44-7053	10.00 (.394)	14.90 (.587)
6	• 22-43-6060	22-44-7062	22-44-7061	22-44-7064	22-44-7063	12.50 (.492)	17.40 (.685)
7	• 22-43-6070	22-44-7072	22-44-7071	22-44-7074	22-44-7073	15.00 (.591)	19.90 (.783)
8	• 22-43-6080	22-44-7082	22-44-7081	22-44-7084	22-44-7083	17.50 (.689)	22.40 (.882)
9	• 22-43-6090	22-44-7092	22-44-7091	22-44-7094	22-44-7093	20.00 (.787)	24.90 (.980)
10	• 22-43-6100	22-44-7102	22-44-7101	22-44-7104	22-44-7103	22.50 (.886)	27.40 (1.079)
11	• 22-43-6110	22-44-7112	22-44-7111	22-44-7114	22-44-7113	25.00 (.984)	29.90 (1.177)
12	• 22-43-6120	22-44-7122	22-44-7121	22-44-7124	22-44-7123	27.50 (1.083)	32.40 (1.276)
13	• 22-43-6130	22-44-7132	22-44-7131	22-44-7134	22-44-7133	30.00 (1.181)	24.90 (1.374)
14	• 22-43-6140	22-44-7142	22-44-7141	22-44-7144	22-44-7143	32.50 (1.280)	37.40 (1.472)
15	• 22-43-6150	22-44-7152	22-44-7151	22-44-7154	22-44-7153	35.00 (1.378)	39.90 (1.571)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.50mm (.098") Pitch SPOX™ Wire-to-Board Header

42267 Shrouded In-Line Footprint

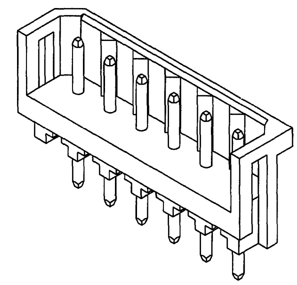
Features and Benefits
- Polarized to mating connector
- Standard kinked PC tails for retention to PC board
- Available in standard white or 4 optional colors

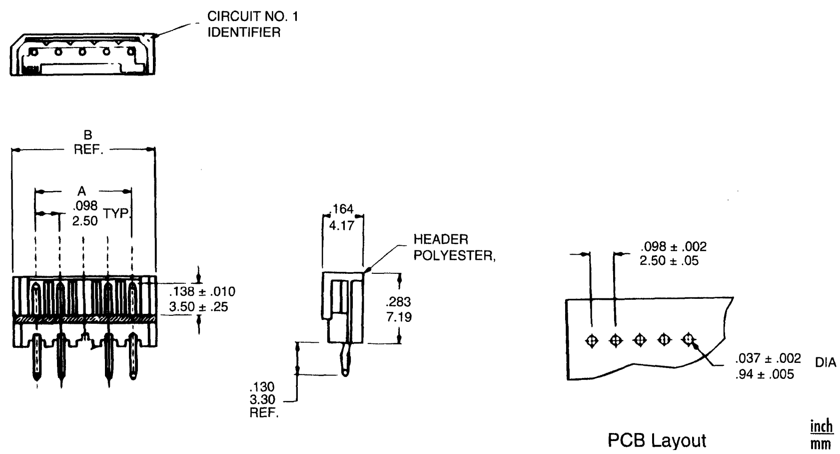
Reference Information
Product Specification: PS-42219
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 42219 connectors
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 3.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Mating Force: 1.8kg max.
Unmating Force: 0.15kg min.
Durability: 25 cycles

Physical
Housing: Polyester, UL 94V-0
Contact: Brass .027" diameter
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.					Dimension	
	Natural (White)	Red	Yellow	Orange	Green	A	B
2	• 22-43-8020	22-43-8021	22-43-8024	22-43-8025	22-43-8026	2.50 (.098)	7.40 (.291)
3	• 22-43-8030	22-43-8031	22-43-8034	22-43-8035	22-43-8036	5.00 (.197)	9.90 (.390)
4	• 22-43-8040	22-43-8041	22-43-8044	22-43-8045	22-43-8046	7.50 (.295)	12.40 (.488)
5	• 22-43-8050	22-43-8051	22-43-8054	22-43-8055	22-43-8056	10.00 (.394)	14.90 (.587)
6	• 22-43-8060	22-43-8061	22-43-8064	22-43-8065	22-43-8066	12.50 (.492)	17.40 (.685)
7	• 22-43-8070	22-43-8071	22-43-8074	22-43-8075	22-43-8076	15.00 (.591)	19.90 (.783)
8	• 22-43-8080	22-43-8081	22-43-8084	22-43-8085	22-43-8086	17.50 (.689)	22.40 (.882)
9	• 22-43-8090	22-43-8091	22-43-8094	22-43-8095	22-43-8096	20.00 (.787)	24.90 (.980)
10	• 22-43-8100	22-43-8101	22-43-8104	22-43-8105	22-43-8106	22.50 (.886)	27.40 (1.079)
11	• 22-43-8110	22-43-8111	22-43-8114	22-43-8115	22-43-8116	25.00 (.984)	29.90 (1.177)
12	• 22-43-8120	22-43-8121	22-43-8124	22-43-8125	22-43-8126	27.50 (1.083)	32.40 (1.276)
13	• 22-43-8130	22-43-8131	22-43-8134	22-43-8135	22-43-8136	30.00 (1.181)	34.90 (1.374)
14	• 22-43-8140	22-43-8141	22-43-8144	22-43-8145	22-43-8146	32.50 (1.280)	37.40 (1.472)
15	• 22-43-8150	22-43-8151	22-43-8154	22-43-8155	22-43-8156	35.00 (1.378)	39.90 (1.571)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Crimp Terminal Housing

2695/6471

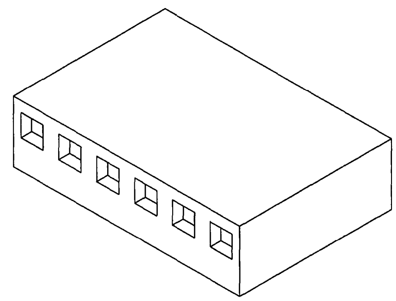
Features and Benefits
- Sizes 1 to 25 circuits
- 6471 is end-to-end stackable (2 housings only)
- 2695 version with or without locking ramp and polarizing ribs
- Optional polarization or locking ramp version available on 2695 only

Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4380, 4094, 6373, 6410, 7395, 7478, 42152, 42153, 42225, 42226, 42227, 42228, 42375, 42376, 70021, 70327, 70475 and 0.64mm (.025") pins
Use With: 2695—2759, 6459 or 41572 terminals
6471—4809 terminals
Designed In: Inches

*Electrical**
Voltage: 250V
Current: Phosphor Bronze—4.0A max.
Brass—2.5A max.
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

*Mechanical**
Contact Insertion Force: 681g (1.5 lb) max.
Contact Retention to Housing: 3.63kg (8 lb) min.
Mating Force: 199g max.
Unmating Force: 57g min.
Normal Force: 200g min.
Durability: 25 cycles

Physical
Housing: 2695—Red nylon, UL 94V-0
6471—White nylon, UL 94V-0
Temperature: -40 to +75°C



PCB Connectors

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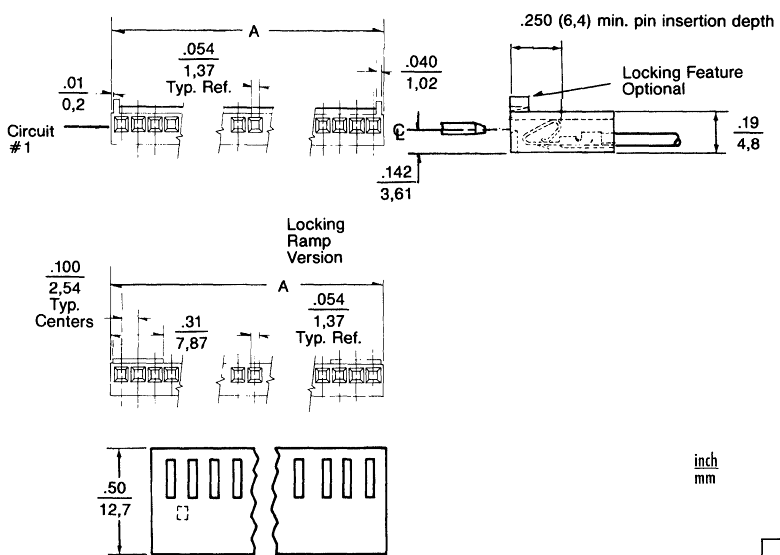


inch
mm

	Order No.
Polarizing Key	15-04-9209
Polarizing Peg	15-04-9210

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension A
	2695			6471	
	With Locking Ramp	With Locking Ramp and Polarizing Ribs	Without Locking Ramp or Ribs	With Locking Ramp and Polarizing Ribs†	
1			• 22-01-2011		3.10 (.122)
2	• 22-01-2027	• 22-01-3027	• 22-01-2021	22-01-2025	5.60 (.220)
3	• 22-01-2037	• 22-01-3037	• 22-01-2031	22-01-2035	8.10 (.320)
4	• 22-01-2047	• 22-01-3047	• 22-01-2041	22-01-2045	10.70 (.420)
5	• 22-01-2057	• 22-01-3057	• 22-01-2051	22-01-2055	13.20 (.520)
6	• 22-01-2067	• 22-01-3067	• 22-01-2061	22-01-2065	15.80 (.620)
7	• 22-01-2077	• 22-01-3077	• 22-01-2071	22-01-2075	18.30 (.720)
8	• 22-01-2087	• 22-01-3087	• 22-01-2081	22-01-2085	20.90 (.820)
9	• 22-01-2097	• 22-01-3097	• 22-01-2091	22-01-2095	23.40 (.920)
10	• 22-01-2107	• 22-01-3107	• 22-01-2101	22-01-2105	25.90 (1.020)
11	• 22-01-2117	• 22-01-3117	• 22-01-2111	22-01-2115	28.50 (1.120)
12	• 22-01-2127	• 22-01-3127	• 22-01-2121	22-01-2125	31.00 (1.220)
13	• 22-01-2137	• 22-01-3137	• 22-01-2131	22-01-2135	33.50 (1.320)

Circuits	Order No.				Dimension A
	2695			6471	
	With Locking Ramp	With Locking Ramp and Polarizing Ribs	Without Locking Ramp or Ribs	With Locking Ramp and Polarizing Ribs†	
14	• 22-01-2147	• 22-01-3147	• 22-01-2141	22-01-2145	36.10 (1.420)
15	• 22-01-2157	• 22-01-3157	• 22-01-2151	22-01-2155	38.60 (1.520)
16	• 22-01-2167	• 22-01-3167	• 22-01-2161	22-01-2165	41.20 (1.620)
17	• 22-01-2177	• 22-01-3177	• 22-01-2171	22-01-2175	43.70 (1.720)
18	• 22-01-2187	• 22-01-3187	• 22-01-2181	22-01-2185	46.20 (1.820)
19	• 22-01-2197	• 22-01-3197	• 22-01-2191		48.80 (1.920)
20	• 22-01-2207	• 22-01-3207	• 22-01-2201		51.30 (2.020)
21	• 22-01-2217	• 22-01-3217	• 22-01-2211		53.90 (2.120)
22	• 22-01-2227	• 22-01-3227	• 22-01-2221		56.40 (2.220)
23	• 22-01-2237	• 22-01-3237	• 22-01-2231		58.90 (2.320)
24	• 22-01-2247	• 22-01-3247	• 22-01-2241		61.50 (2.420)
25	• 22-01-2257	• 22-01-3257	• 22-01-2251		64.00 (2.520)

• US Standard Product, available through Molex franchised distributors
* When mated with Molex product only
† For circuits 19-28, contact factory
☐ Highlighted area denotes preferred version in Europe and the Far East

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK®
Crimp Terminal Housing
7880
High Pressure

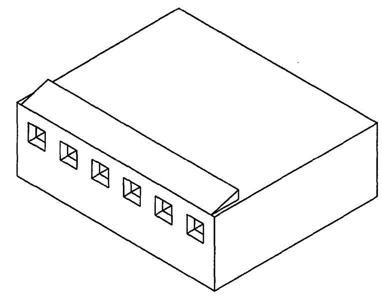
Features and Benefits
- Sizes 1 to 28 circuits
- Standard with locking ramp
- Side insertable polarizing key
- Suitable for high vibration requirements

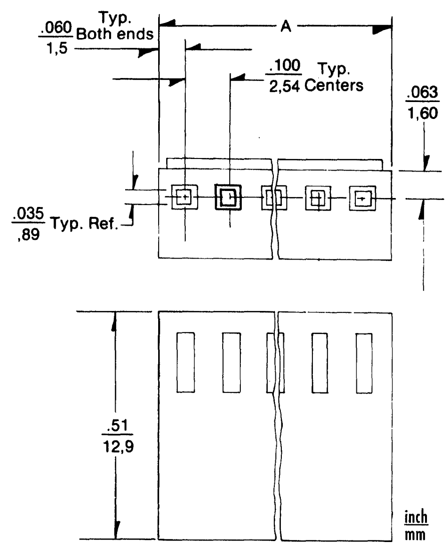
Reference Information
Product Specification: PS-7879
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 4180, 4380, 6373, 6410, 7395, 7478, 42152, 42153, 42225, 42226, 42227, 42228, 42375, 42376, 70021, 70327, 70345, 70475 and 0.64mm (.025") pins
Use With: 7879 terminals
Designed In: Inches

Electrical*
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500K MΩ min.

Mechanical*
Contact Insertion Force: 1.5 lb max.
Contact Retention to Housing: 8 lb min.
Mating Force: 475g max.
Unmating Force: 100g min.
Normal Force: 430g min.
Durability: 25 cycles

Physical
Housing: Red nylon, UL 94V-0
Temperature: -40 to +75°C





	Order No.
Polarizing Key	89-00-0422

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
1	• 10-11-2013	3.00 (.120)
2	• 10-11-2023	5.60 (.220)
3	• 10-11-2033	8.10 (.320)
4	• 10-11-2043	10.70 (.420)
5	• 10-11-2053	13.20 (.520)
6	• 10-11-2063	15.80 (.620)
7	• 10-11-2073	18.30 (.720)
8	• 10-11-2083	20.80 (.820)
9	• 10-11-2093	23.40 (.920)
10	• 10-11-2103	25.90 (1.020)
11	• 10-11-2113	28.50 (1.120)
12	• 10-11-2123	31.00 (1.220)
13	• 10-11-2133	33.50 (1.320)
14	• 10-11-2143	36.10 (1.420)

Circuits	Order No.	Dimension A
15	• 10-11-2153	38.60 (1.520)
16	• 10-11-2163	41.20 (1.620)
17	• 10-11-2173	43.70 (1.720)
18	• 10-11-2183	46.20 (1.820)
19	• 10-11-2193	48.80 (1.920)
20	• 10-11-2203	51.30 (2.020)
21	• 10-11-2213	53.90 (2.120)
22	• 10-11-2223	56.40 (2.220)
23	• 10-11-2233	59.90 (2.320)
24	• 10-11-2243	61.50 (2.420)
25	• 10-11-2253	64.00 (2.520)
26	• 10-11-2263	66.60 (2.620)
27	• 10-11-2273	69.10 (2.720)
28	• 10-11-2283	71.60 (2.820)

• US Standard Product, available through Molex franchised distributors
* When mated with Molex product only
Note: In the Far East this housing has a different Engineering Series No. and different Order No.

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK®
Crimp Terminal
7879
High Pressure

Features and Benefits
- Multiple contacting points
- Patented triple cantilever with box shroud
- Suitable for high vibration requirements
- Box shroud prevents contamination to the contact surface
- Crimping die or hand tool available

Reference Information
Product Specification: PS-7879
Packaging: Loose or reel
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Use With: 7880 housings
Designed In: Inches

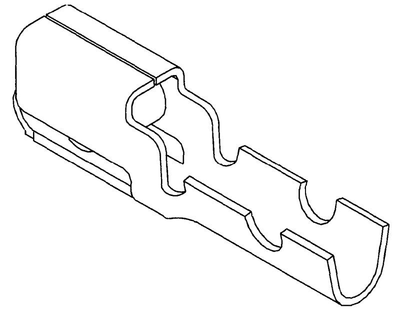
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: ΔR 10mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Wire Pull-Out Force:

Wire Gauge (AWG)	22	24	26	28	30
Pull-Out Force (lb)	10	8	6	4	3

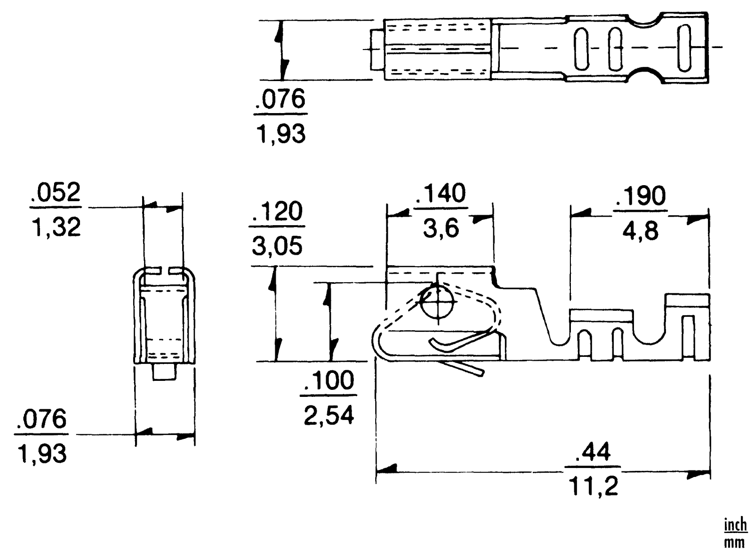
Mating Force: 475g max.
Unmating Force: 100g min.
Normal Force: 430g min.
Durability: 25 cycles

Physical
Contact: Brass
Plating: See Table
Wire Accommodation: 22 to 30 AWG
Insulation Range: 1.58mm (.062") diameter max.



PCB Connectors

J



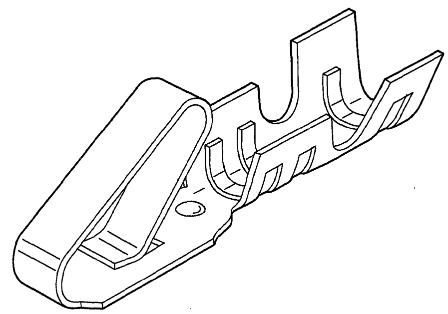
ORDERING INFORMATION AND DIMENSIONS

Order No.		Plating	Wire Size	Insulation Diameter	Application Tooling	
Loose	Reel				Crimp Die	Hand Crimp Tool
• 08-50-0005	• 08-50-0004	Tin/Copper	22-30	1.57 (.062) max.	11-40-2251	11-01-0185
08-55-0129	08-55-0124	Select Gold				

• US Standard Product, available through Molex franchised distributors
Recommended wire range assumes stranded wire

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK®
Crimp Terminal
2759/6459



Features and Benefits
- Standard cantilever terminal
- Cantilever design provides high contact pressure
- Wiping action cleans oxides when connector is mated
- 2759 Series is Brass
- 6459 Series is Phosphor Bronze

Reference Information
Product Specification: PS-10-07
Packaging: Loose or reel
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Use With: 2695, 5051, 6745 and 41895 housings
Designed In: Inches

Electrical
Voltage: 250V
Current: 6459—4.0A
2759—2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Wire Pull-Out Force:

Wire Gauge (AWG)	22	24	26	28	30
Pull-Out Force (lb)	10	8	6	4	3

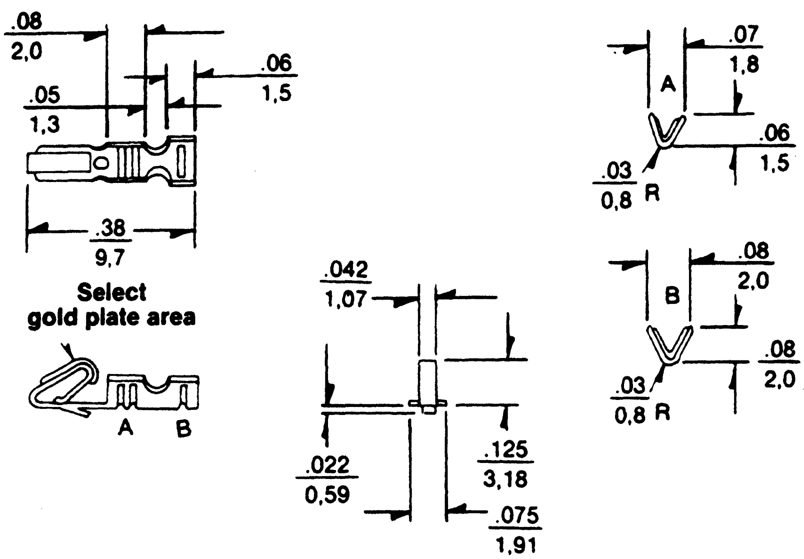
Mating Force: 255g max.
Unmating Force: 50g min.
Normal Force: 200g min.
Durability: 25 cycles

Physical
Contact: 6459—Phosphor Bronze
2759—Brass
Plating: See Table
Wire Accommodation: 22 to 30 AWG
Insulation Range: 1.58mm (.062") diameter max.

PCB Connectors

J

Preferred Version in the Americas



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Contact	Order No.						Wire Size	Insulation OD
	Tin Plating		15µ" Gold Plating		15µ" Selective Gold Plating			
	Loose	Chain	Loose	Chain	Loose	Chain		
Brass	• 08-50-0114	• 08-50-0113	• 08-56-0110	• 08-56-0109	• 08-55-0102	• 08-55-0101	22-30	1.57 (.062)
Phosphor Bronze	• 08-52-0123	• 08-52-0101	• 08-65-0814	• 08-65-0813	• 08-65-0816	• 08-65-0815	22-30	1.57 (.062)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Cat Ear Terminal

40445/41572/5159

Features and Benefits

- Similar to 2759/6459 Series with cat ears
- Cat ears provide 2 high pressure points of contact
- Suitable for high vibrational requirements

Reference Information

Product Specification: PS-10-07
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Use With: 2695, 3071, 5051 and 6471
Designed In: Inches

Electrical

Voltage: 250V
Current: 4.0A (5159—3.0A)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC (5059—1000V AC/1 min.)
Insulation Resistance: 50K MΩ min. (5059—1000 MΩ min.)

Mechanical

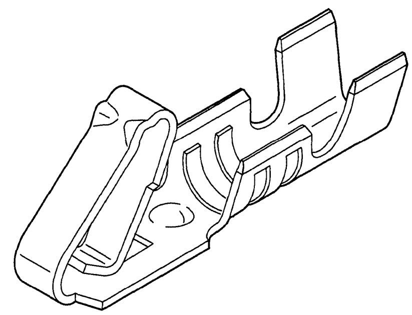
Wire Pull-Out Force:

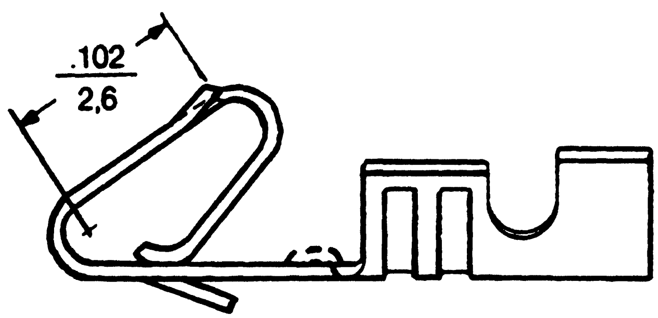
Wire Gauge (AWG)	22	24	26	28	30
Pull-Out Force (lb)	10	8	6	4	3

Mating Force: 300g max.
Unmating Force: 70g min.
Normal Force: 230g min.
Durability: 25 cycles

Physical

Contact: Phosphor Bronze and Brass
Plating: See Table
Wire Accommodation: 22 to 30 AWG





inch
mm

ORDERING INFORMATION

40445—Preferred Version in Europe	
Hot Tin/Lead Dip Plating Order No.	
Loose	Chain
97-00-0445	97-00-0444

5159—Preferred Version in the Far East			
Phosphor Bronze Order No.		Brass Order No.	
Loose	Chain	Loose	Chain
08-70-0049	08-70-0048	08-70-0069	08-70-0064

41572—Preferred Version in the Americas	
Hot Tin/Lead Dip Plating Order No.	
Loose	Chain
08-65-0805	08-65-0804

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Crimp Terminal
4809 Anti-Fishhooking

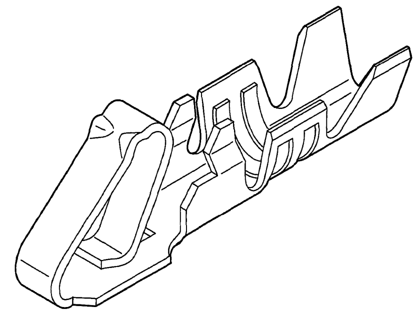
Features and Benefits
- Avoids tangling at pre-assembly
- Available with cat ears

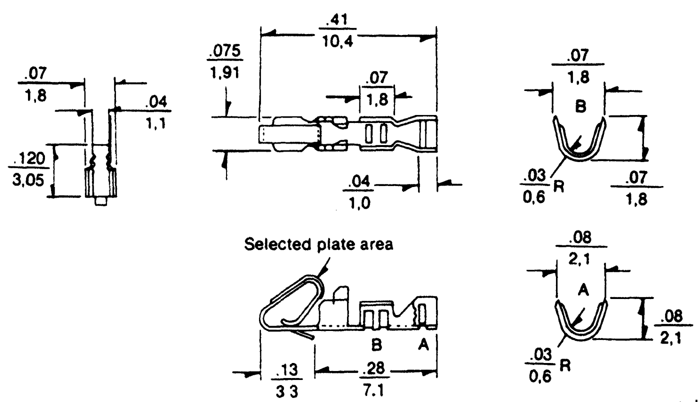
Reference Information
Product Specification: PS-10-07
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5051 and 6471 housings
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Contact Insertion Force: 681g max.
Contact Retention to Housing: 27.21g min.
Wire Pull-Out Force: 3 lb min.
Mating Force: 199g max.
Unmating Force: 57g min.
Normal Force: 300g
Durability: 50 cycles Gold and 25 cycles Tin

Physical
Contact: Brass
Plating: Gold, select Gold and Tin/Lead
Temperature: -40 to +105°C
Wire Accommodation: 22 to 30 AWG





inch
mm

ORDERING INFORMATION

Order No.		Plating	Crimp Wire Size	Insulation Diameter	Engineering No.
Loose	Chain				
08-50-0032	08-50-0031	1.00 to 2.50μm Tin/Lead	22-30	1.57 (.062) max.	4809
	08-55-0110	0.38μm Gold in contact area only			
08-56-0115	08-56-0120	0.38μm Gold in contact area, Gold flash overall			

2.54mm (.100") Pitch KK® Connector

7720 IDT Dual Contact

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 28 circuits
- 4 points of contact on conductor
- Feed-to and feed-through versions available
- Standard with locking ramp
- End-to-end polarization optional
- Molded-in strain reliefs

Reference Information

Product Specification: PS-7690
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 4180, 6373, 6410, 7395, 7478, 7832, 42152, 42153, 42225, 42226, 42227, 42228, 42375, 42376, 70327 headers, and standard 0.64mm (.025") and square 2.54mm (.100") centerline headers
Use Molex Cable: 7234, 7307, 7767, 8996, 8997, 24214 and 24241
Designed In: Inches

Electrical

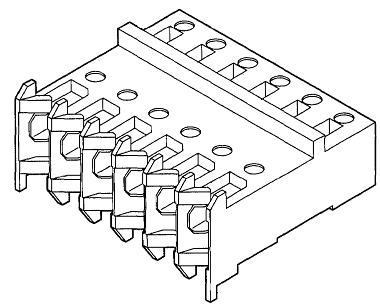
Voltage: 250V
Current: 3.5A max. (24 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 200K MΩ min.

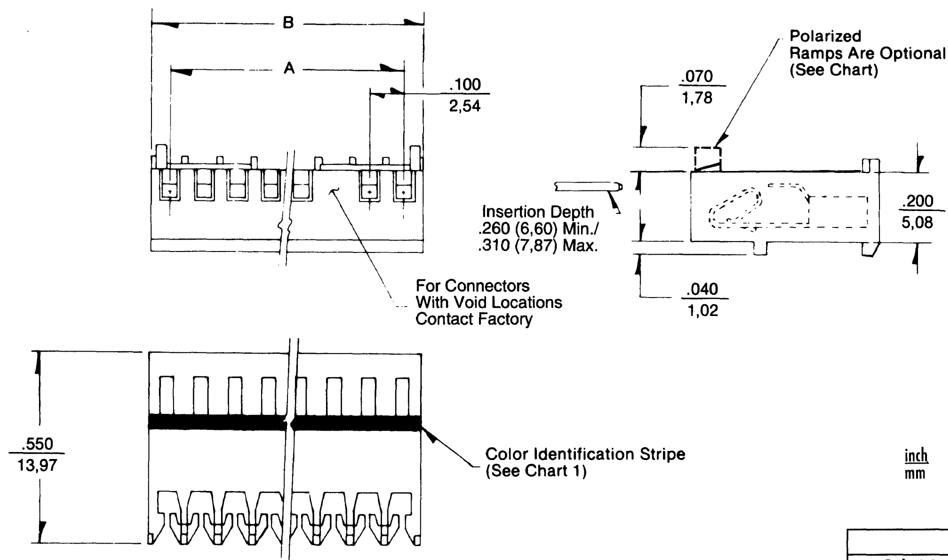
Mechanical

Contact Retention to Housing: 6 lb min.
Mating Force: 255g max.
Unmating Force: 85g min.
Normal Force: 6.5 oz min.
Durability: 25 cycles

Physical

Housing: Natural nylon, UL 94V-2
Contact: Brass
Plating: Tin
Temperature: 0 to +75°C
Wire Range: 0.76 to 1.52mm (.030 to .060") OD max. (Discrete Wire) and 0.76 to 1.27mm (.030 to .050") OD max. (mass termination)





	Order No.
Polarizing Key	15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Order No.						Color	Type of Wire Terminated
Feed-Through			Feed-To				
Without Ramp	With Ramp	With Polarized Ramp	Without Ramp	With Ramp	With Polarized Ramp		
22-26-7XX1	22-26-8XX1	22-26-9XX1	22-41-3XX1	22-41-4XX1	22-41-5XX1	Brown	26 AWG stranded or solid, and 28 AWG solid, stranded and fused
22-26-7XX2	22-26-8XX2	22-26-9XX2	22-41-3XX2	22-41-4XX2	22-41-5XX2	Green	24 AWG stranded, solid, fused, topcoat, and 26 AWG fused and topcoat
Replace XX with number of circuits, 02 to 28							

Circuits	Dimension A	Dimension B
2	2.54 (.100)	5.44 (.214)
3	5.08 (.200)	7.98 (.314)
4	7.62 (.300)	10.52 (.414)
5	10.16 (.400)	13.06 (.514)
6	12.70 (.500)	15.60 (.614)
7	15.24 (.600)	18.14 (.714)
8	17.78 (.700)	20.68 (.814)
9	20.32 (.800)	23.22 (.914)
10	22.86 (.900)	25.76 (1.014)

Circuits	Dimension A	Dimension B
11	25.40 (1.000)	28.30 (1.114)
12	27.94 (1.100)	30.84 (1.214)
13	30.48 (1.200)	33.38 (1.314)
14	33.02 (1.300)	35.92 (1.414)
15	35.56 (1.400)	38.46 (1.514)
16	38.10 (1.500)	41.00 (1.614)
17	40.64 (1.600)	43.54 (1.714)
18	43.18 (1.700)	46.08 (1.814)
19	45.72 (1.800)	48.62 (1.914)

Circuits	Dimension A	Dimension B
20	48.26 (1.900)	51.16 (2.014)
21	50.80 (2.000)	53.70 (2.114)
22	53.34 (2.100)	56.24 (2.214)
23	55.88 (2.200)	58.78 (2.314)
24	58.42 (2.300)	61.32 (2.414)
25	60.92 (2.400)	63.86 (2.514)
26	63.50 (2.500)	66.40 (2.614)
27	66.04 (2.600)	68.94 (2.714)
28	68.58 (2.700)	71.48 (2.814)

Note: Some wires require deviation from chart

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Connector

40555
IDT
Dual Contact

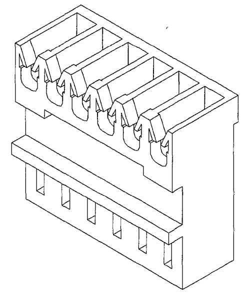
Features and Benefits
- Sizes 2 to 28 circuits
- Heavy duty end walls for terminal support
- Feed-to only
- Standard with locking ramp
- End-to-end polarization optional
- Molded-in strain reliefs

Reference Information
Product Specification: PS-40554
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 4180, 6373, 6410, 7395, 7478, 7832, 42152, 42153, 42225, 42226, 42227, 42228, 42375, 42376, 70327 headers, and standard 0.64mm (.025") and square 2.54mm (.100") centerline headers
Use Molex Cable: 8996, 8997 and 24226
Designed In: Inches

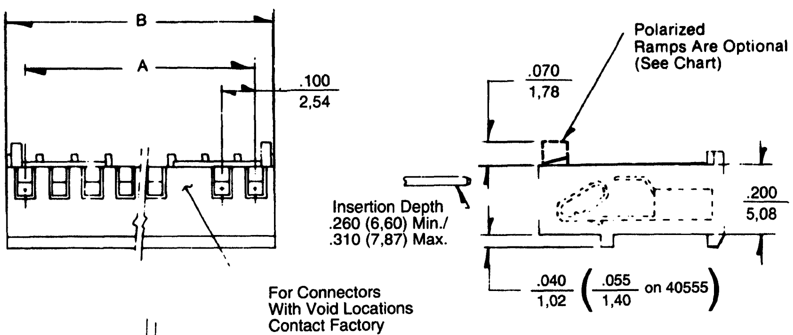
Electrical
Voltage: 250V
Current: 3.5A (24 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 200K MΩ min.

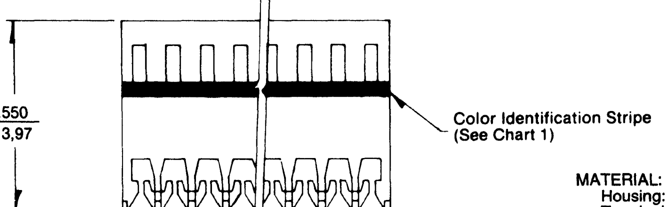
Mechanical
Contact Retention to Housing: 6 lb min.
Mating Force: 255g max.
Unmating Force: 85g min.
Normal Force: 6.5 oz min.
Durability: 25 cycles

Physical
Housing: Natural nylon, UL 94V-2
Contact: Copper Alloy
Plating: Tin
Temperature: 0 to +75°C
Wire Range: 0.76 to 1.52mm (.030 to .060") OD max. (Discrete Wire) and 0.76 to 1.27mm (.030 to .050") OD max. (mass termination)



Preferred Version in the Americas





inches
mm

inch
mm

MATERIAL:
Housing: Nylon 94V-2 Color: Natural
Terminal: Copper Alloy Tin Plated

	Order No.
Polarizing Key	15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Order No.			Color	Types of Wire Terminated
Without Ramp	With Ramp	With Polarized Ramp		
22-41-9XX2	22-41-9XX5	22-41-9XX8	Green	26 AWG fused/topcoated, and 24 AWG solid, stranded and fused/topcoated
Replace XX with number of circuits, 02 to 28				

Circuits	Dimension	
	A	B
2	2.54 (.100)	5.44 (.214)
3	5.08 (.200)	7.98 (.314)
4	7.62 (.300)	10.52 (.414)
5	10.16 (.400)	13.06 (.514)
6	12.70 (.500)	15.60 (.614)
7	15.24 (.600)	18.14 (.714)
8	17.78 (.700)	20.68 (.814)
9	20.32 (.800)	23.22 (.914)
10	22.86 (.900)	25.76 (1.014)
11	25.40 (1.000)	28.30 (1.114)
12	27.94 (1.100)	30.84 (1.214)
13	30.48 (1.200)	33.38 (1.314)
14	33.02 (1.300)	35.92 (1.414)
15	35.56 (1.400)	38.46 (1.514)

Circuits	Dimension	
	A	B
16	38.10 (1.500)	41.00 (1.614)
17	40.64 (1.600)	43.54 (1.714)
18	43.18 (1.700)	46.08 (1.814)
19	45.72 (1.800)	48.62 (1.914)
20	48.26 (1.900)	51.16 (2.014)
21	50.80 (2.000)	53.70 (2.114)
22	53.34 (2.100)	56.24 (2.214)
23	55.88 (2.200)	58.78 (2.314)
24	58.42 (2.300)	61.32 (2.414)
25	60.92 (2.400)	63.86 (2.514)
26	63.50 (2.500)	66.40 (2.614)
27	66.04 (2.600)	68.94 (2.714)
28	68.58 (2.700)	71.48 (2.814)

Note: Some wires require deviation from chart

FEATURES AND SPECIFICATIONS

molex®

2.54mm (.100") Pitch Connector

7720S

IDT, High Pressure "Cat Ear" Contact System

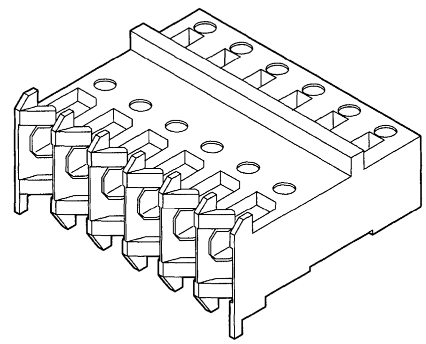
Features and Benefits
- Sizes 2 to 17 circuits
- Standard with locking ramp
- Feed-to and feed-through versions available
- Molded-in strain reliefs

Reference Information
Product Specification: PS-7690
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 4180, 4380, 6373, 6410, 7395, 7478, 7832, 42152, 42153, 42375, 42376, 70327 headers and standard 2.54mm (.100") center headers
Use Molex Cable: 7234, 7307, 7767, 8996, 8997, 24214, 24226 and 24241
Designed In: Inches

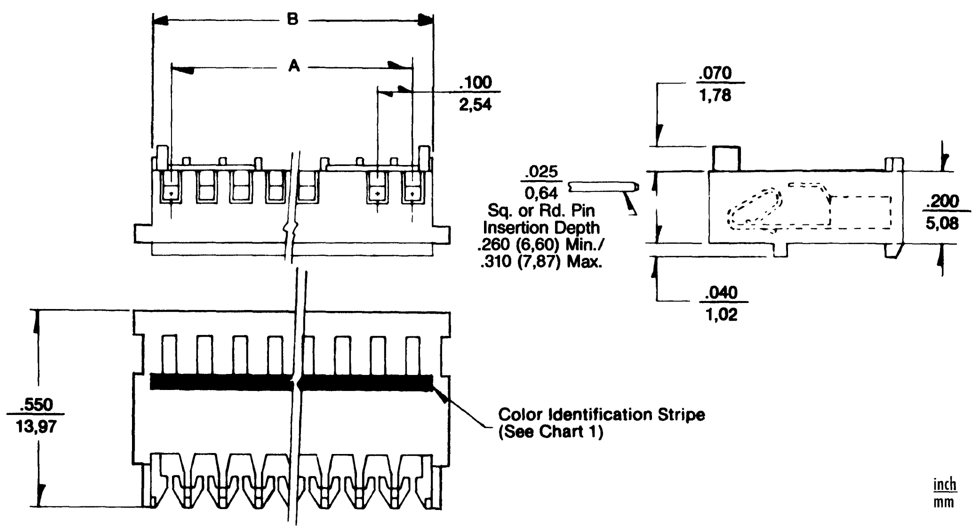
Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 200K MΩ min.

Mechanical
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 1.35 lb min.
Mating Force: 9 oz max.
Unmating Force: 2 oz min.
Normal Force: 6.5 oz min.
Durability: 25 cycles

Physical
Housing: Natural nylon, UL 94V-2
Contact: Brass
Plating: Tin
Wire Range: 0.76mm (.030") to 1.42mm (.056") OD



Preferred Version in Europe and the Far East



	Order No.
Polarizing Key	15-04-0292

ORDERING INFORMATION AND DIMENSIONS

Color Identification Stripe		
ID Slot Version	Color	Type of Wire Terminated [all wires have a max. insulation diameter of 1.42mm (.056")]
H	Green	24 AWG stranded, 26 AWG solid and fused, and 28 AWG fused
J	Brown	26 AWG stranded, and 28 AWG solid and stranded

Circuits	Version		Dimension	
	H	J	A	B
2	22-50-3025	38-00-2092	2.54 (.100)	5.44 (.214)
3	22-50-3035	38-00-2093	5.08 (.200)	7.98 (.314)
4	22-50-3045	38-00-2094	7.62 (.300)	10.52 (.414)
5	22-50-3055	38-00-2095	10.16 (.400)	13.06 (.514)
6	22-50-3065	38-00-2096	12.70 (.500)	15.60 (.614)
7	22-50-3075	38-00-2097	15.24 (.600)	18.14 (.714)
8	22-50-3085	38-00-2098	17.78 (.700)	20.68 (.814)
9	22-50-3095	38-00-2099	20.32 (.800)	23.22 (.914)
10	22-50-3105	38-00-2100	22.86 (.900)	25.76 (1.014)
11	22-50-3115	38-00-2101	25.40 (1.000)	28.30 (1.114)
12	22-50-3125	38-00-2102	27.94 (1.100)	30.84 (1.214)
13	22-50-3135	38-00-2103	30.48 (1.200)	33.38 (1.314)
14	22-50-3145	38-00-2104	33.02 (1.300)	35.92 (1.414)
15	22-50-3155	38-00-2105	35.56 (1.400)	38.46 (1.514)
16	22-50-3165	38-00-2106	38.10 (1.500)	41.00 (1.614)
17	22-50-3175	38-00-2107	40.64 (1.600)	43.54 (1.714)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 25 circuits
- End-to-end stackable
- 42625 Series high temperature version (contact factory)

Reference Information
Product Specification: PS-10-07
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 4180, 4380, 42152, 42153, 42375 and 42376 headers and .025" square pins
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.5A max.*
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500K MΩ min.

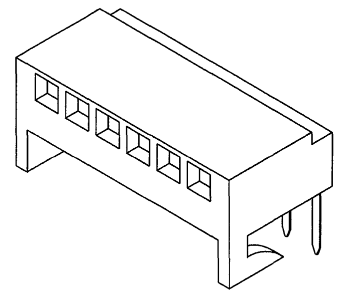
Mechanical
Mating Force: 199g max.
Unmating Force: 57g min.

Physical
Housing: Nylon, UL 94V-0
Contact: Brass (contact factory for Phosphor Bronze)
Plating: See Table
Temperature: -40 to +75°C

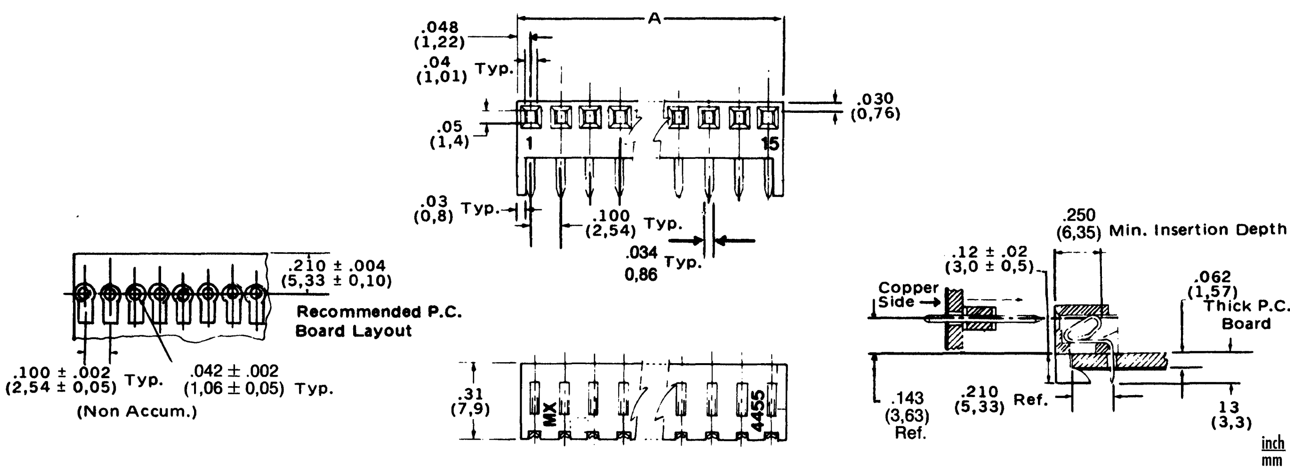
molex®

2.54mm (.100") Pitch KK® PC Board Connector

4455 Side Entry, Type A Right Angle Mount



Preferred Version in the Americas



	Order No.
Polarizing Key 4161-1	15-04-9209

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension A
	Tin	Gold	Select Gold	
2	• 22-15-2026	• 22-16-2021	• 22-16-2020	4.98 (.196)
3	• 22-15-2036	• 22-16-2031	• 22-16-2030	7.52 (.296)
4	• 22-15-2046	• 22-16-2041	• 22-16-2040	10.06 (.396)
5	• 22-15-2056	• 22-16-2051	• 22-16-2050	12.60 (.496)
6	• 22-15-2066	• 22-16-2061	• 22-16-2060	15.14 (.596)
7	• 22-15-2076	• 22-16-2071	• 22-16-2070	17.68 (.696)
8	• 22-15-2086	• 22-16-2081	• 22-16-2080	20.22 (.796)
9	• 22-15-2096	• 22-16-2091	• 22-16-2090	22.76 (.896)
10	• 22-15-2106	• 22-16-2101	• 22-16-2100	25.30 (.996)
11	• 22-15-2116	• 22-16-2111	• 22-16-2110	27.84 (1.096)
12	• 22-15-2126	• 22-16-2121	• 22-16-2120	30.38 (1.196)
13	• 22-15-2136	• 22-16-2131	• 22-16-2130	32.92 (1.296)

Circuits	Order No.			Dimension A
	Tin	Gold	Select Gold	
14	• 22-15-2146	• 22-16-2141	• 22-16-2140	35.46 (1.396)
15	• 22-15-2156	• 22-16-2151	• 22-16-2150	38.00 (1.496)
16	• 22-15-2166	• 22-16-2161	• 22-16-2160	40.54 (1.596)
17	• 22-15-2176	• 22-16-2171	• 22-16-2170	43.08 (1.696)
18	• 22-15-2186	• 22-16-2181	• 22-16-2180	45.62 (1.796)
19	• 22-15-2196	• 22-16-2191	• 22-16-2190	48.16 (1.896)
20	• 22-15-2206	• 22-16-2201	• 22-16-2200	50.70 (1.996)
21	• 22-15-2216	• 22-16-2211	• 22-16-2210	53.24 (2.096)
22	• 22-15-2226	• 22-16-2221	• 22-16-2220	55.76 (2.196)
23	• 22-15-2236	• 22-16-2231	• 22-16-2230	58.32 (2.296)
24	• 22-15-2246	• 22-16-2241	• 22-16-2240	60.86 (2.396)
25	• 22-15-2256	• 22-16-2251	• 22-16-2250	63.40 (2.496)

• US Standard Product, available through Molex franchised distributors
* Current rating is dependent upon PCB traces, Copper weight, solder, etc. (contact factory for more information)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® PC Board Connector

4455

Bottom Entry, Type B Bottom Entry Mount

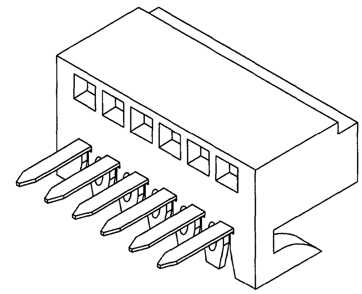
Features and Benefits
- Sizes 2 to 25 circuits
- End-to-end stackable
- Mating header must be long enough to accommodate board thickness
- 42625 Series high temperature version (contact factory)

Reference Information
Product Specification: PS-10-07
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 4180, 4380, 42152, 42153, 42375 and 42376 headers and .025" square pins
Designed In: Inches

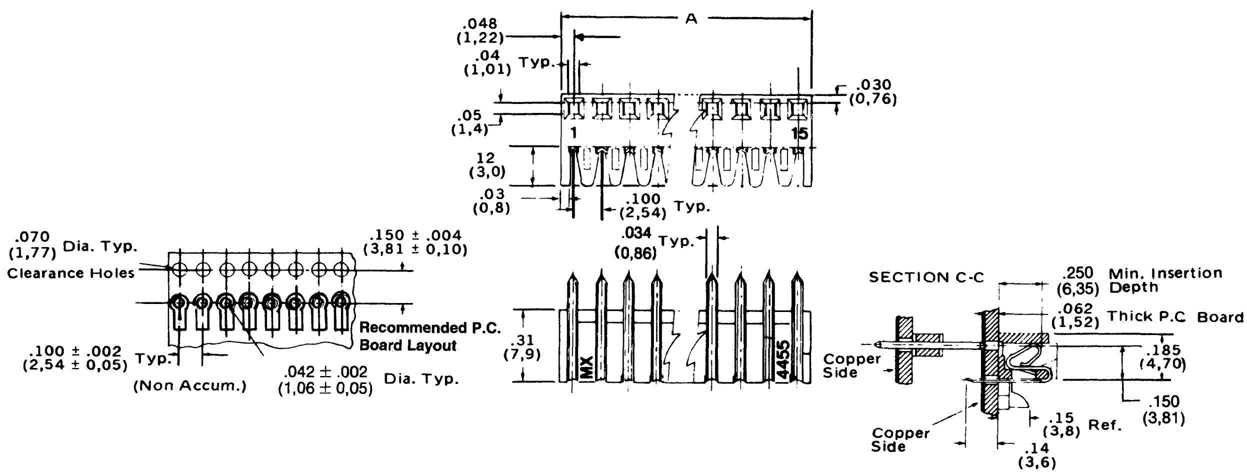
Electrical
Voltage: 250V
Current: 2.5A max.*
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 199g max.
Unmating Force: 57g min.

Physical
Housing: Nylon, UL 94V-0
Contact: Brass (contact factory for Phosphor Bronze)
Plating: See Table
Temperature: -40 to +105°C



Preferred Version in the Americas



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin	Order No. Gold	Order No. Select Gold	Dimension A
2	• 22-14-2024	• 22-17-2022	• 22-17-3022	4.98 (.196)
3	• 22-14-2034	• 22-17-2032	• 22-17-3032	7.52 (.296)
4	• 22-14-2044	• 22-17-2042	• 22-17-3042	10.06 (.396)
5	• 22-14-2054	• 22-17-2052	• 22-17-3052	12.60 (.496)
6	• 22-14-2064	• 22-17-2062	• 22-17-3062	15.14 (.596)
7	• 22-14-2074	• 22-17-2072	• 22-17-3072	17.68 (.696)
8	• 22-14-2084	• 22-17-2082	• 22-17-3082	20.22 (.796)
9	• 22-14-2094	• 22-17-2092	• 22-17-3092	22.76 (.896)
10	• 22-14-2104	• 22-17-2102	• 22-17-3102	25.30 (.996)
11	• 22-14-2114	• 22-17-2112	• 22-17-3112	27.84 (1.096)
12	• 22-14-2124	• 22-17-2122	• 22-17-3122	30.38 (1.196)
13	• 22-14-2134	• 22-17-2132	• 22-17-3132	32.92 (1.296)

Circuits	Order No. Tin	Order No. Gold	Order No. Select Gold	Dimension A
14	• 22-14-2144	• 22-17-2142	• 22-17-3142	35.46 (1.396)
15	• 22-14-2154	• 22-17-2152	• 22-17-3152	38.00 (1.496)
16	• 22-14-2164	• 22-17-2162	• 22-17-3162	40.54 (1.596)
17	• 22-14-2174	• 22-17-2172	• 22-17-3172	43.08 (1.696)
18	• 22-14-2184	• 22-17-2182	• 22-17-3182	45.62 (1.796)
19	• 22-14-2194	• 22-17-2192	• 22-17-3192	48.16 (1.896)
20	• 22-14-2204	• 22-17-2202	• 22-17-3202	50.70 (1.996)
21	• 22-14-2214	• 22-17-2212	• 22-17-3212	53.24 (2.096)
22	• 22-14-2224	• 22-17-2222	• 22-17-3222	55.76 (2.196)
23	• 22-14-2234	• 22-17-2232	• 22-17-3232	58.32 (2.296)
24	• 22-14-2244	• 22-17-2242	• 22-17-3242	60.86 (2.396)
25	• 22-14-2254	• 22-17-2252	• 22-17-3252	63.40 (2.496)

• US Standard Product, available through Molex franchised distributors
* Current rating is dependent upon PCB traces, Copper weight, solder, etc. (contact factory for more information)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK®
PC Board Connector
4455
Top Entry, Type C Top Entry Mount

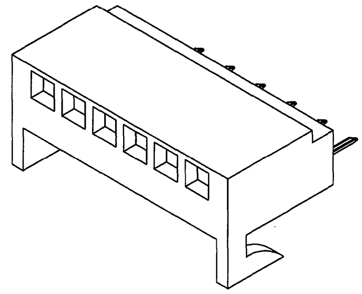
Features and Benefits
- Sizes 2 to 25 circuits
- End-to-end stackable
- Also available without board hooks (see table below)
- 42625 Series high temperature version (contact factory)

Reference Information
Product Specification: PS-10-07
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 42152, 42375, 42376, 42377, 70021 and 70475 headers and .025" square pins (edge mount only)
Designed In: Inches

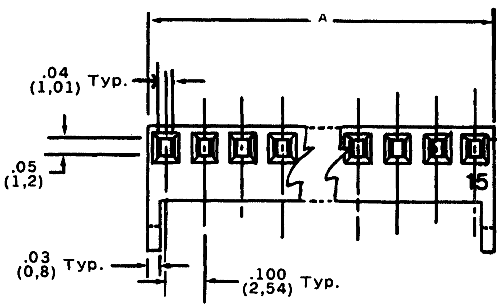
Electrical
Voltage: 250V
Current: 2.5A max.*
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

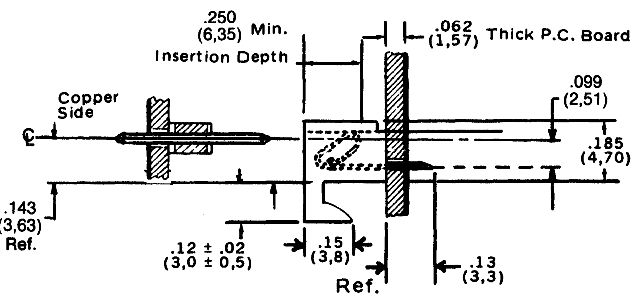
Mechanical
Contact Retention to Housing: 3.63kg (8 lb) min.
Mating Force: 199g max.
Unmating Force: 57g min.
Normal Force: 300g average
Durability: 25 cycles

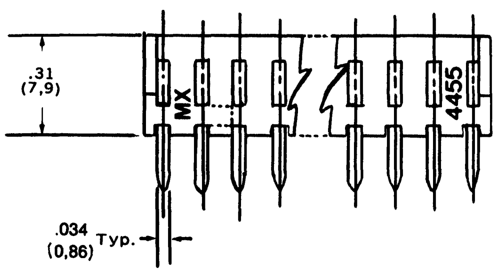
Physical
Housing: Nylon, UL 94V-0
Contact: Brass (contact factory for Phosphor Bronze)
Plating: See Table
Temperature: -40 to +75°C



Preferred Version in the Americas







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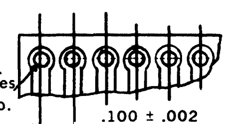


	Order No.
Polarizing Key 4161-1	15-04-9209

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin With Hooks	Tin Without Hooks	Gold With Hooks	Select Gold With Hooks	Dimension A
2	• 22-02-2025	22-02-7023	• 22-18-2023	• 22-18-2021	4.98 (.196)
3	• 22-02-2035	22-02-7033	• 22-18-2033	• 22-18-2031	7.52 (.296)
4	• 22-02-2045	22-02-7043	• 22-18-2043	• 22-18-2041	10.06 (.396)
5	• 22-02-2055	22-02-7053	• 22-18-2053	• 22-18-2051	12.60 (.496)
6	• 22-02-2065	22-02-7063	• 22-18-2063	• 22-18-2061	15.14 (.596)
7	• 22-02-2075	22-02-7073	• 22-18-2073	• 22-18-2071	17.68 (.696)
8	• 22-02-2085	22-02-7083	• 22-18-2083	• 22-18-2081	20.22 (.796)
9	• 22-02-2095	22-02-7093	• 22-18-2093	• 22-18-2091	22.76 (.896)
10	• 22-02-2105	22-02-7103	• 22-18-2103	• 22-18-2101	25.30 (.996)
11	• 22-02-2115	22-02-7113	• 22-18-2113	• 22-18-2111	27.84 (1.096)
12	• 22-02-2125	22-02-7123	• 22-18-2123	• 22-18-2121	30.38 (1.196)
13	• 22-02-2135	22-02-7133	•22-18-2133	•22-18-2131	32.92 (1.296)

Circuits	Order No. Tin With Hooks	Tin Without Hooks	Gold With Hooks	Select Gold With Hooks	Dimension A
14	• 22-02-2145	22-02-7143	• 22-18-2143	• 22-18-2141	35.46 (1.396)
15	• 22-02-2155	22-02-7153	• 22-18-2153	• 22-18-2151	38.00 (1.496)
16	• 22-02-2165	22-02-7163	• 22-18-2163	• 22-18-2161	40.54 (1.596)
17	• 22-02-2175	22-02-7173	• 22-18-2173	• 22-18-2171	43.08 (1.696)
18	• 22-02-2185	22-02-7183	• 22-18-2183	• 22-18-2181	45.62 (1.796)
19	• 22-02-2195	22-02-7193	• 22-18-2193	• 22-18-2191	48.16 (1.896)
20	• 22-02-2205	22-02-7203	• 22-18-2203	• 22-18-2201	50.70 (1.996)
21	• 22-02-2215	22-02-7213	• 22-18-2213	• 22-18-2211	53.24 (2.096)
22	• 22-02-2225	22-02-7223	• 22-18-2223	• 22-18-2221	55.76 (2.196)
23	• 22-02-2235	22-02-7233	• 22-18-2233	• 22-18-2231	58.32 (2.296)
24	• 22-02-2245	22-02-7243	• 22-18-2243	• 22-18-2241	60.86 (2.396)
25	• 22-02-2255	22-02-7253	• 22-18-2253	• 22-18-2251	63.40 (2.496)

• US Standard Product, available through Molex franchised distributors
* Current rating is dependent upon PCB traces, Copper weight, solder, etc. (contact factory for more information)

2.54mm (.100") Pitch
KK®
PC Board Connector

4455
With Cat Ear Terminals

FEATURES AND SPECIFICATIONS

These assemblies are the same as 4455A, B and C versions, except these have higher pressure cat ear contacts on the Bronze terminals.

Reference Information
Product Specification: PS-10-07
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 4030, 4094, 70021 and 70475
Designed In: Inches

Electrical
Voltage: 250V
Current: 2.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Contact Retention to Housing: 27.21g min.
Mating Force: 199g max.
Unmating Force: 57g min.
Normal Force: 300g
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Hot Tin/Lead dip—1µm min.
Temperature: -40 to +105°C

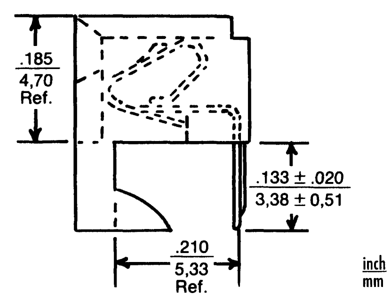
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	38-00-1332	2.54 (.100)	4.98 (.196)
3	38-00-1333	5.08 (.200)	7.52 (.296)
4	38-00-1334	7.62 (.300)	10.06 (.396)
5	38-00-1335	10.16 (.400)	12.60 (.496)
6	38-00-1336	12.70 (.500)	15.14 (.596)
7	38-00-1337	15.24 (.600)	17.68 (.696)
8	38-00-1338	17.78 (.700)	20.21 (.796)
9	38-00-1339	20.30 (.800)	22.76 (.896)
10	38-00-1340	22.86 (.900)	25.30 (.996)
11	38-00-1341	25.40 (1.000)	27.84 (1.096)
12	38-00-1342	27.94 (1.100)	30.38 (1.196)
13	38-00-1343	30.48 (1.200)	32.92 (1.296)

Circuits	Order No.	Dimension A	Dimension B
14	38-00-1344	33.02 (1.300)	33.46 (1.396)
15	38-00-1345	35.56 (1.400)	38.00 (1.496)
16	38-00-1346	38.10 (1.500)	40.54 (1.596)
17	38-00-1347	40.64 (1.600)	43.08 (1.696)
18	38-00-1348	43.18 (1.700)	45.62 (1.796)
19	38-00-1349	45.72 (1.800)	48.16 (1.896)
20	38-00-1350	48.26 (1.900)	50.70 (1.996)
21	38-00-1351	50.80 (2.000)	53.24 (2.096)
22	38-00-1352	53.34 (2.100)	55.78 (2.196)
23	38-00-1353	55.88 (2.200)	58.32 (2.296)
24	38-00-1354	58.42 (2.300)	60.86 (2.396)
25	38-00-1355	60.96 (2.400)	63.40 (2.496)

Preferred Version in Europe and the Far East

Right Angle



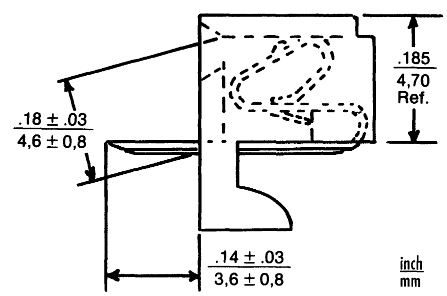
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	38-00-1392	2.54 (.100)	4.98 (.196)
3	38-00-1393	5.08 (.200)	7.52 (.296)
4	38-00-1394	7.62 (.300)	10.06 (.396)
5	38-00-1395	10.16 (.400)	12.60 (.496)
6	38-00-1396	12.70 (.500)	15.14 (.596)
7	38-00-1397	15.24 (.600)	17.68 (.696)
8	38-00-1398	17.78 (.700)	20.21 (.796)
9	38-00-1399	20.30 (.800)	22.76 (.896)
10	38-00-1400	22.86 (.900)	25.30 (.996)
11	38-00-1401	25.40 (1.000)	27.84 (1.096)
12	38-00-1402	27.94 (1.100)	30.38 (1.196)
13	38-00-1403	30.48 (1.200)	32.92 (1.296)

Circuits	Order No.	Dimension A	Dimension B
14	38-00-1404	33.02 (1.300)	33.46 (1.396)
15	38-00-1405	35.56 (1.400)	38.00 (1.496)
16	38-00-1406	38.10 (1.500)	40.54 (1.596)
17	38-00-1407	40.64 (1.600)	43.08 (1.696)
18	38-00-1408	43.18 (1.700)	45.62 (1.796)
19	38-00-1409	45.72 (1.800)	48.16 (1.896)
20	38-00-1410	48.26 (1.900)	50.70 (1.996)
21	38-00-1411	50.80 (2.000)	53.24 (2.096)
22	38-00-1412	53.34 (2.100)	55.78 (2.196)
23	38-00-1413	55.88 (2.200)	58.32 (2.296)
24	38-00-1414	58.42 (2.300)	60.86 (2.396)
25	38-00-1415	60.96 (2.400)	63.40 (2.496)

Preferred Version in Europe and the Far East

Bottom Entry



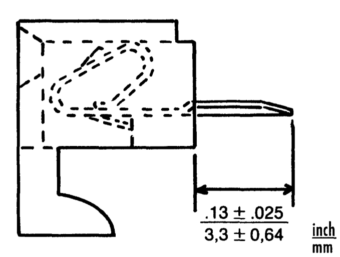
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	38-00-1422	2.54 (.100)	4.98 (.196)
3	38-00-1423	5.08 (.200)	7.52 (.296)
4	38-00-1424	7.62 (.300)	10.06 (.396)
.5	38-00-1425	10.16 (.400)	12.60 (.496)
6	38-00-1426	12.70 (.500)	15.14 (.596)
7	38-00-1427	15.24 (.600)	17.68 (.696)
8	38-00-1428	17.78 (.700)	20.21 (.796)
9	38-00-1429	20.30 (.800)	22.76 (.896)
10	38-00-1430	22.86 (.900)	25.30 (.996)
11	38-00-1431	25.40 (1.000)	27.84 (1.096)
12	38-00-1432	27.94 (1.100)	30.38 (1.196)
13	38-00-1433	30.48 (1.200)	32.92 (1.296)

Circuits	Order No.	Dimension A	Dimension B
14	38-00-1434	33.02 (1.300)	33.46 (1.396)
15	38-00-1435	35.56 (1.400)	38.00 (1.496)
16	38-00-1436	38.10 (1.500)	40.54 (1.596)
17	38-00-1437	40.64 (1.600)	43.08 (1.696)
18	38-00-1438	43.18 (1.700)	45.62 (1.796)
19	38-00-1439	45.72 (1.800)	48.16 (1.896)
20	38-00-1440	48.26 (1.900)	50.70 (1.996)
21	38-00-1441	50.80 (2.000)	53.24 (2.096)
22	38-00-1442	53.34 (2.100)	55.78 (2.196)
23	38-00-1443	55.88 (2.200)	58.32 (2.296)
24	38-00-1444	58.42 (2.300)	60.86 (2.396)
25	38-00-1445	60.96 (2.400)	63.40 (2.496)

Preferred Version in Europe and the Far East

Top Entry



2.54mm (.100") Pitch KK® Header Cross Reference

	Breakway Nylon (94V-0)*‡	Solid Nylon (94V-0)‡	
	2 to 36 circuits (• 36 circuit only)	2 to 28 circuits (• 2 to 25 circuits only)	
Flat	**42375**	**4030**	**42152 (White)†**
Tin	• 22-28-4XX2‡‡	• 22-03-2XX1	22-66-2XX0
Gold§		• 22-10-2XX1	22-66-3XX0
Select Gold**	• 22-28-4XX5		22-10-7XX8
Flat	**42376**	**4094**	**42153 (White)†**
Tin	• 22-28-6XX0‡‡	• 22-05-2XX1	22-67-2XX0
Gold§		• 22-12-2XX1	22-67-3XX0
Select Gold**	• 22-28-6XX2		22-12-3XX0
Flat	**42377**		
Tin	• 22-28-8XX0‡‡		
Gold§			
Select Gold**	• 22-28-8XX2		
Friction Lock	**42227††**	**6373**	**43009**
Tin	• 22-28-0XX0‡‡	• 22-23-2XX1	22-23-5XX1
Gold§		• 22-11-2XX2	
Select Gold**	• 22-28-0XX1		
Friction Lock	**42228††**	**7478**	
Tin	• 22-28-1XX0‡‡	• 22-05-3XX1	
Gold§		• 22-12-2XX4	
Select Gold**	• 22-28-1XX1		
Polarizing Wall	**42225††**		
Tin	• 22-28-3XX0‡‡		
Gold§			
Select Gold**	• 22-28-3XX1		
Polarizing Wall	**42226††**		
Tin	• 22-28-2XX0‡‡		
Gold§			
Select Gold**	• 22-28-2XX2		

• US Standard Product, available through Molex franchised distributors
* Cutting tool available for Breakaway product—Order No. 11-20-1230
† Recommended for circuit sizes greater than 10
‡ Replace XX with circuit sizes
§ 20μ" overall Gold over Nickel on Brass
** 15μ" select Gold over Phosphor Bronze—30μ" select Gold available (contact factory)
†† Available with kinks and/or backwalls removed
‡‡ Tin/Lead (90/10) over Phosphor Bronze

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Breakaway Header

42375

Straight Flat

Features and Benefits

- Sizes 2 to 36 circuits
- Surface mount compatible
- Available with kinked PC tails
- .240, .295 and .320" standard mating lengths
- Tin and 15 or 30μ" Gold plating
- Voids optional

Reference Information

Product Specification: PS-10-07
Packaging: Bag
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7859, 7880, 40555, 40556, 70066A, 70400A, 70430, 90147 and 90148
Designed In: Inches

Electrical

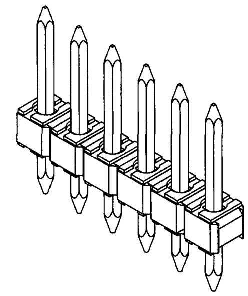
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical

Durability: 25 cycles

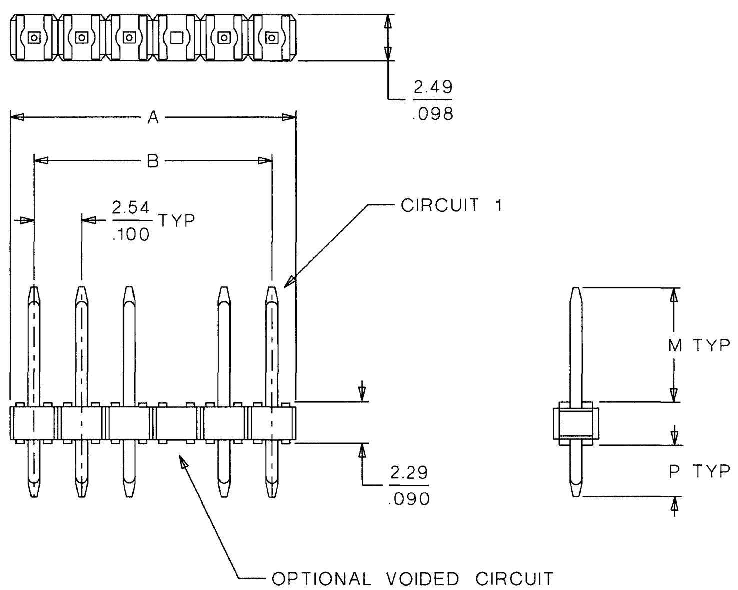
Physical

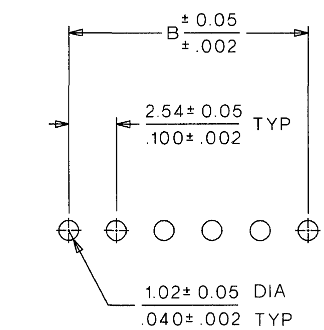
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: 0 to +75°C



PCB Connectors

J





PCB LAYOUT:COMPONENT SIDE

RECOMMENDED PCB THICKNESS: $\frac{1.57 \pm 0.18}{.062 \pm .007}$

ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.					
	M = 6.09mm (.240") P = 3.18mm (.125")	M = 6.09mm (.240") P = 3.43mm (.135") Kinked PC Tail	M = 7.49mm (.295") P = 3.05mm (.120")	M = 7.49mm (.295") P = 3.43mm (.135") Kinked PC Tail	M = 8.13mm (.320") P = 3.05mm (.130")	M = 8.13mm (.320") P = 3.43mm (.135") Kinked PC Tail
Tin	• 22-28-4XX0	22-28-5XX0	• 22-28-4XX2	22-28-5XX2	• 22-28-4XX1	22-28-5XX1
15μ" select Gold	• 22-28-4XX3	22-28-5XX3	• 22-28-4XX5	22-28-5XX5	• 22-28-4XX4	22-28-5XX4
30μ" select Gold	• 22-28-4XX6	22-28-5XX6	• 22-28-4XX8	22-28-5XX8	• 22-28-4XX7	22-28-5XX7
Replace XX with no. of circuits, 02-36						

Circuits	Dimension A	Dimension B
2	5.08 (.200)	2.54 (.100)
3	7.62 (.300)	5.08 (.200)
4	10.16 (.400)	7.62 (.300)
5	12.70 (.500)	10.16 (.400)
6	15.24 (.600)	12.70 (.500)
7	17.78 (.700)	15.24 (.600)
8	20.32 (.800)	17.78 (.700)
9	22.86 (.900)	20.32 (.800)
10	25.40 (1.000)	22.86 (.900)

Circuits	Dimension A	Dimension B
11	27.94 (1.100)	25.40 (1.000)
12	30.48 (1.200)	27.94 (1.100)
13	33.02 (1.300)	30.48 (1.200)
14	35.56 (1.400)	33.02 (1.300)
15	38.10 (1.500)	35.56 (1.400)
16	40.64 (1.600)	38.10 (1.500)
17	43.18 (1.700)	40.64 (1.600)
18	45.72 (1.800)	43.18 (1.700)
19	48.26 (1.900)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.80 (2.000)	48.26 (1.900)
21	53.34 (2.100)	50.80 (2.000)
22	55.88 (2.200)	53.34 (2.100)
23	58.42 (2.300)	55.88 (2.200)
24	60.96 (2.400)	58.42 (2.300)
25	63.50 (2.500)	60.96 (2.400)
26	66.04 (2.600)	63.50 (2.500)
27	68.58 (2.700)	66.04 (2.600)
28	71.12 (2.800)	68.58 (2.700)

Circuits	Dimension A	Dimension B
29	73.66 (2.900)	71.12 (2.800)
30	76.20 (3.000)	73.66 (2.900)
31	78.74 (3.100)	76.20 (3.000)
32	81.28 (3.200)	78.74 (3.100)
33	83.82 (3.300)	81.28 (3.200)
34	86.36 (3.400)	83.82 (3.300)
35	88.90 (3.500)	86.36 (3.400)
36	91.44 (3.600)	88.90 (3.500)

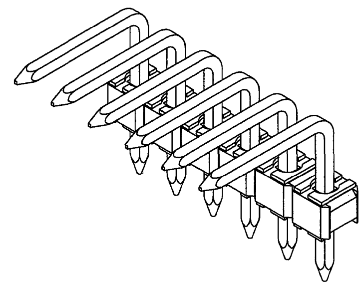
• US Standard Product, available through Molex franchised distributors (36 circuit only)

Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Breakaway Header

42376 Right Angle Flat



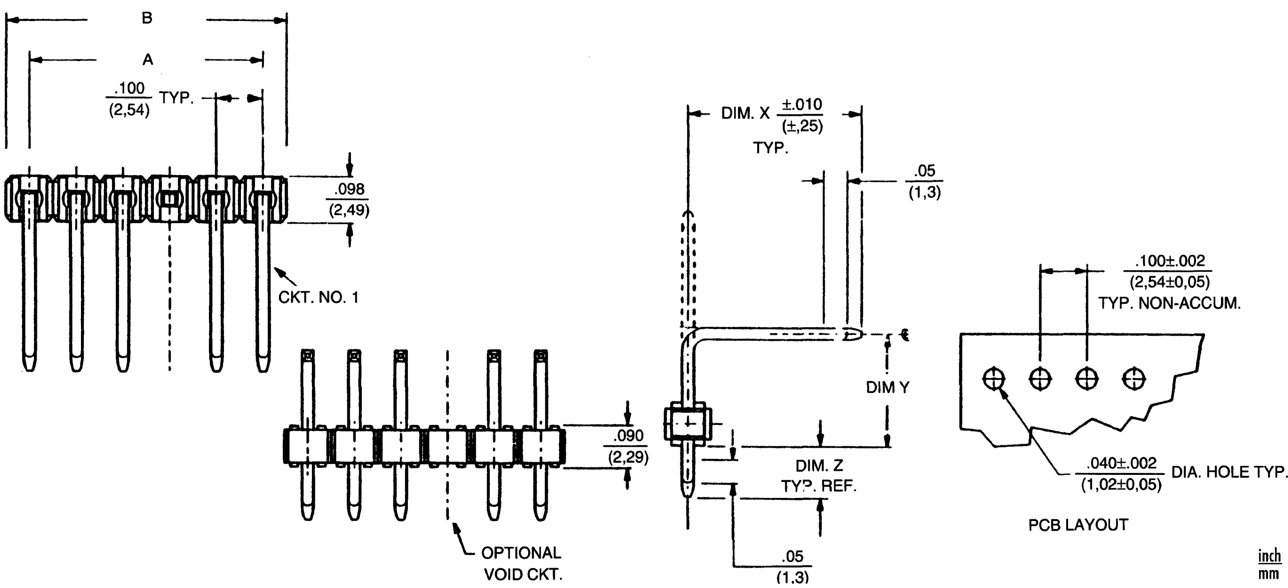
Features and Benefits
- Sizes 2 to 36 circuits
- Surface mount compatible
- Available with kinked PC tails
- .240, .295 and .320" standard mating lengths
- Tin and 15 or 30μ" Gold plating
- Voids optional

Reference Information
Product Specification: PS-10-07
Packaging: Bag
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7859, 7880, 40555, 40556, 70066A, 70400A, 70430, 90147 and 90148
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: 0 to +75°C



ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No. X = 9.17mm (.361") Y = 3.61mm (.142") Z = 3.06mm (.120")	X = 9.17mm (.361") Y = 3.61mm (.142") Z = 3.43mm (.135") Kinked PC Tail	X = 10.29mm (.405") Y = 6.30mm (.248") Z = 3.06mm (.120")	X = 10.29mm (.405") Y = 6.30mm (.248") Z = 3.43mm (.135") Kinked PC Tail
Tin	• 22-28-6XX0	22-28-7XX0	• 22-28-6XX1	22-28-7XX1
15μ" select Gold	• 22-28-6XX2	22-28-7XX2	• 22-28-6XX3	22-28-7XX3
30μ" select Gold	• 22-28-6XX4	22-28-7XX4	• 22-28-6XX5	22-28-7XX5
Replace XX with no. of circuits, 02-36				

Circuits	Dimension A	B
2	2.54 (.100)	5.08 (.200)
3	5.08 (.200)	7.62 (.300)
4	7.62 (.300)	10.16 (.400)
5	10.16 (.400)	12.70 (.500)
6	12.70 (.500)	15.24 (.600)
7	15.24 (.600)	17.78 (.700)
8	17.78 (.700)	20.32 (.800)
9	20.32 (.800)	22.86 (.900)
10	22.86 (.900)	25.40 (1.000)

Circuits	Dimension A	B
11	25.40 (1.000)	27.94 (1.100)
12	27.94 (1.100)	30.48 (1.200)
13	30.48 (1.200)	33.02 (1.300)
14	33.02 (1.300)	35.56 (1.400)
15	35.56 (1.400)	38.10 (1.500)
16	38.10 (1.500)	40.64 (1.600)
17	40.64 (1.600)	43.18 (1.700)
18	43.18 (1.700)	45.72 (1.800)
19	45.72 (1.800)	48.26 (1.900)

Circuits	Dimension A	B
20	48.26 (1.900)	50.80 (2.000)
21	50.80 (2.000)	53.34 (2.100)
22	53.34 (2.100)	55.88 (2.200)
23	55.88 (2.200)	58.42 (2.300)
24	58.42 (2.300)	60.96 (2.400)
25	60.96 (2.400)	63.50 (2.500)
26	63.50 (2.500)	66.04 (2.600)
27	66.04 (2.600)	68.58 (2.700)
28	68.58 (2.700)	71.12 (2.800)

Circuits	Dimension A	B
29	71.12 (2.800)	73.66 (2.900)
30	73.66 (2.900)	76.20 (3.000)
31	76.20 (3.000)	78.74 (3.100)
32	78.74 (3.100)	81.28 (3.200)
33	81.28 (3.200)	83.82 (3.300)
34	83.82 (3.300)	86.36 (3.400)
35	86.36 (3.400)	88.90 (3.500)
36	88.90 (3.500)	91.44 (3.600)

• US Standard Product, available through Molex franchised distributors (36 circuit only)
Note: Dimension X = Mating End, Dimension Y = Mating Height and Dimension Z = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Breakaway Header

42377 Right Angle Flat

Features and Benefits

- Sizes 2 to 36 circuits
- Surface mount compatible
- Available with kinked PC tails
- .244 or .320" standard mating lengths
- Tin and 15 or 30μ" Gold plating
- Voids optional

Reference Information

Product Specification: PS-10-07
Packaging: Bag
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With*: 2695, 4455, 6471, 7720, 7859, 7880, 40555, 40556, 70066A, 70400A, 70430, 90147 and 90148
Designed In: Inches

Electrical

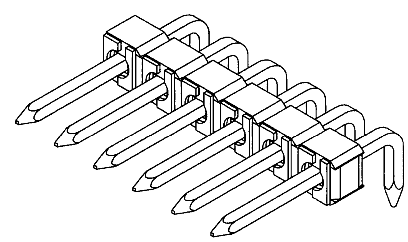
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

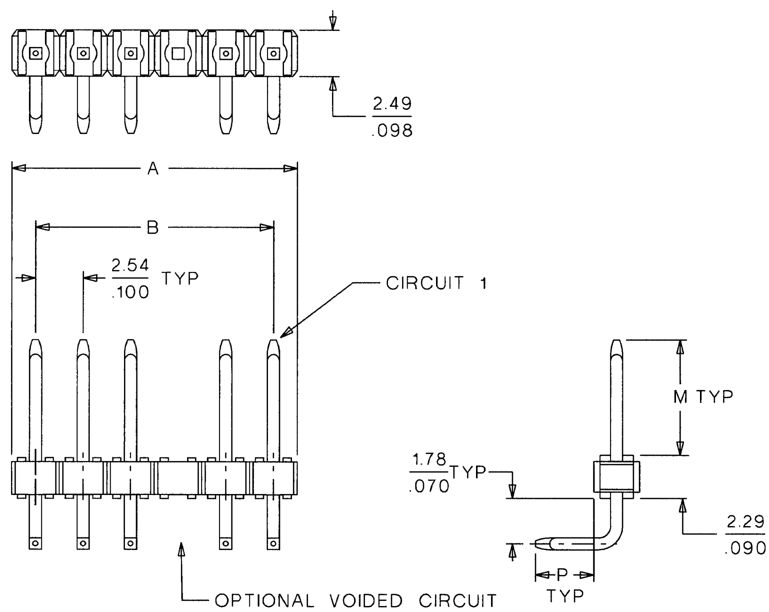
Mechanical

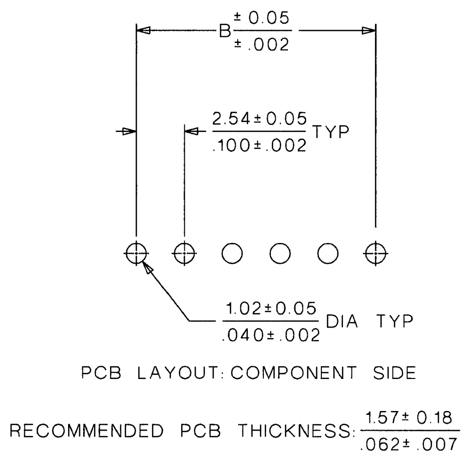
Durability: 25 cycles

Physical

Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: 0 to +75°C







ORDERING INFORMATION AND DIMENSIONS

Plating Option	Order No.			
	M = 6.20mm (.244") P = 3.05mm (.120")	M = 6.20mm (.244") P = 3.43mm (.135") Kinked PC Tail	M = 8.23mm (.324") P = 3.05mm (.120")	M = 8.23mm (.324") P = 3.43mm (.135") Kinked PC Tail
Tin	• 22-28-8XX0	22-28-9XX0	• 22-28-8XX1	22-28-9XX1
15μ" select Gold	• 22-28-8XX2	22-28-9XX2	• 22-28-8XX3	22-28-9XX3
30μ" select Gold	• 22-28-8XX4	22-28-9XX4	• 22-28-8XX5	22-28-9XX5
Replace XX with no. of circuits, 02-36				

Circuits	Dimension A	Dimension B
2	5.08 (.200)	2.54 (.100)
3	7.62 (.300)	5.08 (.200)
4	10.16 (.400)	7.62 (.300)
5	12.70 (.500)	10.16 (.400)
6	15.24 (.600)	12.70 (.500)
7	17.78 (.700)	15.24 (.600)
8	20.32 (.800)	17.78 (.700)
9	22.86 (.900)	20.32 (.800)
10	25.40 (1.000)	22.86 (.900)

Circuits	Dimension A	Dimension B
11	27.94 (1.100)	25.40 (1.000)
12	30.48 (1.200)	27.94 (1.100)
13	33.02 (1.300)	30.48 (1.200)
14	35.56 (1.400)	33.02 (1.300)
15	38.10 (1.500)	35.56 (1.400)
16	40.64 (1.600)	38.10 (1.500)
17	43.18 (1.700)	40.64 (1.600)
18	45.72 (1.800)	43.18 (1.700)
19	48.26 (1.900)	45.72 (1.800)

Circuits	Dimension A	Dimension B
20	50.80 (2.000)	48.26 (1.900)
21	53.34 (2.100)	50.80 (2.000)
22	55.88 (2.200)	53.34 (2.100)
23	58.42 (2.300)	55.88 (2.200)
24	60.96 (2.400)	58.42 (2.300)
25	63.50 (2.500)	60.96 (2.400)
26	66.04 (2.600)	63.50 (2.500)
27	68.58 (2.700)	66.04 (2.600)
28	71.12 (2.800)	68.58 (2.700)

Circuits	Dimension A	Dimension B
29	73.66 (2.900)	71.12 (2.800)
30	76.20 (3.000)	73.66 (2.900)
31	78.74 (3.100)	76.20 (3.000)
32	81.28 (3.200)	78.74 (3.100)
33	83.82 (3.300)	81.28 (3.200)
34	86.36 (3.400)	83.82 (3.300)
35	88.90 (3.500)	86.36 (3.400)
36	91.44 (3.600)	88.90 (3.500)

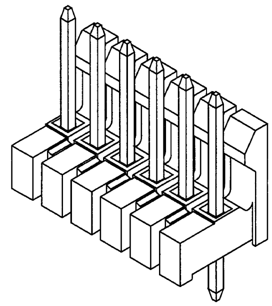
• US Standard Product, available through Molex franchised distributors (36 circuit only)
* 2695, 4455 and 7880 mate when 42377 is at board edge only
Note: Dimension M = Mating End and Dimension P = PC Tail

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Breakaway Header

42227

Straight Friction Lock



Features and Benefits
- Sizes 2 to 36 circuits
- Available with kinked pins for better PC board retention
- Available with end backwalls removed for left to right polarization

Reference Information
Product Specification: PS-10-07
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

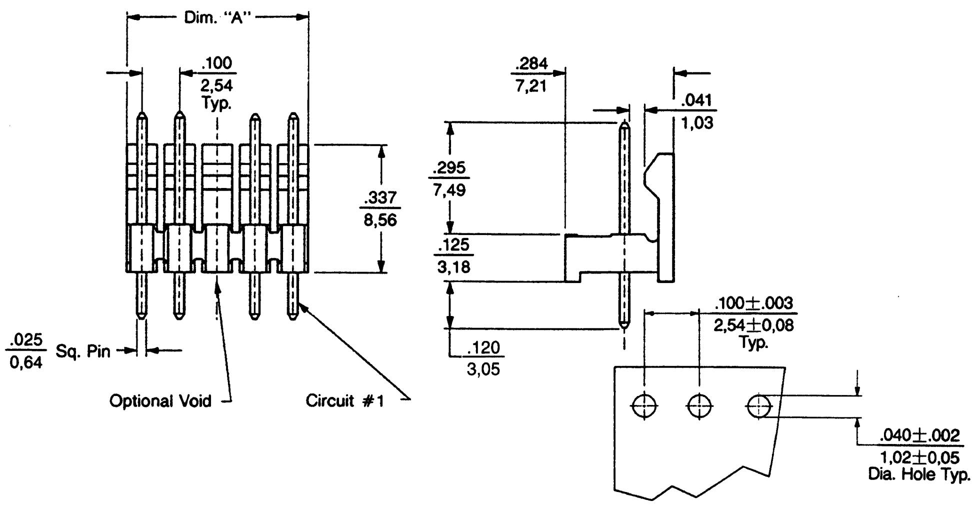
Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C

PCB Connectors

J



Recommended P.C. Board Hole Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Order No.								
Standard			With Kinked Tails			With Backwalls Removed		
Tin	15μ" Select Gold	30μ" Select Gold	Tin	15μ" Select Gold	30μ" Select Gold	Tin	15μ" Select Gold	30μ" Select Gold
• 22-28-0XX0	• 22-28-0XX1	• 22-28-0XX2	22-28-0XX3	22-28-0XX4	22-28-0XX5	22-28-0XX6	22-28-0XX7	22-28-0XX8
Replace XX with no. of circuits, 02-36								

Circuits	Dimension A
2	5.08 (.200)
3	7.62 (.300)
4	10.16 (.400)
5	12.70 (.500)
6	15.24 (.600)
7	17.78 (.700)
8	20.32 (.800)
9	22.86 (.900)
10	25.40 (1.000)
11	27.94 (1.100)
12	30.48 (1.200)
13	33.02 (1.300)

Circuits	Dimension A
14	35.56 (1.400)
15	38.10 (1.500)
16	40.64 (1.600)
17	43.18 (1.700)
18	45.72 (1.800)
19	48.26 (1.900)
20	50.80 (2.000)
21	53.34 (2.100)
22	55.88 (2.200)
23	58.42 (2.300)
24	60.96 (2.400)
25	63.50 (2.500)

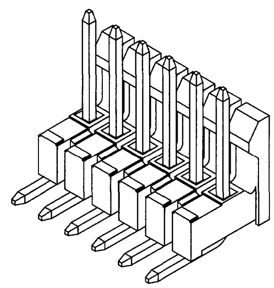
Circuits	Dimension A
26	66.04 (2.600)
27	68.58 (2.700)
28	71.12 (2.800)
29	73.66 (2.900)
30	76.20 (3.000)
31	78.74 (3.100)
32	81.28 (3.200)
33	83.82 (3.300)
34	86.36 (3.400)
35	88.90 (3.500)
36	91.44 (3.600)

• US Standard Product, available through Molex franchised distributors (36 circuit only)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Header

42228 Right Angle Friction Lock



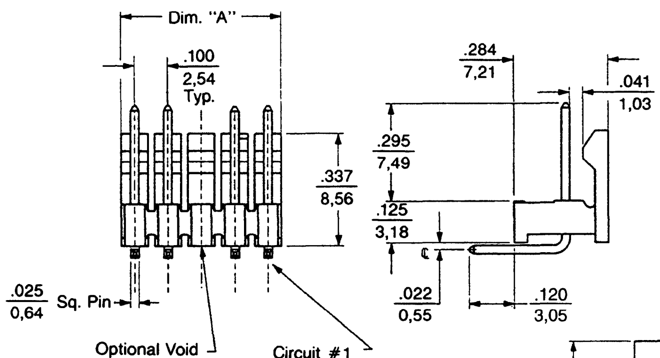
Features and Benefits
- Sizes 2 to 36 circuits
- Available with kinked pins for better PC board retention
- Available with end backwalls removed for left to right polarization

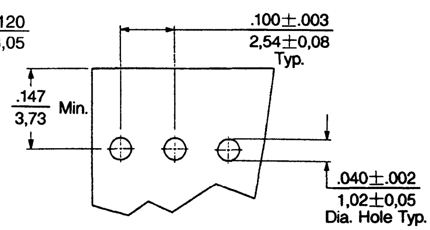
Reference Information
Product Specification: PS-10-07
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C





Recommended P.C. Board Hole Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Order No.								
Standard			With Kinked Tails			With Backwalls Removed		
Tin	15µ" Select Gold	30µ" Select Gold	Tin	15µ" Select Gold	30µ" Select Gold	Tin	15µ" Select Gold	30µ" Select Gold
• 22-28-1XX0	• 22-28-1XX1	• 22-28-1XX2	22-28-1XX3	22-28-1XX4	22-28-1XX5	22-28-1XX6	22-28-1XX7	22-28-1XX8
Replace XX with no. of circuits, 02-36								

Circuits	Dimension A
2	5.08 (.200)
3	7.62 (.300)
4	10.16 (.400)
5	12.70 (.500)
6	15.24 (.600)
7	17.78 (.700)
8	20.32 (.800)
9	22.86 (.900)
10	25.40 (1.000)
11	27.94 (1.100)
12	30.48 (1.200)
13	33.02 (1.300)

Circuits	Dimension A
14	35.56 (1.400)
15	38.10 (1.500)
16	40.64 (1.600)
17	43.18 (1.700)
18	45.72 (1.800)
19	48.26 (1.900)
20	50.80 (2.000)
21	53.34 (2.100)
22	55.88 (2.200)
23	58.42 (2.300)
24	60.96 (2.400)
25	63.50 (2.500)

Circuits	Dimension A
26	66.04 (2.600)
27	68.58 (2.700)
28	71.12 (2.800)
29	73.66 (2.900)
30	76.20 (3.000)
31	78.74 (3.100)
32	81.28 (3.200)
33	83.82 (3.300)
34	86.36 (3.400)
35	88.90 (3.500)
36	91.44 (3.600)

• US Standard Product, available through Molex franchised distributors (36 circuit only)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Breakaway Header

42225

Straight Polarizing

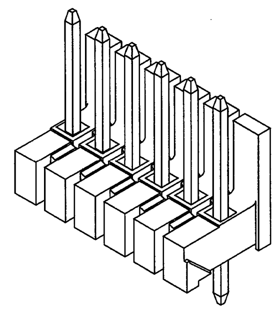
Features and Benefits
- Sizes 2 to 36 circuits
- Available with kinked pins for better PC board retention
- Available with end backwalls removed for left to right polarization

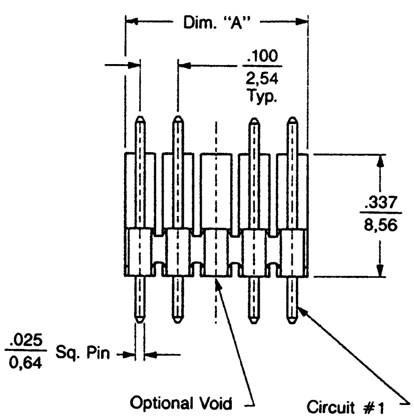
Reference Information
Product Specification: PS-10-07
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

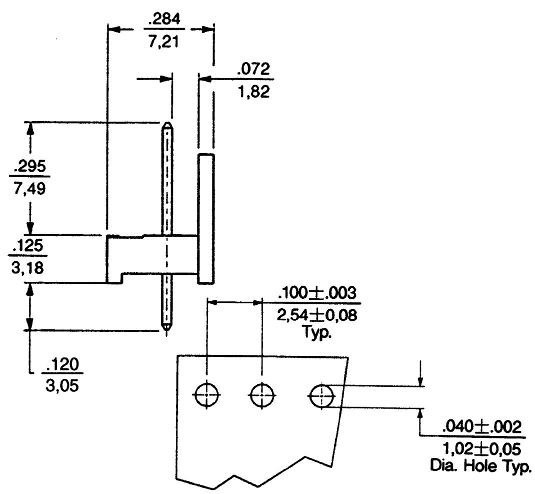
Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C







Recommended P.C. Board Hole Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Order No.								
Standard			With Kinked Tails			With Backwalls Removed		
Tin	15μ" Select Gold	30μ" Select Gold	Tin	15μ" Select Gold	30μ" Select Gold	Tin	15μ" Select Gold	30μ" Select Gold
• 22-28-3XX0	• 22-28-3XX1	• 22-28-3XX2	22-28-3XX3	22-28-3XX4	22-28-3XX5	22-28-3XX6	22-28-3XX7	22-28-3XX8
Replace XX with no. of circuits, 02-36								

Circuits	Dimension A
2	5.08 (.200)
3	7.62 (.300)
4	10.16 (.400)
5	12.70 (.500)
6	15.24 (.600)
7	17.78 (.700)
8	20.32 (.800)
9	22.86 (.900)
10	25.40 (1.000)
11	27.94 (1.100)
12	30.48 (1.200)
13	33.02 (1.300)

Circuits	Dimension A
14	35.56 (1.400)
15	38.10 (1.500)
16	40.64 (1.600)
17	43.18 (1.700)
18	45.72 (1.800)
19	48.26 (1.900)
20	50.80 (2.000)
21	53.34 (2.100)
22	55.88 (2.200)
23	58.42 (2.300)
24	60.96 (2.400)
25	63.50 (2.500)

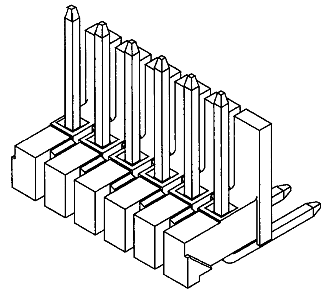
Circuits	Dimension A
26	66.04 (2.600)
27	68.58 (2.700)
28	71.12 (2.800)
29	73.66 (2.900)
30	76.20 (3.000)
31	78.74 (3.100)
32	81.28 (3.200)
33	83.82 (3.300)
34	86.36 (3.400)
35	88.90 (3.500)
36	91.44 (3.600)

• US Standard Product, available through Molex franchised distributors (36 circuit only)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Breakaway Header

42226 Right Angle Polarizing



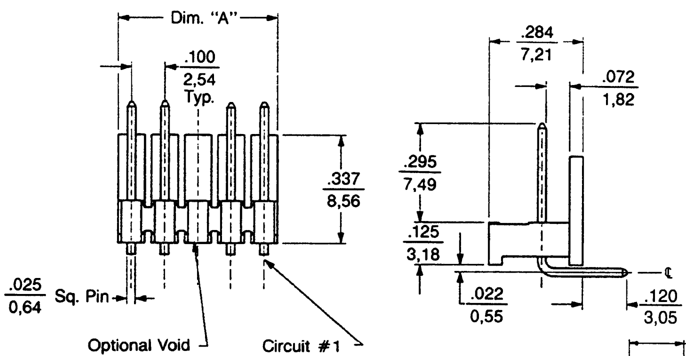
Features and Benefits
- Sizes 2 to 36 circuits
- Available with kinked pins for better PC board retention
- Available with end backwalls removed for left to right polarization

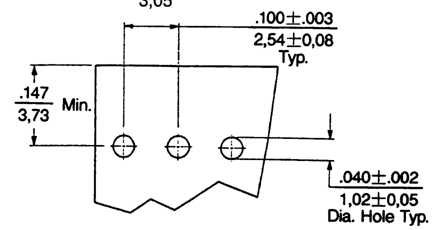
Reference Information
Product Specification: PS-10-07
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: Glass-filled nylon, UL 94V-0
Contact: Phosphor Bronze, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C





Recommended P.C. Board Hole Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

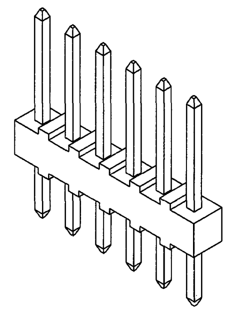
Order No.								
Standard			With Kinked Tails			With Backwalls Removed		
Tin	15μ" Select Gold	30μ" Select Gold	Tin	15μ" Select Gold	30μ" Select Gold	Tin	15μ" Select Gold	30μ" Select Gold
• 22-28-2XX0	• 22-28-2XX2	• 22-28-2XX3	22-28-2XX4	22-28-2XX5	22-28-2XX6	22-28-2XX7	22-28-2XX8	22-28-2XX9
Replace XX with no. of circuits, 02-36								

Circuits	Dimension A	Circuits	Dimension A	Circuits	Dimension A
2	5.08 (.200)	14	35.56 (1.400)	26	66.04 (2.600)
3	7.62 (.300)	15	38.10 (1.500)	27	68.58 (2.700)
4	10.16 (.400)	16	40.64 (1.600)	28	71.12 (2.800)
5	12.70 (.500)	17	43.18 (1.700)	29	73.66 (2.900)
6	15.24 (.600)	18	45.72 (1.800)	30	76.20 (3.000)
7	17.78 (.700)	19	48.26 (1.900)	31	78.74 (3.100)
8	20.32 (.800)	20	50.80 (2.000)	32	81.28 (3.200)
9	22.86 (.900)	21	53.34 (2.100)	33	83.82 (3.300)
10	25.40 (1.000)	22	55.88 (2.200)	34	86.36 (3.400)
11	27.94 (1.100)	23	58.42 (2.300)	35	88.90 (3.500)
12	30.48 (1.200)	24	60.96 (2.400)	36	91.44 (3.600)
13	33.02 (1.300)	25	63.50 (2.500)		

• US Standard Product, available through Molex franchised distributors (36 circuit only)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Header 4030/42152 Straight Flat



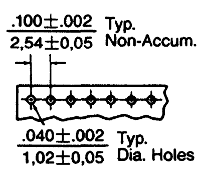
Features and Benefits
- Sizes 2 to 28 circuits
- 42152 recommended for circuit sizes greater than 10
- 4030 with voids is 4380 Series

Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

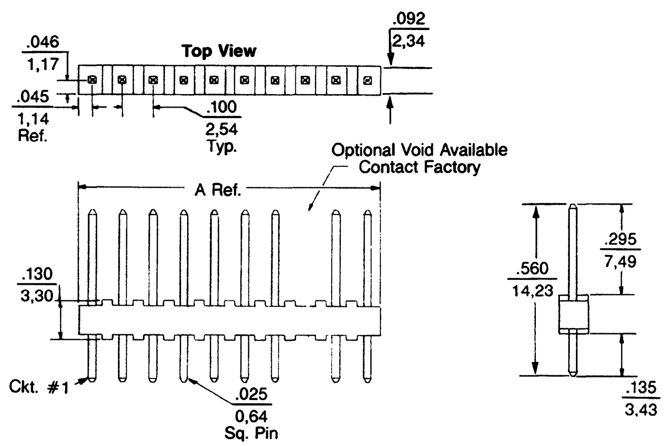
Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: 4030—Red nylon, UL 94V-0
42152—White glass-filled nylon, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C



Recommended P.C. Board Layout for .100" (2,54 mm) Headers



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 4030 Tin	4030 Gold	42152 Tin	42152 Gold	42152 Select Gold	Dimension A
2	• 22-03-2021	• 22-10-2021	22-66-2020	22-66-3020	22-10-7028	4.80 (.190)
3	• 22-03-2031	• 22-10-2031	22-66-2030	22-66-3030	22-10-7038	7.40 (.290)
4	• 22-03-2041	• 22-10-2041	22-66-2040	22-66-3040	22-10-7048	9.90 (.390)
5	• 22-03-2051	• 22-10-2051	22-66-2050	22-66-3050	22-10-7058	12.50 (.490)
6	• 22-03-2061	• 22-10-2061	22-66-2060	22-66-3060	22-10-7068	15.00 (.590)
7	• 22-03-2071	• 22-10-2071	22-66-2070	22-66-3070	22-10-7078	17.50 (.690)
8	• 22-03-2081	• 22-10-2081	22-66-2080	22-66-3080	22-10-7088	20.10 (.790)
9	• 22-03-2091	• 22-10-2091	22-66-2090	22-66-3090	22-10-7098	22.60 (.890)
10	• 22-03-2101	• 22-10-2101	22-66-2100	22-66-3100	22-10-7108	25.10 (.990)
11	• 22-03-2111	• 22-10-2111	22-66-2110	22-66-3110	22-10-7118	27.70 (1.090)
12	• 22-03-2121	• 22-10-2121	22-66-2120	22-66-3120	22-10-7128	30.20 (1.190)
13	• 22-03-2131	• 22-10-2131	22-66-2130	22-66-3130	22-10-7138	32.80 (1.290)
14	• 22-03-2141	• 22-10-2141	22-66-2140	22-66-3140	22-10-7148	35.30 (1.390)
15	• 22-03-2151	• 22-10-2151	22-66-2150	22-66-3150	22-10-7158	37.90 (1.490)
16	• 22-03-2161	• 22-10-2161	22-66-2160	22-66-3160	22-10-7168	40.40 (1.590)
17	• 22-03-2171	• 22-10-2171	22-66-2170	22-66-3170	22-10-7178	42.90 (1.690)
18	• 22-03-2181	• 22-10-2181	22-66-2180	22-66-3180	22-10-7188	45.50 (1.790)
19	• 22-03-2191	• 22-10-2191	22-66-2190	22-66-3190	22-10-7198	48.00 (1.890)
20	• 22-03-2201	• 22-10-2201	22-66-2200	22-66-3200	22-10-7208	50.60 (1.990)
21	• 22-03-2211	• 22-10-2211	22-66-2210	22-66-3210	22-10-7218	53.10 (2.090)
22	• 22-03-2221	• 22-10-2221	22-66-2220	22-66-3220	22-10-7228	55.60 (2.190)
23	• 22-03-2231	• 22-10-2231	22-66-2230	22-66-3230	22-10-7238	58.20 (2.290)
24	• 22-03-2241	• 22-10-2241	22-66-2240	22-66-3240	22-10-7248	60.10 (2.390)
25	• 22-03-2251	• 22-10-2251	22-66-2250	22-66-3250	22-10-7258	63.20 (2.490)
28	22-03-2281	22-10-2281	22-66-2280	22-66-3280	22-10-7288	70.90 (2.790)

• US Standard Product, available through Molex franchised distributors
In the Far East the polyester product has different Engineering No. and Order No.
Contact factory for sales drawings on 70309-XXXX

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Header

4094/42153 Right Angle Flat

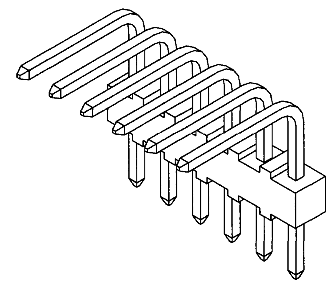
Features and Benefits
- Sizes 2 to 28 circuits
- 42153 recommended for circuit sizes greater than 10
- 4094 with voids is 4494 Series

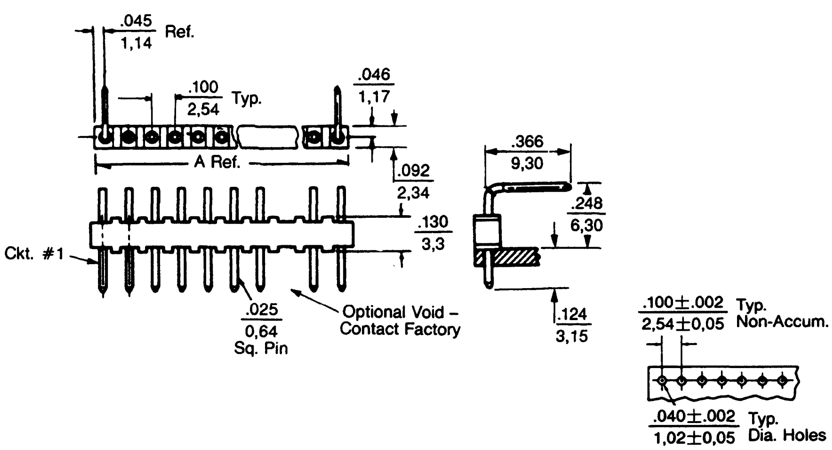
Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: 4094—Red nylon, UL 94V-0
42153—White glass-filled nylon, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C





Recommended P.C. Board Layout for .100" (2,54 mm) Headers

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 4094 Tin	4094 Gold	42153 Tin	42153 Gold	42153 Select Gold	Dimension A
2	• 22-05-2021	• 22-12-2021	22-67-2020	22-67-3020	22-12-3020	4.80 (.190)
3	• 22-05-2031	• 22-12-2031	22-67-2030	22-67-3030	22-12-3030	7.40 (.290)
4	• 22-05-2041	• 22-12-2041	22-67-2040	22-67-3040	22-12-3040	9.90 (.390)
5	• 22-05-2051	• 22-12-2051	22-67-2050	22-67-3050	22-12-3050	12.50 (.490)
6	• 22-05-2061	• 22-12-2061	22-67-2060	22-67-3060	22-12-3060	15.00 (.590)
7	• 22-05-2071	• 22-12-2071	22-67-2070	22-67-3070	22-12-3070	17.50 (.690)
8	• 22-05-2081	• 22-12-2081	22-67-2080	22-67-3080	22-12-3080	20.10 (.790)
9	• 22-05-2091	• 22-12-2091	22-67-2090	22-67-3090	22-12-3090	22.60 (.890)
10	• 22-05-2101	• 22-12-2101	22-67-2100	22-67-3100	22-12-3100	25.10 (.990)
11	• 22-05-2111	• 22-12-2111	22-67-2110	22-67-3110	22-12-3110	27.70 (1.090)
12	• 22-05-2121	• 22-12-2121	22-67-2120	22-67-3120	22-12-3120	30.20 (1.190)
13	• 22-05-2131	• 22-12-2131	22-67-2130	22-67-3130	22-12-3130	32.80 (1.290)
14	• 22-05-2141	• 22-12-2141	22-67-2140	22-67-3140	22-12-3140	35.30 (1.390)

Circuits	Order No. 4094 Tin	4094 Gold	42153 Tin	42153 Gold	42153 Select Gold	Dimension A
15	• 22-05-2151	• 22-12-2151	22-67-2150	22-67-3150	22-12-3150	37.90 (1.490)
16	• 22-05-2161	• 22-12-2161	22-67-2160	22-67-3160	22-12-3160	40.40 (1.590)
17	• 22-05-2171	• 22-12-2171	22-67-2170	22-67-3170	22-12-3170	42.90 (1.690)
18	• 22-05-2181	• 22-12-2181	22-67-2180	22-67-3180	22-12-3180	45.50 (1.790)
19	• 22-05-2191	• 22-12-2191	22-67-2190	22-67-3190	22-12-3190	48.00 (1.890)
20	• 22-05-2201	• 22-12-2201	22-67-2200	22-67-3200	22-12-3200	50.60 (1.990)
21	• 22-05-2211	• 22-12-2211	22-67-2210	22-67-3210	22-12-3210	53.10 (2.090)
22	• 22-05-2221	• 22-12-2221	22-67-2220	22-67-3220	22-12-3220	55.60 (2.190)
23	• 22-05-2231	• 22-12-2231	22-67-2230	22-67-3230	22-12-3230	58.20 (2.290)
24	• 22-05-2241	• 22-12-2241	22-67-2240	22-67-3240	22-12-3240	60.10 (2.390)
25	• 22-05-2251	• 22-12-2251	22-67-2250	22-67-3250	22-12-3250	63.20 (2.490)
28	22-05-2281	22-12-2281	22-67-2280	22-67-3280	22-12-3280	70.90 (2.790)

• US Standard Product, available through Molex franchised distributors
In the Far East the polyester product has different Engineering No. and Order No.
Contact factory for sales drawings on 70319-XXXX

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Header

6373 Straight Friction Lock

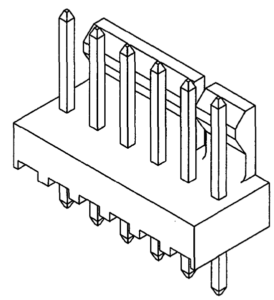
Features and Benefits
- Sizes 2 to 28 circuits
- Friction lock provides passive lock to connector with ramp
- Good in high vibration applications

Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7220, 7880, 40555 and 70400-H
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

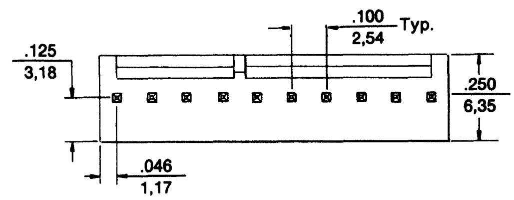
Mechanical
Durability: 25 cycles

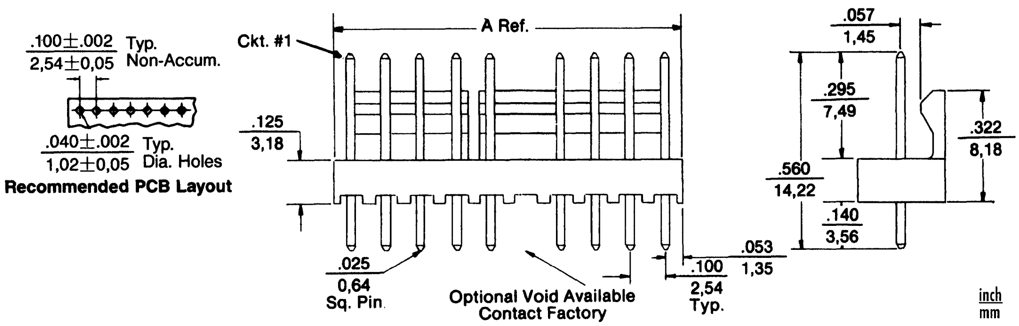
Physical
Housing: Red nylon, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C



PCB Connectors

J





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	• 22-23-2021	• 22-11-2022	5.08 (.200)
3	• 22-23-2031	• 22-11-2032	7.62 (.300)
4	• 22-23-2041	• 22-11-2042	10.16 (.400)
5	• 22-23-2051	• 22-11-2052	12.70 (.500)
6	• 22-23-2061	• 22-11-2062	15.24 (.600)
7	• 22-23-2071	• 22-11-2072	17.78 (.700)
8	• 22-23-2081	• 22-11-2082	20.32 (.800)
9	• 22-23-2091	• 22-11-2092	22.86 (.900)
10	• 22-23-2101	• 22-11-2102	25.40 (1.000)
11	• 22-23-2111	• 22-11-2112	27.94 (1.100)
12	• 22-23-2121	• 22-11-2122	30.48 (1.200)
13	• 22-23-2131	• 22-11-2132	33.02 (1.300)
14	• 22-23-2141	• 22-11-2142	35.56 (1.400)
15	• 22-23-2151	• 22-11-2152	38.10 (1.500)

Circuits	Order No.		Dimension A
	Tin	Gold	
16	• 22-23-2161	• 22-11-2162	40.64 (1.600)
17	• 22-23-2171	• 22-11-2172	43.18 (1.700)
18	• 22-23-2181	• 22-11-2182	45.72 (1.800)
19	• 22-23-2191	• 22-11-2192	48.26 (1.900)
20	• 22-23-2201	• 22-11-2202	50.80 (2.000)
21	• 22-23-2211	• 22-11-2212	53.34 (2.100)
22	• 22-23-2221	• 22-11-2222	55.88 (2.200)
23	• 22-23-2231	• 22-11-2232	58.42 (2.300)
24	• 22-23-2241	• 22-11-2242	60.96 (2.400)
25	• 22-23-2251	• 22-11-2252	63.50 (2.500)
26	22-23-2261	22-11-2262	66.04 (2.600)
27	22-23-2271	22-11-2272	68.58 (2.700)
28	22-23-2281	22-11-2282	71.12 (2.800)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

molex

2.54mm (.100") Pitch KK® Header

7478 Right Angle Friction Lock

Features and Benefits

- Sizes 2 to 28 circuits
- Friction lock provides passive lock to connector with ramp
- Good in high vibration applications
- 7478 with voids is 7832 Series

Reference Information

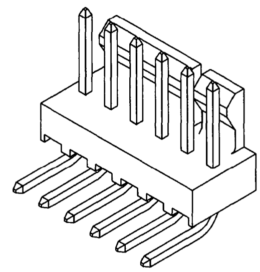
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455A, 4455C, 6471, 7880 and 70400-H
Designed In: Inches

Electrical

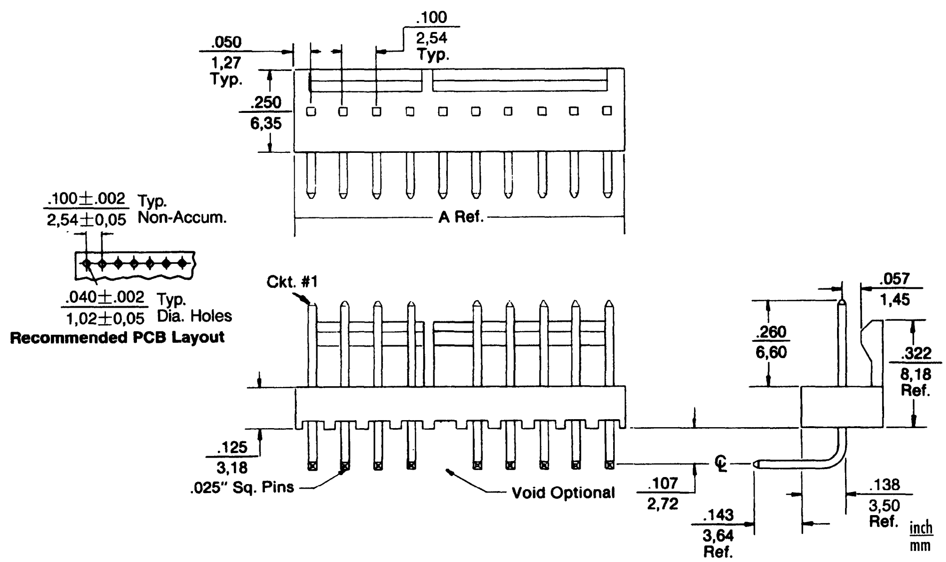
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical

Housing: Red nylon, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C



Preferred Version in the Americas



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	• 22-05-3021	• 22-12-2024	5.08 (.200)
3	• 22-05-3031	• 22-12-2034	7.62 (.300)
4	• 22-05-3041	• 22-12-2044	10.16 (.400)
5	• 22-05-3051	• 22-12-2054	12.70 (.500)
6	• 22-05-3061	• 22-12-2064	15.24 (.600)
7	• 22-05-3071	• 22-12-2074	17.78 (.700)
8	• 22-05-3081	• 22-12-2084	20.32 (.800)
9	• 22-05-3091	• 22-12-2094	22.86 (.900)
10	• 22-05-3101	• 22-12-2104	25.40 (1.000)
11	• 22-05-3111	• 22-12-2114	27.94 (1.100)
12	• 22-05-3121	• 22-12-2124	30.48 (1.200)
13	• 22-05-3131	• 22-12-2134	33.02 (1.300)
14	• 22-05-3141	• 22-12-2144	35.56 (1.400)
15	• 22-05-3151	• 22-12-2154	38.10 (1.500)

Circuits	Order No.		Dimension A
	Tin	Gold	
16	• 22-05-3161	• 22-12-2164	40.64 (1.600)
17	• 22-05-3171	• 22-12-2174	43.18 (1.700)
18	• 22-05-3181	• 22-12-2184	45.72 (1.800)
19	• 22-05-3191	• 22-12-2194	48.26 (1.900)
20	• 22-05-3201	• 22-12-2204	50.80 (2.000)
21	• 22-05-3211	• 22-12-2214	53.34 (2.100)
22	• 22-05-3221	• 22-12-2224	55.88 (2.200)
23	• 22-05-3231	• 22-12-2234	58.42 (2.300)
24	• 22-05-3241	• 22-12-2244	60.96 (2.400)
25	• 22-05-3251	• 22-12-2254	63.50 (2.500)
26	22-05-3261	22-12-2264	66.04 (2.600)
27	22-05-3271	22-12-2274	68.58 (2.700)
28	22-05-3281	22-12-2284	71.12 (2.800)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch KK® Header

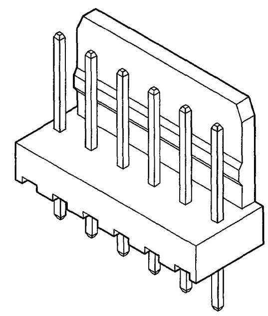
6410 Straight Friction Lock

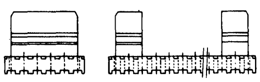
Features and Benefits
- Sizes 2 to 28 circuits
- Friction lock provides passive lock to connector with ramp
- Good in high vibration applications
- Higher backwall than the 6373 Series

Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695 with locking ramp, 6471 and 7880
Designed In: Inches

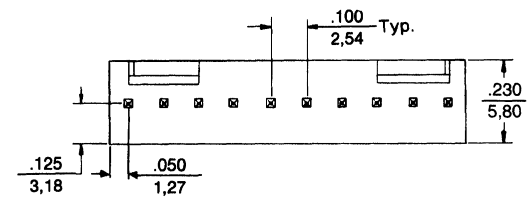
Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

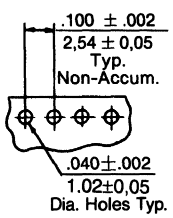
Physical
Housing: Red nylon, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: See Table
Temperature: -40 to +75°C



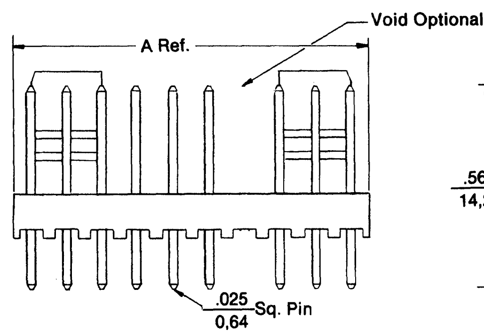


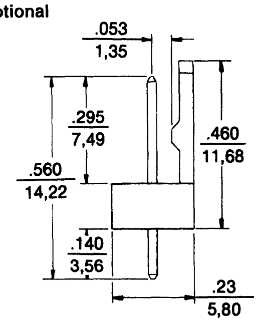
Single Ramp on 2-6 Circuits
Two Ramps on 7-28 Circuits





Recommended P.C. Board Layout





inch / mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	• 22-27-2021	• 22-29-2021	5.08 (.200)
3	• 22-27-2031	• 22-29-2031	7.62 (.300)
4	• 22-27-2041	• 22-29-2041	10.16 (.400)
5	• 22-27-2051	• 22-29-2051	12.70 (.500)
6	• 22-27-2061	• 22-29-2061	15.24 (.600)
7	• 22-27-2071	• 22-29-2071	17.78 (.700)
8	• 22-27-2081	• 22-29-2081	20.32 (.800)
9	• 22-27-2091	• 22-29-2091	22.86 (.900)
10	• 22-27-2101	• 22-29-2101	25.40 (1.000)
11	• 22-27-2111	• 22-29-2111	27.94 (1.100)
12	• 22-27-2121	• 22-29-2121	30.48 (1.200)
13	• 22-27-2131	• 22-29-2131	33.02 (1.300)
14	• 22-27-2141	• 22-29-2141	35.56 (1.400)
15	• 22-27-2151	• 22-29-2151	38.10 (1.500)

Circuits	Order No.		Dimension A
	Tin	Gold	
16	• 22-27-2161	• 22-29-2161	40.64 (1.600)
17	• 22-27-2171	• 22-29-2171	43.18 (1.700)
18	• 22-27-2181	• 22-29-2181	45.72 (1.800)
19	• 22-27-2191	• 22-29-2191	48.26 (1.900)
20	• 22-27-2201	• 22-29-2201	50.80 (2.000)
21	• 22-27-2211	• 22-29-2211	53.34 (2.100)
22	• 22-27-2221	• 22-29-2221	55.88 (2.200)
23	• 22-27-2231	• 22-29-2231	58.42 (2.300)
24	• 22-27-2241	• 22-29-2241	60.96 (2.400)
25	• 22-27-2251	• 22-29-2251	63.50 (2.500)
26	22-27-2261	22-29-2261	66.04 (2.600)
27	22-27-2271	22-29-2271	68.58 (2.700)
28	22-27-2281	22-29-2281	71.12 (2.800)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

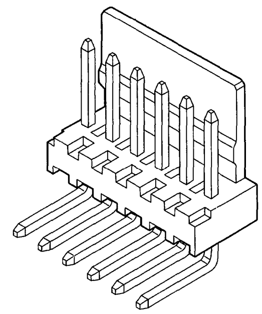
Features and Benefits
- Sizes 2 to 28 circuits
- Edge mount only

Reference Information
Mates With: 2695, 6471 and 7720S
Designed In: Inches

Physical
Housing: White nylon, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: Tin
Temperature: -40 to +105°C

molex 2.54mm (.100") Pitch KK® Header

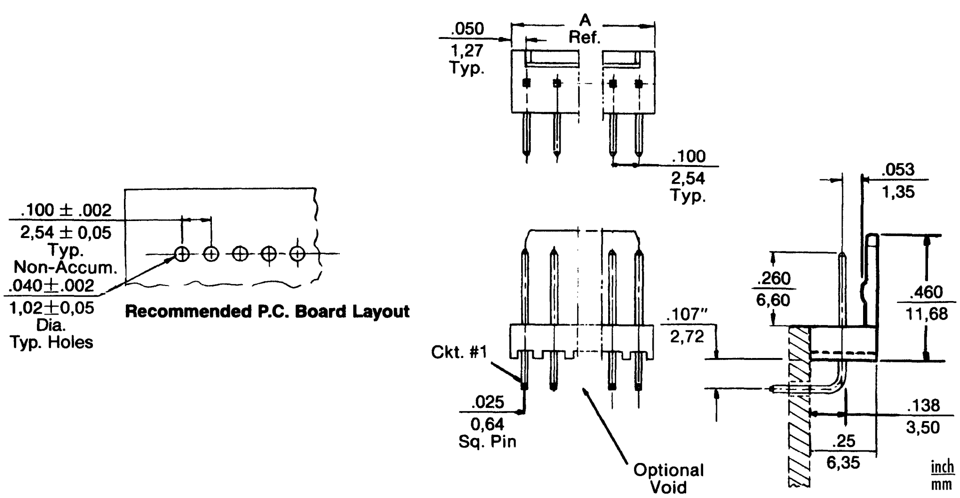
7395 Right Angle Friction Lock



Preferred Version in Europe and the Far East

PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
2	22-05-7028	5.08 (.200)
3	22-05-7038	7.62 (.300)
4	22-05-7048	10.16 (.400)
5	22-05-7058	12.70 (.500)
6	22-05-7068	15.24 (.600)
7	22-05-7078	17.78 (.700)
8	22-05-7088	20.32 (.800)
9	22-05-7098	22.86 (.900)
10	22-05-7108	25.40 (1.000)
11	22-05-7118	27.94 (1.100)
12	22-05-7128	30.48 (1.200)
13	22-05-7138	33.02 (1.300)
14	22-05-7148	35.56 (1.400)
15	22-05-7158	38.10 (1.500)

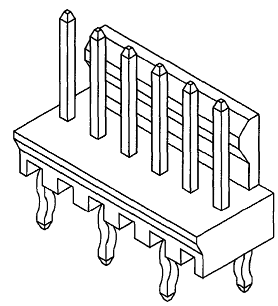
Circuits	Order No.	Dimension A
16	22-05-7168	40.64 (1.600)
17	22-05-7178	43.18 (1.700)
18	22-05-7188	45.72 (1.800)
19	22-05-7198	48.26 (1.900)
20	22-05-7208	50.80 (2.000)
21	22-05-7218	53.34 (2.100)
22	22-05-7228	55.88 (2.200)
23	22-05-7238	58.42 (2.300)
24	22-05-7248	60.96 (2.400)
25	22-05-7258	63.50 (2.500)
26	22-05-7268	66.04 (2.600)
27	22-05-7278	68.58 (2.700)
28	22-05-7288	71.12 (2.800)

FEATURES AND SPECIFICATIONS

2.54mm (.100") Pitch Header

42009

Straight Staggered Tail



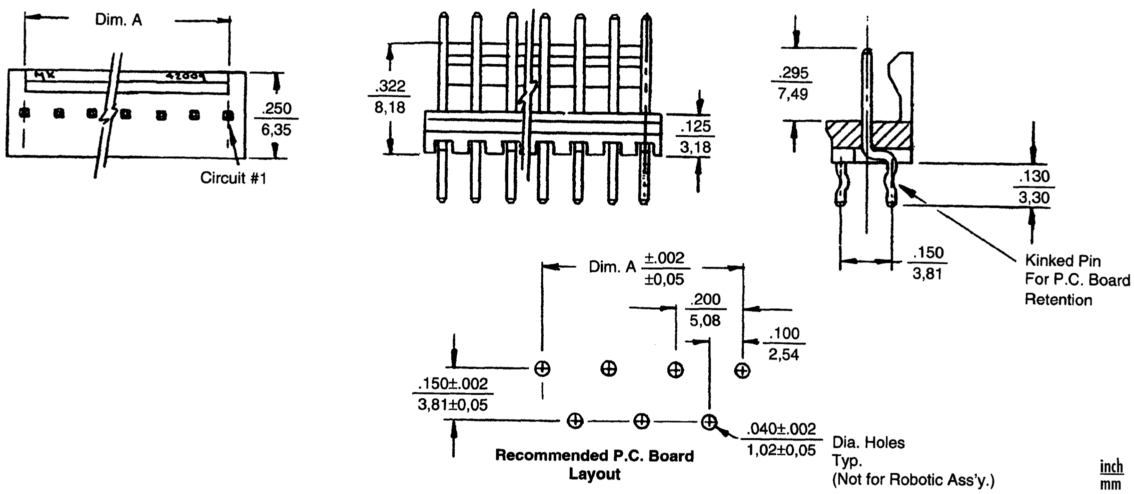
Features and Benefits
- Sizes 2 to 10 circuits
- Kinked solder tails for retention to PCB
- Staggered tails prevent solder bridging
- Staggered tails provide greater stability
- Friction lock provides passive lock to connector with ramp

Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: White polyester, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: Tin
Temperature: -40 to +75°C



ORDERING INFORMATION AND DIMENSIONS

Circuits	Tin Order No.	Dimension A
2	22-23-3024	4.95 (.195)
3	22-23-3034	7.49 (.295)
4	22-23-3044	10.03 (.395)
5	22-23-3054	12.57 (.495)
6	22-23-3064	15.11 (.595)
7	22-23-3074	17.65 (.695)
8	22-23-3084	20.19 (.795)
9	22-23-3094	22.73 (.895)
10	22-23-3104	25.27 (.995)

FEATURES AND SPECIFICATIONS

molex®

2.54mm (.100") Pitch Header

43009

Straight Kinked Tail

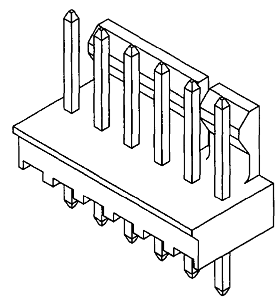
Features and Benefits
- Sizes 2 to 10 circuits
- Kinked solder tails for retention to PCB
- Friction lock provides passive lock to connector with ramp

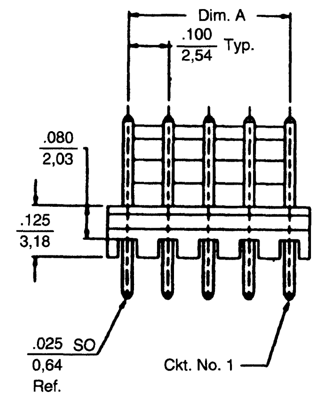
Reference Information
Product Specification: PS-10-07
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2695, 4455, 6471, 7720, 7880 and 40555
Designed In: Inches

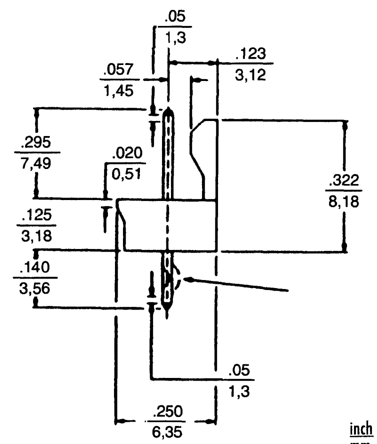
Electrical
Voltage: 250V
Current: 4.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Mechanical
Durability: 25 cycles

Physical
Housing: Polyester, UL 94V-0
Contact: Brass, 0.64mm (.025") square
Plating: Tin
Temperature: -40 to +75°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Tin Order No.	Dimension A
2	22-23-5021	4.95 (.195)
3	22-23-5031	7.49 (.295)
4	22-23-5041	10.03 (.395)
5	22-23-5051	12.57 (.495)
6	22-23-5061	15.11 (.595)
7	22-23-5071	17.65 (.695)
8	22-23-5081	20.19 (.795)
9	22-23-5091	22.73 (.895)
10	22-23-5101	25.27 (.995)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Crimp Terminal Housing

41695

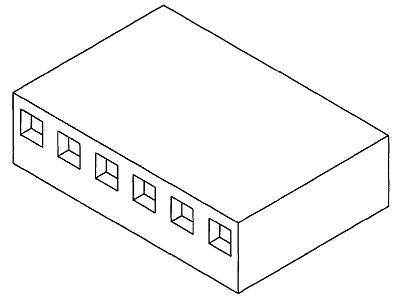
Features and Benefits
- Sizes 2 to 20 circuits
- Locking ramp feature available
- Polarizing rib feature available for side-to-side polarization
- Offset pin entry holes provide 180° polarization
- Accepts entire line of .156" contacts
- Optional voids available

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: A4042, 41661, 41662, 41671, 41672, 41681, 41682, 41701, 41711, 41721, 41741, 41761, 41771, 41772, 41791, 41792, 42441, 42461, 42471, 42472, 42491 and 42492
Use With: 2478, 2578, 6438, 6838, 7258 and 8818 terminals
Designed In: Inches

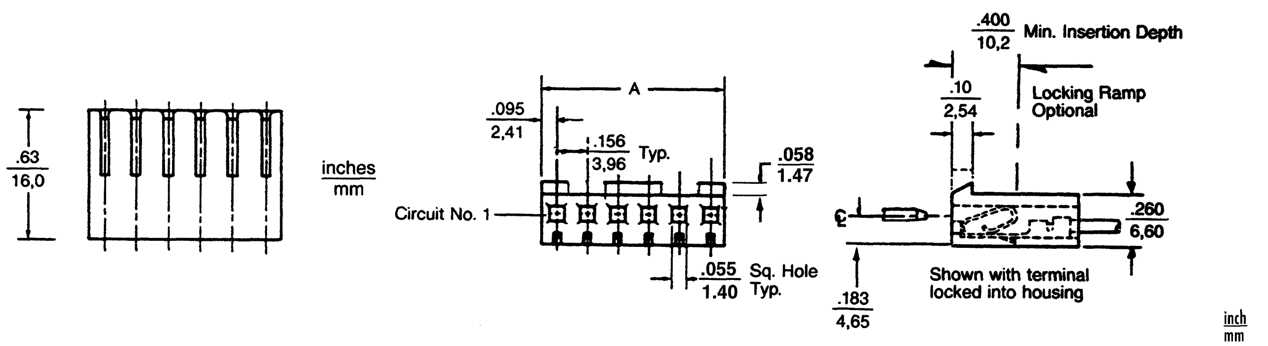
Electrical
Voltage: 250V AC max.
Current: Phosphor Bronze—7.0A max.
Brass—5.0A max.
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500K MΩ min.

Mechanical
Contact Insertion Force: 1.8kg (4 lb) max.
Contact Retention to Housing: 3.6kg (8 lb) min.
Mating Force: Square pin—2.25 lb max.
Round pin—1.60 lb max.
Unmating Force: Square pin—0.84 lb min.
Round pin—0.60 lb min.
Normal Force: 0.75kg (1.65 lb)
Durability: 25 cycles max.

Physical
Housing: Polyester, UL 94V-0
Temperature: 0 to +75°C



Preferred Version in the Americas



	Order No.
Polarizing Key	• 15-04-0297

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. With Locking Ramp and Polarizing Ribs	Without Locking Ramp or Polarizing Ribs	With Locking Ramp Only	Dimension A
2	• 09-50-8023	• 09-50-8020	• 09-50-8021	8.79 (.346)
3	• 09-50-8033	• 09-50-8030	• 09-50-8031	12.75 (.502)
4	• 09-50-8043	• 09-50-8040	• 09-50-8041	16.71 (.658)
5	• 09-50-8053	• 09-50-8050	• 09-50-8051	20.67 (.814)
6	• 09-50-8063	• 09-50-8060	• 09-50-8061	24.64 (.970)
7	• 09-50-8073	• 09-50-8070	• 09-50-8071	28.60 (1.126)
8	• 09-50-8083	• 09-50-8080	• 09-50-8081	32.56 (1.282)
9	• 09-50-8093	• 09-50-8090	• 09-50-8091	36.53 (1.438)
10	• 09-50-8103	• 09-50-8100	• 09-50-8101	40.49 (1.594)
11	• 09-50-8113	• 09-50-8110	• 09-50-8111	44.45 (1.750)

Circuits	Order No. With Locking Ramp and Polarizing Ribs	Without Locking Ramp or Polarizing Ribs	With Locking Ramp Only	Dimension A
12	• 09-50-8123	• 09-50-8120	• 09-50-8121	48.41 (1.906)
13	• 09-50-8133	• 09-50-8130	• 09-50-8131	52.37 (2.062)
14	• 09-50-8143	• 09-50-8140	• 09-50-8141	56.34 (2.218)
15	• 09-50-8153	• 09-50-8150	• 09-50-8151	60.30 (2.374)
16	• 09-50-8163	• 09-50-8160	• 09-50-8161	64.26 (2.530)
17	• 09-50-8173	• 09-50-8170	• 09-50-8171	68.22 (2.686)
18	• 09-50-8183	• 09-50-8180	• 09-50-8181	72.19 (2.842)
19	• 09-50-8193	• 09-50-8190	• 09-50-8191	76.15 (2.998)
20	• 09-50-8203	• 09-50-8200	• 09-50-8201	80.11 (3.154)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 24 circuits
- Locking ramp available
- Molded void options available
- Standard ramp options available
- Polarizing pegs and keys available
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: A4042, 41661, 41662, 41671, 41672, 41681, 41682, 41701, 41711, 41721, 41741, 41761, 41771, 41772, 41791, 41792, 42441, 42461, 42471, 42491 and 42492
Use With: 2478, 2578 and 8818 crimp terminals
Designed In: Inches

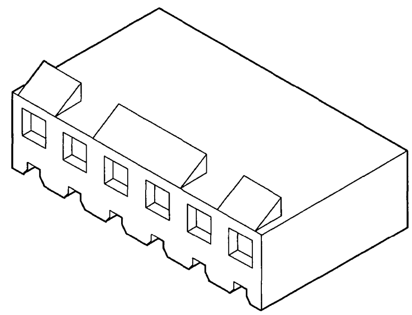
Electrical
Voltage: 250V AC max.
Current: Phosphor Bronze—7.0A max.
Brass—5.0A max.
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical
Contact Insertion Force: 1.8kg (4 lb) max.
Contact Retention to Housing: 3.6kg (8 lb) min.
Mating Force: Square pin—2.25 lb max.
Round pin—1.60 lb max.
Unmating Force: Square pin—0.84 lb min.
Round pin—0.60 lb min.
Normal Force: 0.75kg (1.65 lb)
Durability: 25 cycles max.

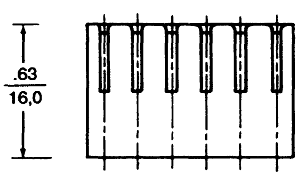
Physical
Housing: Nylon, UL 94V-2 (see 41695 for UL 94V-0 housing)
Temperature: 0 to +75°C

molex® 3.96mm (.156") Pitch Crimp Terminal Housing

2139



Preferred Version in the Americas



inch
mm

	Order No.
Polarizing Key	• 15-04-0219
Polarizing Peg	• 15-04-0220

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Without Locking Ramp	With Locking Ramp	
2	• 09-50-7021	• 09-50-3021	7.92 (.310)
3	• 09-50-7031	• 09-50-3031	11.79 (.460)
4	• 09-50-7041	• 09-50-3041	15.75 (.620)
5	• 09-50-7051	• 09-50-3051	19.71 (.780)
6	• 09-50-7061	• 09-50-3061	23.67 (.930)
7	• 09-50-7071	• 09-50-3071	27.64 (1.090)
8	• 09-50-7081	• 09-50-3081	31.60 (1.240)
9	• 09-50-7091	• 09-50-3091	35.56 (1.400)
10	• 09-50-7101	• 09-50-3101	39.52 (1.560)
11	• 09-50-7111	• 09-50-3111	43.48 (1.710)
12	• 09-50-7121	• 09-50-3121	47.45 (1.870)
13	• 09-50-7131	• 09-50-3131	51.41 (2.020)

Circuits	Order No.		Dimension A
	Without Locking Ramp	With Locking Ramp	
14	• 09-50-7141	• 09-50-3141	55.37 (2.180)
15	• 09-50-7151	• 09-50-3151	59.33 (2.340)
16	• 09-50-7161	• 09-50-3161	63.30 (2.492)
17	• 09-50-7171	• 09-50-3171	67.26 (2.648)
18	• 09-50-7181	• 09-50-3181	71.22 (2.804)
19	• 09-50-7191	• 09-50-3191	65.18 (2.960)
20	• 09-50-7201	• 09-50-3201	79.15 (3.116)
21	• 09-50-7211	• 09-50-3211	83.11 (3.272)
22	• 09-50-7221	• 09-50-3221	87.07 (3.428)
23	• 09-50-7231	• 09-50-3231	91.03 (3.584)
24	• 09-50-7241	• 09-50-3241	95.00 (3.740)

• US Standard Product, available through Molex franchised distributors
Note: Use 41695 for .100" and over insulation diameter wire

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch KK® Crimp Terminal Housing

3069

Features and Benefits

- Sizes 2 to 20 circuits
- Standard version without polarizing rib
- With or without locking ramp

Reference Information

Product Specification: PS-08-50
Packaging: Loose
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2220, 3190, 3192, 3243, 3246, A4042, 41661, 41662, 41671, 41672, 41681, 41682, 41701, 41711, 41721, 41741, 41761, 41771, 41772, 41791, 41792, 42441, 42461, 42471, 42491 and 42492
Use With: Molex double cantilever crimp terminals
Designed In: Inches

Electrical

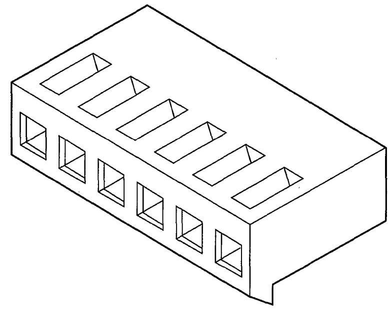
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical

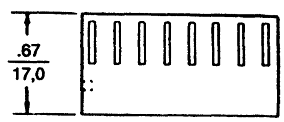
Contact Insertion Force: 4 lb max.
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 5 lb min.
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles

Physical

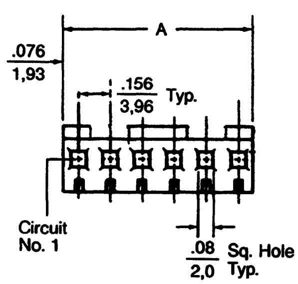
Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C

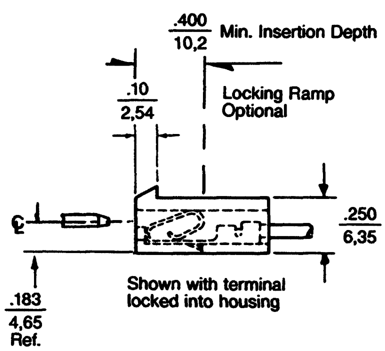


Preferred Version in Europe and the Far East



3069 Series





	Order No.
Polarizing Key	• 15-04-0219
Polarizing Peg	• 15-04-0220

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Without Locking Ramp	Order No. With Locking Ramp	Dimension A
2	09-92-0200	09-91-0200	7.92 (.310)
3	09-92-0300	09-91-0300	11.79 (.460)
4	09-92-0400	09-91-0400	15.75 (.620)
5	09-92-0500	09-91-0500	19.71 (.780)
6	09-92-0600	09-91-0600	23.67 (.930)
7	09-92-0700	09-91-0700	27.64 (1.090)
8	09-92-0800	09-91-0800	31.60 (1.240)
9	09-92-0900	09-91-0900	35.56 (1.400)
10	09-92-1000	09-91-1000	39.52 (1.560)
11	09-92-1100	09-91-1100	43.48 (1.710)

Circuits	Order No. Without Locking Ramp	Order No. With Locking Ramp	Dimension A
12	09-92-1200	09-91-1200	47.45 (1.870)
13	09-92-1300	09-91-1300	51.41 (2.020)
14	09-92-1400	09-91-1400	55.37 (2.180)
15	09-92-1500	09-91-1500	59.33 (2.340)
16	09-92-1600	09-91-1600	63.30 (2.492)
17	09-92-1700	09-91-1700	67.26 (2.648)
18	09-92-1800	09-91-1800	71.22 (2.804)
19	09-92-1900	09-91-1900	65.18 (2.960)
20	09-92-2000	09-91-2000	79.15 (3.116)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Housing

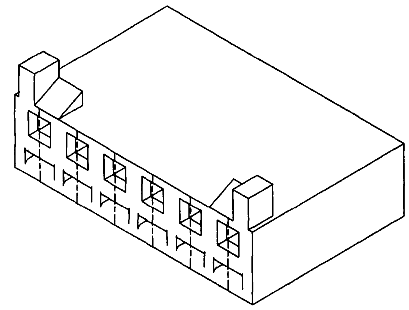
43061

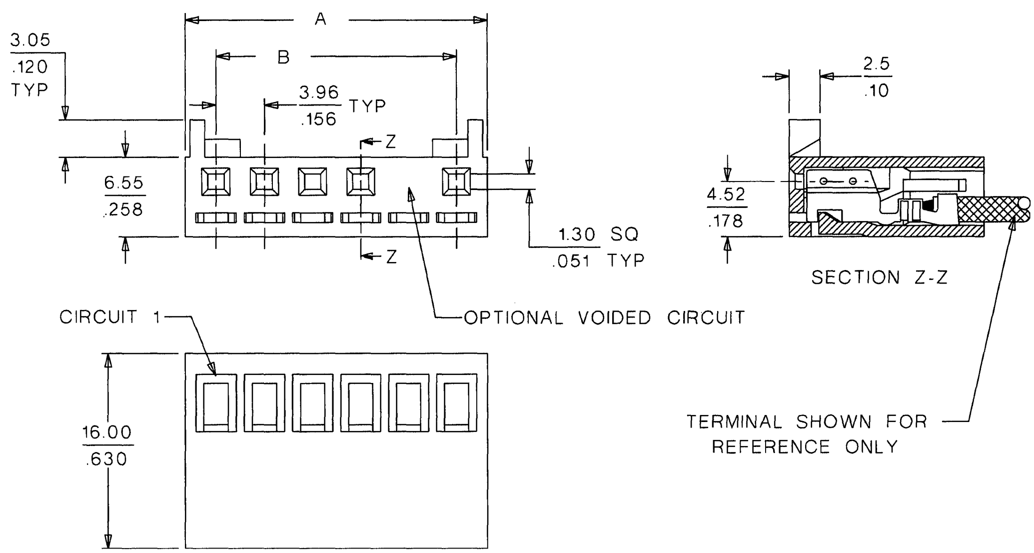
Features and Benefits
- Ramp and ribs provide 180° and side-to-side polarization
- Housing option A provides passive retention to headers with friction lock backwalls
- Integral housing latch eliminates potential for terminal back-out due to damaged locking tangs
- Spring box terminal design offers 4 points of contact; this interconnect system is recommended for severe environmental and high vibration applications

Reference Information
Product Specification: PS-5194/5225
UL File No.: E29179
CSA File No.: LR19980
Use With: 5194 and 5225
Designed In: Inches

Electrical
Voltage: 250V AC max.
Current: Phosphor Bronze—7.0A max.
Brass—5.0A max.
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC

Physical
Housing: White polyester, UL 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin over Copper





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	With Ramps and Ribs	Without Ramps and Ribs	A	B
2	43061-0002	43061-0013	9.06 (.357)	3.96 (.156)
3	43061-0003	43061-0014	13.02 (.513)	7.92 (.312)
4	43061-0004	43061-0015	16.98 (.669)	11.88 (.468)
5	43061-0005	43061-0016	20.94 (.824)	15.84 (.624)
6	43061-0006	43061-0017	24.90 (.980)	19.80 (.780)
7	43061-0007	43061-0018	28.86 (1.136)	23.76 (.935)
8	43061-0008	43061-0019	32.82 (1.292)	27.72 (1.091)
9	43061-0009	43061-0020	36.78 (1.448)	31.68 (1.247)
10	43061-0010	43061-0021	40.74 (1.604)	35.64 (1.403)
11	43061-0011	43061-0022	44.70 (1.760)	39.60 (1.560)
12	43061-0012	43061-0023	48.66 (1.916)	43.56 (1.715)

FEATURES AND SPECIFICATIONS

3.96mm (.156") and 5.08mm (.200") Pitch Crimp Terminal

2478/2578/8818

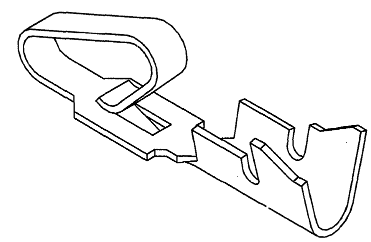
Features and Benefits
- For 3.96mm (.156") and 5.08mm (.200") applications
- Double cantilever design
- Single beam terminal is available for low insertion force 7821 Series (contact factory for further details)
- For low-level current and voltage use Gold plating
- Phosphor Bronze is recommended for rated current
- Complete line of terminal crimping equipment available (see Section W of this catalog)

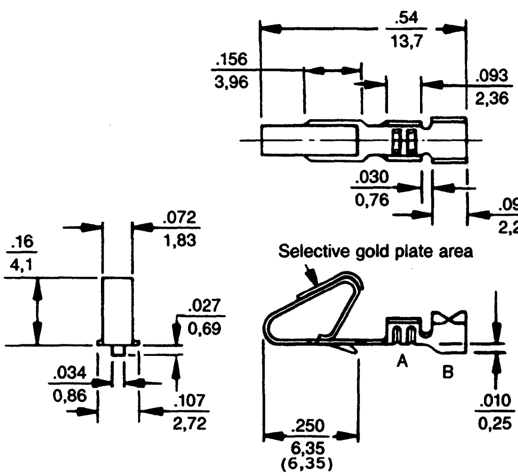
Reference Information
Product Specification: PS-08-50
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Use With: 2139, 3069 and 41695
Designed In: Inches

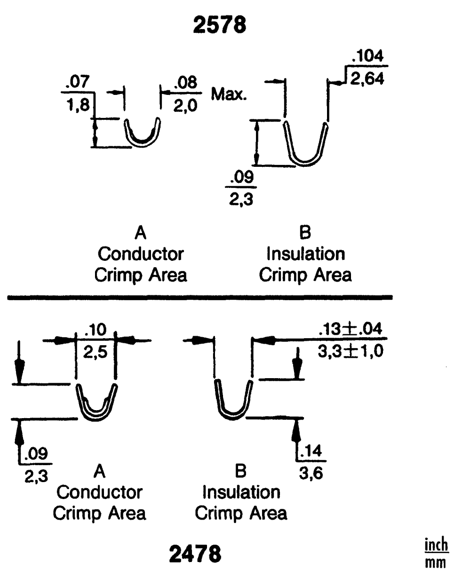
Electrical
Voltage: 250V AC max.
Current: Phosphor Bronze—7.0A max.
Brass—5.0A max.
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical
Contact Insertion Force: 1.8kg (4 lb) max.
Contact Retention to Housing: 3.6kg (8 lb) min.
Wire Pull-Out Force: 20 lb max./18 AWG
Normal Force: 0.75kg (1.65 lb)
Durability: 25 cycles max.

Physical
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: Phosphor Bronze—0 to +75°C
Brass—0 to +50°C







ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Insulation OD	Series	Material	Order No.					
				Tin Plating		Gold Plating No. 1		Gold Plating No. 2	
				Loose	Chain	Loose	Chain	Loose	Chain
18-20	2.79 (.110) max.	2478	Phosphor Bronze	• 08-52-0072	• 08-52-0071	• 08-58-0122	• 08-58-0121	• 08-65-0115	• 08-65-0114
18-20	2.79 (.110) max.	2478	Brass	08-50-0106	08-50-0105	08-56-0106	08-56-0105	08-55-0104	08-55-0103
22-26	1.65 (.065) max.	2578	Phosphor Bronze	• 08-50-0134	• 08-50-0133	• 08-58-0126	• 08-58-0125	• 08-65-0117	• 08-65-0116
22-26	1.65 (.065) max.	2578	Brass	08-50-0108	08-50-0107	08-56-0108	08-56-0107	08-55-0106	08-55-0105
18-22	2.90 (.095) max.	8818	Phosphor Bronze	08-52-0132	08-52-0131	08-58-0136	08-58-0135	08-65-0129	08-65-0128
18-22	2.90 (.095) max.	8818	Brass	08-50-0023	08-50-0008				

• US Standard Product, available through Molex franchised distributors
Recommended wire range assumes stranded wire
Plating No. 1: 20μ" min. Gold in contact area with a flash overall
Plating No. 2: 15μ" min. Gold in contact area only

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Crimp Terminal Housing

6442

Use with Trifurcon™ Terminals

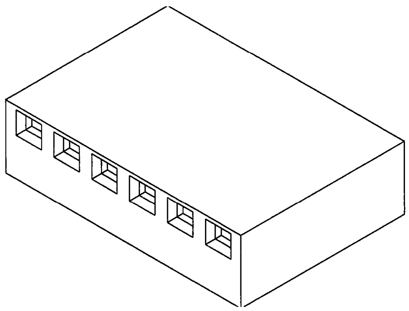
Features and Benefits
- Sizes 2 to 24 circuits
- Available with voided circuits in various locations (contact factory)
- Optional continuous locking ramp on housings for up to 8 circuits; for housings with more than 8 circuits, ramp spans 4 circuits on each end
- Polarizing keys and pegs available
- Offset pin entry holes provide 180° polarization
- Side hook option available for panel mount applications (contact factory)

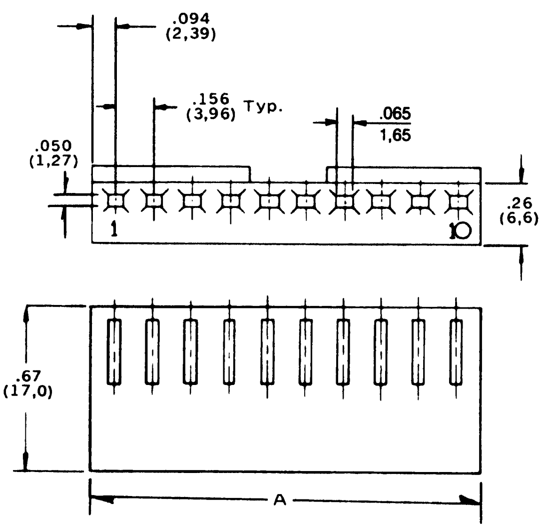
Reference Information
Product Specification: PS-40-02
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2220, 3190, 3192, 3243, 3246, 3279, A4042, 41661, 41662, 41671, 41672, 41681, 41682, 41701, 41711, 41721, 41741, 41761, 41771, 41772, 41791, 41792, 42441, 42461, 42471, 42472, 42491 and 42492
Use With: 6438, 6838 and 7258 Trifurcon terminals
Designed In: Inches

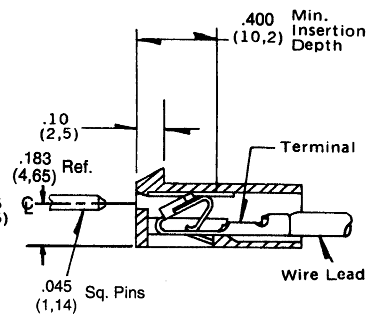
Electrical
Voltage: 250V AC max.
Current: Phosphor Bronze—7.0A max.
Brass—5.0A max.
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical
Contact Insertion Force: 1.8kg (4 lb)
Contact Retention to Housing: 3.6kg (8 lb)
Wire Pull-Out Force: 20 lb max./18 AWG
Mating Force: Square pin—2.25 lb max.
Round pin—1.60 lb max.
Unmating Force: Square pin—0.84 lb min.
Round pin—0.60 lb min.
Normal Force: 0.75kg (1.65 lb)
Durability: 25 cycles max.

Physical
Housing: Nylon, UL 94V-2 (see 41695 for 94V-0)
Temperature: 0 to +75°C







Typical Section View
Showing Locking Ramp

Terminal shown locked
into housing

inch
mm

	Order No.
Polarizing Key	89-00-3001
Polarizing Peg	89-00-3002

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. With Ramp	Order No. Without Ramp	Dimension A
2	• 26-03-4020	26-03-3021	8.74 (.344)
3	• 26-03-4030	26-03-3031	12.70 (.500)
4	• 26-03-4041	26-03-3041	16.66 (.656)
5	• 26-03-4050	26-03-3051	20.62 (.812)
6	• 26-03-4061	26-03-3061	24.59 (.968)
7	• 26-03-4070	26-03-3071	28.55 (1.124)
8	• 26-03-4081	26-03-3081	32.51 (1.280)
9	• 26-03-4090	26-03-3091	36.47 (1.436)
10	• 26-03-4101	26-03-3101	40.44 (1.592)
11	• 26-03-4111	26-03-3111	44.40 (1.748)
12	• 26-03-4121	26-03-3121	48.36 (1.904)
13	• 26-03-4131	26-03-3131	52.31 (2.060)

Circuits	Order No. With Ramp	Order No. Without Ramp	Dimension A
14	• 26-03-4141	26-03-3141	56.29 (2.216)
15	• 26-03-4151	26-03-3151	60.25 (2.372)
16	• 26-03-4161	26-03-3161	64.21 (2.528)
17	• 26-03-4171	26-03-3171	68.17 (2.684)
18	• 26-03-4181	26-03-3181	72.14 (2.840)
19	• 26-03-4191	26-03-3191	76.10 (2.996)
20	• 26-03-4201	26-03-3201	80.06 (3.152)
21	• 26-03-4211	26-03-3211	84.02 (3.308)
22	• 26-03-4221	26-03-3221	87.99 (3.464)
23	• 26-03-4231	26-03-3231	91.95 (3.620)
24	• 26-03-4241	26-03-3241	95.91 (3.776)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Trifurcon™ Crimp Terminal

6838/7258/6438

Features and Benefits
- Complete line of terminal crimping equipment available (see Section W of this catalog)
- Accommodates 18 to 26 AWG
- Trifurcon design provides 3 distinct points of contact
- Ideal choice where high shock or vibration exists
- For low current/voltage, Gold is recommended (contact factory)
- Phosphor Bronze recommended for rated current

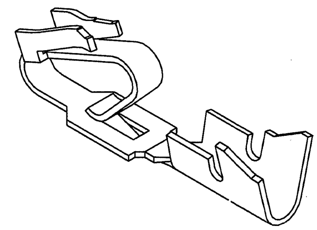
Reference Information
Product Specification: PS-40-02
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
Use With: 6442 and 41695 crimp terminal housings, and 7660 and 7674 IDT housings
Designed In: Inches

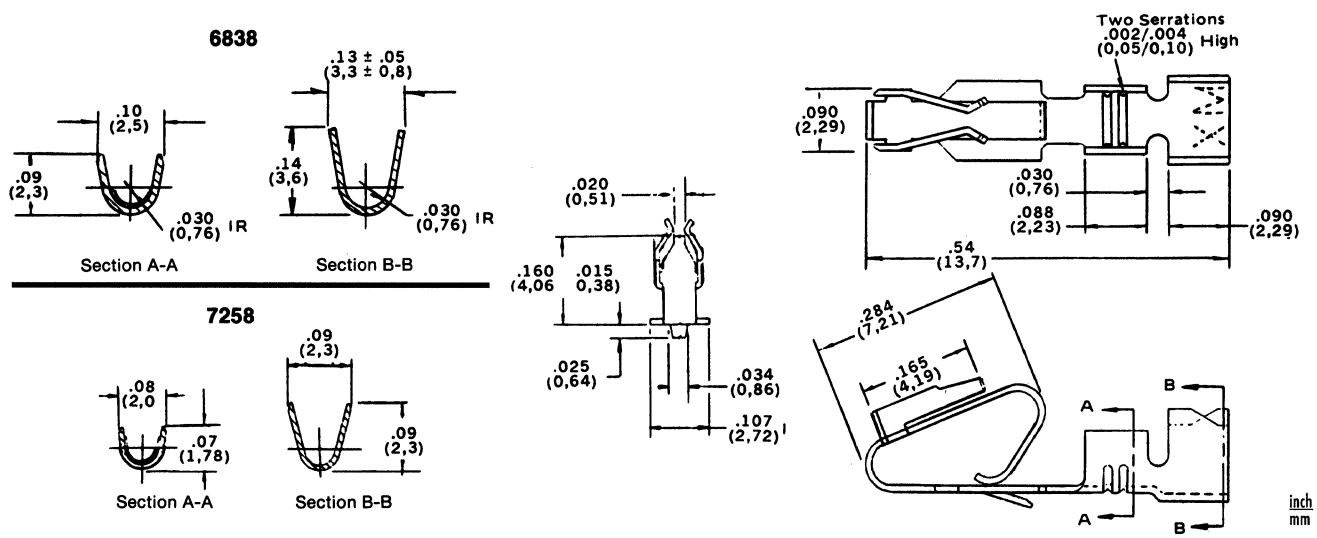
Electrical
Voltage: 250V AC max.
Current: Phosphor Bronze—7.0A max.
Brass—5.0A max.
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Mechanical
Contact Insertion Force: 1.8kg (4 lb) max.
Contact Retention to Housing: 3.6kg (8 lb) min.
Wire Pull-Out Force: 20 lb max./18 AWG
Normal Force: 0.75kg (1.65 lb)
Durability: 25 cycles max.

Physical
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: Phosphor Bronze—0 to +75°C
Brass—0 to +50°C

An ideal choice for situations in which flux contamination, high shock or vibration exist. This terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at 3 points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling.





ORDERING INFORMATION AND DIMENSIONS

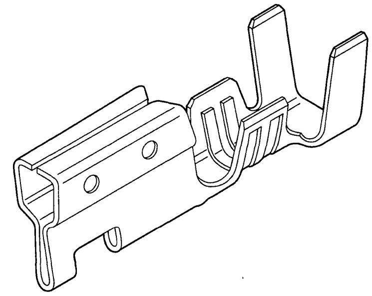
Wire Size AWG	Insulation OD	Series	Material	Order No.					
				Tin Plating		Gold Plating		Select Gold Plating	
				Loose	Chain	Loose	Chain	Loose	Chain
18-20	2.79 (.110) max.	6838	Phosphor Bronze	• 08-52-0113	• 08-52-0112	• 08-58-0189	• 08-58-0187	• 08-58-0111	• 08-58-0110
18-20	2.79 (.110) max.	6838	Brass	08-50-0189	08-50-0187				
22-26	1.65 (.065) max.	7258	Phosphor Bronze	• 08-52-0125	• 08-52-0124	• 08-56-0124	• 08-56-0123	• 08-65-0122	• 08-65-0121
22-26	1.65 (.065) max.	7258	Brass	08-50-0185	08-50-0183				
18-20	2.41 (.095) max.	6438	Brass	08-50-0165	08-50-0164	08-56-0139	08-56-0137	08-56-0133	08-56-0135

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Crimp Terminal

5194/5225 Spring Box



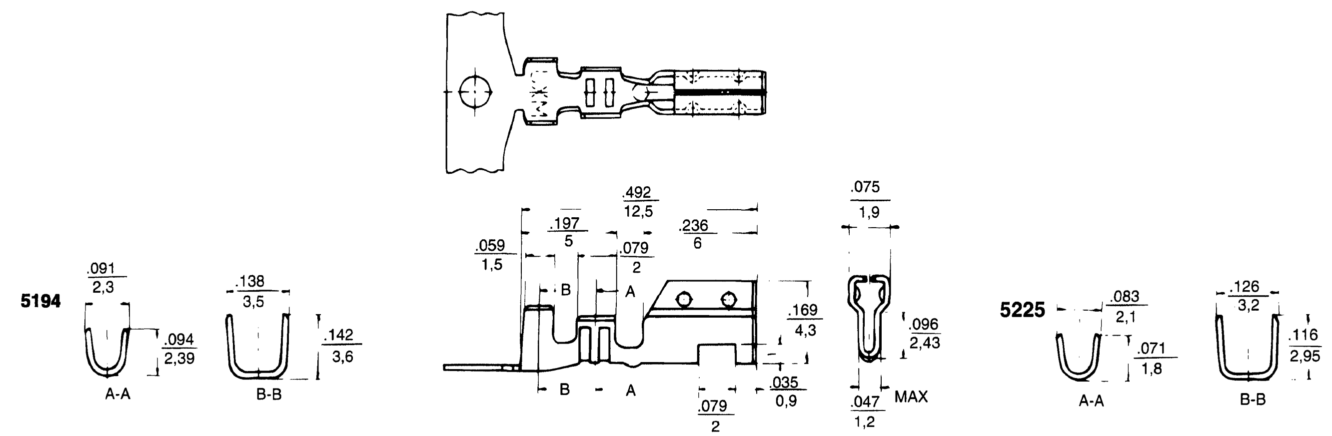
Features and Benefits
- 4-point contact
- Anti-fishhooking contact design

Reference Information
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
Use With: 5195-N, 5196-N, 5197-N, 5198-N and 5199-N housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5194—7.0A max.
5225—4.0A max.
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: 5194—Brass and Phosphor Bronze
5225—Brass
Plating: Tin
Temperature: -40 to +105°C
Wire Accommodation: 5194—18 to 24 AWG
5225—22 to 28 AWG

Available Primarily in the Far East



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Order No.	Terminal	Wire Gauge AWG	Insulation Diameter	Contact Material	Automatic Tooling Press	Automatic Tooling Crimp Die	Hand Tool
08-70-1031	Chain	18-24	1.30-3.20mm	Tin-Plated Brass or Phosphor Bronze	11-26-0033 M15A or 57117-4000	11-26-0028 JM5859A	
08-70-1030	Loose						11-26-0058 JHTR5904
08-70-1029	Chain	22-28	1.20-2.60mm		11-26-0033 M15A or 57117-4000	11-26-0028 JM5859A	
08-70-1028	Loose						JHTR5906

Recommended wire range assumes stranded wire

3.96mm (.156") Pitch SPOX™ Crimp Terminal Housing

5195-N

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 12 circuits
- With locking ramp
- Molded-in locking arm for terminal

Reference Information

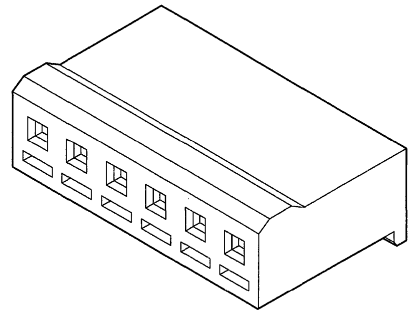
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5271-NA, 5272-NA, 5273-NA, 5274-NA and 5096-NC headers
Use With: 5194 and 5225
Designed In: Millimeters

Electrical

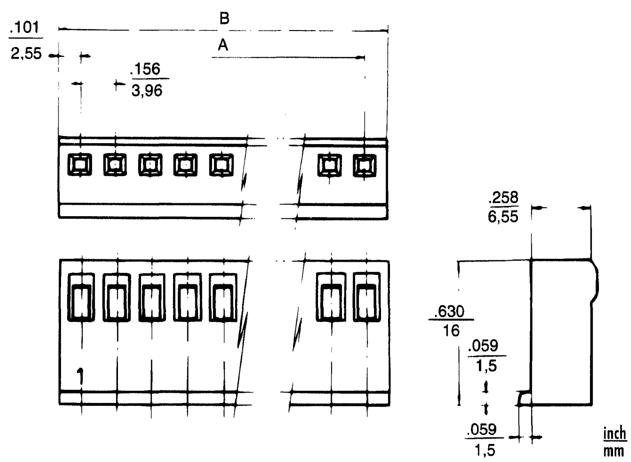
Voltage: 250V
Current: 5194—7.0A
5225—4.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-50-1021	3.96 (.156)	9.06 (.357)
3	09-50-1031	7.92 (.312)	13.02 (.513)
4	09-50-1041	11.88 (.467)	16.98 (.669)
5	09-50-1051	15.84 (.623)	20.94 (.824)
6	09-50-1061	19.80 (.779)	24.90 (.980)
7	09-50-1071	23.76 (.935)	28.86 (1.136)
8	09-50-1081	27.72 (1.091)	32.82 (1.292)
9	09-50-1091	31.68 (1.247)	36.78 (1.448)
10	09-50-1101	35.64 (1.403)	40.74 (1.604)
11	09-50-1111	39.60 (1.559)	44.70 (1.760)
12	09-50-1121	43.56 (1.714)	48.66 (1.916)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Crimp Terminal Housing

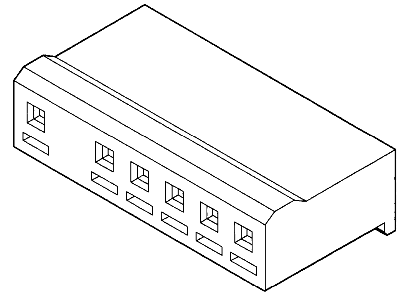
5196-N

Features and Benefits
- Sizes 2 to 11 circuits
- With locking ramp
- Second circuits blanked for polarization
- Molded pull tab
- Molded-in locking arm for terminal

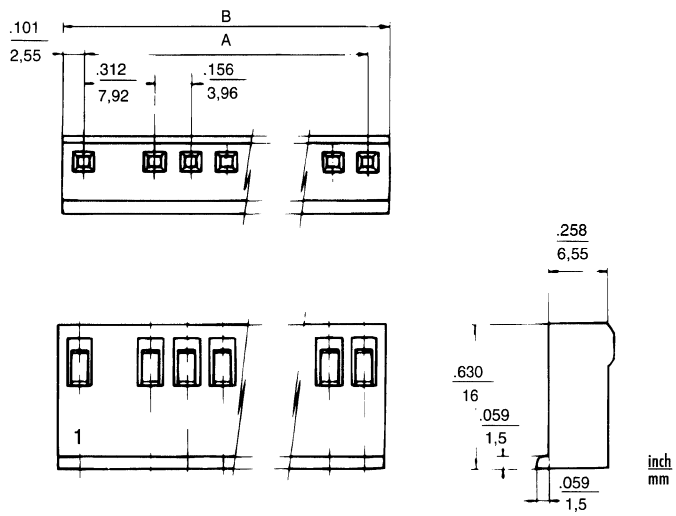
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5275-NA, 5276-NA, 5277-NA and 5278-NA headers
Use With: 5194 and 5225
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5194—7.0A
5225—4.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



Available Primarily in the Far East



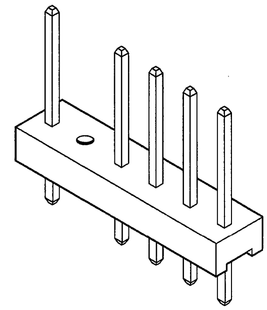
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-50-1023	7.92 (.312)	13.02 (.512)
3	09-50-1033	11.88 (.467)	16.98 (.669)
4	09-50-1043	15.84 (.623)	20.94 (.824)
5	09-50-1053	19.80 (.779)	24.90 (.980)
6	09-50-1063	23.76 (.935)	28.86 (1.136)
7	09-50-1073	27.72 (1.091)	32.82 (1.292)
8	09-50-1083	31.68 (1.247)	36.78 (1.448)
9	09-50-1093	35.64 (1.403)	40.74 (1.604)
10	09-50-1103	39.60 (1.559)	44.70 (1.760)
11	09-50-1113	43.56 (1.714)	48.66 (1.916)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Header

5275-NA Straight



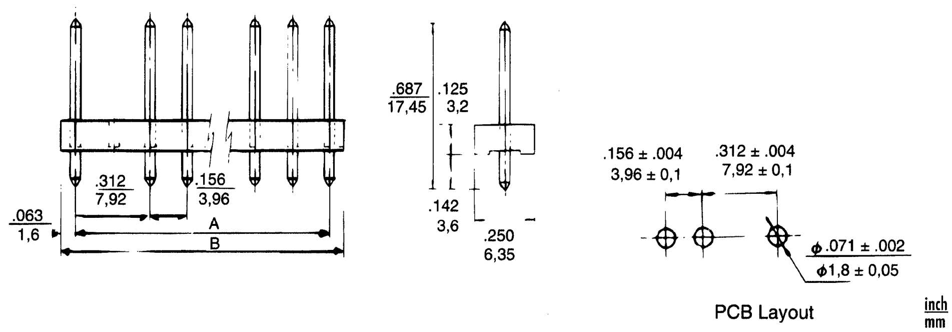
Features and Benefits
- Sizes 2 to 11 circuits
- Second circuit blanked for polarization
- Other plating options available

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5196-N housing
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C

Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-67-4022	7.92 (.312)	11.12 (.437)
3	09-67-4032	11.88 (.467)	15.08 (.594)
4	09-67-4042	15.84 (.623)	19.04 (.750)
5	09-67-4052	19.80 (.779)	23.00 (.906)
6	09-67-4062	23.76 (.935)	26.96 (1.061)
7	09-67-4072	27.72 (1.091)	30.92 (1.217)
8	09-67-4082	31.68 (1.247)	34.88 (1.373)
9	09-67-4092	35.64 (1.403)	38.84 (1.529)
10	09-67-4102	39.60 (1.559)	42.80 (1.685)
11	09-67-4112	43.56 (1.714)	46.76 (1.841)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Connector

7675

IDT

Double Cantilever Contact

Features and Benefits
- Sizes 2 to 24 circuits
- Standard with locking ramp
- Feed-to and feed-through versions
- Molded-in strain reliefs
- Optional covers, polarizing keys and pegs
- Double cantilever contacts preloaded in housing

Reference Information
Product Specification: PS-7660
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: 41661, 41662, 41681, 41682, 41741, 41761, 41771, 41772, 41791 and 41792 headers
Use Molex Cable: 7382, 7517, 8868 and 40174
Designed In: Inches

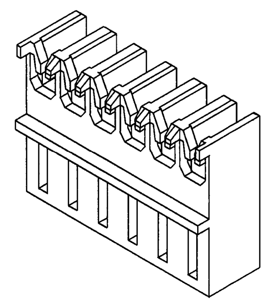
Electrical
Voltage: 250V
Current: 5.0A (22, 20 and 18 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 2000V AC
Insulation Resistance: 200K MΩ min.

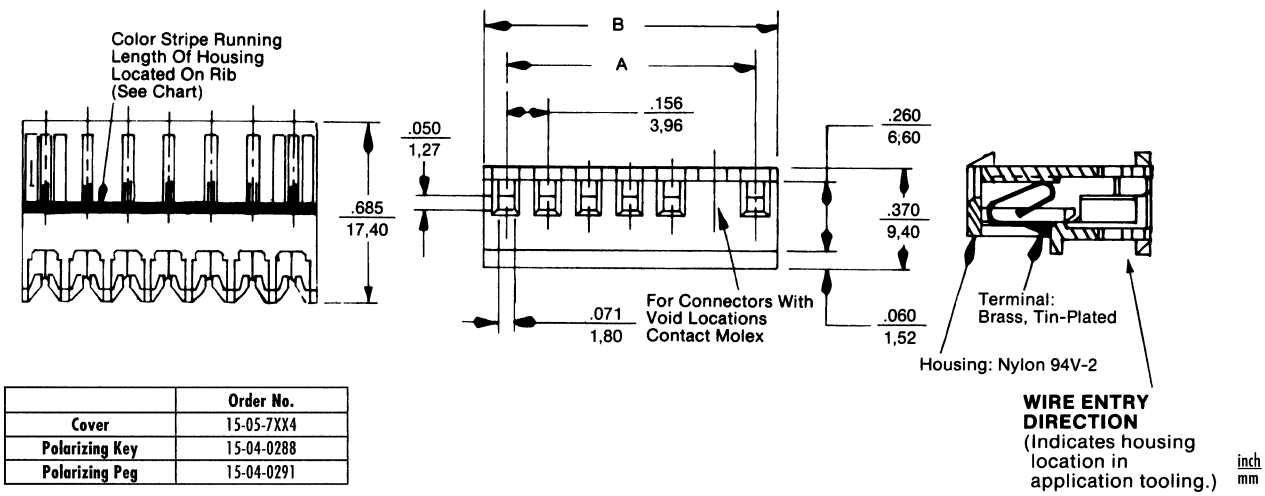
Mechanical
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force:

AWG	18	20	22	24
Horizontal (lb)	20.0	17.0	12.7	8.0
Vertical (lb)	5.0	3.8	3.5	2.4

Mating Force: 2 lb max.
Unmating Force: 0.5 lb min.
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-2
Contact: Brass
Plating: Tin or Gold
Temperature: -40 to +75°C
Wire Range: 1.14mm (.045") to 2.41mm (.095") OD solid or stranded





	Order No.
Cover	15-05-7XX4
Polarizing Key	15-04-0288
Polarizing Peg	15-04-0291

ORDERING INFORMATION AND DIMENSIONS

Order No.		Style	Color	Types of Wire Terminated
With Locking Ramp	Without Locking Ramp			
09-06-0XX8	09-07-0XX8	Feed-to	Yellow	18 AWG solid or fused stranded
09-06-0XX7	09-07-0XX7	Feed-through		
09-06-1XX8	09-07-1XX8	Feed-to	Red	20 AWG solid or fused stranded, and 18 AWG stranded wire
09-06-1XX7	09-07-1XX7	Feed-through		
09-06-2XX8	09-07-2XX8	Feed-to	Blue	20 AWG stranded
09-06-2XX7	09-07-2XX7	Feed-through		
09-06-3XX8	09-07-3XX8	Feed-to	Green	26 and 27 AWG stranded, fused stranded, and 24 AWG stranded wire
09-06-3XX7	09-07-3XX7	Feed-through		
09-06-5XX8	09-07-5XX8	Feed-to	Black	24 and 22 AWG solid or fused stranded, and 22 AWG stranded wire
09-06-5XX7	09-07-5XX7	Feed-through		
Replace XX with no. of circuits, 02-24				

Circuits	Dimension A	Dimension B
2	3.96 (.156)	8.38 (.330)
3	7.92 (.312)	12.34 (.486)
4	11.89 (.468)	16.31 (.642)
5	15.85 (.624)	20.27 (.798)
6	19.81 (.780)	24.23 (.954)
7	23.77 (.932)	28.19 (1.110)
8	27.74 (1.092)	32.16 (1.266)
9	31.70 (1.248)	36.12 (1.422)
10	35.66 (1.404)	40.08 (1.578)
11	39.62 (1.560)	44.04 (1.734)
12	43.59 (1.716)	48.00 (1.890)
13	47.55 (1.872)	51.97 (2.046)
14	51.51 (2.028)	55.93 (2.202)
15	55.47 (2.184)	59.89 (2.358)
16	59.44 (2.340)	63.86 (2.514)
17	63.40 (2.496)	67.82 (2.670)
18	67.36 (2.652)	71.78 (2.826)
19	71.32 (2.808)	75.74 (2.982)
20	75.29 (2.964)	79.70 (3.138)
21	79.25 (3.120)	83.67 (3.294)
22	83.21 (3.276)	87.63 (3.450)
23	87.17 (3.432)	91.59 (3.606)
24	91.14 (3.588)	95.55 (3.762)

Note: Some wires require deviation from chart

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Connector

7674

IDT, 3-point Trifurcon™ Contact

Features and Benefits
- Sizes 2 to 16 circuits
- Standard with locking ramp
- Feed-to and feed-through versions
- Molded-in strain reliefs
- Optional covers, polarizing keys and pegs
- 3-point contact Trifurcon contacts preloaded in housing

Reference Information
Product Specification: PS-7660
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: 41661, 41662, 41681, 41682, 41741, 41761, 41771, 41772, 41791 and 41792 headers
Use Molex Cable: 7382, 7517, 8868 and 40174
Designed In: Inches

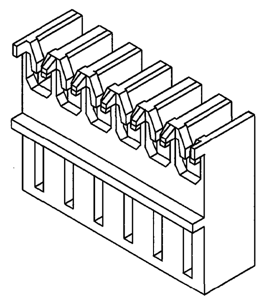
Electrical
Voltage: 250V
Current: 5.0A (22, 20 and 18 AWG)
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 2000V AC
Insulation Resistance: 200 MΩ min.

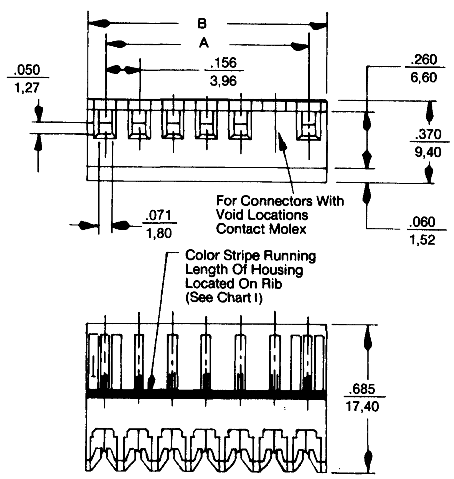
Mechanical
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force:

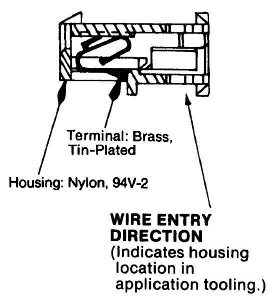
AWG	Horizontal (lb)	Vertical (lb)
18	20.0	5.0
20	17.0	3.8
22	12.7	3.5
24	8.0	2.4

Mating Force: 2.5 lb max.
Unmating Force: 1.2 lb max.
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-2
Contact: Brass
Plating: Tin or Gold
Temperature: -40 to +75°C
Wire Range: 1.14mm (.045") to 2.41mm (.095") OD solid or stranded







inch
mm

	Order No.
Cover	15-05-7XX4
Polarizing Key	15-04-0288
Polarizing Peg	15-04-0291

ORDERING INFORMATION AND DIMENSIONS

Order No.		Style	Color	Types of Wire Terminated
With Locking Ramp	Without Locking Ramp			
09-06-0XX0	09-07-0XX0	Feed-to	Yellow	18 AWG solid or fused stranded
09-06-0XX9	09-07-0XX9	Feed-through		
09-06-1XX0	09-07-1XX0	Feed-to	Red	20 AWG solid or fused stranded, and 18 AWG stranded wire
09-06-1XX9	09-07-1XX9	Feed-through		
09-06-2XX0	09-07-2XX0	Feed-to	Blue	20 AWG stranded wire
09-06-2XX9	09-07-2XX9	Feed-through		
09-06-3XX0	09-07-3XX0	Feed-to	Green	26 and 27 AWG stranded, fused stranded, and 24 AWG stranded wire
09-06-3XX9	09-07-3XX9	Feed-through		
09-06-5XX0	09-07-5XX0	Feed-to	Black	24 and 22 AWG solid or fused stranded, and 22 AWG stranded wire
09-06-5XX9	09-07-5XX9	Feed-through		
Replace XX with no. of circuits required, 02-16				

Circuits	Dimension A	Dimension B
2	3.96 (.156)	8.38 (.330)
3	7.92 (.312)	12.34 (.486)
4	11.89 (.468)	16.31 (.642)
5	15.85 (.624)	20.27 (.798)

Circuits	Dimension A	Dimension B
6	19.81 (.780)	24.23 (.954)
7	23.77 (.932)	28.19 (1.110)
8	27.74 (1.092)	32.16 (1.266)
9	31.70 (1.248)	36.12 (1.422)

Circuits	Dimension A	Dimension B
10	35.66 (1.404)	40.08 (1.578)
11	39.62 (1.560)	44.04 (1.734)
12	43.59 (1.716)	48.00 (1.890)
13	47.55 (1.872)	51.97 (2.046)

Circuits	Dimension A	Dimension B
14	51.51 (2.028)	55.93 (2.202)
15	55.47 (2.184)	59.89 (2.358)
16	59.44 (2.340)	63.86 (2.514)

Note: Some wires require deviation from chart

FEATURES AND SPECIFICATIONS

molex

3.96mm (.156") Pitch PC Board Connector

41815

Right Angle Mount Type A

Features and Benefits

- Sizes 2 to 15 circuits
- Large lead-in chamfers
- Side entry mount
- Polarizing key available
- Various tail lengths available
- Single beam available for low insertion force

Reference Information

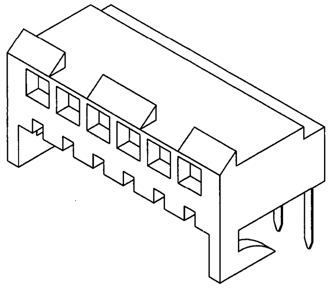
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3192, 41661, 41662, 41671, 41701, 41711, 41741, 41761, 41771, 41772, 41791 and 41792
Designed In: Inches

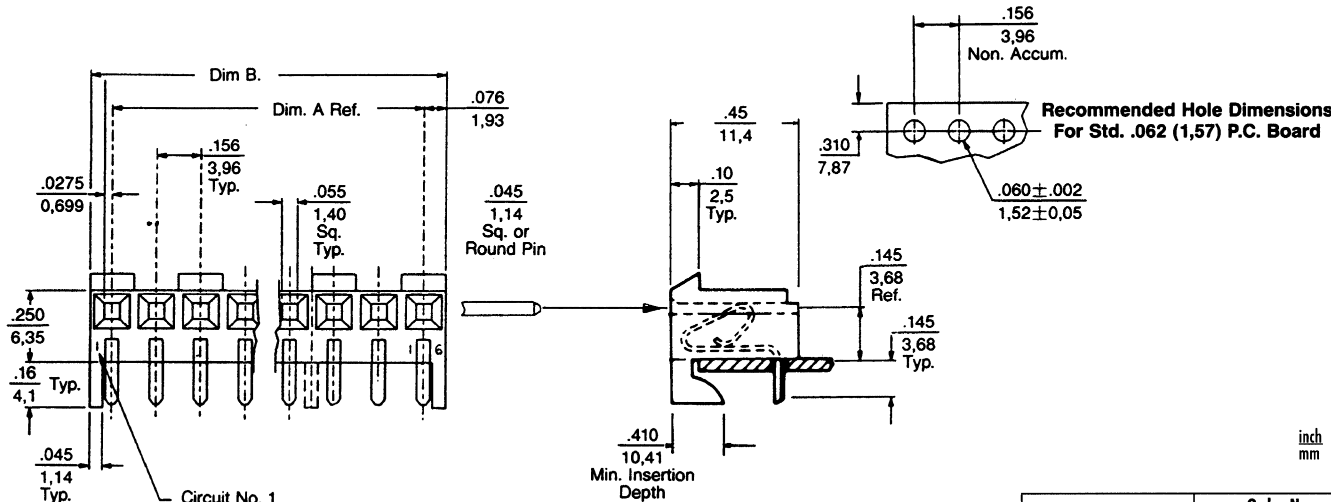
Electrical

Voltage: 250V AC max.
Current: 5.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Physical

Housing: Polyester, UL 94V-0
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: 0 to +75°C





	Order No.
Polarizing Key	• 15-04-0297

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Select Gold	A	B
2	• 09-48-2021	• 09-48-3025	3.96 (.156)	7.82 (.308)
3	• 09-48-2031	• 09-48-3035	7.92 (.312)	11.79 (.464)
4	• 09-48-2041	• 09-48-3045	11.89 (.468)	15.75 (.620)
5	• 09-48-2051	• 09-48-3055	15.85 (.624)	19.70 (.776)
6	• 09-48-2061	• 09-48-3065	19.81 (.780)	23.67 (.932)
7	• 09-48-2071	• 09-48-3075	23.77 (.936)	27.64 (1.088)
8	• 09-48-2081	• 09-48-3085	27.74 (1.092)	31.60 (1.244)
9	• 09-48-2091	• 09-48-3095	31.70 (1.248)	35.56 (1.400)
10	• 09-48-2101	• 09-48-3105	35.66 (1.404)	39.52 (1.556)
11	• 09-48-2111	• 09-48-3115	39.62 (1.560)	43.48 (1.712)
12	• 09-48-2121	• 09-48-3125	43.59 (1.716)	47.45 (1.868)
13	• 09-48-2131	• 09-48-3135	47.55 (1.872)	51.41 (2.024)
14	• 09-48-2141	• 09-48-3145	51.50 (2.028)	55.37 (2.180)
15	• 09-48-2151	• 09-48-3155	55.47 (2.184)	59.33 (2.336)

• US Standard Product, available through Molex franchised distributors
* Dependent upon PC board

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch PC Board Connector

41815

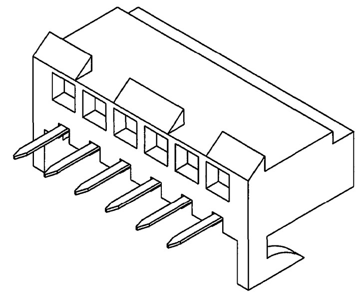
Bottom Entry Type B

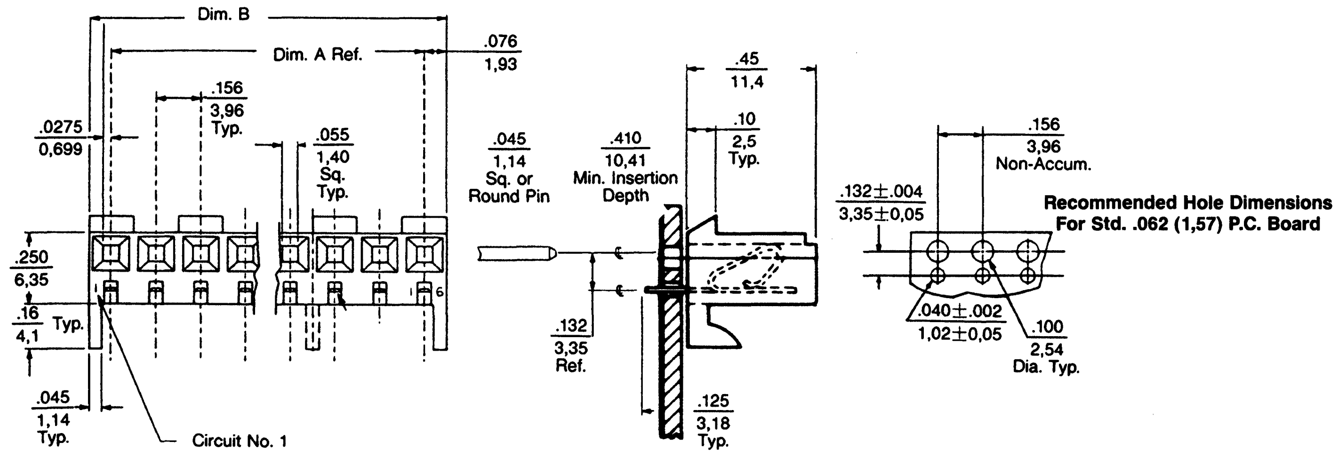
Features and Benefits
- Sizes 2 to 15 circuits
- Large lead-in chamfers
- Bottom entry mount
- Polarizing key available
- Bottom entry PCB connectors require longer pin lengths on mating headers (contact factory)

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex KK® 3.96mm (.156") center headers or 1.14mm (.045") staked pins
Designed In: Inches

Electrical
Voltage: 250V AC max.
Current: 5.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: 0 to +75°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Select Gold	A	B
2	• 09-48-2022	• 09-48-3024	3.96 (.156)	7.82 (.308)
3	• 09-48-2032	• 09-48-3034	7.92 (.312)	11.79 (.464)
4	• 09-48-2042	• 09-48-3044	11.89 (.468)	15.75 (.620)
5	• 09-48-2052	• 09-48-3054	15.85 (.624)	19.70 (.776)
6	• 09-48-2062	• 09-48-3064	19.81 (.780)	23.67 (.932)
7	• 09-48-2072	• 09-48-3074	23.77 (.936)	27.64 (1.088)
8	• 09-48-2082	• 09-48-3084	27.74 (1.092)	31.60 (1.244)
9	• 09-48-2092	• 09-48-3094	31.70 (1.248)	35.56 (1.400)
10	• 09-48-2102	• 09-48-3104	35.66 (1.404)	39.52 (1.556)
11	• 09-48-2112	• 09-48-3114	39.62 (1.560)	43.48 (1.712)
12	• 09-48-2122	• 09-48-3124	43.59 (1.716)	47.45 (1.868)
13	• 09-48-2132	• 09-48-3134	47.55 (1.872)	51.41 (2.024)
14	• 09-48-2142	• 09-48-3144	51.50 (2.028)	55.37 (2.180)
15	• 09-48-2152	• 09-48-3154	55.47 (2.184)	59.33 (2.336)

• US Standard Product, available through Molex franchised distributors
* Dependent upon PC board

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch PC Board Connector

41815

Top Entry Type C

Features and Benefits

- Sizes 2 to 15 circuits
- Large lead-in chamfers
- Top entry mount
- Available with hooks removed (contact factory)
- Polarizing key available
- Kinked terminal option available, and single beam available for low insertion force

Reference Information

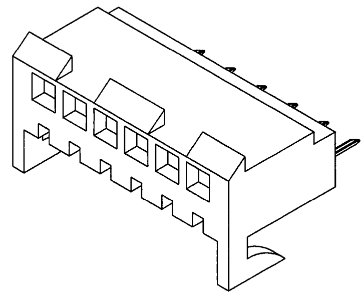
Product Specification: PS-08-80
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex KK® 3.96mm (.156") center headers or 1.14mm (.045") staked pins
Designed In: Inches

Electrical

Voltage: 250V AC max.
Current: 5.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

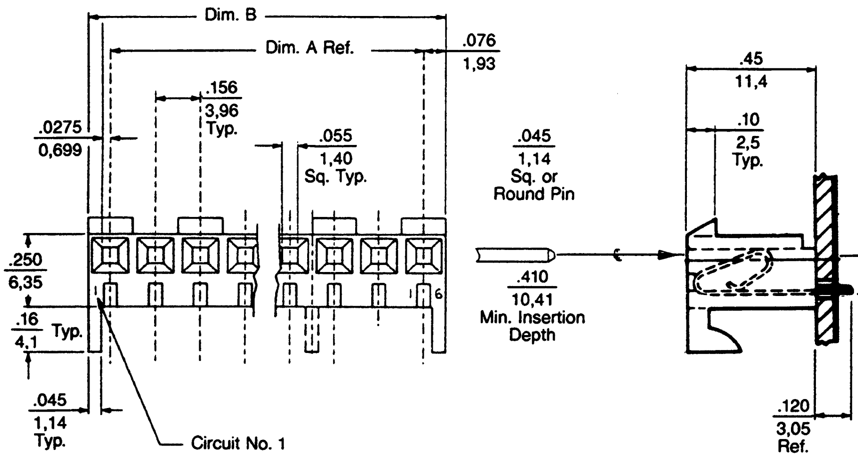
Physical

Housing: Polyester, UL 94V-0
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: 0 to +75°C

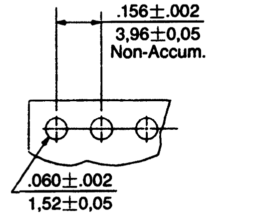


PCB Connectors

J



Recommended Hole Dimensions For Std. .062 (1,57) P.C. Board



inch
mm

	Order No.
Polarizing Key	• 15-04-0297

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Select Gold	A	B
2	• 09-48-2023	• 09-48-3026	3.96 (.156)	7.82 (.308)
3	• 09-48-2033	• 09-48-3036	7.92 (.312)	11.79 (.464)
4	• 09-48-2043	• 09-48-3046	11.89 (.468)	15.75 (.620)
5	• 09-48-2053	• 09-48-3056	15.85 (.624)	19.70 (.776)
6	• 09-48-2063	• 09-48-3066	19.81 (.780)	23.67 (.932)
7	• 09-48-2073	• 09-48-3076	23.77 (.936)	27.64 (1.088)
8	• 09-48-2083	• 09-48-3086	27.74 (1.092)	31.60 (1.244)
9	• 09-48-2093	• 09-48-3096	31.70 (1.248)	35.56 (1.400)
10	• 09-48-2103	• 09-48-3106	35.66 (1.404)	39.52 (1.556)
11	• 09-48-2113	• 09-48-3116	39.62 (1.560)	43.48 (1.712)
12	• 09-48-2123	• 09-48-3126	43.59 (1.716)	47.45 (1.868)
13	• 09-48-2133	• 09-48-3136	47.55 (1.872)	51.41 (2.024)
14	• 09-48-2143	• 09-48-3146	51.50 (2.028)	55.37 (2.180)
15	• 09-48-2153	• 09-48-3156	55.47 (2.184)	59.33 (2.336)

• US Standard Product, available through Molex franchised distributors
* Dependent upon PC board

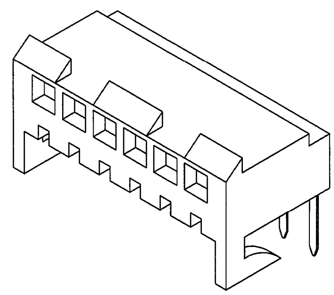
FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch PC Board Connector

2145/3215

Side Entry

Type A

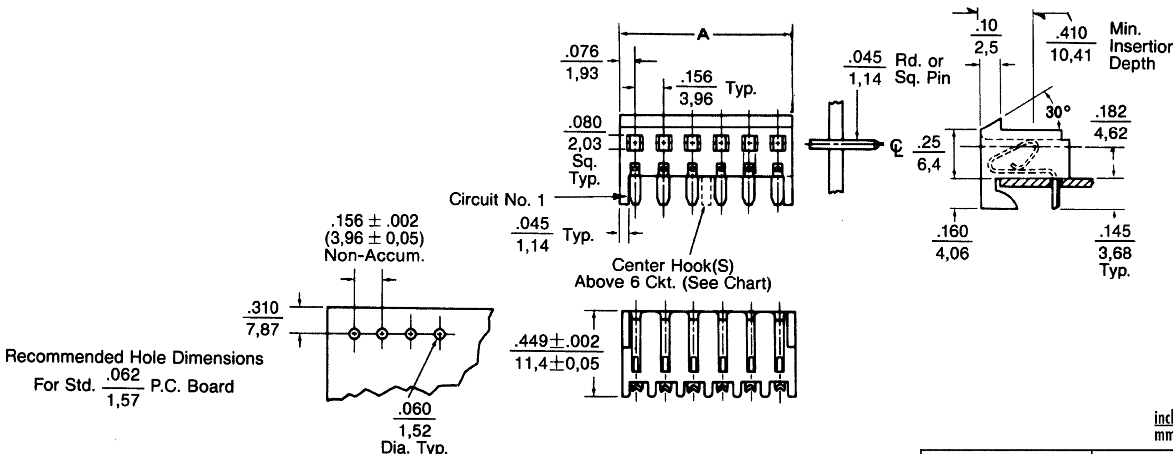


Features and Benefits
- Sizes 2 to 15 circuits
- Polarizing key and peg available
- Various pin lengths available
- Single beam available for low insertion force
- See 6365 for Trifurcon™ equivalent (contact factory)

Reference Information
Packaging: Bags/trays
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3192, 41661, 41662, 41671, 41672 headers and Molex KK® 3.96mm (.156") center headers and 1.14mm (.045") pins
Designed In: Inches

Electrical
Voltage: 250V AC max.
Current: 5.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Physical
Housing: Nylon, UL 94V-2
(see 41815 for polyester, UL 94V-0)
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: 0 to +75°C



	Order No.
Polarizing Key	• 15-04-0219
Polarizing Peg	• 15-04-0220

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension A	Center Hook(s) Location
	2145		3215			
	Tin/Lead	Select Gold	Tin	Select Gold		
2	• 09-52-3021	• 09-62-3021			7.82 (.308)	
3	• 09-52-3031	• 09-62-3031	26-11-6034	26-11-6031	11.79 (.464)	
4	• 09-52-3041	• 09-62-3041	26-11-6044	26-11-6041	15.75 (.620)	
5	• 09-52-3051	• 09-62-3051	26-11-6054	26-11-6051	19.71 (.776)	
6	• 09-52-3061	• 09-62-3061	26-11-6064	26-11-6061	23.07 (.932)	
7	• 09-52-3071	• 09-62-3071	26-11-6074	26-11-6071	27.64 (1.088)	
8	• 09-52-3081	• 09-62-3081	26-11-6084	26-11-6081	31.60 (1.244)	(1) between circuits 4-5
9	• 09-52-3091	• 09-62-3091	26-11-6094	26-11-6091	35.56 (1.400)	(1) between circuits 4-5
10	• 09-52-3101	• 09-62-3101	26-11-6104	26-11-6101	39.52 (1.556)	(1) between circuits 5-6
11	• 09-52-3111	• 09-62-3111	26-11-6114	26-11-6111	43.48 (1.712)	
12	• 09-52-3121	• 09-62-3121	26-11-6124	26-11-6121	47.45 (1.868)	(2) between circuits 4-5 and 8-9
13	• 09-52-3131	• 09-62-3131		26-11-6131	51.41 (2.024)	
14	• 09-52-3141	• 09-62-3141		26-11-6141	55.37 (2.180)	
15	• 09-52-3151	• 09-62-3151	26-11-6154	26-11-6151	59.33 (2.336)	(2) between circuits 5-6 and 10-11

• US Standard Product, available through Molex franchised distributors
* Dependent upon PC board
▩ Highlighted area denotes preferred version in Europe and the Far East

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch PC Board Connector

2145/3215

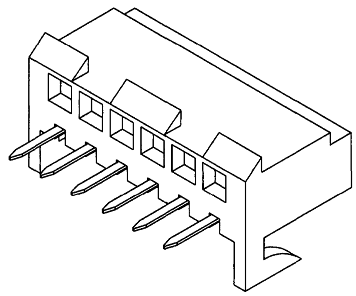
Bottom Entry Type B

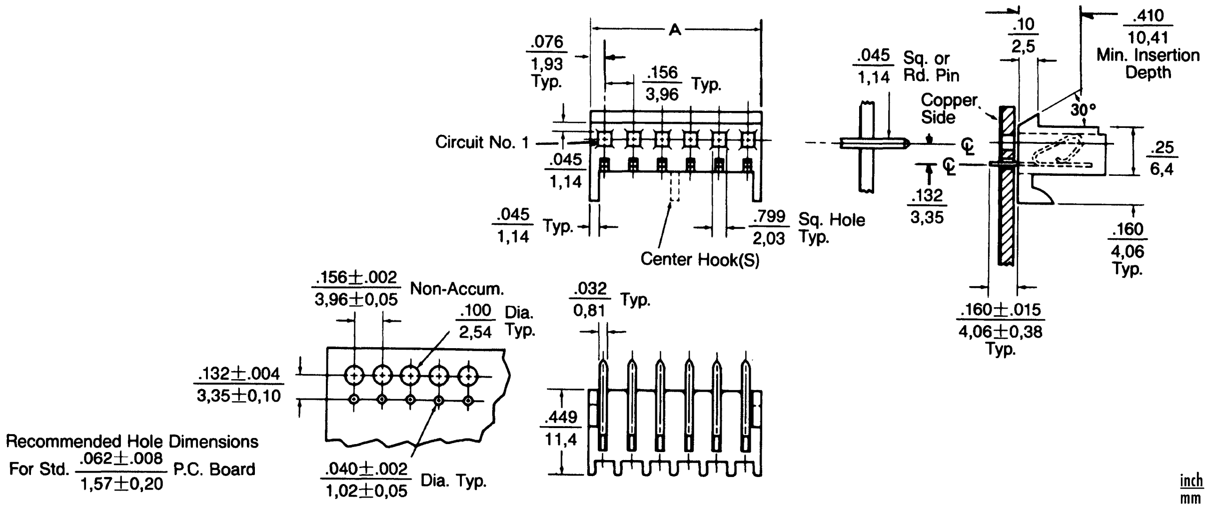
Features and Benefits
- Sizes 2 to 15 circuits
- Mating headers require longer pin lengths (contact factory)
- Polarizing key available
- Available without hooks
- Various tail lengths available

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex KK® 3.96mm (.156") pitch headers
Designed In: Inches

Electrical
Voltage: 250V AC
Current: 5.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

Physical
Housing: Nylon, UL 94V-2
(see 41815 for polyester, UL 94V-0)
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: 0 to +75°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. 2145 Tin/Lead	Order No. 2145 Select Gold	Order No. 3215 Tin	Order No. 3215 Select Gold	Dimension A	Center Hook(s) Location
2	• 09-52-3022	• 09-62-3022			7.82 (.308)	
3	• 09-52-3032	• 09-62-3032	26-11-6035	26-29-1031	11.79 (.464)	
4	• 09-52-3042	• 09-62-3042	26-11-6045	26-29-1041	15.75 (.620)	
5	• 09-52-3052	• 09-62-3052	26-11-6055	26-29-1051	19.71 (.776)	
6	• 09-52-3062	• 09-62-3062	26-11-6065	26-29-1061	23.07 (.932)	
7	• 09-52-3072	• 09-62-3072	26-11-6075	26-29-1071	27.64 (1.088)	
8	• 09-52-3082	• 09-62-3082	26-11-6085	26-29-1081	31.60 (1.244)	(1) between circuits 4-5
9	• 09-52-3092	• 09-62-3092	26-11-6095	26-29-1091	35.56 (1.400)	(1) between circuits 4-5
10	• 09-52-3102	• 09-62-3102	26-11-6105	26-29-1101	39.52 (1.556)	(1) between circuits 5-6
11	• 09-52-3112	• 09-62-3112		26-29-1111	43.48 (1.712)	
12	• 09-52-3122	• 09-62-3122	26-11-6125	26-29-1121	47.45 (1.868)	(2) between circuits 4-5 and 8-9
13	• 09-52-3132	• 09-62-3132		26-29-1131	51.41 (2.024)	
14	• 09-52-3142	• 09-62-3142		26-29-1141	55.37 (2.180)	
15	• 09-52-3152	• 09-62-3152	26-11-6155	26-29-1151	59.33 (2.336)	(2) between circuits 5-6 and 10-11

• US Standard Product, available through Molex franchised distributors
* Dependent upon PC board
☐ Highlighted area denotes preferred version in Europe and the Far East

molex®

3.96mm (.156") Pitch PC Board Connector

2145/3215

Top Entry

Type C

Features and Benefits

- Sizes 2 to 15 circuits
- Available without locking ramp or hook (contact factory)
- Polarizing key available
- Various tail lengths available
- Available with kinked tail option or single beam for low insertion force
- See 6365 for Trifurcon™ equivalent (contact factory)

Reference Information

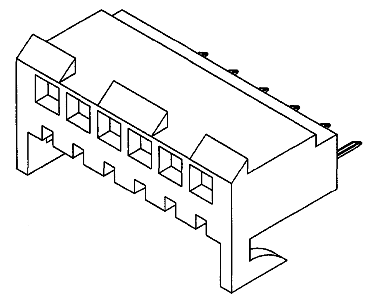
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex KK® 3.96mm (.156") pitch locking headers
Designed In: Inches

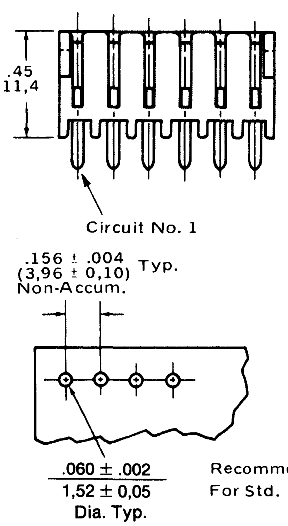
Electrical

Voltage: 250V
Current: 5.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 50K MΩ min.

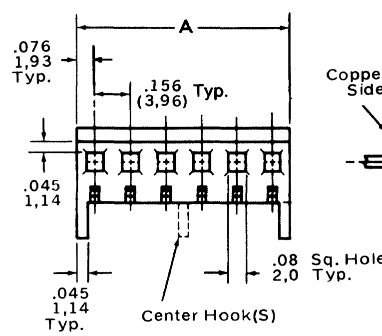
Physical

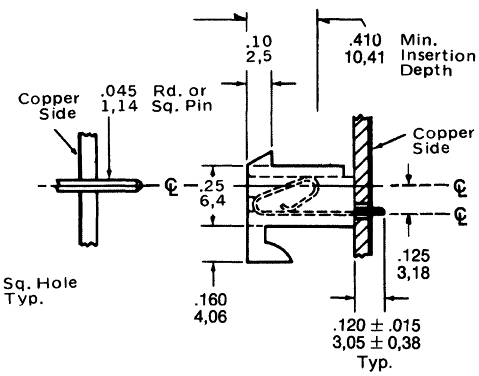
Housing: Nylon, UL 94V-2
(see 41815 for polyester, UL 94V-0)
Contact: Brass or Phosphor Bronze
Plating: See Table
Temperature: 0 to +75°C





Recommended Hole Dimensions For Std. .062 ±.008 / 1,57 ±0,20 P.C. Board





inch
mm

	Order No.
Polarizing Key	15-04-0219

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension A	Center Hook(s) Location
	2145		3215			
	Tin	Select Gold	Tin	Select Gold		
2	• 09-52-3023	• 09-62-3023			7.82 (.308)	
3	• 09-52-3033	• 09-62-3033	26-11-2033	26-30-1033	11.79 (.464)	
4	• 09-52-3043	• 09-62-3043	26-11-2043	26-30-1043	15.75 (.620)	
5	• 09-52-3053	• 09-62-3053	26-11-2053	26-30-1053	19.71 (.776)	
6	• 09-52-3063	• 09-62-3063	26-11-2063	26-30-1063	23.07 (.932)	
7	• 09-52-3073	• 09-62-3073	26-11-2073	26-30-1073	27.64 (1.088)	
8	• 09-52-3083	• 09-62-3083	26-11-2083	26-30-1083	31.60 (1.244)	(1) between circuits 4-5
9	• 09-52-3093	• 09-62-3093	26-11-2093	26-30-1093	35.56 (1.400)	(1) between circuits 4-5
10	• 09-52-3103	• 09-62-3103	26-11-2103	26-30-1103	39.52 (1.556)	(1) between circuits 5-6
11	• 09-52-3113	• 09-62-3113	26-11-2113	26-30-1113	43.48 (1.712)	
12	• 09-52-3123	• 09-62-3123	26-11-2123	26-30-1123	47.45 (1.868)	(2) between circuits 4-5 and 8-9
13	• 09-52-3133	• 09-62-3133	26-11-2133	26-30-1133	51.41 (2.024)	
14	• 09-52-3143	• 09-62-3143	23-11-2143	26-30-1143	55.37 (2.180)	
15	• 09-52-3153	• 09-62-3153	26-11-2153	26-30-1153	59.33 (2.336)	(2) between circuits 5-6 and 10-11

• US Standard Product, available through Molex franchised distributors
* Dependent upon PC board
▩ Highlighted area denotes preferred version in Europe and the Far East

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch PC Board Connector

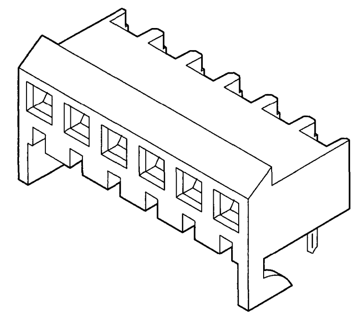
5145-NAH Right Angle Mount

Features and Benefits
- Sizes 2 to 12 circuits

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5271-NA headers
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

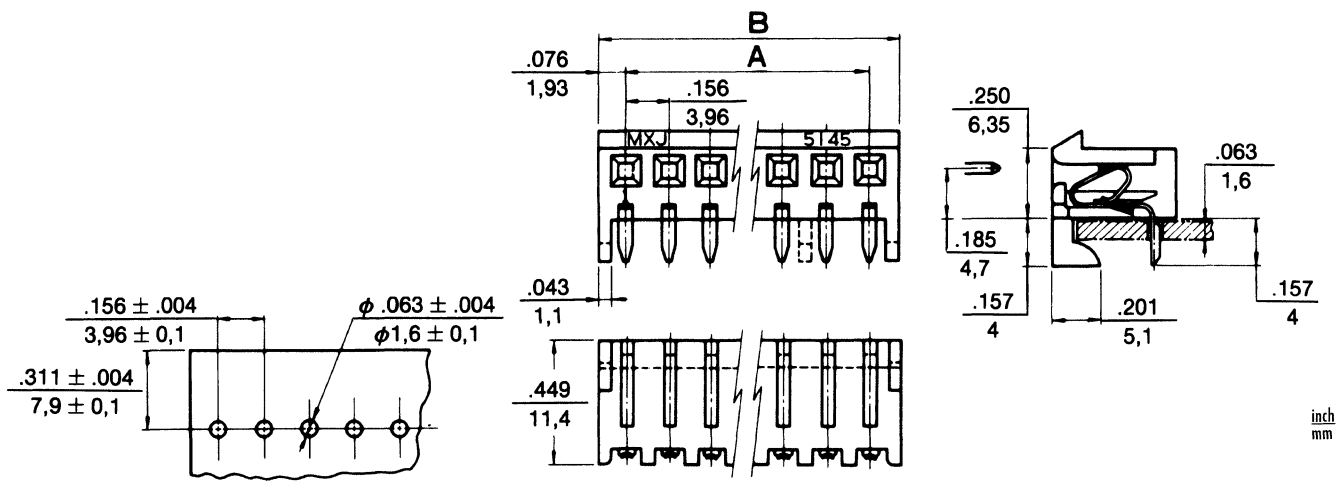
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C



PCB Connectors

J

Preferred Version in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	26-01-1026	3.96 (.156)	7.82 (.308)
3	26-01-1036	7.92 (.312)	11.78 (.464)
4	26-01-1046	11.88 (.468)	15.74 (.620)
5	26-01-1056	15.84 (.624)	19.70 (.775)
6	26-01-1066	19.80 (.780)	23.66 (.931)
7	26-01-1076	23.76 (.935)	27.62 (1.087)
8	26-01-1086	27.72 (1.091)	31.58 (1.243)
9	26-01-1096	31.68 (1.247)	35.54 (1.399)
10	26-01-1106	35.64 (1.403)	39.50 (1.555)
11	26-01-1116	39.60 (1.559)	43.52 (1.713)
12	26-01-1126	43.56 (1.715)	47.42 (1.870)

FEATURES AND SPECIFICATIONS

molex **3.96mm (.156") Pitch PC Board Connector**

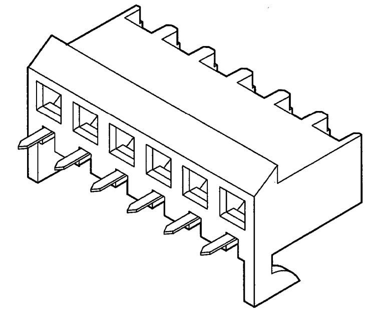
5145-NBH
Bottom Entry

Features and Benefits
- Sizes 2 to 12 circuits

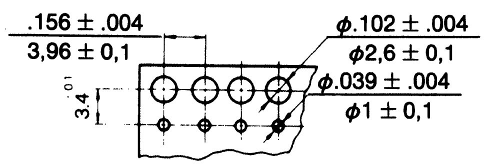
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 41661 headers
Designed In: Millimeters

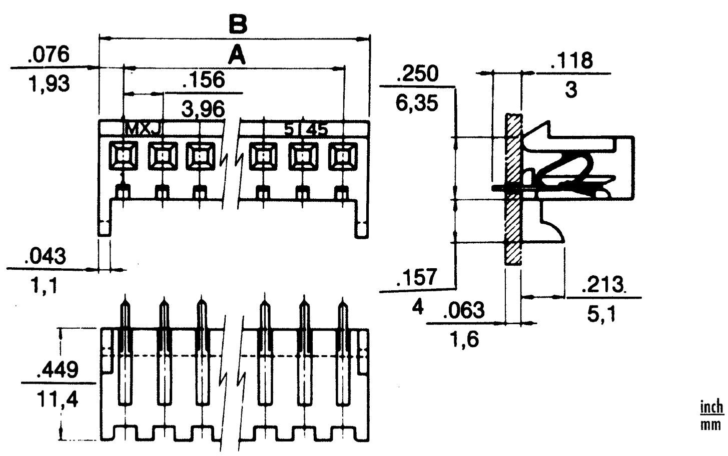
Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C



Preferred Version in the Far East





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	26-01-1028	3.96 (.156)	7.82 (.308)
3	26-01-1038	7.92 (.312)	11.78 (.464)
4	26-01-1048	11.88 (.468)	15.74 (.620)
5	26-01-1058	15.84 (.624)	19.70 (.775)
6	26-01-1068	19.80 (.780)	23.66 (.931)
7	26-01-1078	23.76 (.935)	27.62 (1.087)
8	26-01-1088	27.72 (1.091)	31.58 (1.243)
9	26-01-1098	31.68 (1.247)	35.54 (1.399)
10	26-01-1108	35.64 (1.403)	39.50 (1.555)
12	26-01-1128	43.56 (1.715)	47.42 (1.870)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 12 circuits

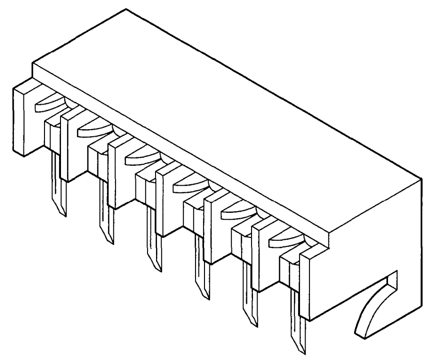
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5271-NA headers
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

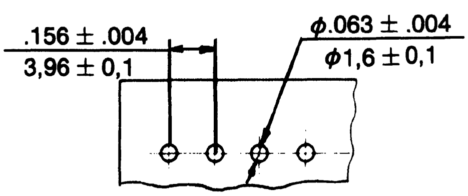
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass
Plating: Tin
Temperature: -40 to +105°C

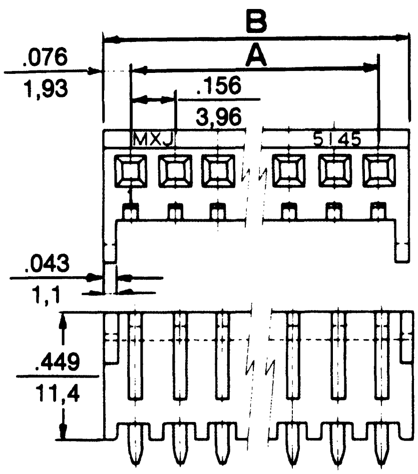
3.96mm (.156") Pitch PC Board Connector

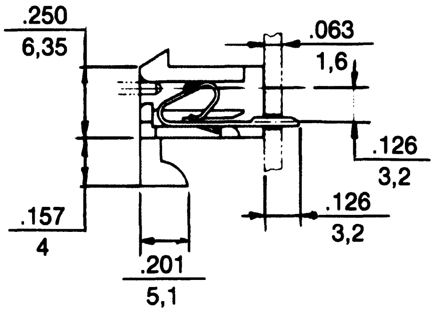
5145-NCH Top Entry



Preferred Version in the Far East







inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	26-01-1029	3.96 (.156)	7.82 (.308)
3	26-01-1039	7.92 (.312)	11.78 (.464)
4	26-01-1049	11.88 (.468)	15.74 (.620)
5	26-01-1059	15.84 (.624)	19.70 (.775)
6	26-01-1069	19.80 (.780)	23.66 (.931)
7	26-01-1079	23.76 (.935)	27.62 (1.087)
8	26-01-1089	27.72 (1.091)	31.58 (1.243)
9	26-01-1099	31.68 (1.247)	35.54 (1.399)
10	26-01-1109	35.64 (1.403)	39.50 (1.555)
12	26-01-1129	43.56 (1.715)	47.42 (1.870)

3.96mm (.156") Pitch KK® Header Cross Reference

	Solid Polyester†	Solid Polyester with Press-Fit Pegs†	Solid Polyester with Snap-In Pegs†	Breakaway Polyester†
	2 to 18 Circuits	2 to 18 Circuits	2 to 18 Circuits	2 to 24 Circuits
Flat	**A-41741**	**A-42441**	**A-42841**	**A-41701**
Tin	• 26-60-0XX0	26-64-0XX0	26-60-1XX3	26-51-0XX1*
Gold	• 26-61-0XX0	26-65-0XX0	26-60-1XX4	26-51-2XX0*
Flat	**A-41771**	**A-42471**	**A-42871**	**A-41661**
Tin	• 26-60-2XX0	26-64-2XX0	26-60-9XX0	26-48-1XX1*
Gold	• 26-61-2XX0	26-65-2XX0	26-61-9XX0	26-48-2XX1*
Flat	**A-41772**	**A-42472**	**A-42872**	**A-41662**
Tin	• 26-60-3XX0	26-64-3XX0	26-60-9XX3	26-48-1XX2*
Gold	• 26-61-3XX0	26-65-3XX0	26-60-9XX4	26-48-2XX2*
Friction Lock	**A-41761**	**A-42461**	**A-42861**	**A-41711**
Tin	• 26-60-1XX0	26-64-1XX0	26-60-8XX1	26-51-0XX2*
Gold	• 26-61-1XX0	26-65-1XX0	26-60-8XX2	26-51-2XX2*
Friction Lock	**A-41791**	**A-42491**	**A-42891**	**A-41671**
Tin	• 26-60-4XX0	26-64-4XX0	26-60-6XX0	26-48-1XX5*
Gold	• 26-61-4XX0	26-65-4XX0	26-60-6XX2	26-48-2XX5*
Friction Lock	**A-41792**	**A-42492**	**A-42892**	**A-41672‡**
Tin	• 26-60-5XX0	26-64-5XX0	26-60-7XX0	26-48-1XX6*
Gold	• 26-61-5XX0	26-65-5XX0	26-60-7XX1	26-48-2XX6*
Polarizing Wall				**A-41721**
Tin				26-51-0XX3*
Gold				26-51-2XX3*
Polarizing Wall				**A-41681**
Tin				26-48-1XX3*
Gold				26-48-2XX3*
Polarizing Wall				**A-41682**
Tin				26-48-1XX4*
Gold				26-48-2XX4*

• US Standard Product, available through Molex franchised distributors
* US Standard Product, available through Molex franchised distributors (24 circuit only)
† Replace XX with circuit size
‡ 41672 must be mounted at board edge

FEATURES AND SPECIFICATIONS

molex®

3.96mm (.156") Pitch Breakaway Header

41661/41701 Straight

Features and Benefits

- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact factory)
- May be purchased in full 24 circuit sticks and broken into required circuit sizes

Reference Information

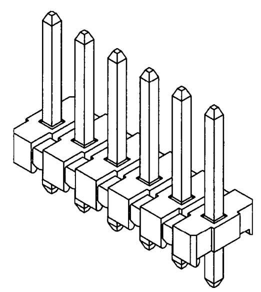
Product Specification: PS-41186/08-50
Packaging: Bulk
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: .156" Crimp/IDT/PCB connectors
Designed In: Inches

Electrical

Voltage: 250V AC max.
Current: 7.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

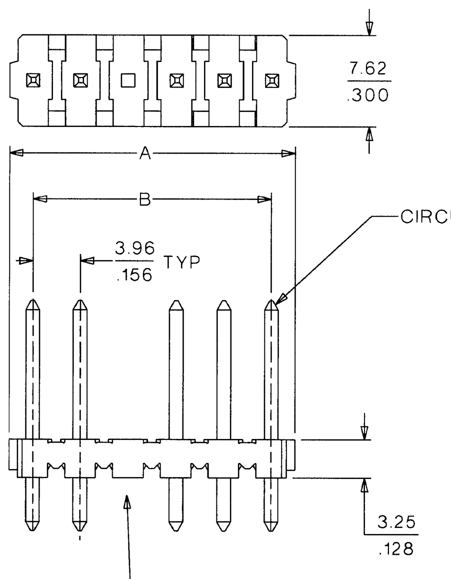
Physical

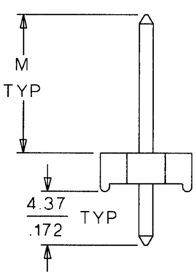
Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: 0 to +75°C

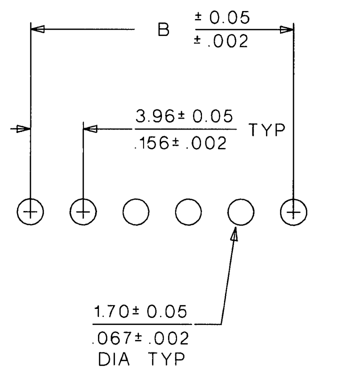


PCB Connectors

J







PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS $\frac{1.57 \pm 0.18}{.062 \pm .007}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	Square Pin		Round Pin		A	B
	Tin	Gold	Tin	Gold		
2	26-48-1021	26-48-2021	26-51-0021	26-51-2020	3.96 (.156)	6.78/7.87 (.267/.310)
3	26-48-1031	26-48-2031	26-51-0031	26-51-2030	7.92 (.312)	10.74/11.84 (.423/.466)
4	26-48-1041	26-48-2041	26-51-0041	26-51-2040	11.89 (.468)	14.71/15.80 (.579/.622)
5	26-48-1051	26-48-2051	26-51-0051	26-51-2050	15.85 (.624)	18.67/19.76 (.735/.778)
6	26-48-1061	26-48-2061	26-51-0061	26-51-2060	19.81 (.780)	22.63/23.72 (.891/.934)
7	26-48-1071	26-48-2071	26-51-0071	26-51-2070	23.77 (.936)	26.59/27.69 (1.047/1.090)
8	26-48-1081	26-48-2081	26-51-0081	26-51-2080	27.74 (1.092)	30.56/31.65 (1.203/1.246)
9	26-48-1091	26-48-2091	26-51-0091	26-51-2090	31.70 (1.248)	34.52/35.61 (1.359/1.402)
10	26-48-1101	26-48-2101	26-51-0101	26-51-2100	35.66 (1.404)	38.48/39.57 (1.515/1.558)
11	26-48-1111	26-48-2111	26-51-0111	26-51-2110	39.62 (1.560)	42.44/43.54 (1.671/1.714)
12	26-48-1121	26-48-2121	26-51-0121	26-51-2120	43.59 (1.716)	46.41/47.50 (1.827/1.870)
13	26-48-1131	26-48-2131	26-51-0131	26-51-2130	47.55 (1.872)	50.37/51.46 (1.983/2.026)

Circuits	Order No.				Dimension	
	Square Pin		Round Pin		A	B
	Tin	Gold	Tin	Gold		
14	26-48-1141	26-48-2141	26-51-0141	26-51-2140	51.51 (2.028)	54.33/55.42 (2.139/2.182)
15	26-48-1151	26-48-2151	26-51-0151	26-51-2150	55.47 (2.184)	58.29/59.39 (2.295/2.338)
16	26-48-1161	26-48-2161	26-51-0161	26-51-2160	59.44 (2.340)	62.26/63.35 (2.451/2.494)
17	26-48-1171	26-48-2171	26-51-0171	26-51-2170	63.40 (2.496)	66.22/67.31 (2.607/2.650)
18	26-48-1181	26-48-2181	26-51-0181	26-51-2180	67.36 (2.652)	70.18/71.27 (2.763/2.806)
19	26-48-1191	26-48-2191	26-51-0191	26-51-2190	71.32 (2.808)	74.14/75.23 (2.919/2.962)
20	26-48-1201	26-48-2201	26-51-0201	26-51-2200	75.29 (2.964)	78.11/79.20 (3.075/3.118)
21	26-48-1211	26-48-2211	26-51-0211	26-51-2210	79.25 (3.120)	82.07/83.16 (3.231/3.274)
22	26-48-1221	26-48-2221	26-51-0221	26-51-2220	83.21 (3.276)	86.03/87.12 (3.387/3.430)
23	26-48-1231	26-48-2231	26-51-0231	26-51-2230	87.17 (3.432)	89.94/91.08 (3.541/3.586)
24	• 26-48-1241	• 26-48-2241	• 26-51-0241	• 26-51-2240	91.14 (3.588)	93.85/95.00 (3.695/3.740)

• US Standard Product, available through Molex franchised distributors
* Dependent upon connector and PC board
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Breakaway Header

41662

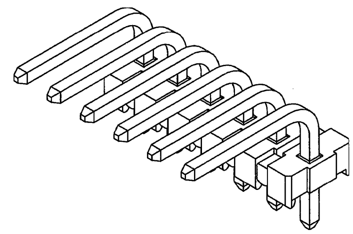
Right Angle

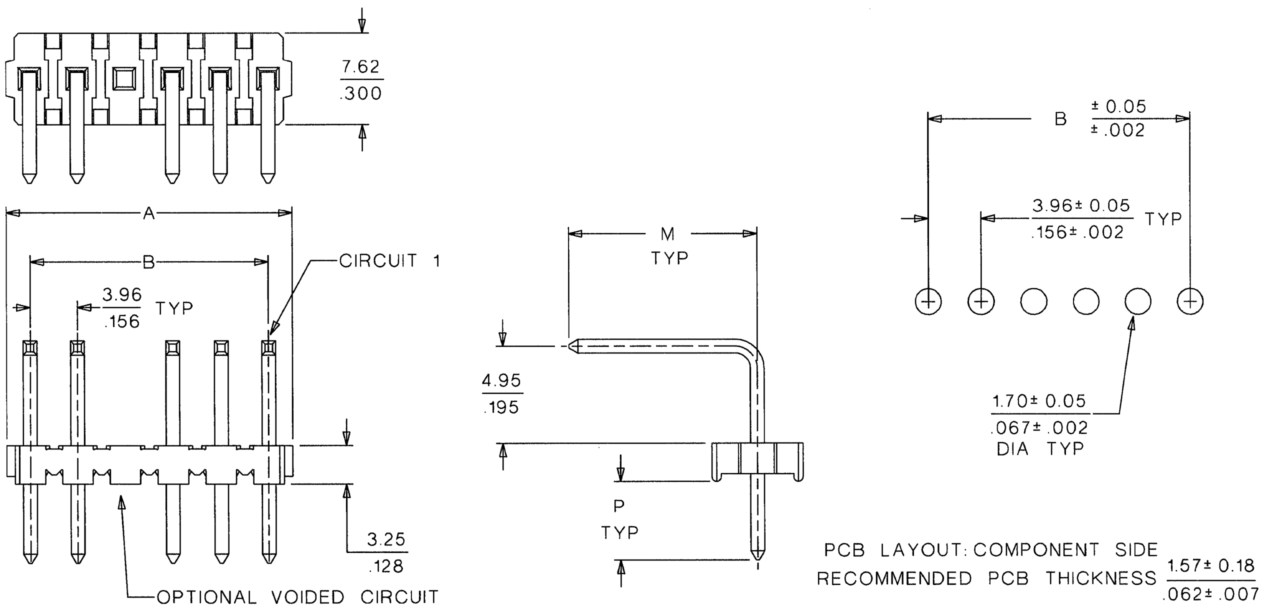
Features and Benefits
- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact factory)
- May be purchased in full 24 circuit sticks and broken into required circuit sizes

Reference Information
Product Specification: PS-41186/08-50
Packaging: Bulk
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Mates With: .156" Crimp/IDT/PCB connectors
Designed In: Inches

Electrical
Voltage: 250V AC max.
Current: 7.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: 0 to +75°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Square Pin Tin	Order No. Square Pin Gold	Dimension A	Dimension B
2	26-48-1022	26-48-2022	3.96 (.156)	6.78 / 7.87 (.267/.310)
3	26-48-1032	26-48-2032	7.92 (.312)	10.74/11.84 (.423/.466)
4	26-48-1042	26-48-2042	11.89 (.468)	14.71/15.80 (.579/.622)
5	26-48-1052	26-48-2052	15.85 (.624)	18.67/19.76 (.735/.778)
6	26-48-1062	26-48-2062	19.81 (.780)	22.63/23.72 (.891/.934)
7	26-48-1072	26-48-2072	23.77 (.936)	26.59/27.69 (1.047/1.090)
8	26-48-1082	26-48-2082	27.74 (1.092)	30.56/31.65 (1.203/1.246)
9	26-48-1092	26-48-2092	31.70 (1.248)	34.52/35.61 (1.359/1.402)
10	26-48-1102	26-48-2102	35.66 (1.404)	38.48/39.57 (1.515/1.558)
11	26-48-1112	26-48-2112	39.62 (1.560)	42.44/43.54 (1.671/1.714)
12	26-48-1122	26-48-2122	43.59 (1.716)	46.41/47.50 (1.827/1.870)
13	26-48-1132	26-48-2132	47.55 (1.872)	50.37/51.46 (1.983/2.026)

Circuits	Order No. Square Pin Tin	Order No. Square Pin Gold	Dimension A	Dimension B
14	26-48-1142	26-48-2142	51.51 (2.028)	54.33/55.42 (2.139/2.182)
15	26-48-1152	26-48-2152	55.47 (2.184)	58.29/59.39 (2.295/2.338)
16	26-48-1162	26-48-2162	59.44 (2.340)	62.26/63.35 (2.451/2.494)
17	26-48-1172	26-48-2172	63.40 (2.496)	66.22/67.31 (2.607/2.650)
18	26-48-1182	26-48-2182	67.36 (2.652)	70.18/71.27 (2.763/2.806)
19	26-48-1192	26-48-2192	71.32 (2.808)	74.14/75.23 (2.919/2.962)
20	26-48-1202	26-48-2202	75.29 (2.964)	78.11/79.20 (3.075/3.118)
21	26-48-1212	26-48-2212	79.25 (3.120)	82.07/83.16 (3.231/3.274)
22	26-48-1222	26-48-2222	83.21 (3.276)	86.03/87.12 (3.387/3.430)
23	26-48-1232	26-48-2232	87.17 (3.432)	89.94/91.08 (3.541/3.586)
24	• 26-48-1242	• 26-48-2242	91.14 (3.588)	93.85/95.00 (3.695/3.740)

• US Standard Product, available through Molex franchised distributors
* Dependent upon connector and PC board
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Breakaway Header

41671/41711

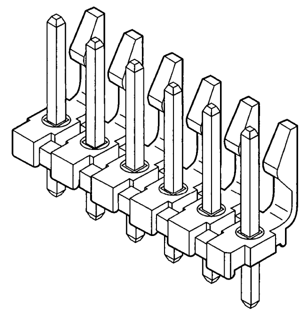
Straight Friction Lock

Features and Benefits
- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact factory)
- May be purchased in full 24 circuit sticks and broken into required circuit sizes
- Passive locking feature is used to maintain interconnection and is ideal for high vibration applications

Reference Information
Product Specification: PS-41186/08-50
Packaging: Bulk
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 250V AC max.
Current: 7.0A max.*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Black glass-filled poylester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: 0 to +75°C



PCB Connectors

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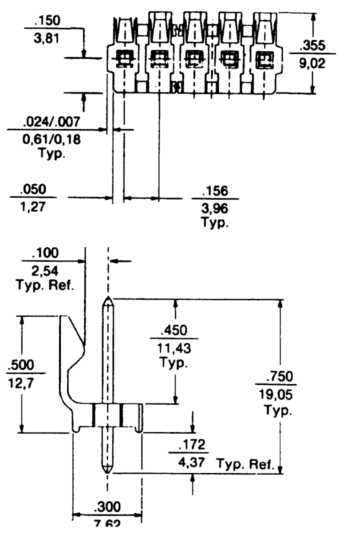
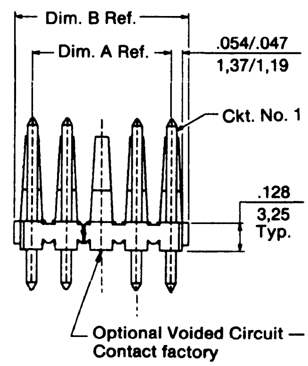
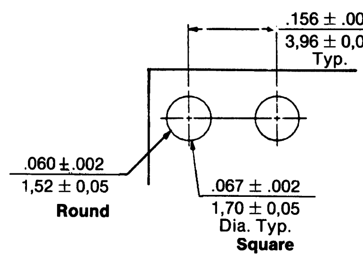






Recommended PC Board Hole Layout 41671 and 41711

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	Square Pin		Round Pin		A	B
	Tin	Gold	Tin	Gold		
2	26-48-1025	26-48-2025	26-51-0022	26-51-2022	3.96 (.156)	6.78/7.87 (.267/.310)
3	26-48-1035	26-48-2035	26-51-0032	26-51-2032	7.92 (.312)	10.74/11.84 (.423/.466)
4	26-48-1045	26-48-2045	26-51-0042	26-51-2042	11.89 (.468)	14.71/15.80 (.579/.622)
5	26-48-1055	26-48-2055	26-51-0052	26-51-2052	15.85 (.624)	18.67/19.76 (.735/.778)
6	26-48-1065	26-48-2065	26-51-0062	26-51-2062	19.81 (.780)	22.63/23.72 (.891/.934)
7	26-48-1075	26-48-2075	26-51-0072	26-51-2072	23.77 (.936)	26.59/27.69 (1.047/1.090)
8	26-48-1085	26-48-2085	26-51-0082	26-51-2082	27.74 (1.092)	30.56/31.65 (1.203/1.246)
9	26-48-1095	26-48-2095	26-51-0092	26-51-2092	31.70 (1.248)	34.52/35.61 (1.359/1.402)
10	26-48-1105	26-48-2105	26-51-0102	26-51-2102	35.66 (1.404)	38.48/39.57 (1.515/1.558)
11	26-48-1115	26-48-2115	26-51-0112	26-51-2112	39.62 (1.560)	42.44/43.54 (1.671/1.714)
12	26-48-1125	26-48-2125	26-51-0122	26-51-2122	43.59 (1.716)	46.41/47.50 (1.827/1.870)
13	26-48-1135	26-48-2135	26-51-0132	26-51-2132	47.55 (1.872)	50.37/51.46 (1.983/2.026)
14	26-48-1145	26-48-2145	26-51-0142	26-51-2142	51.51 (2.028)	54.33/55.42 (2.139/2.182)
15	26-48-1155	26-48-2155	26-51-0152	26-51-2152	55.47 (2.184)	58.29/59.39 (2.295/2.338)
16	26-48-1165	26-48-2165	26-51-0162	26-51-2162	59.44 (2.340)	62.26/63.35 (2.451/2.494)
17	26-48-1175	26-48-2175	26-51-0172	26-51-2172	63.40 (2.496)	66.22/67.31 (2.607/2.650)
18	26-48-1185	26-48-2185	26-51-0182	26-51-2182	67.36 (2.652)	70.18/71.27 (2.763/2.806)
19	26-48-1195	26-48-2195	26-51-0192	26-51-2192	71.32 (2.808)	74.14/75.23 (2.919/2.962)
20	26-48-1205	26-48-2205	26-51-0202	26-51-2202	75.29 (2.964)	78.11/79.20 (3.075/3.118)
21	26-48-1215	26-48-2215	26-51-0212	26-51-2212	79.25 (3.120)	82.07/83.16 (3.231/3.274)
22	26-48-1225	26-48-2225	26-51-0222	26-51-2222	83.21 (3.276)	86.03/87.12 (3.387/3.430)
23	26-48-1235	26-48-2235	26-51-0232	26-51-2232	87.17 (3.432)	89.94/91.08 (3.541/3.586)
24	• 26-48-1245	• 26-48-2245	• 26-51-0242	• 26-51-2242	91.14 (3.588)	93.85/95.00 (3.695/3.740)

• US Standard Product, available through Molex franchised distributors
* Dependent upon connector and PC board
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Breakaway Header

41672

Right Angle Friction Lock

Features and Benefits

- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact factory)
- PCB edge mount only
- May be purchased in full 24 circuit sticks and broken into required circuit sizes

Reference Information

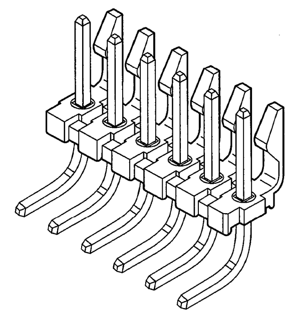
Product Specification: PS-41186/08-50
Packaging: Bulk
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Eletrical

Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C



PCB Connectors

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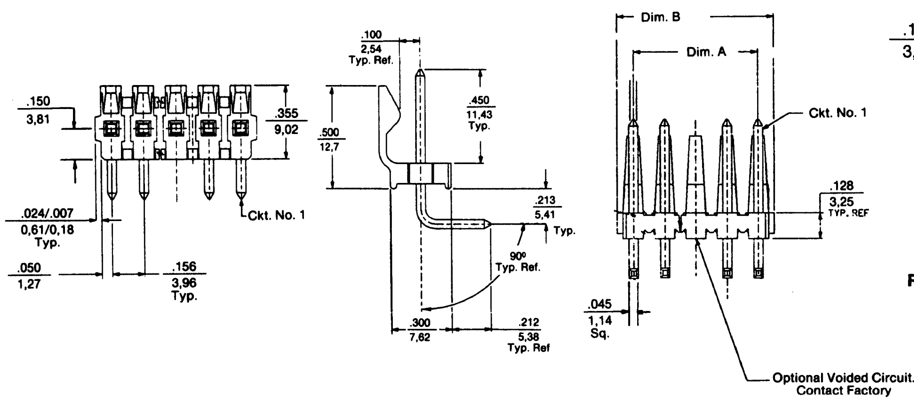
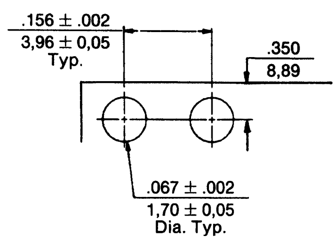




Recommended PC Board Hole Layout
41672
Edge Mount Only

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Square Pin Tin	Order No. Square Pin Gold	Dimension A	Dimension B
2	26-48-1026	26-48-2026	3.96 (.156)	6.78 / 7.87 (.267/.310)
3	26-48-1036	26-48-2036	7.92 (.312)	10.74/11.84 (.423/.466)
4	26-48-1046	26-48-2046	11.89 (.468)	14.71/15.80 (.579/.622)
5	26-48-1056	26-48-2056	15.85 (.624)	18.67/19.76 (.735/.778)
6	26-48-1066	26-48-2066	19.81 (.780)	22.63/23.72 (.891/.934)
7	26-48-1076	26-48-2076	23.77 (.936)	26.59/27.69 (1.047/1.090)
8	26-48-1086	26-48-2086	27.74 (1.092)	30.56/31.65 (1.203/1.246)
9	26-48-1096	26-48-2096	31.70 (1.248)	34.52/35.61 (1.359/1.402)
10	26-48-1106	26-48-2106	35.66 (1.404)	38.48/39.57 (1.515/1.558)
11	26-48-1116	26-48-2116	39.62 (1.560)	42.44/43.54 (1.671/1.714)
12	26-48-1126	26-48-2126	43.59 (1.716)	46.41/47.50 (1.827/1.870)
13	26-48-1136	26-48-2136	47.55 (1.872)	50.37/51.46 (1.983/2.026)

Circuits	Order No. Square Pin Tin	Order No. Square Pin Gold	Dimension A	Dimension B
14	26-48-1146	26-48-2146	51.51 (2.028)	54.33/55.42 (2.139/2.182)
15	26-48-1156	26-48-2156	55.47 (2.184)	58.29/59.39 (2.295/2.338)
16	26-48-1166	26-48-2166	59.44 (2.340)	62.26/63.35 (2.451/2.494)
17	26-48-1176	26-48-2176	63.40 (2.496)	66.22/67.31 (2.607/2.650)
18	26-48-1186	26-48-2186	67.36 (2.652)	70.18/71.27 (2.763/2.806)
19	26-48-1196	26-48-2196	71.32 (2.808)	74.14/75.23 (2.919/2.962)
20	26-48-1206	26-48-2206	75.29 (2.964)	78.11/79.20 (3.075/3.118)
21	26-48-1216	26-48-2216	79.25 (3.120)	82.07/83.16 (3.231/3.274)
22	26-48-1226	26-48-2226	83.21 (3.276)	86.03/87.12 (3.387/3.430)
23	26-48-1236	26-48-2236	87.17 (3.432)	89.94/91.08 (3.541/3.586)
24	• 26-48-1246	• 26-48-2246	91.14 (3.588)	93.85/95.00 (3.695/3.740)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Breakaway Header

41681/41721

Straight Polarizing Wall

Features and Benefits

- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact factory)
- May be purchased in full 24 circuit sticks and broken into required circuit sizes
- Polarizing backwall prevents 180° mismating between connector and header

Reference Information

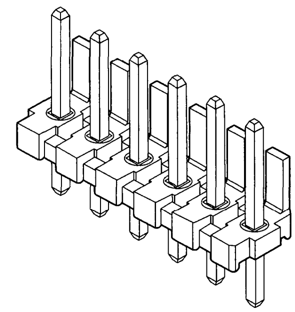
Product Specification: PS-41186
Packaging: Bulk
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical

Voltage: 250V AC max.
Current: 7.0A*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: 0 to +75°C



PCB Connectors

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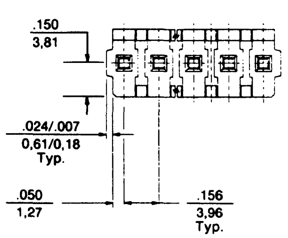
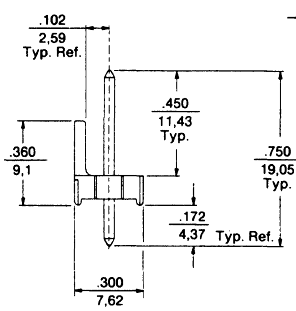
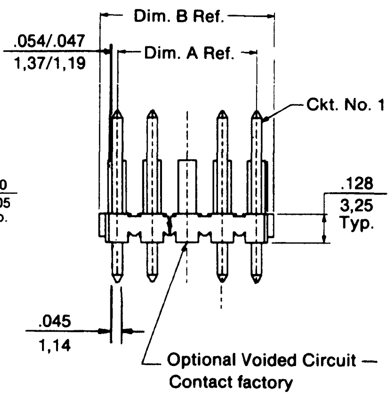
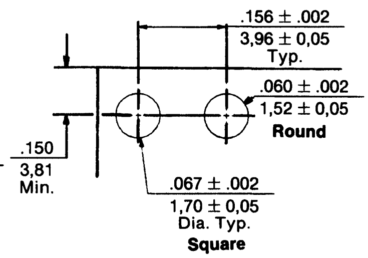








Recommended PC Board Hole Layout
41681 and 41721

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	Square Pin		Round Pin		A	B
	Tin	Gold	Tin	Gold		
2	26-48-1023	26-48-2023	26-51-0023	26-51-2023	3.96 (.156)	6.78/7.87 (.267/.310)
3	26-48-1033	26-48-2033	26-51-0033	26-51-2033	7.92 (.312)	10.74/11.84 (.423/.466)
4	26-48-1043	26-48-2043	26-51-0043	26-51-2043	11.89 (.468)	14.71/15.80 (.579/.622)
5	26-48-1053	26-48-2053	26-51-0053	26-51-2053	15.85 (.624)	18.67/19.76 (.735/.778)
6	26-48-1063	26-48-2063	26-51-0063	26-51-2063	19.81 (.780)	22.63/23.72 (.891/.934)
7	26-48-1073	26-48-2073	26-51-0073	26-51-2073	23.77 (.936)	26.59/27.69 (1.047/1.090)
8	26-48-1083	26-48-2083	26-51-0083	26-51-2083	27.74 (1.092)	30.56/31.65 (1.203/1.246)
9	26-48-1093	26-48-2093	26-51-0093	26-51-2093	31.70 (1.248)	34.52/35.61 (1.359/1.402)
10	26-48-1103	26-48-2103	26-51-0103	26-51-2103	35.66 (1.404)	38.48/39.57 (1.515/1.558)
11	26-48-1113	26-48-2113	26-51-0113	26-51-2113	39.62 (1.560)	42.44/43.54 (1.671/1.714)
12	26-48-1123	26-48-2123	26-51-0123	26-51-2123	43.59 (1.716)	46.41/47.50 (1.827/1.870)
13	26-48-1133	26-48-2133	26-51-0133	26-51-2133	47.55 (1.872)	50.37/51.46 (1.983/2.026)

Circuits	Order No.				Dimension	
	Square Pin		Round Pin		A	B
	Tin	Gold	Tin	Gold		
14	26-48-1143	26-48-2143	26-51-0143	26-51-2143	51.51 (2.028)	54.33/55.42 (2.139/2.182)
15	26-48-1153	26-48-2153	26-51-0153	26-51-2153	55.47 (2.184)	58.29/59.39 (2.295/2.338)
16	26-48-1163	26-48-2163	26-51-0163	26-51-2163	59.44 (2.340)	62.26/63.35 (2.451/2.494)
17	26-48-1173	26-48-2173	26-51-0173	26-51-2173	63.40 (2.496)	66.22/67.31 (2.607/2.650)
18	26-48-1183	26-48-2183	26-51-0183	26-51-2183	67.36 (2.652)	70.18/71.27 (2.763/2.806)
19	26-48-1193	26-48-2193	26-51-0193	26-51-2193	71.32 (2.808)	74.14/75.23 (2.919/2.962)
20	26-48-1203	26-48-2203	26-51-0203	26-51-2203	75.29 (2.964)	78.11/79.20 (3.075/3.118)
21	26-48-1213	26-48-2213	26-51-0213	26-51-2213	79.25 (3.120)	82.07/83.16 (3.231/3.274)
22	26-48-1223	26-48-2223	26-51-0223	26-51-2223	83.21 (3.276)	86.03/87.12 (3.387/3.430)
23	26-48-1233	26-48-2233	26-51-0233	26-51-2233	87.17 (3.432)	89.94/91.08 (3.541/3.586)
24	• 26-48-1243	• 26-48-2243	• 26-51-0243	• 26-51-2243	91.14 (3.588)	93.85/95.00 (3.695/3.740)

• US Standard Product, available through Molex franchised distributors
* Dependent upon connector and PC board
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

molex **3.96mm (.156") Pitch Breakaway Header**

41682

Right Angle Polarizing Wall

Features and Benefits

- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact factory)
- PCB edge mount only
- May be purchased in full 24 circuit sticks and broken into required circuit sizes
- Polarizing backwall prevents 180° mismating between connector and header

Reference Information

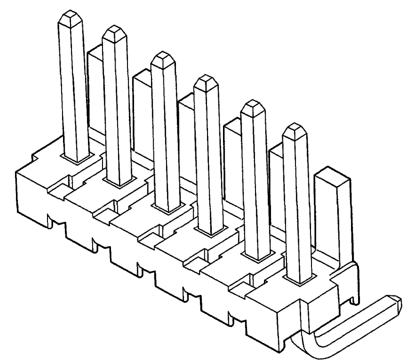
Product Specification: PS-41186
Packaging: Bulk
Tooling Information: See page J-175
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

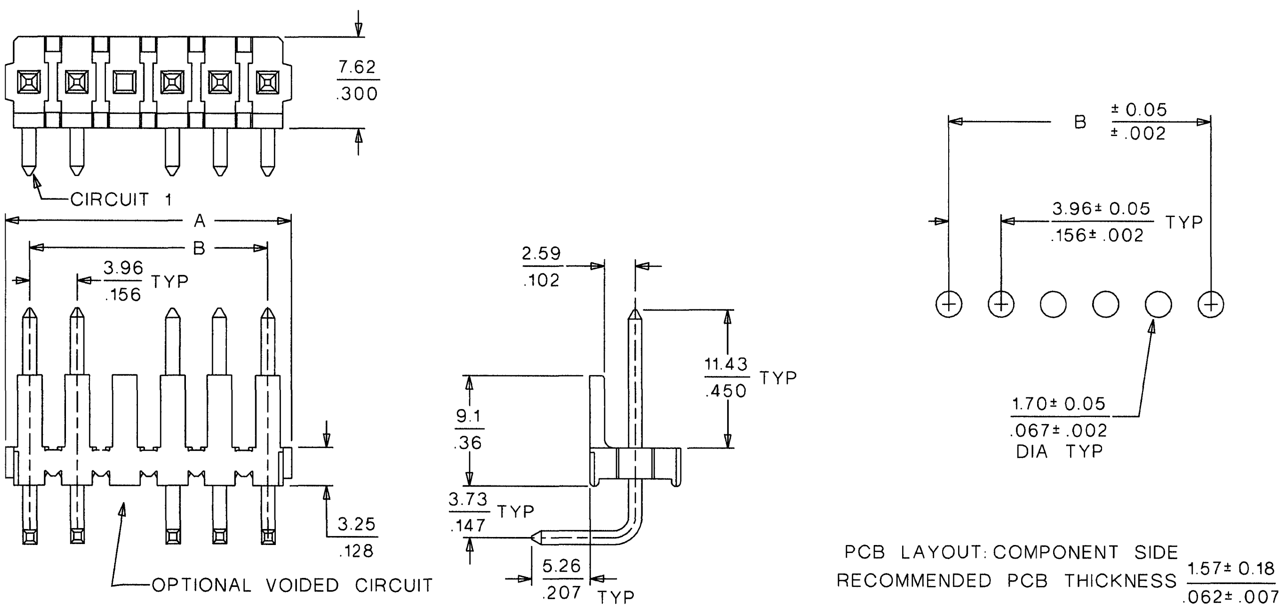
Electrical

Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical

Housing: Black glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Square Pin Tin	Order No. Square Pin Gold	Dimension A	Dimension B
2	26-48-1024	26-48-2024	3.96 (.156)	6.78 / 7.87 (.267/.310)
3	26-48-1034	26-48-2034	7.92 (.312)	10.74/11.84 (.423/.466)
4	26-48-1044	26-48-2044	11.89 (.468)	14.71/15.80 (.579/.622)
5	26-48-1054	26-48-2054	15.85 (.624)	18.67/19.76 (.735/.778)
6	26-48-1064	26-48-2064	19.81 (.780)	22.63/23.72 (.891/.934)
7	26-48-1074	26-48-2074	23.77 (.936)	26.59/27.69 (1.047/1.090)
8	26-48-1084	26-48-2084	27.74 (1.092)	30.56/31.65 (1.203/1.246)
9	26-48-1094	26-48-2094	31.70 (1.248)	34.52/35.61 (1.359/1.402)
10	26-48-1104	26-48-2104	35.66 (1.404)	38.48/39.57 (1.515/1.558)
11	26-48-1114	26-48-2114	39.62 (1.560)	42.44/43.54 (1.671/1.714)
12	26-48-1124	26-48-2124	43.59 (1.716)	46.41/47.50 (1.827/1.870)
13	26-48-1134	26-48-2134	47.55 (1.872)	50.37/51.46 (1.983/2.026)

Circuits	Order No. Square Pin Tin	Order No. Square Pin Gold	Dimension A	Dimension B
14	26-48-1144	26-48-2144	51.51 (2.028)	54.33/55.42 (2.139/2.182)
15	26-48-1154	26-48-2154	55.47 (2.184)	58.29/59.39 (2.295/2.338)
16	26-48-1164	26-48-2164	59.44 (2.340)	62.26/63.35 (2.451/2.494)
17	26-48-1174	26-48-2174	63.40 (2.496)	66.22/67.31 (2.607/2.650)
18	26-48-1184	26-48-2184	67.36 (2.652)	70.18/71.27 (2.763/2.806)
19	26-48-1194	26-48-2194	71.32 (2.808)	74.14/75.23 (2.919/2.962)
20	26-48-1204	26-48-2204	75.29 (2.964)	78.11/79.20 (3.075/3.118)
21	26-48-1214	26-48-2214	79.25 (3.120)	82.07/83.16 (3.231/3.274)
22	26-48-1224	26-48-2224	83.21 (3.276)	86.03/87.12 (3.387/3.430)
23	26-48-1234	26-48-2234	87.17 (3.432)	89.94/91.08 (3.541/3.586)
24	• 26-48-1244	• 26-48-2244	91.14 (3.588)	93.85/95.00 (3.695/3.740)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42471

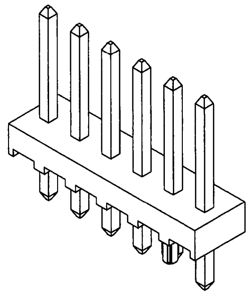
Straight, Square Pin With Press-Fit Pegs

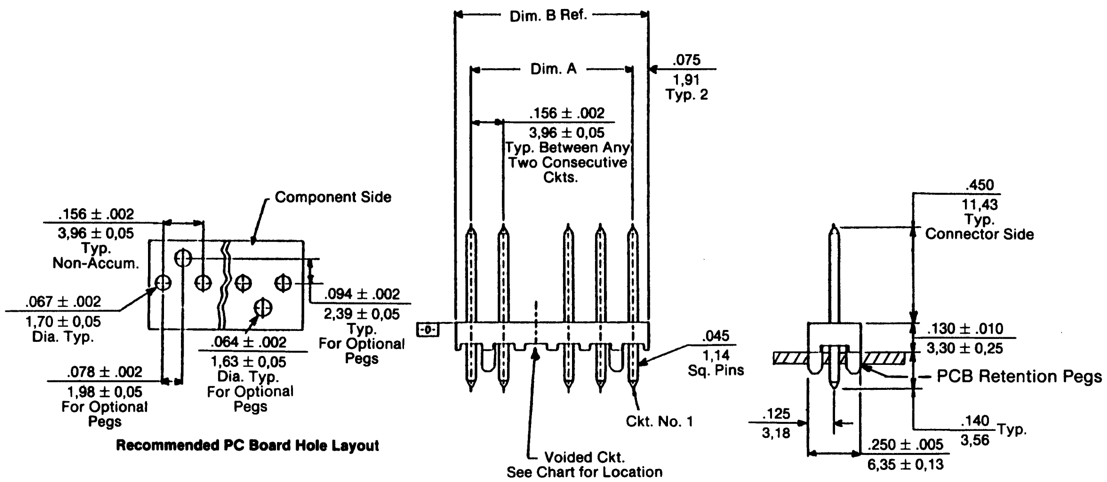
Features and Benefits
- Sizes 2 to 18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Optional voided circuits available
- Various pin lengths available (contact factory)
- End-to-end stackable
- 1.14mm (.045") square pins

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V AC max.
Current: 7.0A max*
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: White glass-filled polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: 0 to +75°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-64-2020	26-65-2020	3.96 (.156)	7.77 (.306)	1
3	26-64-2030	26-65-2030	7.92 (.312)	11.73 (.462)	2
4	26-64-2040	26-65-2040	11.89 (.468)	15.70 (.618)	2
5	26-64-2050	26-65-2050	15.85 (.624)	19.66 (.774)	2
6	26-64-2060	26-65-2060	19.81 (.780)	23.62 (.930)	2
7	26-64-2070	26-65-2070	23.77 (.936)	27.58 (1.086)	2
8	26-64-2080	26-65-2080	27.74 (1.092)	31.55 (1.242)	2
9	26-64-2090	26-65-2090	31.70 (1.248)	35.51 (1.398)	2
10	26-64-2100	26-65-2100	35.66 (1.404)	39.47 (1.554)	2
11	26-64-2110	26-65-2110	39.62 (1.560)	43.43 (1.710)	2
12	26-64-2120	26-65-2120	43.59 (1.716)	47.40 (1.866)	2
13	26-64-2130	26-65-2130	47.55 (1.872)	51.36 (2.022)	2
14	26-64-2140	26-65-2140	51.51 (2.028)	55.32 (2.178)	2
15	26-64-2150	26-65-2150	55.47 (2.184)	59.28 (2.334)	2
16	26-64-2160	26-65-2160	59.44 (2.340)	63.25 (2.490)	2
17	26-64-2170	26-65-2170	63.40 (2.496)	67.21 (2.646)	2
18	26-64-2180	26-65-2180	67.36 (2.652)	71.17 (2.802)	2

* Dependent upon connector and PC board

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42871

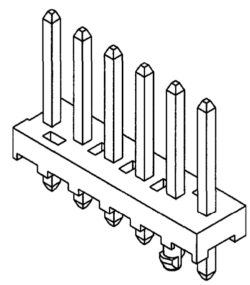
Straight, Square Pin With Snap-In Pegs

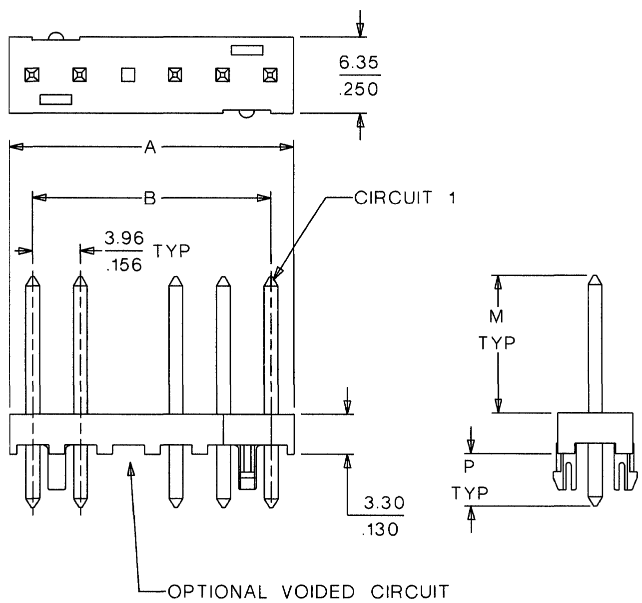
Features and Benefits
- Sizes 2 to 18 circuits
- Snap-in peg locks header to PCB for optimum retention
- Optional voided circuits available
- Various pin lengths available (contact factory)
- End-to-end stackable

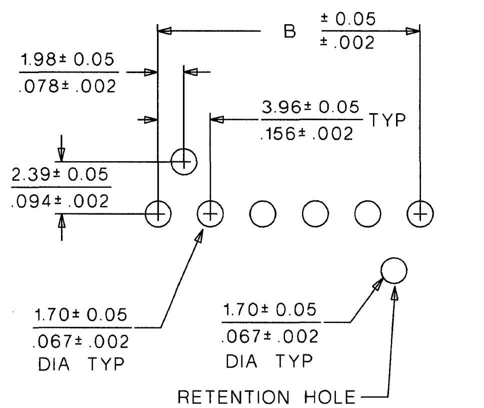
Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: White glass-filled polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") square
Plating: See Table
Temperature: -40 to +105°C







PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS $\frac{1.57 \pm 0.18}{.062 \pm .007}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-60-9020	26-61-9020	7.77 (.306)	3.96 (.156)	1
3	26-60-9030	26-61-9030	11.73 (.462)	7.92 (.312)	2
4	26-60-9040	26-61-9040	15.70 (.618)	11.89 (.468)	2
5	26-60-9050	26-61-9050	19.66 (.774)	15.85 (.624)	2
6	26-60-9060	26-61-9060	23.62 (.930)	19.81 (.780)	2
7	26-60-9070	26-61-9070	27.58 (1.086)	23.77 (.936)	2
8	26-60-9080	26-61-9080	31.55 (1.242)	27.74 (1.092)	2
9	26-60-9090	26-61-9090	35.51 (1.398)	31.70 (1.248)	2
10	26-60-9100	26-61-9100	39.47 (1.554)	35.66 (1.404)	2
11	26-60-9110	26-61-9110	43.43 (1.710)	39.62 (1.560)	2
12	26-60-9120	26-61-9120	47.40 (1.866)	43.59 (1.716)	2
13	26-60-9130	26-61-9130	51.36 (2.022)	47.55 (1.872)	2
14	26-60-9140	26-61-9140	55.32 (2.178)	51.51 (2.028)	2
15	26-60-9150	26-61-9150	59.28 (2.334)	55.47 (2.184)	2
16	26-60-9160	26-61-9160	63.25 (2.490)	59.44 (2.340)	2
17	26-60-9170	26-61-9170	67.21 (2.646)	63.40 (2.496)	2
18	26-60-9180	26-61-9180	71.17 (2.802)	67.36 (2.652)	2

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 18 circuits
- Optional voided circuits available
- Various pin lengths available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50/40-02
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Millimeters or Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

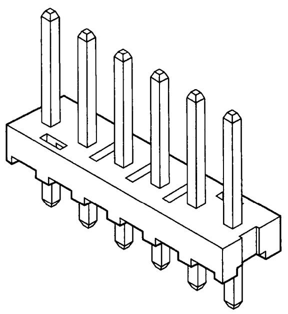
Physical
Housing: White glass-filled polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") square
Plating: See Table
Temperature: -40 to +105°C

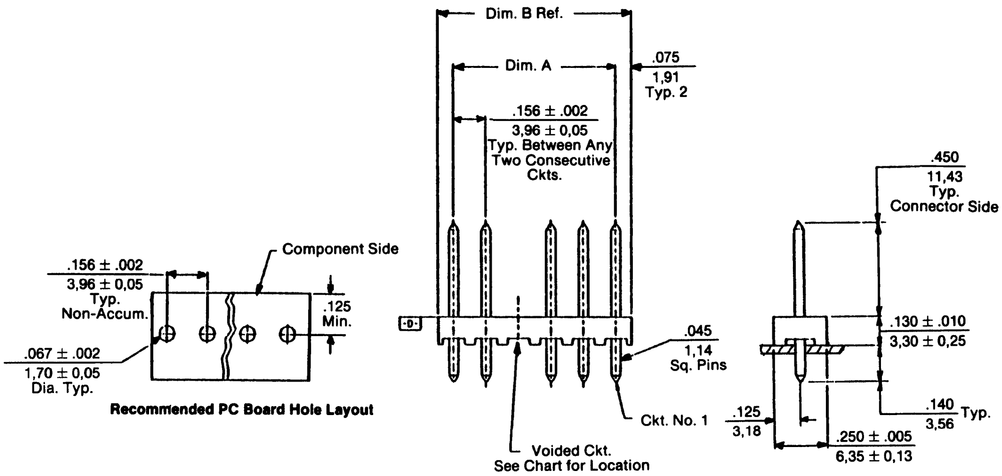
molex

3.96mm (.156") Pitch Header

41771

Straight, Square Pin Without Pegs





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 26-60-2020	• 26-61-2020	3.96 (.156)	7.77 (.306)
3	• 26-60-2030	• 26-61-2030	7.92 (.312)	11.73 (.462)
4	• 26-60-2040	• 26-61-2040	11.89 (.468)	15.70 (.618)
5	• 26-60-2050	• 26-61-2050	15.85 (.624)	19.66 (.774)
6	• 26-60-2060	• 26-61-2060	19.81 (.780)	23.62 (.930)
7	• 26-60-2070	• 26-61-2070	23.77 (.936)	27.58 (1.086)
8	• 26-60-2080	• 26-61-2080	27.74 (1.092)	31.55 (1.242)
9	• 26-60-2090	• 26-61-2090	31.70 (1.248)	35.51 (1.398)
10	• 26-60-2100	• 26-61-2100	35.66 (1.404)	39.47 (1.554)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
11	• 26-60-2110	• 26-61-2110	39.62 (1.560)	43.43 (1.710)
12	• 26-60-2120	• 26-61-2120	43.59 (1.716)	47.40 (1.866)
13	• 26-60-2130	• 26-61-2130	47.55 (1.872)	51.36 (2.022)
14	• 26-60-2140	• 26-61-2140	51.51 (2.028)	55.32 (2.178)
15	• 26-60-2150	• 26-61-2150	55.47 (2.184)	59.28 (2.334)
16	• 26-60-2160	• 26-61-2160	59.44 (2.340)	63.25 (2.490)
17	• 26-60-2170	• 26-61-2170	63.40 (2.496)	67.21 (2.646)
18	• 26-60-2180	• 26-61-2180	67.36 (2.652)	71.17 (2.802)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

5271-NA Straight

Features and Benefits

- Sizes 2 to 12 circuits
- Other plating options available

Reference Information

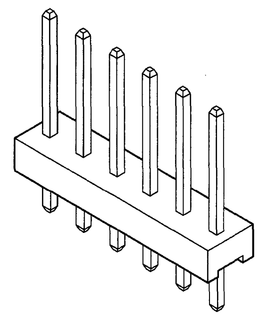
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5195-N, 5145-NAH/NCH and 5239-N housings
Designed In: Millimeters

Electrical

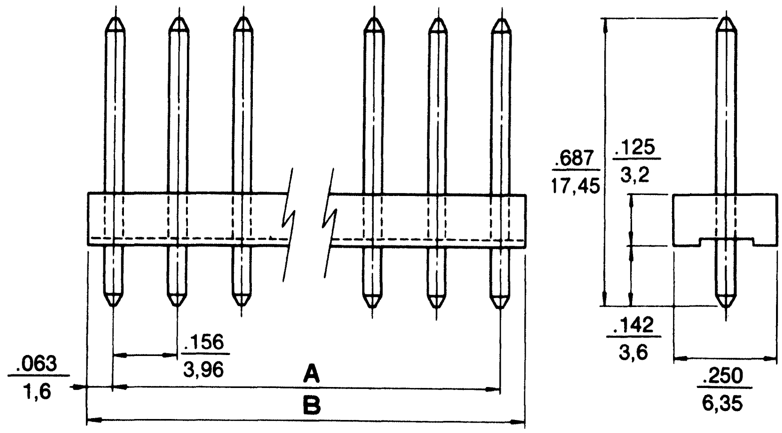
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

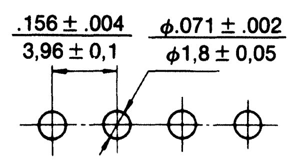
Physical

Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East





P.C. Board Hole Dimensions

inch
mm

PCB Connectors

J

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-67-4021	3.96 (.156)	7.16 (.282)
3	09-67-4031	7.92 (.312)	11.12 (.437)
4	09-67-4041	11.88 (.467)	15.08 (.593)
5	09-67-4051	15.84 (.623)	19.04 (.749)
6	09-67-4061	19.80 (.779)	23.00 (.906)
7	09-67-4071	23.76 (.935)	26.96 (1.061)
8	09-67-4081	27.72 (1.091)	30.92 (1.217)
9	09-67-4091	31.68 (1.247)	34.88 (1.371)
10	09-67-4101	35.64 (1.403)	38.84 (1.529)
11	09-67-4111	39.60 (1.559)	42.80 (1.690)
12	09-67-4121	43.56 (1.714)	46.76 (1.840)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

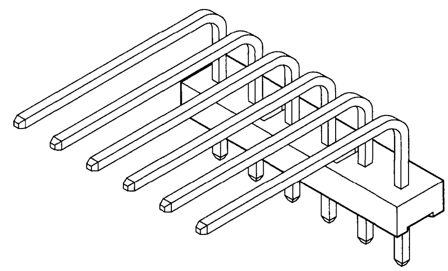
5272-NA Right Angle

Features and Benefits
- Sizes 2 to 12 circuits

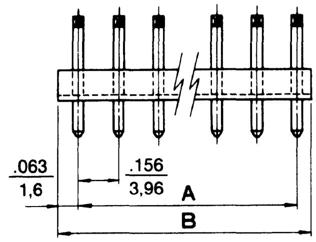
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5195-N and 5239-N housings
Designed In: Millimeters

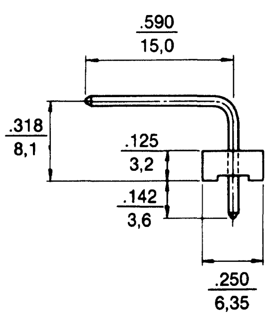
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

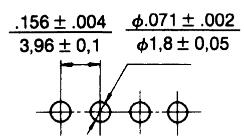
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East







P.C. Board Hole Dimensions

inch
mm

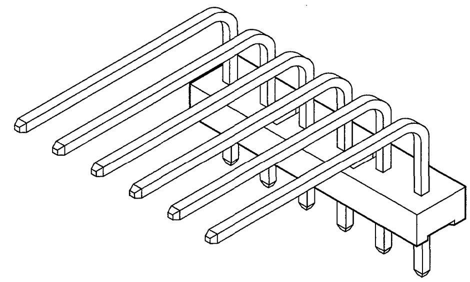
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-66-5022	3.96 (.156)	7.16 (.282)
3	09-66-5032	7.92 (.312)	11.12 (.437)
4	09-66-5042	11.88 (.467)	15.08 (.593)
5	09-66-5052	15.84 (.623)	19.04 (.749)
6	09-66-5062	19.80 (.779)	23.00 (.906)
7	09-66-5072	23.76 (.935)	26.96 (1.061)
8	09-66-5082	27.72 (1.091)	30.92 (1.217)
9	09-66-5092	31.68 (1.247)	34.88 (1.371)
10	09-66-5102	35.64 (1.403)	38.84 (1.529)
11	09-66-5112	39.60 (1.559)	42.80 (1.690)
12	09-66-5122	43.56 (1.714)	46.76 (1.840)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch KK® Header

3246 Right Angle Square Pin



Features and Benefits
- Sizes 2 to 18 circuits
- End-to-end stackable

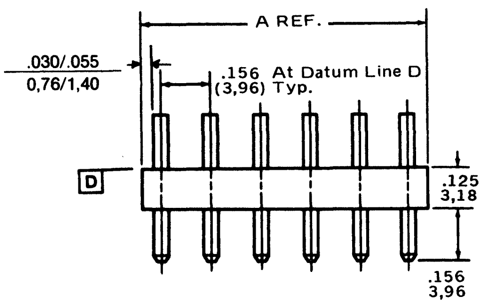
Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179 SC
CSA File No.: LR19980
Mates With: Molex .156" pitch connectors
Designed In: Inches

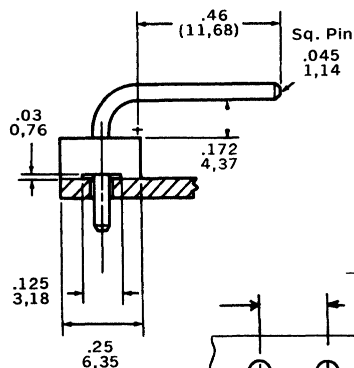
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

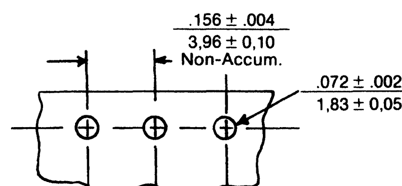
Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-2
Contact: Brass
Plating: 5μm Tin and 0.51μm Gold
Temperature: -40 to +105°C

Preferred Version in Europe and the Far East







Recommended P.C. Board
Hole Dimensions

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin	Order No. Gold	Dimension A
2	26-10-2021	26-28-2021	7.32 (.288)
3	26-10-2031	26-28-2031	11.28 (.444)
4	26-10-2041	26-28-2041	15.24 (.600)
5	26-10-2051	26-28-2051	19.20 (.756)
6	26-10-2061	26-28-2061	23.17 (.912)
7	26-10-2071	26-28-2071	27.13 (1.068)
8	26-10-2081	26-28-2081	31.09 (1.224)
9	26-10-2091	26-28-2091	35.05 (1.380)
10	26-10-2101	26-28-2101	39.01 (1.536)

Circuits	Order No. Tin	Order No. Gold	Dimension A
11	26-10-2111	26-28-2111	42.98 (1.692)
12	26-10-2121	26-28-2121	46.94 (1.848)
13	26-10-2131	26-28-2131	50.90 (2.004)
14	26-10-2141	26-28-2141	54.86 (2.160)
15	26-10-2151	26-28-2151	58.83 (2.316)
16	26-10-2161	26-28-2161	62.70 (2.472)
17	26-10-2171	26-28-2171	66.75 (2.628)
18	26-10-2181	26-28-2181	70.71 (2.784)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Optional voided circuits available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

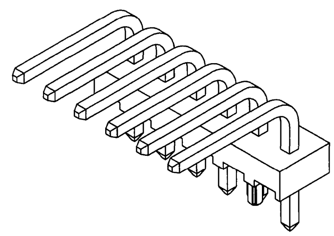
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

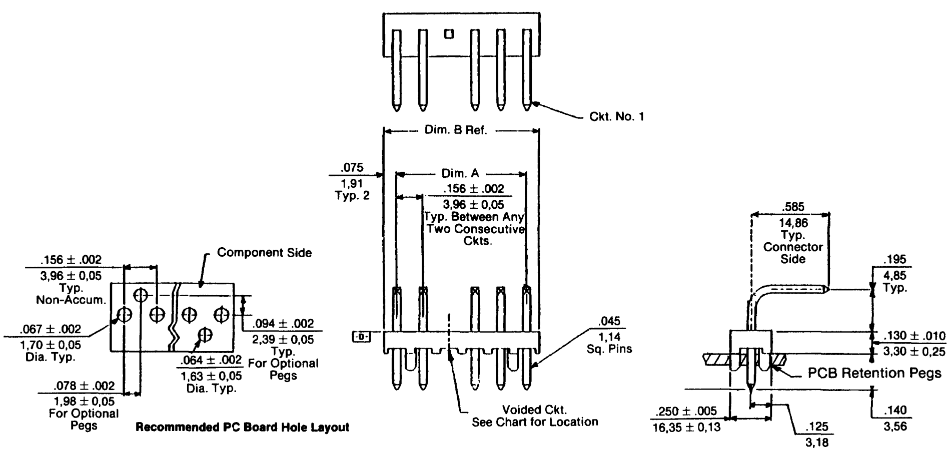
Physical
Housing: Polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") square
Plating: See Table
Temperature: -40 to +105°C

molex 3.96mm (.156") Pitch Header

42472

Right Angle, Square Pin With Press-Fit Pegs





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-64-3020	26-65-3020	3.96 (.156)	7.77 (.306)	1
3	26-64-3030	26-65-3030	7.92 (.312)	11.73 (.462)	2
4	26-64-3040	26-65-3040	11.89 (.468)	15.70 (.618)	2
5	26-64-3050	26-65-3050	15.85 (.624)	19.66 (.774)	2
6	26-64-3060	26-65-3060	19.81 (.780)	23.62 (.930)	2
7	26-64-3070	26-65-3070	23.77 (.936)	27.58 (1.086)	2
8	26-64-3080	26-65-3080	27.74 (1.092)	31.55 (1.242)	2
9	26-64-3090	26-65-3090	31.70 (1.248)	35.51 (1.398)	2
10	26-64-3100	26-65-3100	35.66 (1.404)	39.47 (1.554)	2
11	26-64-3110	26-65-3110	39.62 (1.560)	43.43 (1.710)	2
12	26-64-3120	26-65-3120	43.59 (1.716)	47.40 (1.866)	2
13	26-64-3130	26-65-3130	47.55 (1.872)	51.36 (2.022)	2
14	26-64-3140	26-65-3140	51.51 (2.028)	55.32 (2.178)	2
15	26-64-3150	26-65-3150	55.47 (2.184)	59.28 (2.334)	2
16	26-64-3160	26-65-3160	59.44 (2.340)	63.25 (2.490)	2
17	26-64-3170	26-65-3170	63.40 (2.496)	67.21 (2.646)	2
18	26-64-3180	26-65-3180	67.36 (2.652)	71.17 (2.802)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42872

Right Angle, Square Pin With Snap-In Pegs

Features and Benefits

- Sizes 2 to 18 circuits
- Snap-in peg locks header to PCB for optimum retention
- Optional voided circuits available
- Various pin lengths available (contact factory)

Reference Information

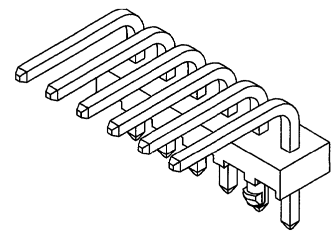
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

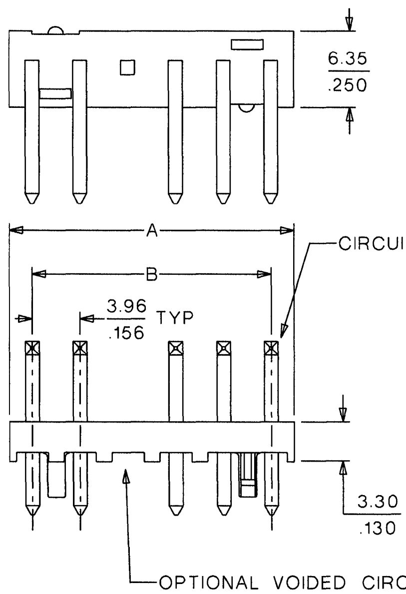
Electrical

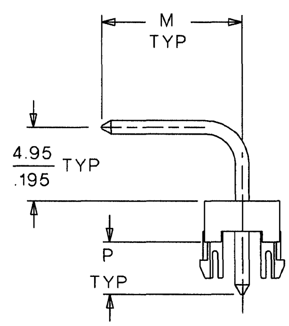
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

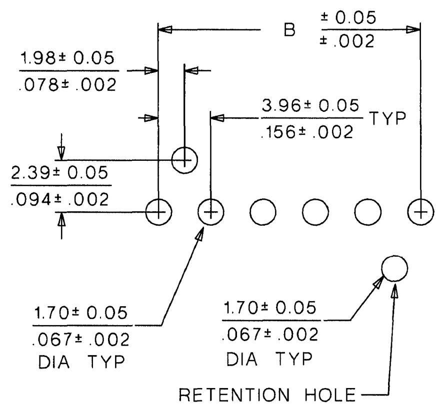
Physical

Housing: Polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") square
Plating: See Table
Temperature: -40 to +105°C









PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS 1.57± 0.18 / .062± .007

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-60-9023	26-60-9024	7.77 (.306)	3.96 (.156)	1
3	26-60-9033	26-60-9034	11.73 (.462)	7.92 (.312)	2
4	26-60-9043	26-60-9044	15.70 (.618)	11.89 (.468)	2
5	26-60-9053	26-60-9054	19.66 (.774)	15.85 (.624)	2
6	26-60-9063	26-60-9064	23.62 (.930)	19.81 (.780)	2
7	26-60-9073	26-60-9074	27.58 (1.086)	23.77 (.936)	2
8	26-60-9083	26-60-9084	31.55 (1.242)	27.74 (1.092)	2
9	26-60-9093	26-60-9094	35.51 (1.398)	31.70 (1.248)	2
10	26-60-9103	26-60-9104	39.47 (1.554)	35.66 (1.404)	2
11	26-60-9113	26-60-9114	43.43 (1.710)	39.62 (1.560)	2
12	26-60-9123	26-60-9124	47.40 (1.866)	43.59 (1.716)	2
13	26-60-9133	26-60-9134	51.36 (2.022)	47.55 (1.872)	2
14	26-60-9143	26-60-9144	55.32 (2.178)	51.51 (2.028)	2
15	26-60-9153	26-60-9154	59.28 (2.334)	55.47 (2.184)	2
16	26-60-9163	26-60-9164	63.25 (2.490)	59.44 (2.340)	2
17	26-60-9173	26-60-9174	67.21 (2.646)	63.40 (2.496)	2
18	26-60-9183	26-60-9184	71.17 (2.802)	67.36 (2.652)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

41772

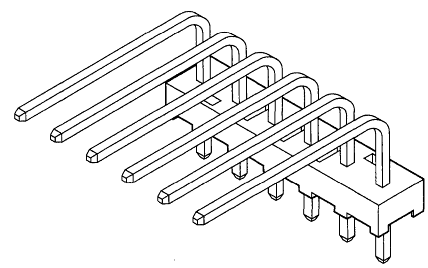
Right Angle, Square Pin Without Pegs

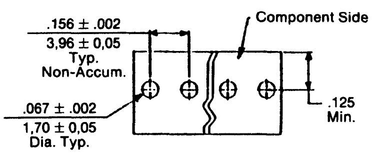
Features and Benefits
- Sizes 2 to 18 circuits
- Optional voided circuits available
- Various pin lengths available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

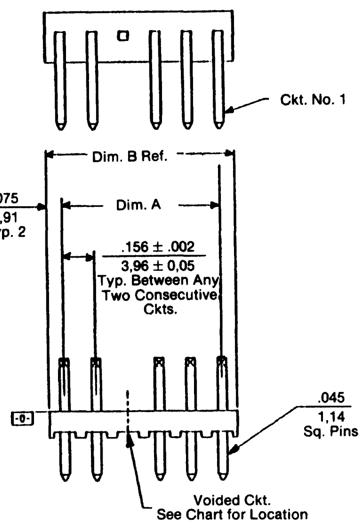
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

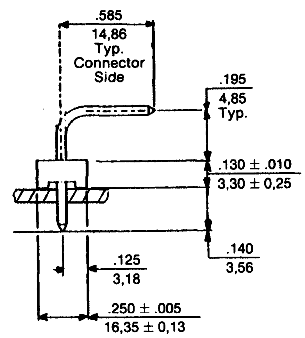
Physical
Housing: Polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") square
Plating: See Table
Temperature: -40 to +105°C





Recommended PC Board Hole Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 26-60-3020	• 26-61-3020	3.96 (.156)	7.77 (.306)
3	• 26-60-3030	• 26-61-3030	7.92 (.312)	11.73 (.462)
4	• 26-60-3040	• 26-61-3040	11.89 (.468)	15.70 (.618)
5	• 26-60-3050	• 26-61-3050	15.85 (.624)	19.66 (.774)
6	• 26-60-3060	• 26-61-3060	19.81 (.780)	23.62 (.930)
7	• 26-60-3070	• 26-61-3070	23.77 (.936)	27.58 (1.086)
8	• 26-60-3080	• 26-61-3080	27.74 (1.092)	31.55 (1.242)
9	• 26-60-3090	• 26-61-3090	31.70 (1.248)	35.51 (1.398)
10	• 26-60-3100	• 26-61-3100	35.66 (1.404)	39.47 (1.554)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
11	• 26-60-3110	• 26-61-3110	39.62 (1.560)	43.43 (1.710)
12	• 26-60-3120	• 26-61-3120	43.59 (1.716)	47.40 (1.866)
13	• 26-60-3130	• 26-61-3130	47.55 (1.872)	51.36 (2.022)
14	• 26-60-3140	• 26-61-3140	51.51 (2.028)	55.32 (2.178)
15	• 26-60-3150	• 26-61-3150	55.47 (2.184)	59.28 (2.334)
16	• 26-60-3160	• 26-61-3160	59.44 (2.340)	63.25 (2.490)
17	• 26-60-3170	• 26-61-3170	63.40 (2.496)	67.21 (2.646)
18	• 26-60-3180	• 26-61-3180	67.36 (2.652)	71.17 (2.802)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42441

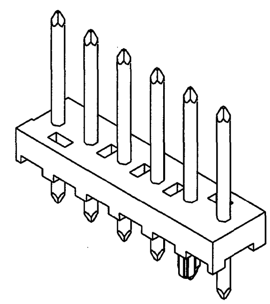
Straight, Round Pin With Press-Fit Pegs

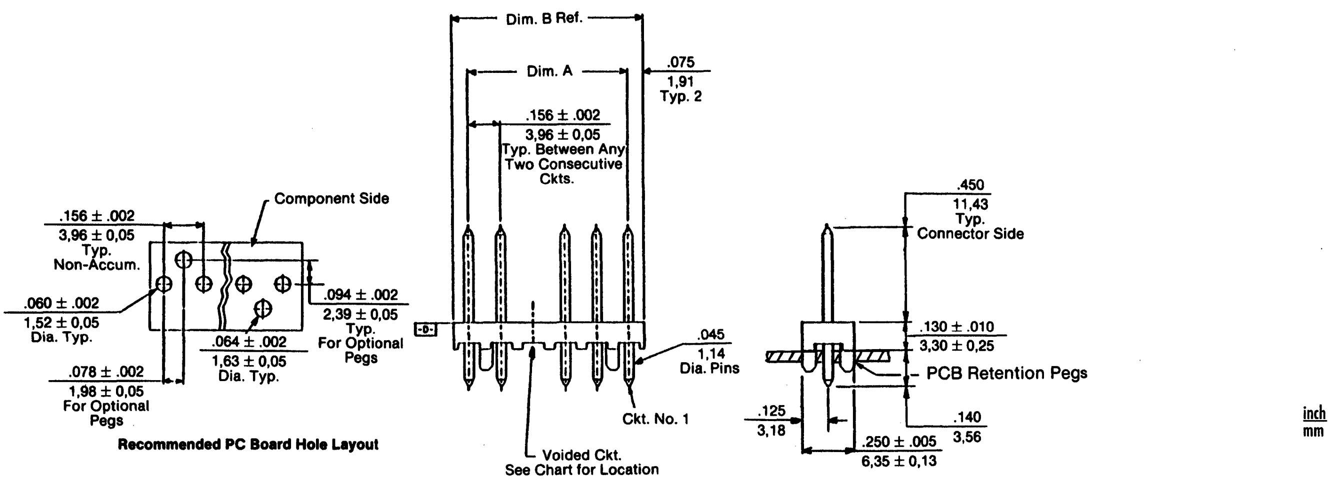
Features and Benefits
- Sizes 2 to 18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Optional voided circuits available
- Various pin lengths available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-64-0020	26-65-0020	3.96 (.156)	7.77 (.306)	1
3	26-64-0030	26-65-0030	7.92 (.312)	11.73 (.462)	2
4	26-64-0040	26-65-0040	11.89 (.468)	15.70 (.618)	2
5	26-64-0050	26-65-0050	15.85 (.624)	19.66 (.774)	2
6	26-64-0060	26-65-0060	19.81 (.780)	23.62 (.930)	2
7	26-64-0070	26-65-0070	23.77 (.936)	27.58 (1.086)	2
8	26-64-0080	26-65-0080	27.74 (1.092)	31.55 (1.242)	2
9	26-64-0090	26-65-0090	31.70 (1.248)	35.51 (1.398)	2
10	26-64-0100	26-65-0100	35.66 (1.404)	39.47 (1.554)	2
11	26-64-0110	26-65-0110	39.62 (1.560)	43.43 (1.710)	2
12	26-64-0120	26-65-0120	43.59 (1.716)	47.40 (1.866)	2
13	26-64-0130	26-65-0130	47.55 (1.872)	51.36 (2.022)	2
14	26-64-0140	26-65-0140	51.51 (2.028)	55.32 (2.178)	2
15	26-64-0150	26-65-0150	55.47 (2.184)	59.28 (2.334)	2
16	26-64-0160	26-65-0160	59.44 (2.340)	63.25 (2.490)	2
17	26-64-0170	26-65-0170	63.40 (2.496)	67.21 (2.646)	2
18	26-64-0180	26-65-0180	67.36 (2.652)	71.17 (2.802)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42841

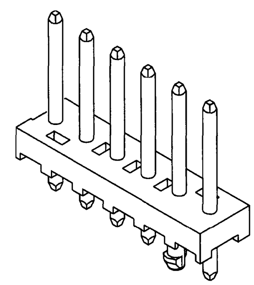
Straight, Round Pin With Snap-In Pegs

Features and Benefits
- Sizes 2 to 18 circuits
- Snap-in peg locks header to PCB for optimum retention
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C



PCB Connectors

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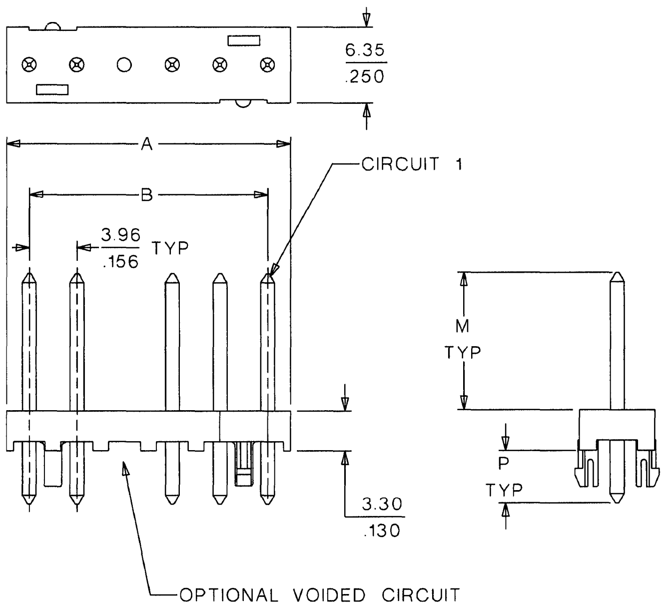
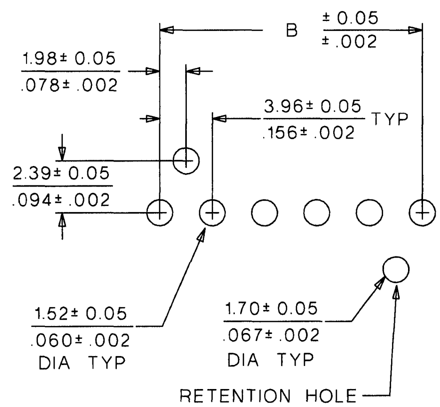




PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS $\frac{1.57 \pm 0.18}{.062 \pm .007}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-60-1023	26-60-1024	7.77 (.306)	3.96 (.156)	1
3	26-60-1033	26-60-1034	11.73 (.462)	7.92 (.312)	2
4	26-60-1043	26-60-1044	15.70 (.618)	11.89 (.468)	2
5	26-60-1053	26-60-1054	19.66 (.774)	15.85 (.624)	2
6	26-60-1063	26-60-1064	23.62 (.930)	19.81 (.780)	2
7	26-60-1073	26-60-1074	27.58 (1.086)	23.77 (.936)	2
8	26-60-1083	26-60-1084	31.55 (1.242)	27.74 (1.092)	2
9	26-60-1093	26-60-1094	35.51 (1.398)	31.70 (1.248)	2
10	26-60-1103	26-60-1104	39.47 (1.554)	35.66 (1.404)	2
11	26-60-1113	26-60-1114	43.43 (1.710)	39.62 (1.560)	2
12	26-60-1123	26-60-1124	47.40 (1.866)	43.59 (1.716)	2
13	26-60-1133	26-60-1134	51.36 (2.022)	47.55 (1.872)	2
14	26-60-1143	26-60-1144	55.32 (2.178)	51.51 (2.028)	2
15	26-60-1153	26-60-1154	59.28 (2.334)	55.47 (2.184)	2
16	26-60-1163	26-60-1164	63.25 (2.490)	59.44 (2.340)	2
17	26-60-1173	26-60-1174	67.21 (2.646)	63.40 (2.496)	2
18	26-60-1183	26-60-1184	71.17 (2.802)	67.36 (2.652)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

molex® **3.96mm (.156") Pitch Header**

41741

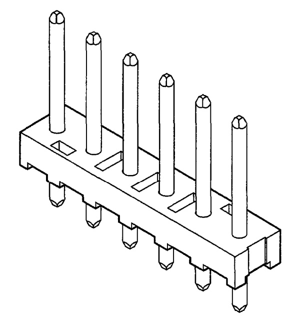
Straight, Round Pin Without Pegs

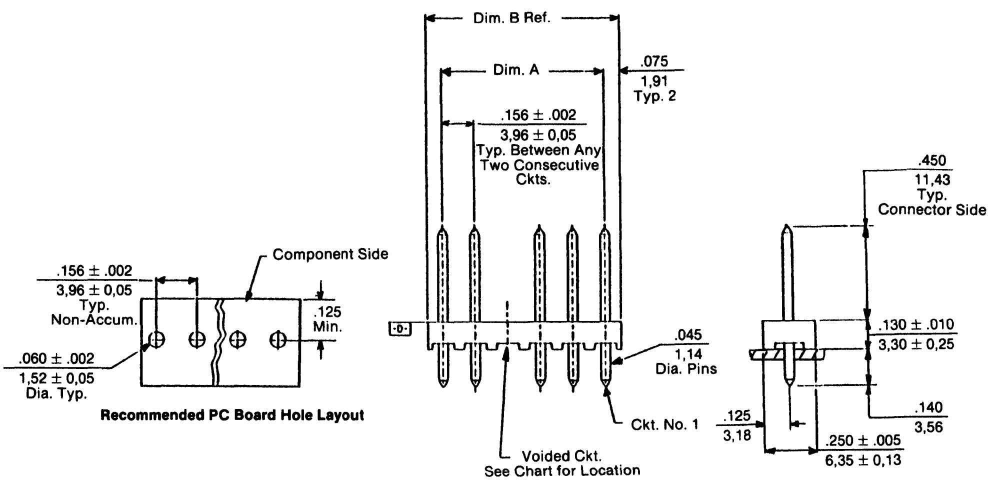
Features and Benefits
- Sizes 2 to 18 circuits
- Round pins pre-inserted into polyester wafers
- Optional voided circuits available (contact factory)
- Various pin lengths available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





inch
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ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 26-60-0020	• 26-61-0020	3.96 (.156)	7.77 (.306)
3	• 26-60-0030	• 26-61-0030	7.92 (.312)	11.73 (.462)
4	• 26-60-0040	• 26-61-0040	11.89 (.468)	15.70 (.618)
5	• 26-60-0050	• 26-61-0050	15.85 (.624)	19.66 (.774)
6	• 26-60-0060	• 26-61-0060	19.81 (.780)	23.62 (.930)
7	• 26-60-0070	• 26-61-0070	23.77 (.936)	27.58 (1.086)
8	• 26-60-0080	• 26-61-0080	27.74 (1.092)	31.55 (1.242)
9	• 26-60-0090	• 26-61-0090	31.70 (1.248)	35.51 (1.398)
10	• 26-60-0100	• 26-61-0100	35.66 (1.404)	39.47 (1.554)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
11	• 26-60-0110	• 26-61-0110	39.62 (1.560)	43.43 (1.710)
12	• 26-60-0120	• 26-61-0120	43.59 (1.716)	47.40 (1.866)
13	• 26-60-0130	• 26-61-0130	47.55 (1.872)	51.36 (2.022)
14	• 26-60-0140	• 26-61-0140	51.51 (2.028)	55.32 (2.178)
15	• 26-60-0150	• 26-61-0150	55.47 (2.184)	59.28 (2.334)
16	• 26-60-0160	• 26-61-0160	59.44 (2.340)	63.25 (2.490)
17	• 26-60-0170	• 26-61-0170	63.40 (2.496)	67.21 (2.646)
18	• 26-60-0180	• 26-61-0180	67.36 (2.652)	71.17 (2.802)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

2220

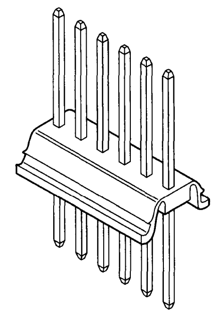
Chassis Mount

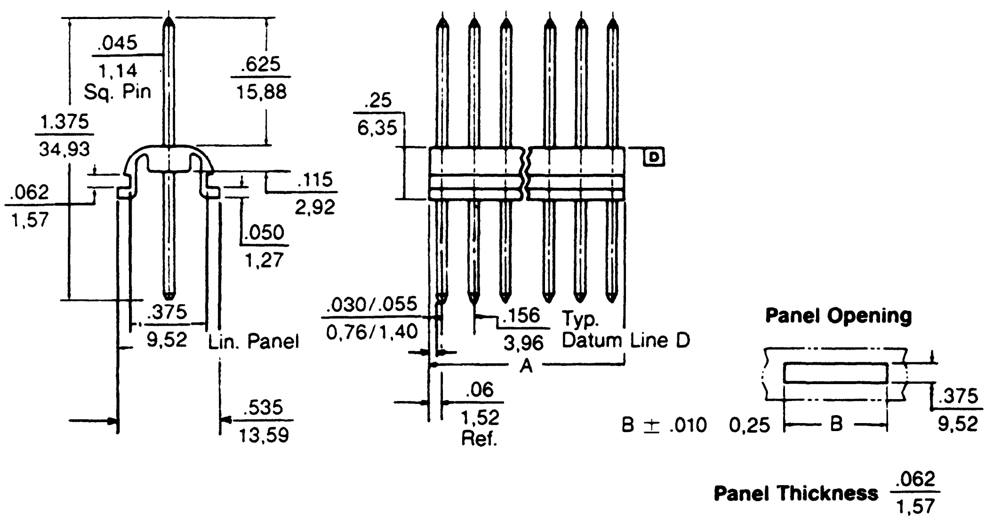
Features and Benefits
- Sizes 2 to 18 circuits
- Mounts in chassis .062" thick
- Various pin lengths available (contact factory)
- For voided options see 6420 Series

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
Mates With: Molex 3.96mm (.156") pitch connectors
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square





inch
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ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	09-57-1025	09-78-1021	7.37 (.290)	7.67 (.302)
3	09-57-1035	09-78-1031	11.33 (.446)	11.63 (.458)
4	09-57-1045	09-78-1041	15.29 (.602)	15.60 (.614)
5	09-57-1055	09-78-1051	19.25 (.758)	19.56 (.770)
6	09-57-1065	09-78-1061	23.22 (.914)	23.52 (.926)
7	09-57-1075	09-78-1071	27.18 (1.070)	27.48 (1.082)
8	09-57-1085	09-78-1081	31.14 (1.226)	31.45 (1.238)
9	09-57-1095	09-78-1091	35.10 (1.382)	35.41 (1.394)
10	09-57-1105	09-78-1101	39.07 (1.538)	39.37 (1.550)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
11	09-57-1115	09-78-1111	43.03 (1.694)	43.33 (1.706)
12	09-57-1125	09-78-1121	46.99 (1.850)	47.29 (1.862)
13	09-57-1135	09-78-1131	50.95 (2.006)	53.54 (2.108)
14	09-57-1145	09-78-1141	54.91 (2.162)	55.22 (2.174)
15	09-57-1155	09-78-1151	58.88 (2.318)	59.18 (2.330)
16	09-57-1165	09-78-1161	62.84 (2.474)	63.14 (2.486)
17	09-57-1175	09-78-1171	66.80 (2.630)	67.11 (2.642)
18	09-57-1185	09-78-1181	70.76 (2.786)	71.07 (2.798)

FEATURES AND SPECIFICATIONS

molex® **3.96mm (.156") Pitch KK® Header**

3192 Straight Round Pin

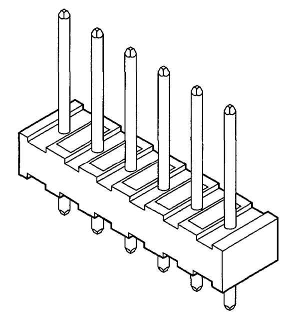
Features and Benefits
- Sizes 2 to 18 circuits
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex 3.96mm (.156") pitch connectors
Designed In: Inches

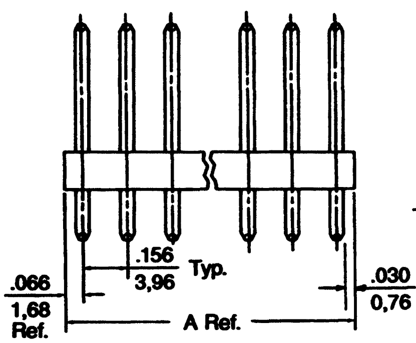
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

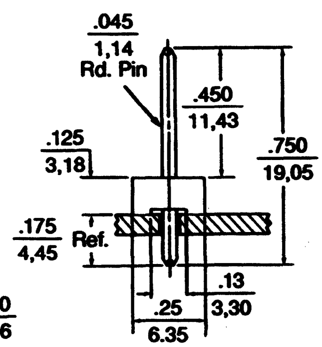
Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

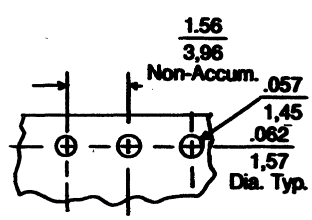
Physical
Housing: Nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") round
Plating: 5µm Tin and 0.51µm Gold
Temperature: -40 to +105°C



Preferred Version in Europe and the Far East







Recommended P.C. Board Hole Dimensions

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	26-20-2021	26-23-2021	7.32 (.288)
3	26-20-2031	26-23-2031	11.28 (.444)
4	26-20-2041	26-23-2041	15.24 (.600)
5	26-20-2051	26-23-2051	19.20 (.756)
6	26-20-2061	26-23-2061	23.17 (.912)
7	26-20-2071	26-23-2071	27.13 (1.068)
8	26-20-2081	26-23-2081	31.09 (1.224)
9	26-20-2091	26-23-2091	35.05 (1.380)
10	26-20-2101	26-23-2101	39.01 (1.536)

Circuits	Order No.		Dimension A
	Tin	Gold	
11	26-20-2111	26-23-2111	42.98 (1.692)
12	26-20-2121	26-23-2121	46.94 (1.848)
13	26-20-2131	26-23-2131	50.90 (2.004)
14	26-20-2141	26-23-2141	54.86 (2.160)
15	26-20-2151	26-23-2151	58.83 (2.316)
16	26-20-2161	26-23-2161	62.79 (2.472)
17	26-20-2171	26-23-2171	66.75 (2.628)
18	26-20-2181	26-23-2181	70.71 (2.784)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42491

Straight, Square Pin Friction Lock With Press-Fit Pegs

Features and Benefits

- Sizes 2 to 18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Optional voided circuits available
- End-to-end stackable

Reference Information

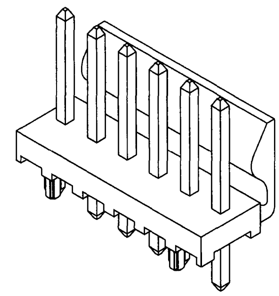
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

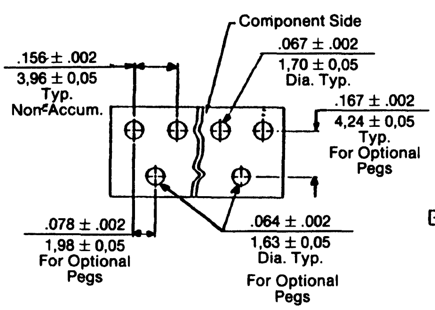
Electrical

Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

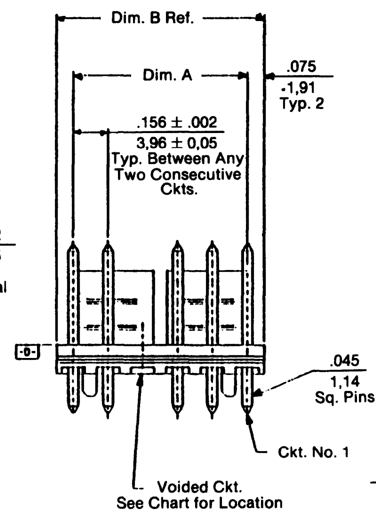
Physical

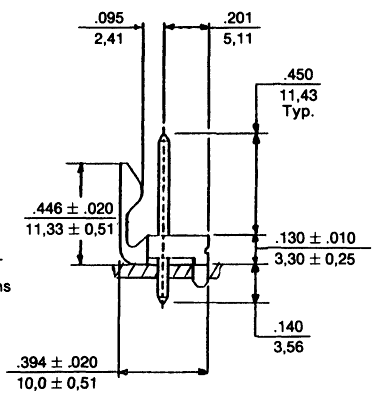
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





Recommended PC Board Hole Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-64-4020	26-65-4020	3.96 (.156)	7.77 (.306)	1
3	26-64-4030	26-65-4030	7.92 (.312)	11.73 (.462)	2
4	26-64-4040	26-65-4040	11.89 (.468)	15.70 (.618)	2
5	26-64-4050	26-65-4050	15.85 (.624)	19.66 (.774)	2
6	26-64-4060	26-65-4060	19.81 (.780)	23.62 (.930)	2
7	26-64-4070	26-65-4070	23.77 (.936)	27.58 (1.086)	2
8	26-64-4080	26-65-4080	27.74 (1.092)	31.55 (1.242)	2
9	26-64-4090	26-65-4090	31.70 (1.248)	35.51 (1.398)	2
10	26-64-4100	26-65-4100	35.66 (1.404)	39.47 (1.554)	2
11	26-64-4110	26-65-4110	39.62 (1.560)	43.43 (1.710)	2
12	26-64-4120	26-65-4120	43.59 (1.716)	47.40 (1.866)	2
13	26-64-4130	26-65-4130	47.55 (1.872)	51.36 (2.022)	2
14	26-64-4140	26-65-4140	51.51 (2.028)	55.32 (2.178)	2
15	26-64-4150	26-65-4150	55.47 (2.184)	59.28 (2.334)	2
16	26-64-4160	26-65-4160	59.44 (2.340)	63.25 (2.490)	2
17	26-64-4170	26-65-4170	63.40 (2.496)	67.21 (2.646)	2
18	26-64-4180	26-65-4180	67.36 (2.652)	71.17 (2.802)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42891

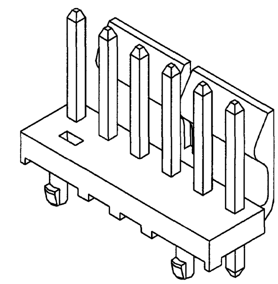
Straight, Square Pin Friction Lock With Snap-In Pegs

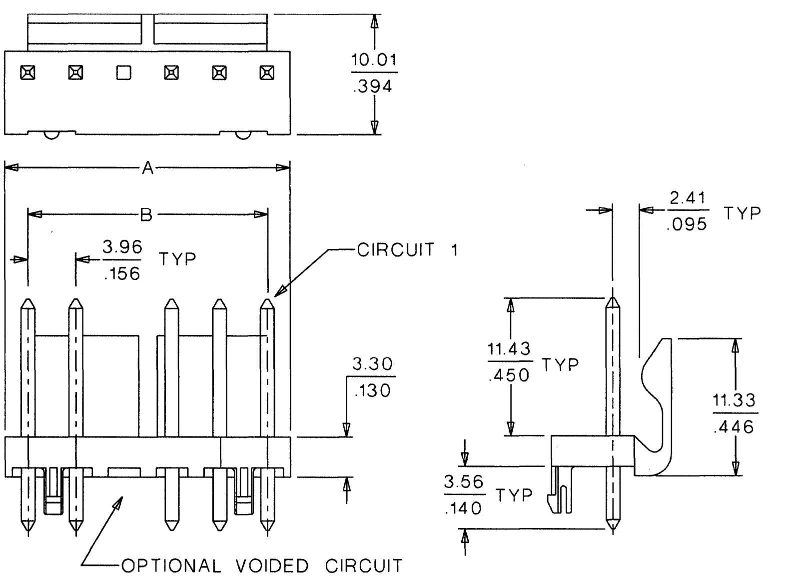
Features and Benefits
- Sizes 2 to 18 circuits
- Snap-in peg locks header to PCB for optimum retention
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Optional voided circuits available
- End-to-end stackable

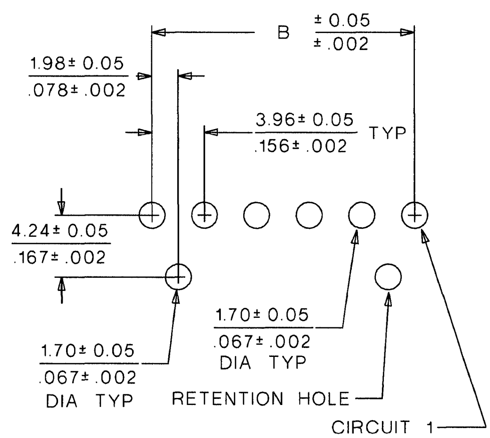
Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C







PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS 1.57± 0.18 / .062±.007

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-60-6020	26-60-6022	7.77 (.306)	3.96 (.156)	1
3	26-60-6030	26-60-6032	11.73 (.462)	7.92 (.312)	2
4	26-60-6040	26-60-6042	15.70 (.618)	11.89 (.468)	2
5	26-60-6050	26-60-6052	19.66 (.774)	15.85 (.624)	2
6	26-60-6060	26-60-6062	23.62 (.930)	19.81 (.780)	2
7	26-60-6070	26-60-6072	27.58 (1.086)	23.77 (.936)	2
8	26-60-6080	26-60-6082	31.55 (1.242)	27.74 (1.092)	2
9	26-60-6090	26-60-6092	35.51 (1.398)	31.70 (1.248)	2
10	26-60-6100	26-60-6102	39.47 (1.554)	35.66 (1.404)	2
11	26-60-6110	26-60-6112	43.43 (1.710)	39.62 (1.560)	2
12	26-60-6120	26-60-6122	47.40 (1.866)	43.59 (1.716)	2
13	26-60-6130	26-60-6132	51.36 (2.022)	47.55 (1.872)	2
14	26-60-6140	26-60-6142	55.32 (2.178)	51.51 (2.028)	2
15	26-60-6150	26-60-6152	59.28 (2.334)	55.47 (2.184)	2
16	26-60-6160	26-60-6162	63.25 (2.490)	59.44 (2.340)	2
17	26-60-6170	26-60-6172	67.21 (2.646)	63.40 (2.496)	2
18	26-60-6180	26-60-6182	71.17 (2.802)	67.36 (2.652)	2

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

41791

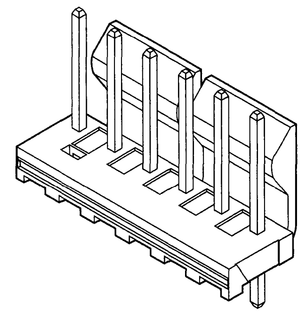
Straight, Square Pin Friction Lock

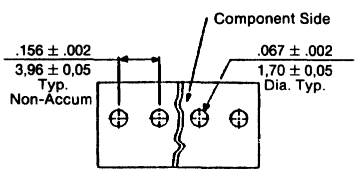
Features and Benefits
- Sizes 2 to 18 circuits
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Various pin lengths available (contact factory)
- Voided circuits available (contact factory)
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

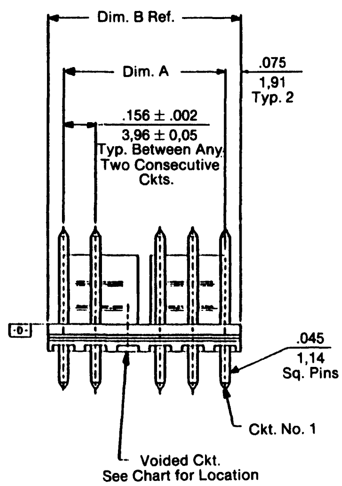
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

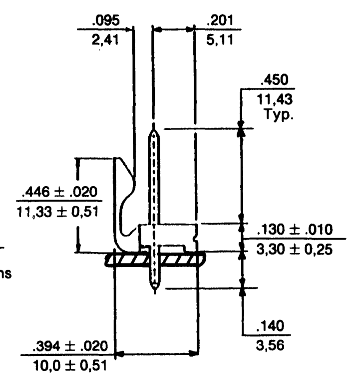
Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





Recommended PC Board Hole Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	• 26-60-4020	• 26-61-4020	3.96 (.156)	7.77 (.306)	1
3	• 26-60-4030	• 26-61-4030	7.92 (.312)	11.73 (.462)	2
4	• 26-60-4040	• 26-61-4040	11.89 (.468)	15.70 (.618)	2
5	• 26-60-4050	• 26-61-4050	15.85 (.624)	19.66 (.774)	2
6	• 26-60-4060	• 26-61-4060	19.81 (.780)	23.62 (.930)	2
7	• 26-60-4070	• 26-61-4070	23.77 (.936)	27.58 (1.086)	2
8	• 26-60-4080	• 26-61-4080	27.74 (1.092)	31.55 (1.242)	2
9	• 26-60-4090	• 26-61-4090	31.70 (1.248)	35.51 (1.398)	2
10	• 26-60-4100	• 26-61-4100	35.66 (1.404)	39.47 (1.554)	2
11	• 26-60-4110	• 26-61-4110	39.62 (1.560)	43.43 (1.710)	2
12	• 26-60-4120	• 26-61-4120	43.59 (1.716)	47.40 (1.866)	2
13	• 26-60-4130	• 26-61-4130	47.55 (1.872)	51.36 (2.022)	2
14	• 26-60-4140	• 26-61-4140	51.51 (2.028)	55.32 (2.178)	2
15	• 26-60-4150	• 26-61-4150	55.47 (2.184)	59.28 (2.334)	2
16	• 26-60-4160	• 26-61-4160	59.44 (2.340)	63.25 (2.490)	2
17	• 26-60-4170	• 26-61-4170	63.40 (2.496)	67.21 (2.646)	2
18	• 26-60-4180	• 26-61-4180	67.36 (2.652)	71.17 (2.802)	2

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

3.96mm (.156") Pitch Header

42492

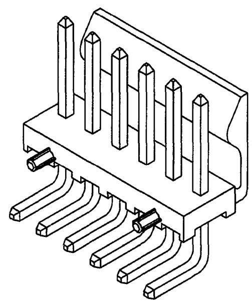
Right Angle, Square Pin Friction Lock With Press-Fit Pegs

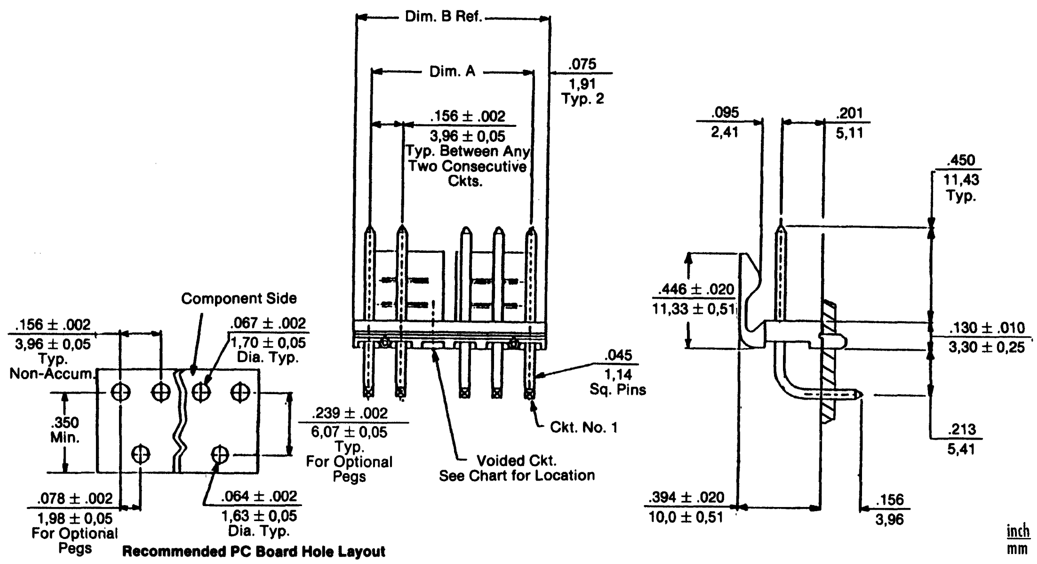
Features and Benefits
- Sizes 2 to 18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Optional voided circuits available
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-64-5020	26-65-5020	3.96 (.156)	7.77 (.306)	1
3	26-64-5030	26-65-5030	7.92 (.312)	11.73 (.462)	2
4	26-64-5040	26-65-5040	11.89 (.468)	15.70 (.618)	2
5	26-64-5050	26-65-5050	15.85 (.624)	19.66 (.774)	2
6	26-64-5060	26-65-5060	19.81 (.780)	23.62 (.930)	2
7	26-64-5070	26-65-5070	23.77 (.936)	27.58 (1.086)	2
8	26-64-5080	26-65-5080	27.74 (1.092)	31.55 (1.242)	2
9	26-64-5090	26-65-5090	31.70 (1.248)	35.51 (1.398)	2
10	26-64-5100	26-65-5100	35.66 (1.404)	39.47 (1.554)	2
11	26-64-5110	26-65-5110	39.62 (1.560)	43.43 (1.710)	2
12	26-64-5120	26-65-5120	43.59 (1.716)	47.40 (1.866)	2
13	26-64-5130	26-65-5130	47.55 (1.872)	51.36 (2.022)	2
14	26-64-5140	26-65-5140	51.51 (2.028)	55.32 (2.178)	2
15	26-64-5150	26-65-5150	55.47 (2.184)	59.28 (2.334)	2
16	26-64-5160	26-65-5160	59.44 (2.340)	63.25 (2.490)	2
17	26-64-5170	26-65-5170	63.40 (2.496)	67.21 (2.646)	2
18	26-64-5180	26-65-5180	67.36 (2.652)	71.17 (2.802)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42892

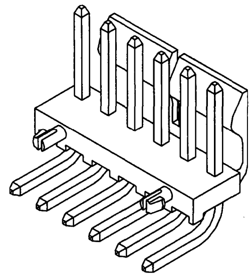
Right Angle, Square Pin Friction Lock With Snap-In Pegs

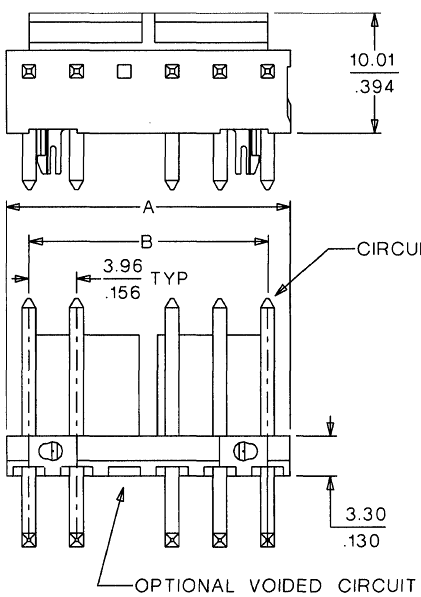
Features and Benefits
- Sizes 2 to 18 circuits
- Snap-in peg locks header to PCB for optimum retention
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Optional voided circuits available
- End-to-end stackable

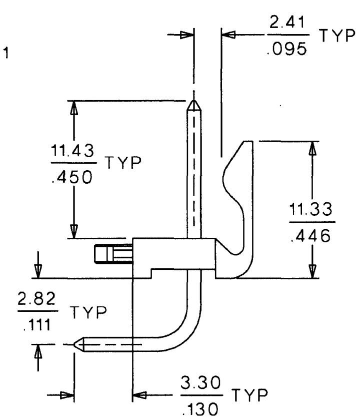
Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

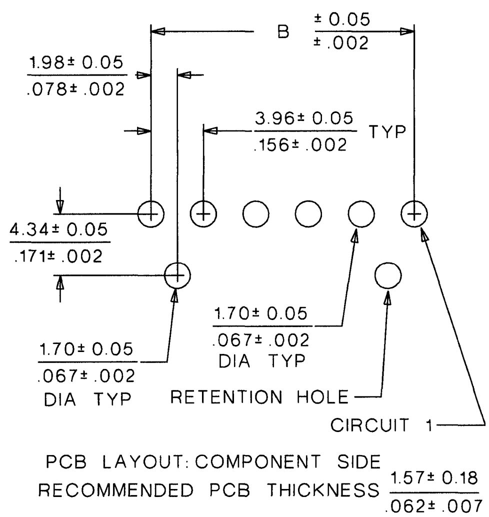
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C









ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-60-7020	26-60-7021	7.77 (.306)	3.96 (.156)	1
3	26-60-7030	26-60-7031	11.73 (.462)	7.92 (.312)	2
4	26-60-7040	26-60-7041	15.70 (.618)	11.89 (.468)	2
5	26-60-7050	26-60-7051	19.66 (.774)	15.85 (.624)	2
6	26-60-7060	26-60-7061	23.62 (.930)	19.81 (.780)	2
7	26-60-7070	26-60-7071	27.58 (1.086)	23.77 (.936)	2
8	26-60-7080	26-60-7081	31.55 (1.242)	27.74 (1.092)	2
9	26-60-7090	26-60-7091	35.51 (1.398)	31.70 (1.248)	2
10	26-60-7100	26-60-7101	39.47 (1.554)	35.66 (1.404)	2
11	26-60-7110	26-60-7111	43.43 (1.710)	39.62 (1.560)	2
12	26-60-7120	26-60-7121	47.40 (1.866)	43.59 (1.716)	2
13	26-60-7130	26-60-7131	51.36 (2.022)	47.55 (1.872)	2
14	26-60-7140	26-60-7141	55.32 (2.178)	51.51 (2.028)	2
15	26-60-7150	26-60-7151	59.28 (2.334)	55.47 (2.184)	2
16	26-60-7160	26-60-7161	63.25 (2.490)	59.44 (2.340)	2
17	26-60-7170	26-60-7171	67.21 (2.646)	63.40 (2.496)	2
18	26-60-7180	26-60-7181	71.17 (2.802)	67.36 (2.652)	2

FEATURES AND SPECIFICATIONS

molex® 3.96mm (.156") Pitch Header

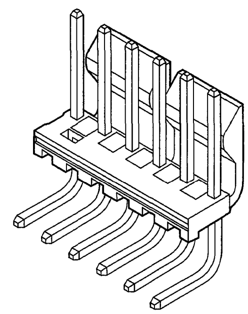
41792
Right Angle, Friction Lock

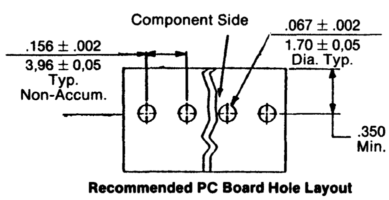
Features and Benefits
- Sizes 2 to 18 circuits
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Various pin lengths available (contact factory)
- Optional voided circuits available
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

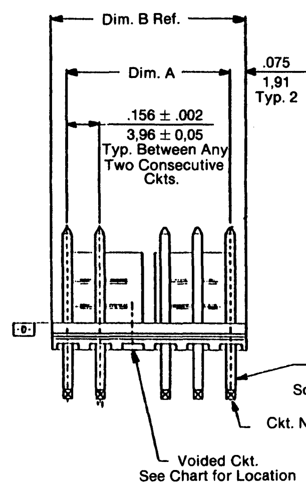
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

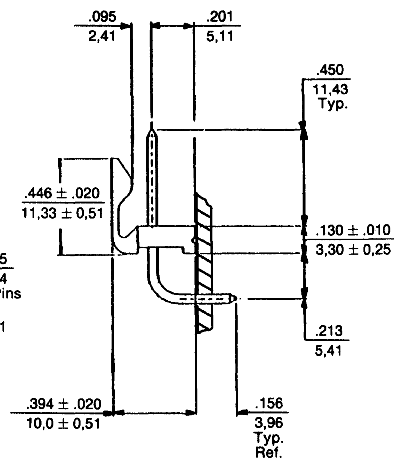
Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





Recommended PC Board Hole Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 26-60-5020	• 26-61-5020	3.96 (.156)	7.77 (.306)
3	• 26-60-5030	• 26-61-5030	7.92 (.312)	11.73 (.462)
4	• 26-60-5040	• 26-61-5040	11.89 (.468)	15.70 (.618)
5	• 26-60-5050	• 26-61-5050	15.85 (.624)	19.66 (.774)
6	• 26-60-5060	• 26-61-5060	19.81 (.780)	23.62 (.930)
7	• 26-60-5070	• 26-61-5070	23.77 (.936)	27.58 (1.086)
8	• 26-60-5080	• 26-61-5080	27.74 (1.092)	31.55 (1.242)
9	• 26-60-5090	• 26-61-5090	31.70 (1.248)	35.51 (1.398)
10	• 26-60-5100	• 26-61-5100	35.66 (1.404)	39.47 (1.554)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
11	• 26-60-5110	• 26-61-5110	39.62 (1.560)	43.43 (1.710)
12	• 26-60-5120	• 26-61-5120	43.59 (1.716)	47.40 (1.866)
13	• 26-60-5130	• 26-61-5130	47.55 (1.872)	51.36 (2.022)
14	• 26-60-5140	• 26-61-5140	51.51 (2.028)	55.32 (2.178)
15	• 26-60-5150	• 26-61-5150	55.47 (2.184)	59.28 (2.334)
16	• 26-60-5160	• 26-61-5160	59.44 (2.340)	63.25 (2.490)
17	• 26-60-5170	• 26-61-5170	63.40 (2.496)	67.21 (2.646)
18	• 26-60-5180	• 26-61-5180	67.36 (2.652)	71.17 (2.802)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42461

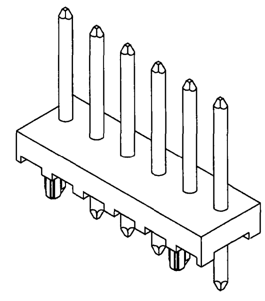
Straight, Round Pin Friction Lock With Press-Fit Pegs

Features and Benefits
- Sizes 2 to 18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Optional voided circuits available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

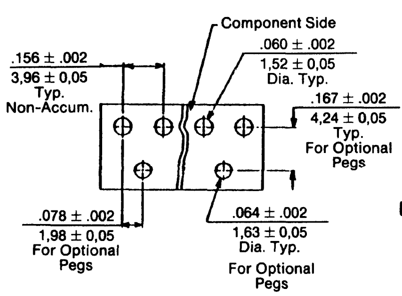
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: White polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C

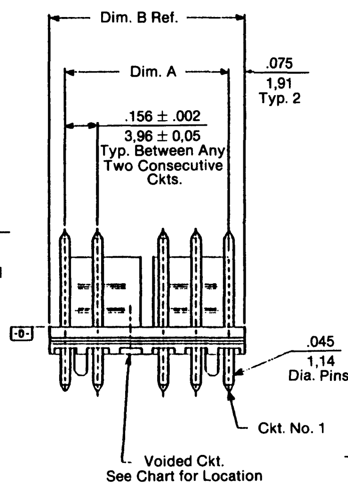


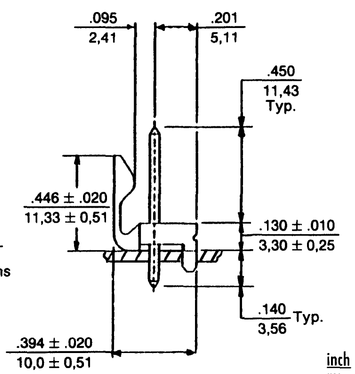
PCB Connectors

J



Recommended PC Board Hole Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-64-1020	26-65-1020	3.96 (.156)	7.77 (.306)	1
3	26-64-1030	26-65-1030	7.92 (.312)	11.73 (.462)	2
4	26-64-1040	26-65-1040	11.89 (.468)	15.70 (.618)	2
5	26-64-1050	26-65-1050	15.85 (.624)	19.66 (.774)	2
6	26-64-1060	26-65-1060	19.81 (.780)	23.62 (.930)	2
7	26-64-1070	26-65-1070	23.77 (.936)	27.58 (1.086)	2
8	26-64-1080	26-65-1080	27.74 (1.092)	31.55 (1.242)	2
9	26-64-1090	26-65-1090	31.70 (1.248)	35.51 (1.398)	2
10	26-64-1100	26-65-1100	35.66 (1.404)	39.47 (1.554)	2
11	26-64-1110	26-65-1110	39.62 (1.560)	43.43 (1.710)	2
12	26-64-1120	26-65-1120	43.59 (1.716)	47.40 (1.866)	2
13	26-64-1130	26-65-1130	47.55 (1.872)	51.36 (2.022)	2
14	26-64-1140	26-65-1140	51.51 (2.028)	55.32 (2.178)	2
15	26-64-1150	26-65-1150	55.47 (2.184)	59.28 (2.334)	2
16	26-64-1160	26-65-1160	59.44 (2.340)	63.25 (2.490)	2
17	26-64-1170	26-65-1170	63.40 (2.496)	67.21 (2.646)	2
18	26-64-1180	26-65-1180	67.36 (2.652)	71.17 (2.802)	2

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

42861

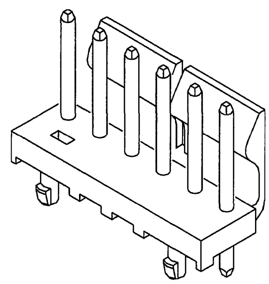
Straight, Round Pin Friction Lock With Snap-In Pegs

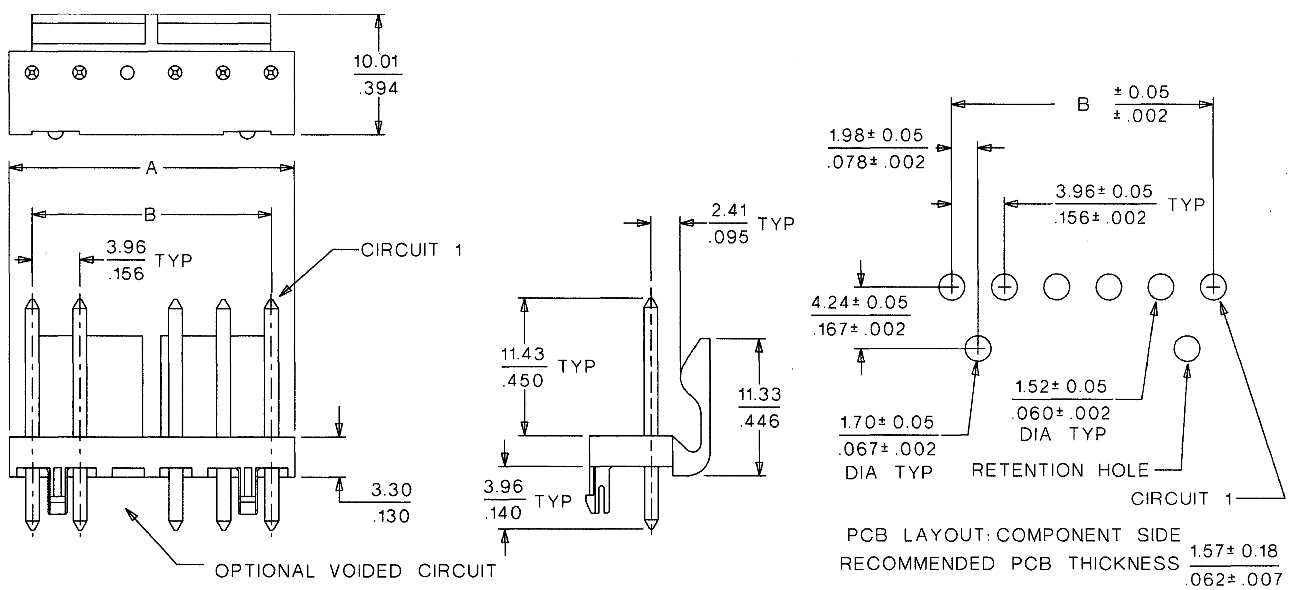
Features and Benefits
- Sizes 2 to 18 circuits
- Snap-in peg locks header to PCB for optimum retention
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Optional voided circuits available (contact factory)
- End-to-end stackable

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: White polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

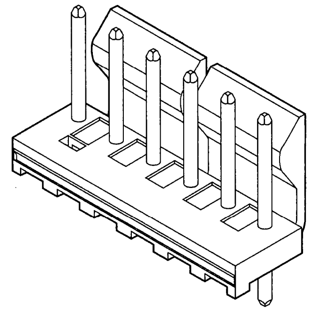
Circuits	Order No.		Dimension		No. of Pegs
	Tin	Gold	A	B	
2	26-60-8021	26-60-8022	7.77 (.306)	3.96 (.156)	1
3	26-60-8031	26-60-8032	11.73 (.462)	7.92 (.312)	2
4	26-60-8041	26-60-8042	15.70 (.618)	11.89 (.468)	2
5	26-60-8051	26-60-8052	19.66 (.774)	15.85 (.624)	2
6	26-60-8061	26-60-8062	23.62 (.930)	19.81 (.780)	2
7	26-60-8071	26-60-8072	27.58 (1.086)	23.77 (.936)	2
8	26-60-8081	26-60-8082	31.55 (1.242)	27.74 (1.092)	2
9	26-60-8091	26-60-8092	35.51 (1.398)	31.70 (1.248)	2
10	26-60-8101	26-60-8102	39.47 (1.554)	35.66 (1.404)	2
11	26-60-8111	26-60-8112	43.43 (1.710)	39.62 (1.560)	2
12	26-60-8121	26-60-8122	47.40 (1.866)	43.59 (1.716)	2
13	26-60-8131	26-60-8132	51.36 (2.022)	47.55 (1.872)	2
14	26-60-8141	26-60-8142	55.32 (2.178)	51.51 (2.028)	2
15	26-60-8151	26-60-8152	59.28 (2.334)	55.47 (2.184)	2
16	26-60-8161	26-60-8162	63.25 (2.490)	59.44 (2.340)	2
17	26-60-8171	26-60-8172	67.21 (2.646)	63.40 (2.496)	2
18	26-60-8181	26-60-8182	71.17 (2.802)	67.36 (2.652)	2

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Header

41761

Straight, Round Pin Friction Lock

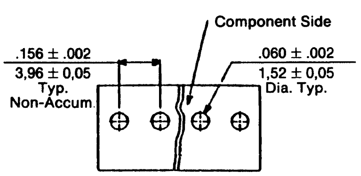


Features and Benefits
- Sizes 2 to 18 circuits
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- Various pin lengths available (contact factory)
- Optional voided circuits available (contact factory)
- End-to-end stackable

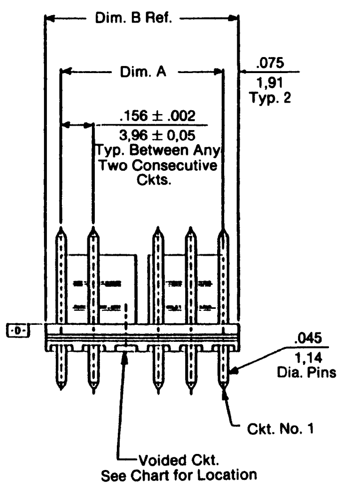
Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2139, 2145, 3069, 6442, 7660, 7664, 7674, 7675, 41695 and 41815
Designed In: Inches

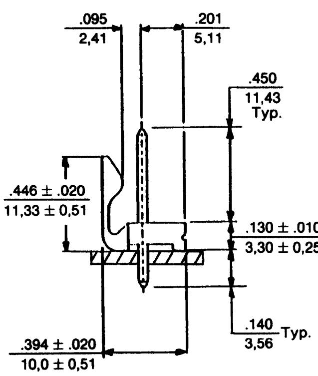
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 6mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K MΩ min.

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: See Table
Temperature: -40 to +105°C



Recommended PC Board Hole Layout





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	• 26-60-1020	• 26-61-1020	3.96 (.156)	7.77 (.306)
3	• 26-60-1030	• 26-61-1030	7.92 (.312)	11.73 (.462)
4	• 26-60-1040	• 26-61-1040	11.89 (.468)	15.70 (.618)
5	• 26-60-1050	• 26-61-1050	15.85 (.624)	19.66 (.774)
6	• 26-60-1060	• 26-61-1060	19.81 (.780)	23.62 (.930)
7	• 26-60-1070	• 26-61-1070	23.77 (.936)	27.58 (1.086)
8	• 26-60-1080	• 26-61-1080	27.74 (1.092)	31.55 (1.242)
9	• 26-60-1090	• 26-61-1090	31.70 (1.248)	35.51 (1.398)
10	• 26-60-1100	• 26-61-1100	35.66 (1.404)	39.47 (1.554)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
11	• 26-60-1110	• 26-61-1110	39.62 (1.560)	43.43 (1.710)
12	• 26-60-1120	• 26-61-1120	43.59 (1.716)	47.40 (1.866)
13	• 26-60-1130	• 26-61-1130	47.55 (1.872)	51.36 (2.022)
14	• 26-60-1140	• 26-61-1140	51.51 (2.028)	55.32 (2.178)
15	• 26-60-1150	• 26-61-1150	55.47 (2.184)	59.28 (2.334)
16	• 26-60-1160	• 26-61-1160	59.44 (2.340)	63.25 (2.490)
17	• 26-60-1170	• 26-61-1170	63.40 (2.496)	67.21 (2.646)
18	• 26-60-1180	• 26-61-1180	67.36 (2.652)	71.17 (2.802)

• US Standard Product, available through Molex franchised distributors
Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch KK® Header

3243

Right Angle, Square Pin Polarizing Wall

Features and Benefits
- Sizes 2 to 17 circuits

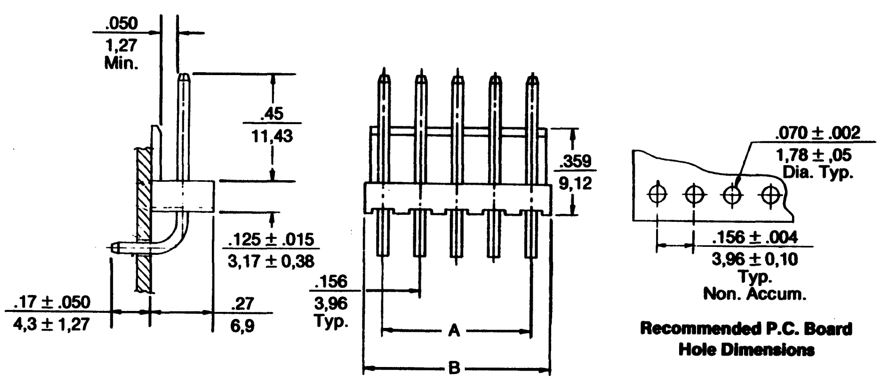
Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex .156" connectors
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: 5μm Tin and 0.51μm Gold
Temperature: -40 to +105°C

Preferred Version in Europe and the Far East



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
2	26-17-1021	26-26-1021	3.96 (.156)	7.92 (.312)
3	26-17-1031	26-26-1031	7.92 (.312)	11.89 (.468)
4	26-17-1041	26-26-1041	11.89 (.468)	15.85 (.624)
5	26-17-1051	26-26-1051	15.85 (.624)	19.81 (.780)
6	26-17-1061	26-26-1061	19.81 (.780)	23.77 (.936)
7	26-17-1071	26-26-1071	23.77 (.936)	27.74 (1.092)
8	26-17-1081	26-26-1081	27.74 (1.092)	31.70 (1.248)
9	26-17-1091	26-26-1091	31.70 (1.248)	35.66 (1.404)

Circuits	Order No.		Dimension	
	Tin	Gold	A	B
10	26-17-1101	26-26-1101	35.66 (1.404)	39.62 (1.560)
11	26-17-1111	26-26-1111	39.62 (1.560)	43.59 (1.716)
12	26-17-1121	26-26-1121	43.59 (1.716)	47.55 (1.872)
13	26-17-1131	26-26-1131	47.55 (1.872)	51.51 (2.028)
14	26-17-1141	26-26-1141	51.51 (2.028)	55.47 (2.184)
15	26-17-1151	26-26-1151	55.47 (2.184)	59.44 (2.340)
16	26-17-1161	26-26-1161	59.44 (2.340)	63.40 (2.496)
17	26-17-1171	26-26-1171	63.40 (2.496)	67.36 (2.652)

FEATURES AND SPECIFICATIONS

molex® 3.96mm (.156") Pitch KK® Header

3190

Straight, Round Pin Polarizing Wall

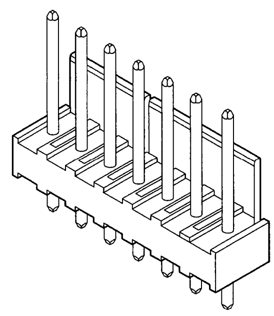
Features and Benefits
- Sizes 2 to 18 circuits

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: Molex .156" connectors
Designed In: Inches

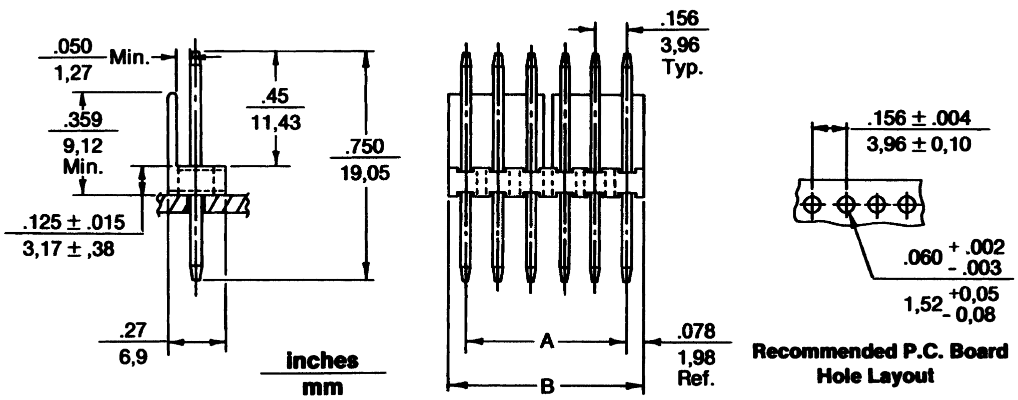
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-0
Contact: Brass, 1.14mm (.045") round
Plating: 5μm Tin and 0.51μm Gold
Temperature: -40 to +105°C



Preferred Version in Europe and the Far East



Recommended P.C. Board Hole Layout

Assemblies over 5 circuits have slot in polarizing wall

inch / mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No. Tin	Order No. Gold	Dimension A	Dimension B
2	26-19-2021	26-22-2021	3.96 (.156)	7.92 (.312)
3	26-19-2031	26-22-2031	7.92 (.312)	11.89 (.468)
4	26-19-2041	26-22-2041	11.89 (.468)	15.85 (.624)
5	26-19-2051	26-22-2051	15.85 (.624)	19.81 (.780)
6	26-19-2061	26-22-2061	19.81 (.780)	23.77 (.936)
7	26-19-2071	26-22-2071	23.77 (.936)	27.74 (1.092)
8	26-19-2081	26-22-2081	27.74 (1.092)	31.70 (1.248)
9	26-19-2091	26-22-2091	31.70 (1.248)	35.66 (1.404)
10	26-19-2101	26-22-2101	35.66 (1.404)	39.62 (1.560)

Circuits	Order No. Tin	Order No. Gold	Dimension A	Dimension B
11	26-19-2111	26-22-2111	39.62 (1.560)	43.59 (1.716)
12	26-19-2121	26-22-2121	43.59 (1.716)	47.55 (1.872)
13	26-19-2131	26-22-2131	47.55 (1.872)	51.51 (2.028)
14	26-19-2141	26-22-2141	51.51 (2.028)	55.47 (2.184)
15	26-19-2151	26-22-2151	55.47 (2.184)	59.44 (2.340)
16	26-19-2161	26-22-2161	59.44 (2.340)	63.40 (2.496)
17	26-19-2171	26-22-2171	63.40 (2.496)	67.36 (2.652)
18	26-19-2181	26-22-2181	67.36 (2.652)	71.32 (2.808)

3.96mm (.156") Pitch SPOX™ Header

5273-NA

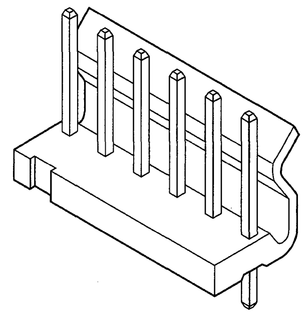
Straight Friction Lock

Features and Benefits
- Sizes 2 to 8 circuits
- Plating options available (contact factory)

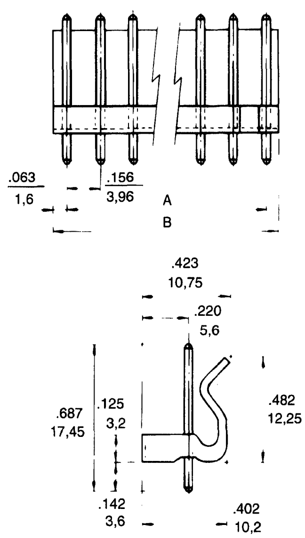
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5195-N and 5239-N housings
Designed In: Millimeters

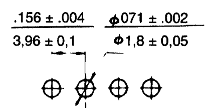
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East





PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-65-2028	3.96 (.156)	7.16 (.282)
3	09-65-2038	7.92 (.312)	11.12 (.437)
4	09-65-2048	11.88 (.467)	15.08 (.593)
5	09-65-2058	15.84 (.623)	19.04 (.749)
6	09-65-2068	19.80 (.779)	23.00 (.906)
7	09-65-2078	23.76 (.935)	26.96 (1.061)
8	09-65-2088	27.72 (1.091)	30.92 (1.217)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Header

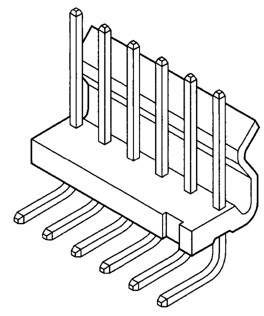
5274-NA Right Angle Friction Lock

Features and Benefits
- Sizes 2 to 6 circuits
- Plating options available (contact factory)

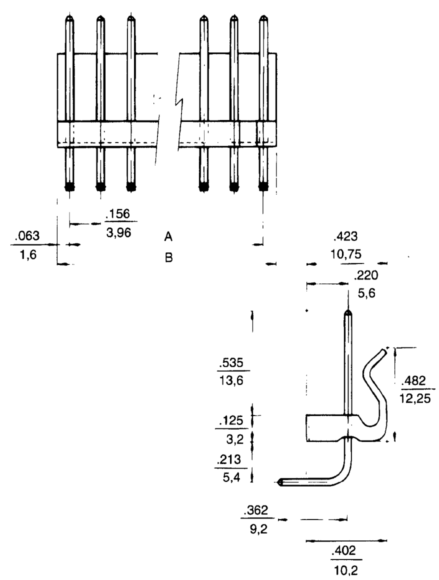
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5195-N and 5239-N housings
Designed In: Millimeters

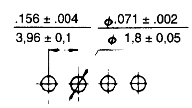
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East





PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	09-75-2024	3.96 (.156)	7.16 (.282)
3	09-75-2034	7.92 (.312)	11.12 (.437)
4	09-75-2044	11.88 (.467)	15.08 (.593)
5	09-75-2054	15.84 (.623)	19.04 (.749)
6	09-75-2064	19.80 (.779)	23.00 (.906)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Header

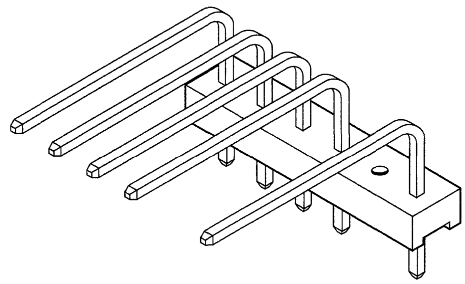
5276-NA Right Angle Flat

Features and Benefits
- Sizes 3 to 11 circuits
- Plating options available (contact factory)

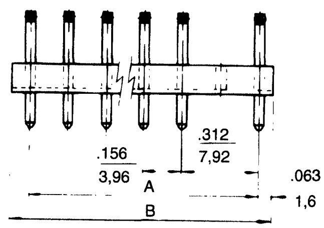
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5196-N and 5265-N housings
Designed In: Millimeters

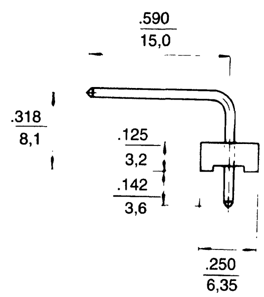
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

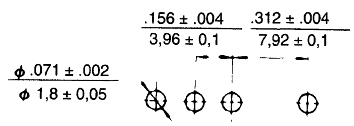
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East







PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
3	09-66-5033	11.88 (.467)	15.08 (.594)
4	09-66-5043	15.84 (.623)	19.04 (.750)
5	09-66-5053	19.80 (.779)	23.00 (.906)
6	09-66-5063	23.76 (.935)	26.96 (1.061)
7	09-66-5073	27.72 (1.091)	30.92 (1.217)
8	09-66-5083	31.68 (1.247)	34.88 (1.373)
9	09-66-5093	35.64 (1.403)	38.84 (1.529)
10	09-66-5103	39.60 (1.559)	42.80 (1.685)
11	09-66-5113	43.56 (1.714)	46.76 (1.841)

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch SPOX™ Header

5277-NA

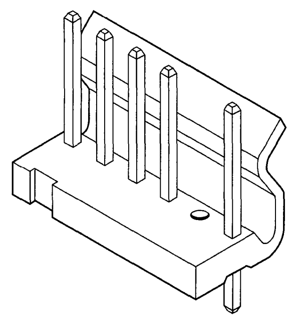
Straight Friction Lock

Features and Benefits
- Sizes 2 to 8 circuits
- Locking ramp

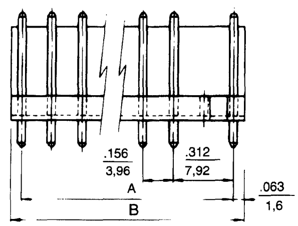
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5196-N and 5265-N housings
Designed In: Millimeters

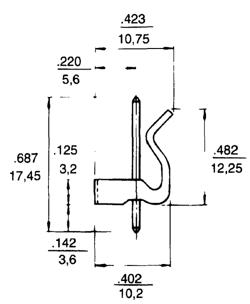
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

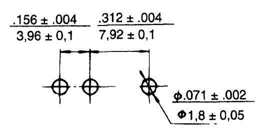
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East







PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	09-65-2029	7.92 (.312)	11.12 (.437)
3	09-65-2039	11.88 (.467)	15.08 (.594)
4	09-65-2049	15.84 (.623)	19.04 (.750)
5	09-65-2059	19.80 (.779)	23.00 (.906)
6	09-65-2069	23.76 (.935)	26.96 (1.061)
7	09-65-2079	27.72 (1.091)	30.92 (1.217)
8	09-65-2089	31.68 (1.247)	34.88 (1.373)

FEATURES AND SPECIFICATIONS

5.00mm (.197") Pitch SPOX™ Crimp Terminal Housing

5199-N

Features and Benefits

- Sizes 2 to 6 circuits available
- Polarization through varied center spacing between circuits 1 and 2
- With locking ramp
- Molded pull tab
- Molded-in locking arm for terminal

Electrical

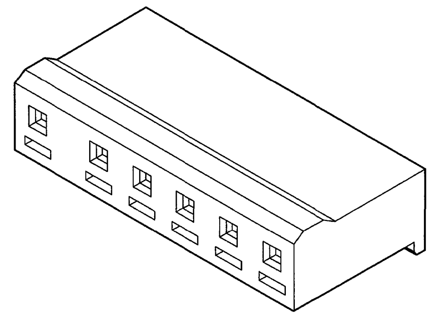
Voltage: 250V
Current: 5194—7.0A
5225—4.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Reference Information

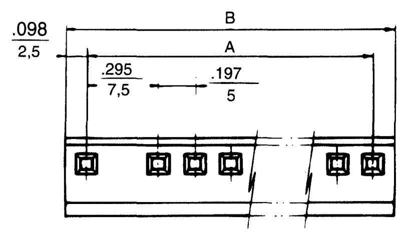
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5287-NA, 5288-NA and 5289-NA headers
Use With: 5194 and 5225 terminals
Designed In: Millimeters

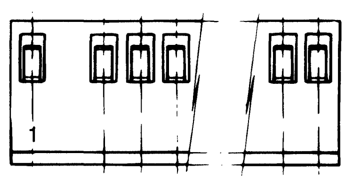
Physical

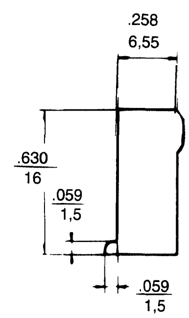
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



Available Primarily in the Far East







inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-63-3024	7.50 (.295)	12.50 (.492)
3	10-63-3034	12.50 (.492)	17.50 (.689)
4	10-63-3044	17.50 (.689)	22.50 (.886)
5	10-63-3054	22.50 (.886)	27.50 (1.083)
6	10-63-3064	27.50 (1.083)	32.50 (1.280)

5.00mm (.197") Pitch SPOX™ Header

5287-NA Straight

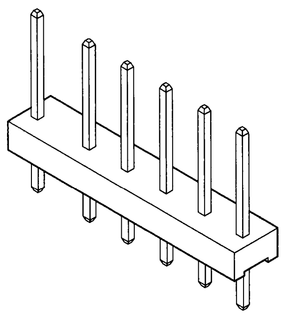
FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 6 circuits
- Polarization through varied center spacing between circuits 1 and 2

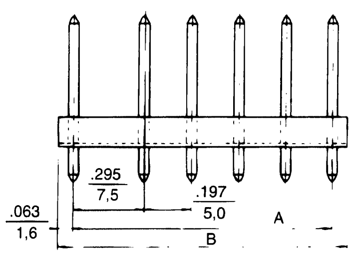
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5199-N housings
Designed In: Millimeters

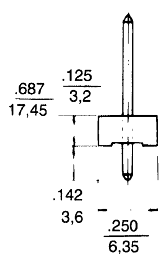
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

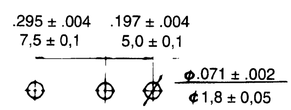
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East







PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-63-3023	7.50 (.295)	10.70 (.421)
3	10-63-3033	12.50 (.492)	15.70 (.618)
4	10-63-3043	17.50 (.689)	20.70 (.815)
5	10-63-3053	22.50 (.886)	25.70 (1.012)
6	10-63-3063	27.50 (1.083)	30.70 (1.209)

PCB Connectors
J

FEATURES AND SPECIFICATIONS

5.00mm (.197") Pitch SPOX™ Header

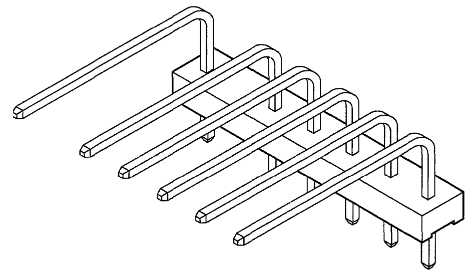
5288-NA Right Angle

Features and Benefits
- Sizes 2 to 6 circuits available
- Polarization through varied center spacing between circuits 1 and 2

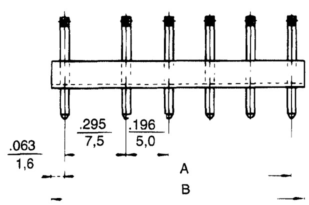
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5199-N housings
Designed In: Millimeters

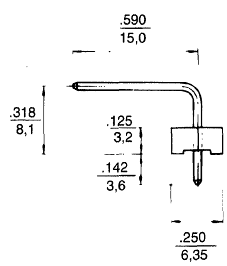
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

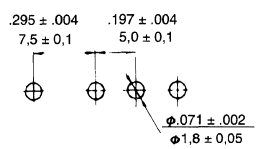
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East







PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-68-3021	7.50 (.295)	10.70 (.421)
3	10-68-3031	12.50 (.492)	15.70 (.618)
4	10-68-3041	17.50 (.689)	20.70 (.814)
5	10-68-3051	22.50 (.886)	25.70 (1.012)
6	10-68-3061	27.50 (1.083)	30.70 (1.209)

FEATURES AND SPECIFICATIONS

5.00mm (.197") Pitch SPOX™ Header

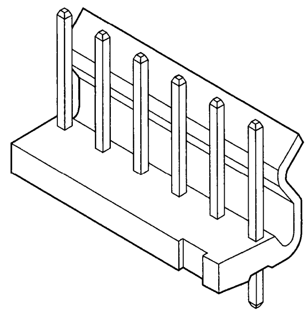
5289-NA Straight Friction Lock

Features and Benefits
- Sizes 2 to 6 circuits
- Locking ramp
- Polarization through varied center spacing between circuits 1 and 2
- Plating options available (contact factory)

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5199-N housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

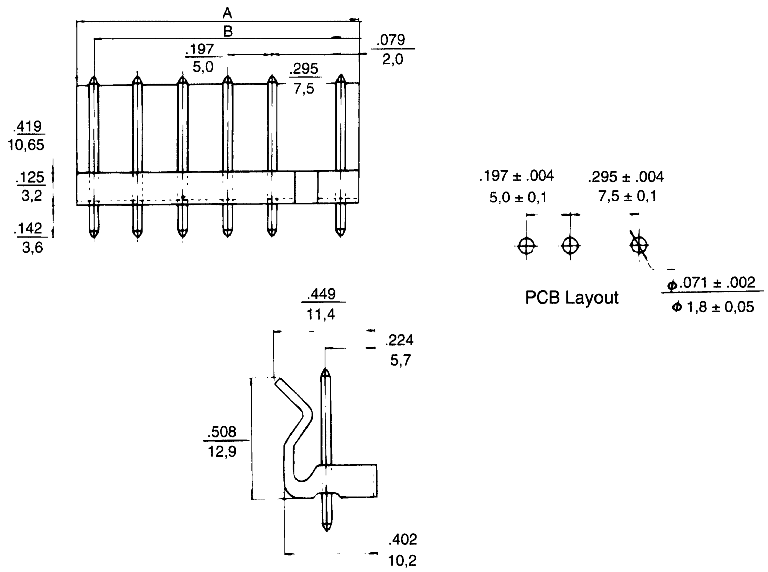
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



PCB Connectors

J

Available Primarily in the Far East



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	10-31-1028	7.50 (.295)	11.50 (.453)
3	10-31-1038	12.50 (.492)	16.50 (.650)
4	10-31-1048	17.50 (.689)	21.50 (.846)
5	10-31-1058	22.50 (.886)	26.50 (1.043)
6	10-31-1068	27.50 (1.083)	31.50 (1.240)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Crimp Terminal Housing

5197-N

Features and Benefits

- Sizes 2 to 9 circuits
- Molded pull tab
- With locking ramp
- Molded-in locking arm for terminal

Reference Information

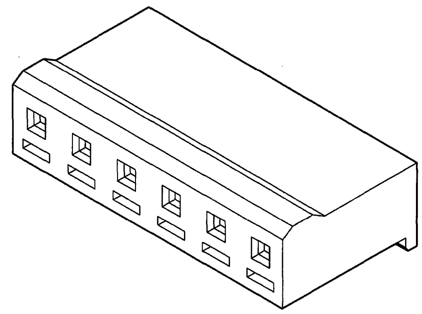
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5279-NA, 5280-NA, 5281-NA and 5282-NA headers
Use With: 5194 and 5225 terminals
Designed In: Millimeters

Electrical

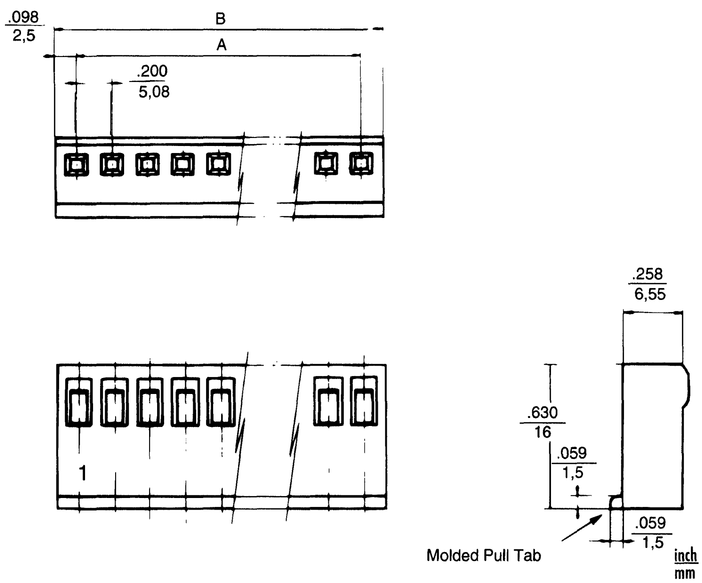
Voltage: 250V
Current: 5194—7.0A
5225—4.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical

Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-01-3026	5.08 (.200)	10.08 (.397)
3	10-01-3036	10.16 (.400)	15.16 (.597)
4	10-01-3046	15.24 (.600)	20.24 (.797)
5	10-01-3056	20.32 (.800)	25.32 (.997)
6	10-01-3066	25.40 (1.000)	30.40 (1.197)
7	10-01-3076	30.48 (1.200)	35.48 (1.397)
8	10-01-3086	35.56 (1.400)	40.56 (1.597)
9	10-01-3096	40.14 (1.580)	45.64 (1.797)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Header

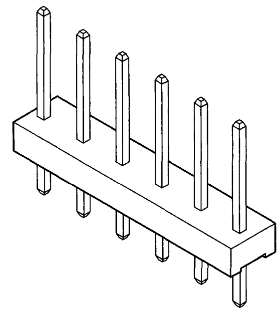
5279-NA Straight

Features and Benefits
- Sizes 2 to 9 circuits
- Plating options available (contact factory)

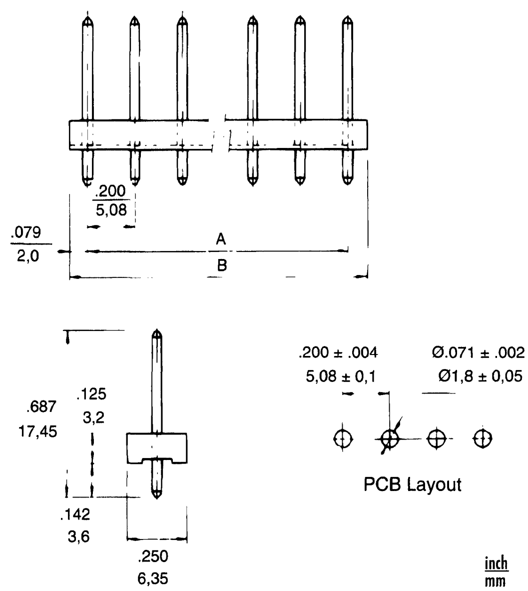
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5197-N and 5258-N housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-02-1027	5.08 (.200)	9.08 (.357)
3	10-02-1037	10.16 (.400)	14.16 (.557)
4	10-02-1047	15.24 (.600)	19.24 (.757)
5	10-02-1057	20.32 (.800)	24.32 (.957)
6	10-02-1067	25.40 (1.000)	29.40 (1.157)
7	10-02-1077	30.48 (1.200)	34.48 (1.357)
8	10-02-1087	35.56 (1.400)	39.56 (1.557)
9	10-02-1097	40.64 (1.600)	44.64 (1.757)

FEATURES AND SPECIFICATIONS

molex®

5.08mm (.200") Pitch SPOX™ Header

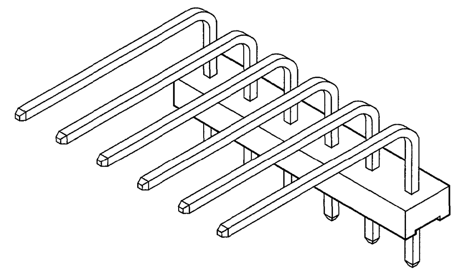
5280-NA Right Angle

Features and Benefits
- Sizes 2 to 9 circuits

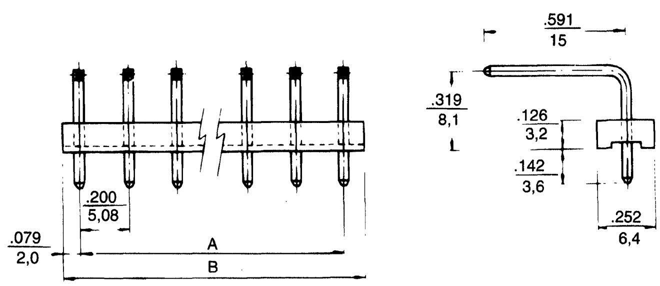
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5197-N and 5258-N housings
Designed In: Millimeters

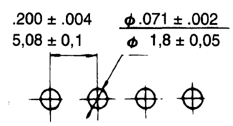
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East





PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-33-1021	5.08 (.199)	9.08 (.357)
3	10-33-1031	10.16 (.399)	14.16 (.557)
4	10-33-1041	15.24 (.599)	19.24 (.757)
5	10-33-1051	20.32 (.799)	24.32 (.957)
6	10-33-1061	25.40 (1.000)	29.40 (1.157)
7	10-33-1071	30.48 (1.199)	34.48 (1.357)
8	10-33-1081	35.56 (1.399)	39.56 (1.557)
9	10-33-1091	40.64 (1.599)	44.64 (1.757)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Header

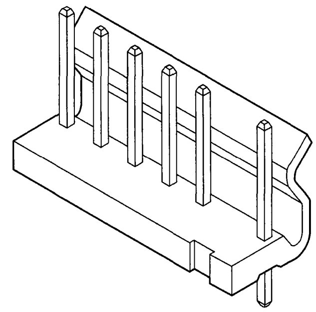
5281-NA Straight Friction Lock

Features and Benefits
- Sizes 2 to 9 circuits

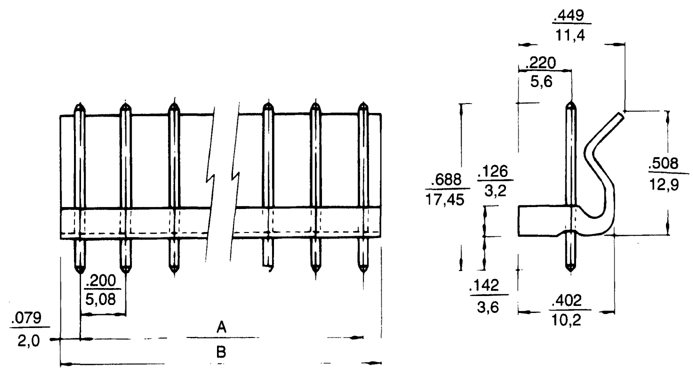
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5197-N and 5258-N housings
Designed In: Millimeters

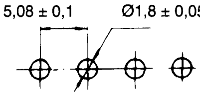
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East





PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-32-1021	5.08 (.199)	9.08 (.357)
3	10-32-1031	10.16 (.399)	14.16 (.557)
4	10-32-1041	15.24 (.599)	19.24 (.757)
5	10-32-1051	20.32 (.799)	24.32 (.957)
6	10-32-1061	25.40 (1.000)	29.40 (1.157)
7	10-32-1071	30.48 (1.199)	34.48 (1.357)
8	10-32-1081	35.56 (1.399)	39.56 (1.557)
9	10-32-1091	40.64 (1.599)	44.64 (1.757)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Crimp Terminal Housing

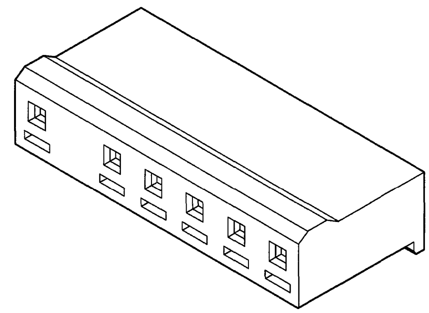
5198-N With Void

Features and Benefits
- Sizes 2 to 8 circuits
- Same as 5197 but with second circuit void

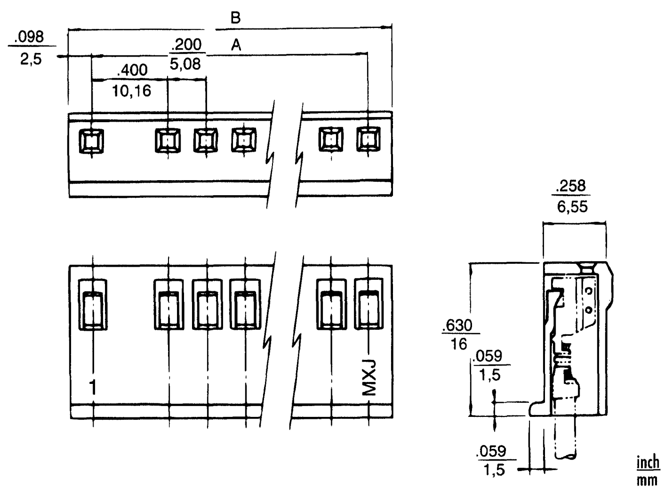
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5283-NA, 5284-NA, 5285-NA and 5286-NA headers
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



Available Primarily in the Far East



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-22-1022	10.16 (.399)	15.16 (.596)
3	10-22-1032	15.24 (.599)	20.24 (.796)
4	10-22-1042	20.32 (.799)	25.32 (.996)
5	10-22-1052	25.40 (1.000)	30.40 (1.196)
6	10-22-1062	30.48 (1.199)	35.48 (1.396)
7	10-22-1072	35.56 (1.399)	40.56 (1.596)
8	10-22-1082	40.64 (1.599)	45.64 (1.796)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Header

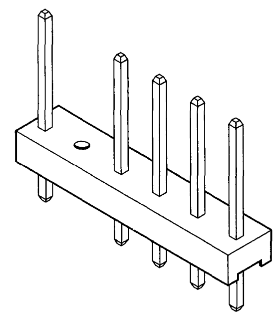
5283-NA Straight With Void

Features and Benefits
- Sizes 3 to 8 circuits
- Same as 5279 but with second pin void

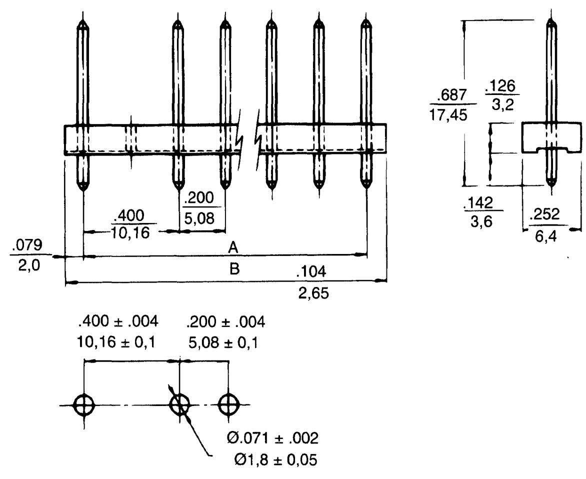
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5127-N and 5198-NA housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East



PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	10-63-1033	15.24 (.599)	19.24 (.757)
4	10-63-1043	20.32 (.799)	24.32 (.957)
5	10-63-1053	25.40 (1.000)	29.40 (1.157)
6	10-63-1063	30.48 (1.199)	34.48 (1.357)
7	10-63-1073	35.56 (1.399)	39.56 (1.557)
8	10-63-1083	40.64 (1.599)	44.64 (1.757)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Header

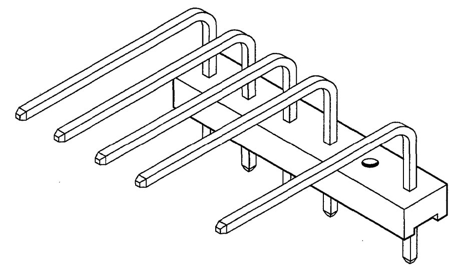
5284-NA Right Angle With Void

Features and Benefits
- Sizes 3 to 8 circuits
- Second pin void

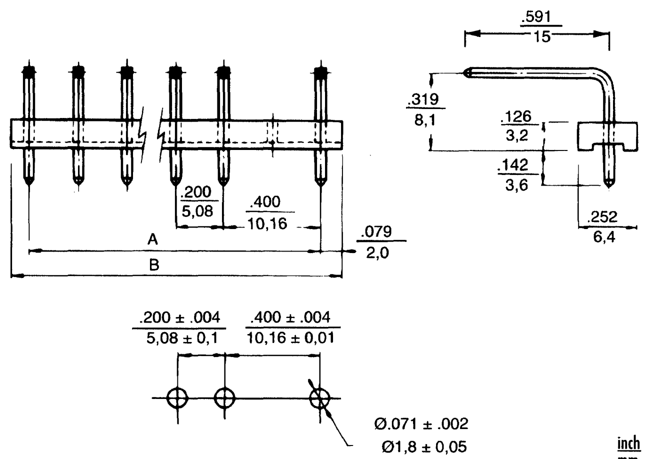
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5127-N and 5198-N housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	10-68-1035	15.24 (.599)	19.24 (.757)
4	10-68-1045	20.32 (.799)	24.32 (.957)
5	10-68-1055	25.40 (1.000)	29.40 (1.157)
6	10-68-1065	30.48 (1.199)	34.48 (1.357)
7	10-68-1075	35.56 (1.399)	39.56 (1.557)
8	10-68-1085	40.64 (1.599)	44.64 (1.757)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch SPOX™ Header

5285-NA

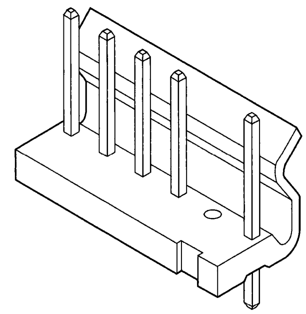
Straight, Friction Lock With Void

Features and Benefits
- Sizes 2 to 8 circuits
- Second pin void

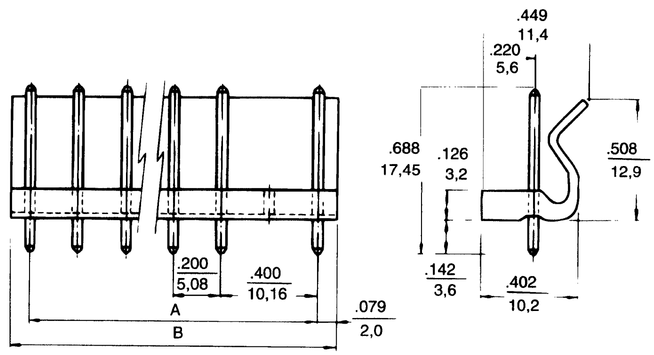
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5127-N and 5198-N housings
Designed In: Millimeters

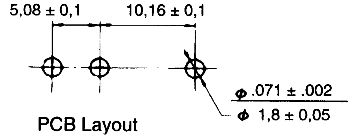
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Housing: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Available Primarily in the Far East





PCB Layout

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-63-1029	10.16 (.399)	14.16 (.557)
3	10-63-1039	15.24 (.599)	19.24 (.757)
4	10-63-1049	20.32 (.799)	24.32 (.957)
5	10-63-1059	25.40 (1.000)	29.40 (1.157)
6	10-63-1069	30.48 (1.199)	34.48 (1.357)
7	10-63-1079	35.56 (1.399)	39.56 (1.557)
8	10-63-1089	40.64 (1.599)	44.64 (1.757)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch KK®
Crimp Terminal Housing
3001

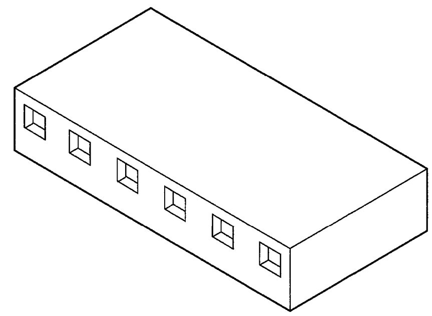
Features and Benefits
- Sizes 1 to 20 circuits available
- Accommodates Polarizing Key 2560-1 and Polarizing Peg 2560-2

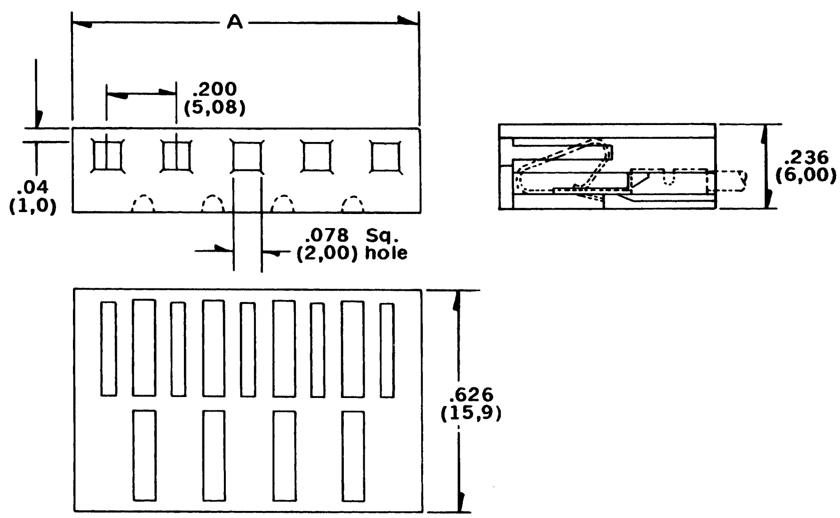
Reference Information
Product Specification: PSX10-39
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3003, 3008 and 3061 headers
Use With: Molex double cantilever crimp terminals
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Contact Insertion Force: 4 lb max.
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 5 lb min. (depends on AWG)
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
1	10-01-1014	5.08 (.200)
2	10-01-1024	10.16 (.400)
3	10-01-1034	15.24 (.600)
4	10-01-1044	20.32 (.800)
5	10-01-1054	25.40 (1.000)
6	10-01-1064	30.48 (1.200)
7	10-01-1074	35.56 (1.400)
8	10-01-1084	40.64 (1.600)
9	10-01-1094	45.72 (1.800)
10	10-01-1104	50.80 (2.000)

Circuits	Order No.	Dimension A
11	10-01-1114	55.88 (2.200)
12	10-01-1124	60.96 (2.400)
13	10-01-1134	66.04 (2.600)
14	10-01-1144	71.12 (2.800)
15	10-01-1154	76.20 (3.000)
16	10-01-1164	81.28 (3.200)
17	10-01-1174	86.36 (3.400)
18	10-01-1184	91.44 (3.600)
19	10-01-1194	96.52 (3.800)
20	10-01-1204	101.60 (4.000)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch KK® Crimp Terminal Housing

3011

Features and Benefits

- Sizes 2 to 20 circuits
- Molded-in polarizing peg on side of housing

Reference Information

Product Specification: PSX10-39
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3003 headers on 1.14mm (.045") staked pins
Use With: 2478 and 2578 terminals
Designed In: Inches

Electrical

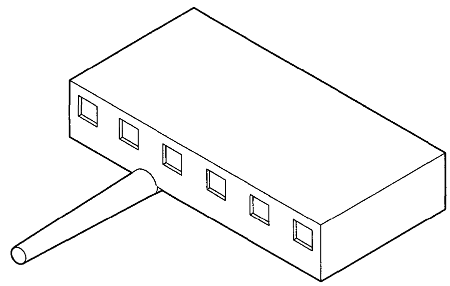
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

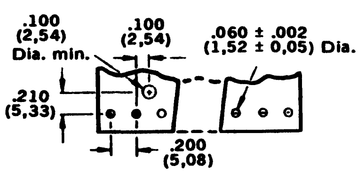
Mechanical

Contact Insertion Force: 4 lb max.
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 5 lb min. (depends on AWG)
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

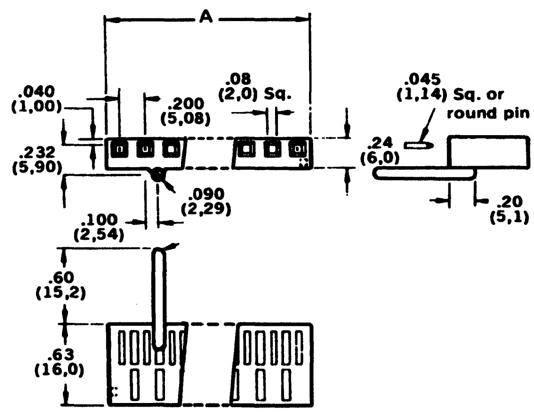
Physical

Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C





P.C. Board Hole Dimensions



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
2 (a)	• 10-13-1024	10.16 (.400)
3 (b)	• 10-13-1034	15.24 (.600)
4 (b)	• 10-13-1044	20.32 (.800)
5 (b)	• 10-13-1055	25.40 (1.000)
6 (b)	• 10-13-1064	30.48 (1.200)
7 (b)	10-13-1075	35.56 (1.400)
8 (b)	10-13-1085	40.64 (1.600)
9 (b)	• 10-13-1094	45.72 (1.800)
10 (b)	• 10-13-1106	50.80 (2.000)
11 (b)	• 10-13-1114	55.88 (2.200)

Circuits	Order No.	Dimension A
12 (b)	• 10-13-1125	60.96 (2.400)
13 (b)	• 10-13-1134	66.04 (2.600)
14 (b)	10-13-1144	71.12 (2.800)
15 (b)	10-13-1154	76.20 (3.000)
16 (b)	10-13-1164	81.28 (3.200)
17 (b)	10-13-1174	86.36 (3.400)
18 (b)	10-13-1184	91.44 (3.600)
19 (b)	10-13-1194	96.52 (3.800)
20 (b)	10-13-1204	101.60 (4.000)

• US Standard Product, available through Molex franchised distributors
Polarizing peg between circuits: (a) 1 and 2; (b) 2 and 3

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Housing

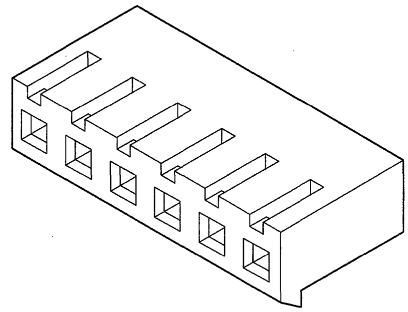
5058-N

Features and Benefits
- Sizes 2 to 9 circuits
- Locking ramp
- Accommodates Polarizing Key 2560-1 and Polarizing Peg 2560-2

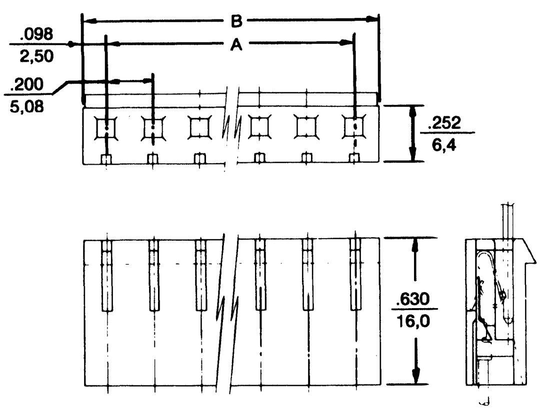
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5282 on 1.14mm (.045") staked pins
Use With: 2478, 2578, 5167 and 5168 terminals
Designed In: Millimeters

Electrical
Voltage: 250V
Current: Brass—7.0A
Phosphor Bronze—5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Housing: 6/6 nylon, UL 94V-2
Temperature: -40 to +105°C



Preferred Version in the Far East



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
2	10-01-5022	5.08 (.200)	10.08 (.397)
3	10-01-5032	10.16 (.400)	15.16 (.597)
4	10-01-5042	15.24 (.600)	20.24 (.797)
5	10-01-5052	20.32 (.800)	25.32 (.997)
6	10-01-5062	25.40 (1.000)	30.40 (1.197)
7	10-01-5072	30.48 (1.200)	35.48 (1.397)
8	10-01-5082	35.56 (1.400)	40.56 (1.597)
9	10-01-5092	40.64 (1.600)	45.64 (1.797)

FEATURES AND SPECIFICATIONS

molex

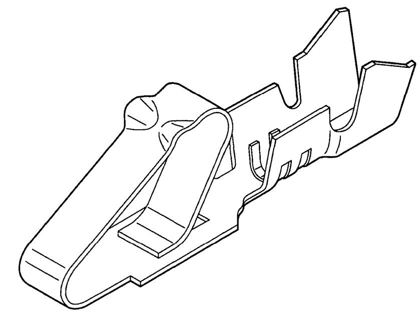
5.08mm (.200") Pitch Cat Ear Terminal

5167/5168

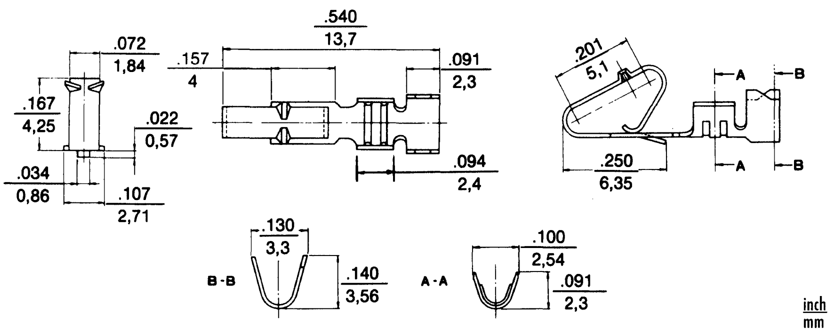
Reference Information
Packaging: Chain or loose
Tooling Information: See pages J-169 and J-170
Use With: 5058 housings
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5167—7.0A
5168—4.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

Physical
Contact: Brass and Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C



Preferred Version in the Far East



ORDERING INFORMATION AND DIMENSIONS

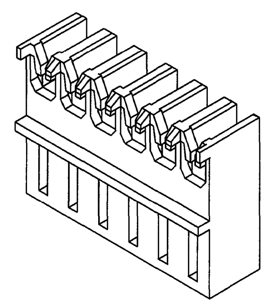
Order No.	Engineering No.	Wire Accommodation AWG	Insulation Outside Diameter	Form	Material	Automatic Tooling		Hand Tool
						Press	Crimp Die	
08-70-0012	5167	18-24	2.50mm max.	Chain	Tin-Plated Brass and Phosphor Bronze	M15A or 57117-4000	JM5868A	JHTR2445A
08-70-0013	5167			Loose				
08-70-0018	5168	22-28	1.70mm max.	Chain				
08-70-0019	5168			Loose				

5.08mm (.200") Pitch Connector

6952

IDT

3-Point Trifurcon™ Contact



FEATURES AND SPECIFICATIONS

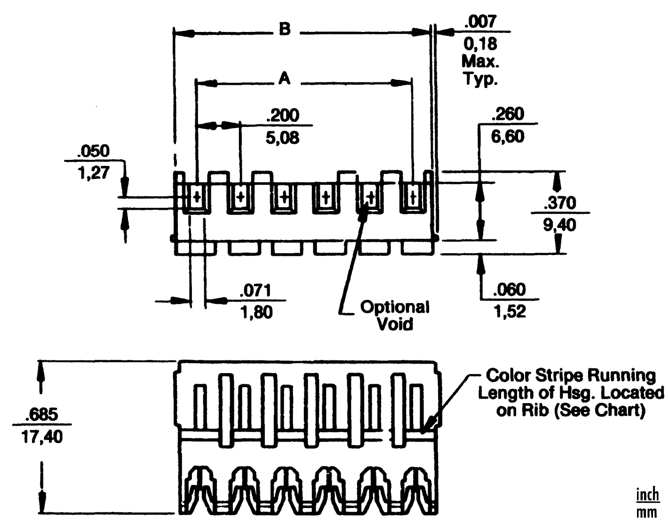
Features and Benefits
- Sizes 2 to 16 circuits
- Without locking ramp
- Feed-to version
- Molded-in strain reliefs

Reference Information
Packaging: Bulk
Tooling Information: See pages J-171 to J-174
UL File No.: E29179
CSA File No.: LR19980
Mates With: Standard 5.08mm (.200") headers
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Contact Insertion Force: 4 lb max.
Contact Retention to Housing: 8 lb min.
Wire Pull-Out Force: 5 lb min.
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Green nylon, UL 94V-2
Contact: Brass
Plating: 1μm Tin/Lead
Temperature: -40 to +105°C
Wire Range: 1.14mm (.045") to 2.41mm (.095") OD max.
Wire Accommodation: 26 and 27 AWG stranded, fused stranded and solid wire or 24 AWG stranded wire



ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch KK®
PC Board Connector
3002
Right Angle Mount Style A

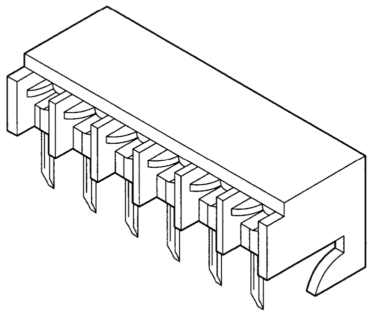
Features and Benefits
- Sizes 2 to 20 circuits

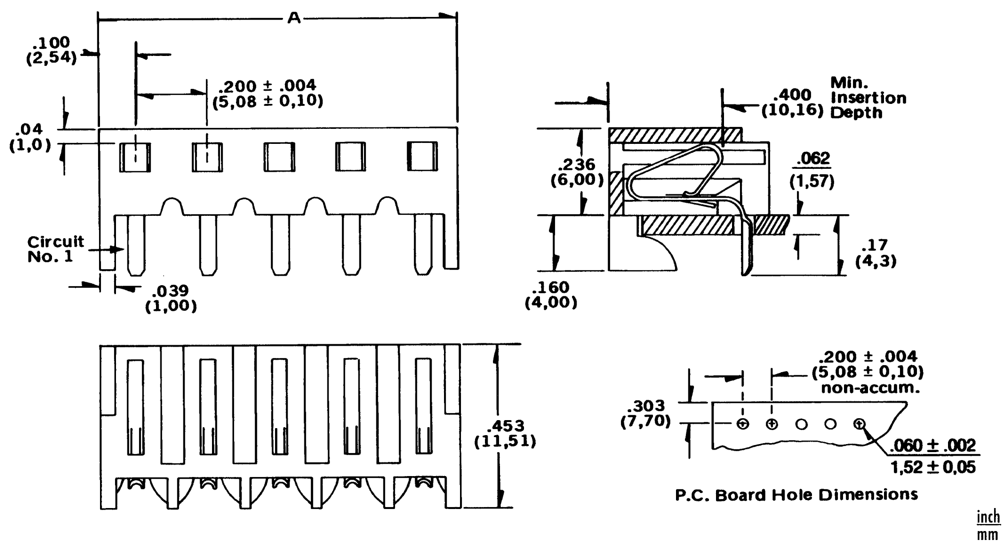
Reference Information
Product Specification: PSX10-39
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2599, 3003 and 3008 headers
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: 1μm Tin/Lead and 0.5μm Gold
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	10-10-1021	10-10-1024	10.16 (.400)
3	10-10-1031	10-10-1034	15.24 (.600)
4	10-10-1041	10-10-1044	20.32 (.800)
5	10-10-1051	10-10-1054	25.40 (1.000)
6	10-10-1061	10-10-1064	30.48 (1.200)
7	10-10-1071	10-10-1074	35.56 (1.400)
8	10-10-1081	10-10-1084	40.64 (1.600)
9	10-10-1091	10-10-1094	45.72 (1.800)
10	10-10-1101	10-10-1104	50.80 (2.000)
11	10-10-1111	10-10-1114	55.88 (2.200)

Circuits	Order No.		Dimension A
	Tin	Gold	
12	10-10-1121	10-10-1124	60.96 (2.400)
13	10-10-1131	10-10-1134	66.04 (2.600)
14	10-10-1141	10-10-1144	71.12 (2.800)
15	10-10-1151	10-10-1154	76.20 (3.000)
16	10-10-1161	10-10-1164	81.28 (3.200)
17	10-10-1171	10-10-1174	86.36 (3.400)
18	10-10-1181	10-10-1184	91.44 (3.600)
19	10-10-1191	10-10-1194	96.52 (3.800)
20	10-10-1201	10-10-1204	101.60 (4.000)

Plating: 1.00 microns Tin/Lead /2.00 microns Copper min. (.000040" Tin/Lead /.000080" Copper min.) or 0.50 microns Gold/0.75 microns Nickel min. (.000020" Gold/.000030" Nickel min.)

FEATURES AND SPECIFICATIONS

molex

5.08mm (.200") Pitch KK®
PC Board Connector
3002
Bottom Entry Mount Style B

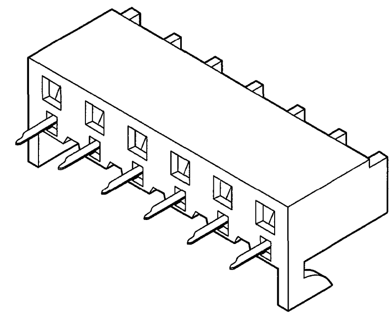
Features and Benefits
- Sizes 2 to 20 circuits

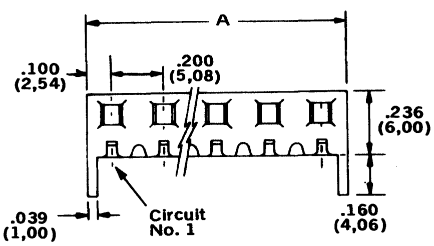
Reference Information
Product Specification: PSX10-39
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2599, 3003 and 3008 headers
Designed In: Inches

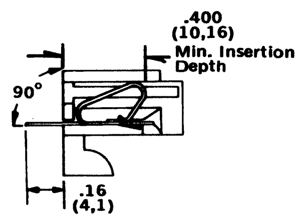
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

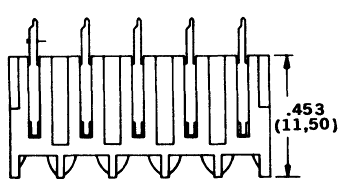
Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

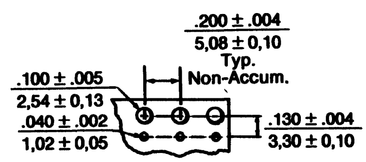
Physical
Housing: Nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: 1μm Tin/Lead and 0.5μm Gold
Temperature: -40 to +105°C











inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	10-02-1022	10-10-1026	10.16 (.400)
3	10-02-1032	10-10-1036	15.24 (.600)
4	10-02-1042	10-10-1046	20.32 (.800)
5	10-02-1052	10-10-1056	25.40 (1.000)
6	10-02-1062	10-10-1066	30.48 (1.200)
7	10-02-1072	10-10-1076	35.56 (1.400)
8	10-02-1082	10-10-1086	40.64 (1.600)
9	10-02-1092	10-10-1096	45.72 (1.800)
10	10-02-1102	10-10-1106	50.80 (2.000)
11	10-02-1112	10-10-1116	55.88 (2.200)

Circuits	Order No.		Dimension A
	Tin	Gold	
12	10-02-1122	10-10-1126	60.96 (2.400)
13	10-02-1132	10-10-1136	66.04 (2.600)
14	10-02-1142	10-10-1146	71.12 (2.800)
15	10-02-1152	10-10-1156	76.20 (3.000)
16	10-02-1162	10-10-1166	81.28 (3.200)
17	10-02-1172	10-10-1176	86.36 (3.400)
18	10-02-1182	10-10-1186	91.44 (3.600)
19	10-02-1192	10-10-1196	96.52 (3.800)
20	10-02-1202	10-10-1206	101.60 (4.000)

Plating: 1.00 microns Tin/Lead /2.00 microns Copper min. (.000040" Tin/Lead /.000080" Copper min.) or 0.50 microns Gold/0.75 microns Nickel min. (.000020" Gold/.000030" Nickel min.)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch KK® PC Board Connector

3002 Top Entry Mount Style C

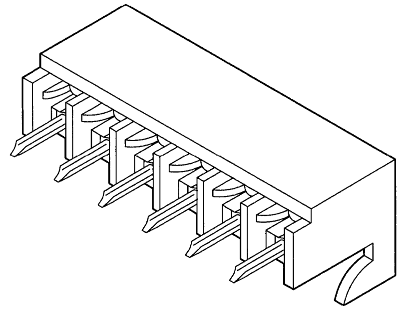
Features and Benefits
- Sizes 2 to 20 circuits

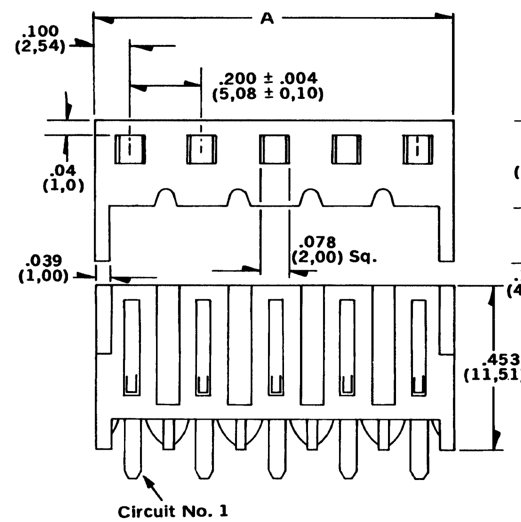
Reference Information
Product Specification: PSX10-39
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
Mates With: 2599, 3003 and 3008 headers
Designed In: Inches

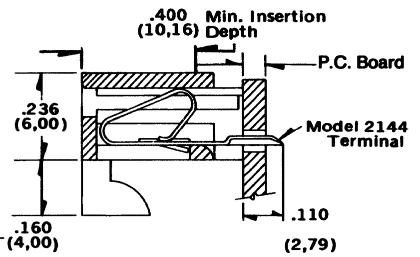
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

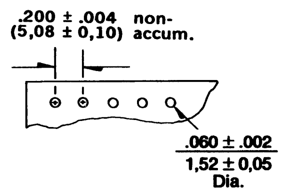
Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: 1μm Tin/Lead and 0.5μm Gold
Temperature: -40 to +105°C









P.C. Board Hole Dimensions

inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	10-10-1023	10-10-1028	10.16 (.400)
3	10-10-1033	10-10-1038	15.24 (.600)
4	10-10-1043	10-10-1048	20.32 (.800)
5	10-10-1053	10-10-1058	25.40 (1.000)
6	10-10-1063	10-10-1068	30.48 (1.200)
7	10-10-1073	10-10-1078	35.56 (1.400)
8	10-10-1083	10-10-1088	40.64 (1.600)
9	10-10-1093	10-10-1098	45.72 (1.800)
10	10-10-1103	10-10-1108	50.80 (2.000)
11	10-10-1113	10-10-1118	55.88 (2.200)

Circuits	Order No.		Dimension A
	Tin	Gold	
12	10-10-1123	10-10-1128	60.96 (2.400)
13	10-10-1133	10-10-1138	66.04 (2.600)
14	10-10-1143	10-10-1148	71.12 (2.800)
15	10-10-1153	10-10-1158	76.20 (3.000)
16	10-10-1163	10-10-1168	81.28 (3.200)
17	10-10-1173	10-10-1178	86.36 (3.400)
18	10-10-1183	10-10-1188	91.44 (3.600)
19	10-10-1193	10-10-1198	96.52 (3.800)
20	10-10-1203	10-10-1208	101.60 (4.000)

Plating: 1.00 microns Tin/Lead /2.00 microns Copper min. (.000040" Tin/Lead /.000080" Copper min.) or
0.50 microns Gold/0.75 microns Nickel min. (.000020" Gold/.000030" Nickel min.)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch KK® Header

3003 Straight Round Pin

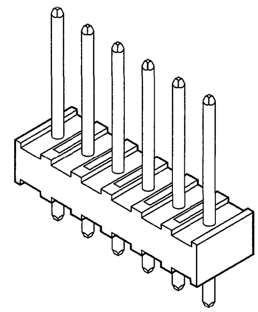
Features and Benefits
- Sizes 2 to 15 circuits
- Available with voids (contact factory)
- Molded insulator

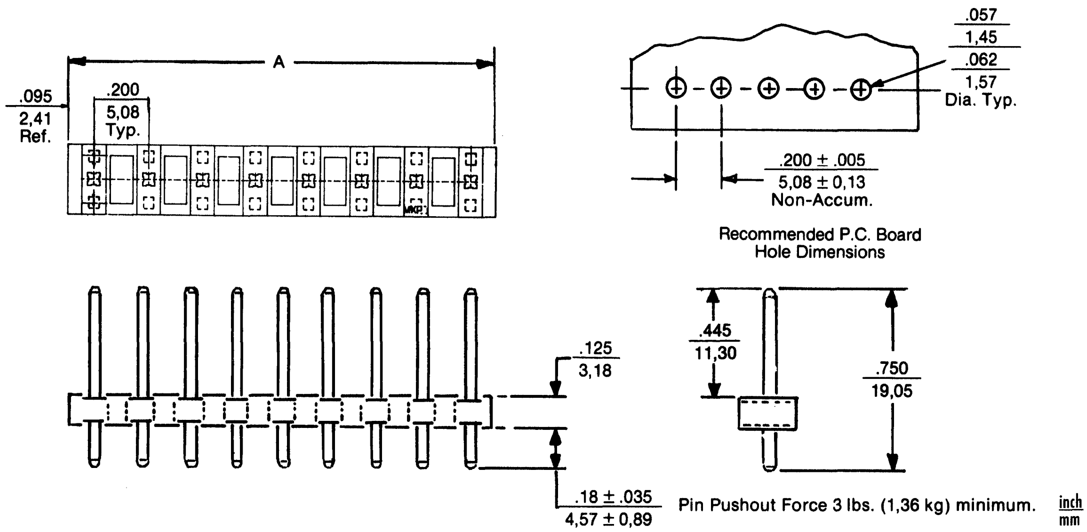
Reference Information
Product Specification: PSX10-39
Packaging: Bulk
UL File No.: E29179SC
CSA File No.: LR19980
Mates With: 3001, 3002, 3011 and 5058-N
Designed In: Inches

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") round
Plating: See Table
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	10-08-1021	10-45-1021	9.91 (.390)
3	10-08-1031	10-45-1031	14.99 (.590)
4	10-08-1041	10-45-1041	20.07 (.790)
5	10-08-1051	10-45-1051	25.15 (.990)
6	10-08-1061	10-45-1061	30.23 (1.190)
7	10-08-1071	10-45-1071	35.31 (1.390)
8	10-08-1081	10-45-1081	40.39 (1.590)
9	10-08-1091	10-45-1091	45.47 (1.790)
10	10-08-1101	10-45-1101	50.55 (1.990)
11	10-08-1111	10-45-1111	55.63 (2.190)
12	10-08-1121	10-45-1121	60.71 (2.390)
13	10-08-1131	10-45-1131	65.79 (2.590)
14	10-08-1141	10-45-1141	70.87 (2.790)
15	10-08-1151	10-45-1151	75.95 (2.990)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Header

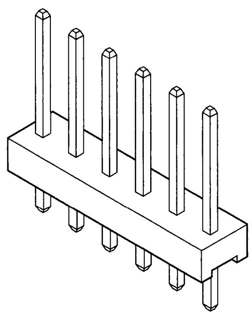
5077-NC Straight Square Pin

Features and Benefits
- Sizes 3 to 6 circuits

Reference Information
Packaging: Bulk
Mates With: 2767-NBH
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

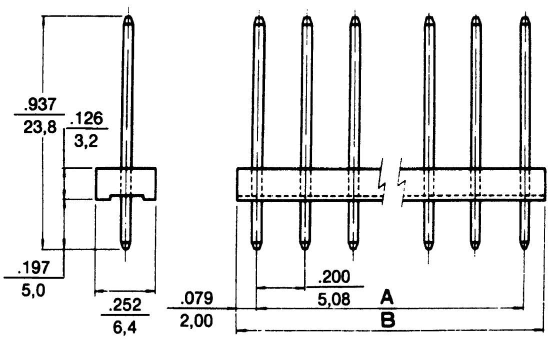
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin
Temperature: -40 to +105°C



Preferred Version in the Far East

PCB Connectors

J



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
3	10-02-4034	10.16 (.400)	14.16 (.557)
4	10-02-4044	15.24 (.600)	19.24 (.757)
5	10-02-4054	20.32 (.800)	24.32 (.957)
6	10-02-4064	25.40 (1.000)	29.40 (1.157)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Header

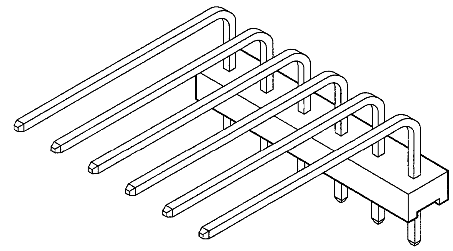
2673

Right Angle Square Pin

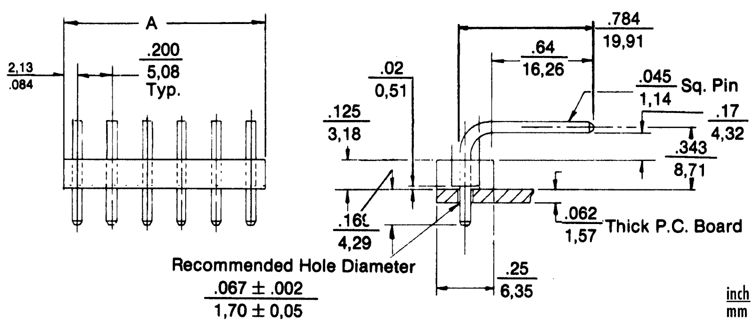
Features and Benefits
- Sizes 2 to 15 circuits
- Voided circuits available (contact factory)

Reference Information
Product Specification: PS-08-50
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3001
Designed In: Millimeters or Inches

Physical
Housing: White nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: Tin or Gold



Preferred Version in the Americas



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A
2	10-06-1021	9.35 (.368)
3	10-06-1031	14.43 (.568)
4	10-06-1041	19.51 (.768)
5	10-06-1051	24.59 (.968)
6	10-06-1061	29.67 (1.168)
7	10-06-1071	34.75 (1.368)
8	10-06-1081	39.83 (1.568)
9	10-06-1091	44.91 (1.788)
10	10-06-1101	49.99 (1.968)
11	10-06-1111	55.07 (2.168)
12	10-06-1121	60.15 (2.368)
13	10-06-1131	65.23 (2.568)
14	10-06-1141	70.31 (2.768)
15	10-06-1151	75.39 (2.968)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Sizes 2 to 15 circuits

Reference Information
Product Specification: PSX10-39
Packaging: Bulk
UL File No.: E29179SC
CSA File No.: LR19980
Mates With: 3001
Designed In: Inches

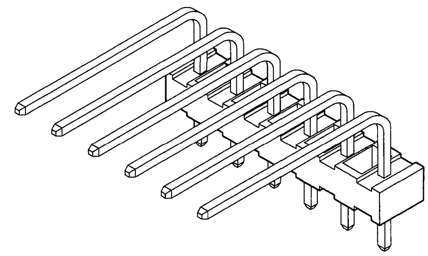
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 500K MΩ min.

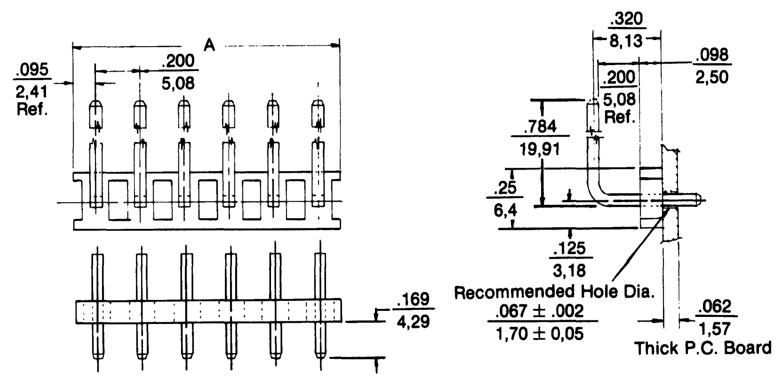
Mechanical
Mating Force: 24 oz max.
Unmating Force: 4 oz min.
Normal Force: 350g
Durability: 25 cycles Tin

Physical
Housing: Nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square
Plating: 5µm min. Tin
Temperature: -40 to +105°C

molex 5.08mm (.200") Pitch KK® Header

3061 Right Angle Square Pin





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension A
	Tin	Gold	
2	10-06-1025	38-00-2012	9.91 (.390)
3	10-06-1035	38-00-2013	14.99 (.590)
4	10-06-1045	38-00-2014	20.07 (.790)
5	10-06-1055	38-00-2015	25.15 (.990)
6	10-06-1065	38-00-2016	30.23 (1.190)
7	10-06-1075	38-00-2017	35.31 (1.390)
8	10-06-1085	38-00-2018	40.39 (1.590)
9	10-06-1095	38-00-2019	45.47 (1.790)
10	10-06-1105	38-00-2020	50.55 (1.990)
11	10-06-1115	38-00-2021	55.63 (2.190)
12	10-06-1125	38-00-2022	60.71 (2.390)
13	10-06-1135	38-00-2023	65.79 (2.590)
14	10-06-1145	38-00-2024	70.89 (2.790)
15	10-06-1155	38-00-2025	75.95 (2.990)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Header

5282-NA

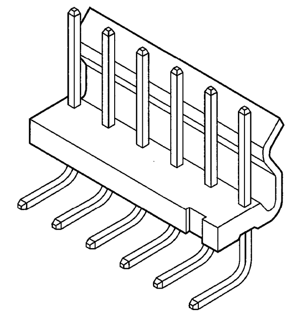
Right Angle Square Pin

Features and Benefits
- Sizes 2 to 7 circuits

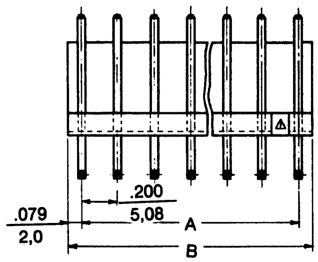
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 5058-N, 5197-N and 5258-N housings
Designed In: Millimeters

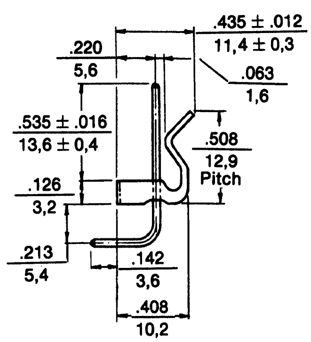
Electrical
Voltage: 250V
Current: 7.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC/1 min.
Insulation Resistance: 1000 MΩ min.

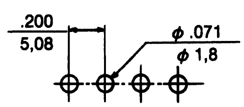
Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Brass, 1.14mm (.045") square pins
Plating: Tin
Temperature: -40 to +105°C



Preferred Version in the Far East







inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension A	Dimension B
2	10-33-1022	5.08 (.200)	9.08 (.357)
3	10-33-1032	10.16 (.400)	14.16 (.557)
4	10-33-1042	15.24 (.600)	19.24 (.757)
5	10-33-1052	20.32 (.800)	24.32 (.957)
6	10-33-1062	25.40 (1.000)	29.40 (1.157)
7	10-33-1072	30.48 (1.200)	34.48 (1.357)

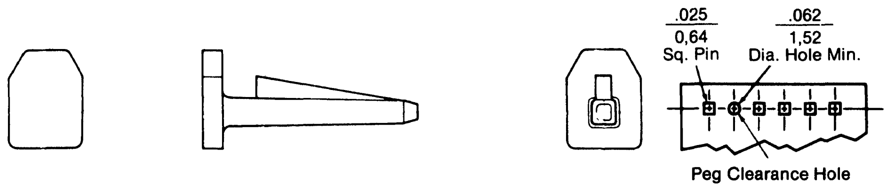
FEATURES AND SPECIFICATIONS

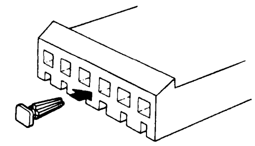
Polarizing Keys and Pegs

2.50mm (.098") and 2.54mm (.100") Pitch

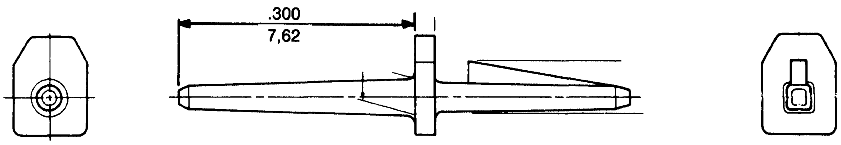
Features and Benefits

- Snap fit into KK® Series housings
- Polarizing peg or key
- Nylon, UL 94V-2 material
- Eases correct orientation between connector and header
- Provides customization of interconnect system





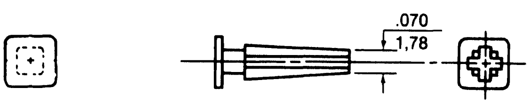
Polarizing Peg

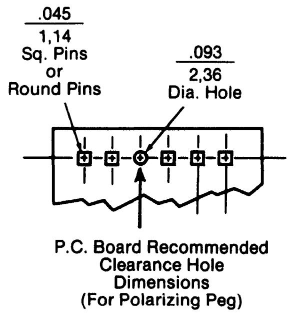


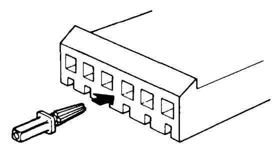
	Engineering No.	Order No.	Fits Connector Housings
Polarizing Key	4161-1	• 15-04-9209	2695, 4025, 4455, 5051, 6471
Polarizing Peg	4161-2	• 15-04-9210	

5.08mm (.200") and 3.96mm (.156") Pitch

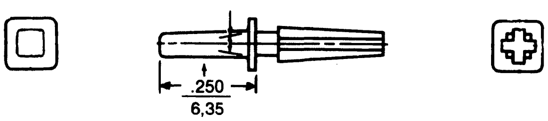
Polarizing Key







Polarizing Peg



	Engineering No.	Order No.	Fits Connector Housings
Polarizing Key	2560-1	• 15-04-0219	2139, 2145
Polarizing Peg	2560-2	• 15-04-0220	
Polarizing Key	7580-1	89-00-3001	6442
Polarizing Peg	7580-2	89-00-3002	
Polarizing Key	42324-A	• 15-04-0297	41695, 41815

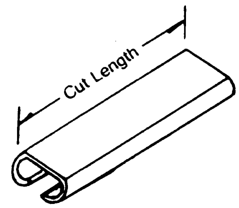
• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

molex **Standard IDT Covers**

7894/7841

Features and Benefits
- Sizes 4 to 28 circuits, see tables
- Prevents contaminants from affecting wire connection
- Cover accommodates feed-to and feed-through IDT connectors
- Improves wire retention



ORDERING INFORMATION AND DIMENSIONS

7894/3.96mm (.156")		
Circuits	**Order No.**	**Cut Length**
4	15-05-7044	15.19 (.598)
5	15-05-7054	19.15 (.754)
6	15-05-7064	23.11 (.910)
7	15-05-7074	27.07 (1.066)
8	15-05-7084	31.04 (1.222)
9	15-05-7094	35.00 (1.378)
10	15-05-7104	38.96 (1.534)
11	15-05-7114	42.93 (1.690)
12	15-05-7124	46.89 (1.846)
13	15-05-7134	50.85 (2.002)
14	15-05-7144	54.81 (2.158)
15	15-05-7154	58.78 (2.314)
16	15-05-7164	62.74 (2.470)
17	15-05-7174	66.70 (2.626)
18	15-05-7184	70.66 (2.782)
19	15-05-7194	74.62 (2.938)
20	15-05-7204	78.59 (3.094)
21	15-05-7214	82.55 (3.250)
22	15-05-7224	86.51 (3.406)
23	15-05-7234	90.47 (3.562)
24	15-05-7244	94.44 (3.718)

7841/2.50mm (.098")			
Circuits	**Order No.**		**Cut Length**
	Feed-Through	**Feed-To**	
4	15-05-8046	15-05-8048	10.49 (.413)
5	15-05-8056	15-05-8058	13.00 (.512)
6	15-05-8066	15-05-8068	15.51 (.611)
7	15-05-8076	15-05-8078	18.00 (.709)
8	15-05-8086	15-05-8088	20.49 (.807)
9	15-05-8096	15-05-8098	23.01 (.906)
10	15-05-8106	15-05-8108	25.50 (1.004)
11	15-05-8116	15-05-8118	27.99 (1.102)
12	15-05-8126	15-05-8128	30.50 (1.201)
13	15-05-8136	15-05-8138	32.99 (1.299)
14	15-05-8146	15-05-8148	35.50 (1.398)
15	15-05-8156	15-05-8158	37.99 (1.496)
16	15-05-8166	15-05-8168	40.51 (1.595)
17	15-05-8176	15-05-8178	43.00 (1.693)
18	15-05-8186	15-05-8188	45.49 (1.791)
19	15-05-8196	15-05-8198	48.00 (1.890)
20	15-05-8206	15-05-8208	50.49 (1.988)
21	15-05-8216	15-05-8218	53.00 (2.067)
22	15-05-8226	15-05-8228	55.49 (2.185)
23	15-05-8236	15-05-8238	57.98 (2.283)
24	15-05-8246	15-05-8248	60.50 (2.382)
25	15-05-8256	15-05-8258	62.99 (2.480)
26	15-05-8266	15-05-8268	65.50 (2.579)
27	15-05-8276	15-05-8278	68.02 (2.678)
28	15-05-8286	15-05-8288	70.51 (2.776)

7894/5.08mm (.200")		
Circuits	**Order No.**	**Cut Length**
4	15-05-7045	18.54 (.730)
5	15-05-7055	23.62 (.930)
6	15-05-7065	28.70 (1.130)
7	15-05-7075	33.78 (1.330)
8	15-05-7085	38.86 (1.530)
9	15-05-7095	43.94 (1.730)
10	15-05-7105	49.02 (1.930)
11	15-05-7115	54.10 (2.130)
12	15-05-7125	59.18 (2.330)
13	15-05-7135	64.26 (2.530)
14	15-05-7145	69.34 (2.730)
15	15-05-7155	74.41 (2.930)
16	15-05-7165	79.50 (3.130)

7841/2.54mm (.100")			
Circuits	**Order No.**		**Cut Length**
	Feed-Through	**Feed-To**	
4	15-05-8045	15-05-8047	10.51 (.414)
5	15-05-8055	15-05-8057	13.05 (.514)
6	15-05-8065	15-05-8067	15.59 (.614)
7	15-05-8075	15-05-8077	18.13 (.714)
8	15-05-8085	15-05-8087	20.67 (.814)
9	15-05-8095	15-05-8097	23.21 (.914)
10	15-05-8105	15-05-8107	25.75 (1.014)
11	15-05-8115	15-05-8117	28.29 (1.114)
12	15-05-8125	15-05-8127	30.83 (1.214)
13	15-05-8135	15-05-8137	33.37 (1.314)
14	15-05-8145	15-05-8147	35.91 (1.414)
15	15-05-8155	15-05-8157	38.45 (1.514)
16	15-05-8165	15-05-8167	40.99 (1.614)
17	15-05-8175	15-05-8177	43.53 (1.714)
18	15-05-8185	15-05-8187	46.07 (1.814)
19	15-05-8195	15-05-8197	48.61 (1.914)
20	15-05-8205	15-05-8207	51.15 (2.014)
21	15-05-8215	15-05-8217	53.69 (2.014)
22	15-05-8225	15-05-8227	56.23 (2.214)
23	15-05-8235	15-05-8237	58.77 (2.314)
24	15-05-8245	15-05-8247	61.31 (2.414)
25	15-05-8255	15-05-8257	63.85 (2.514)
26	15-05-8265	15-05-8267	66.39 (2.614)
27	15-05-8275	15-05-8277	68.93 (2.714)
28	15-05-8285	15-05-8287	71.47 (2.814)

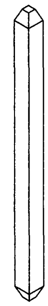
FEATURES AND SPECIFICATIONS

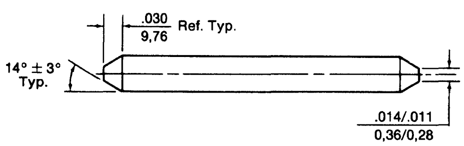
Square Pins

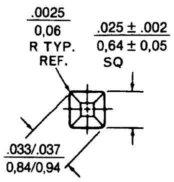
2766/4166
0.64mm (.025") Square Pins

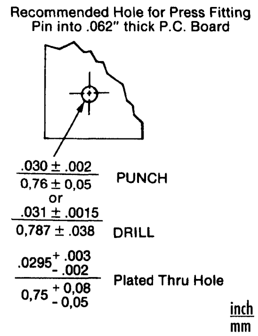
Features and Benefits
- Provides lower profile interconnect system
- Various pin lengths available (contact factory)
- Recommended for .062" thick printed circuit boards
- Pinsetting equipment available see section W

Reference Information
Product Specification: ES-152
Packaging: Bulk
Tooling Information: See page J-176
Mates With: Standard .100" crimp housing, PCB connectors
or IDT connectors
Designed In: Inches







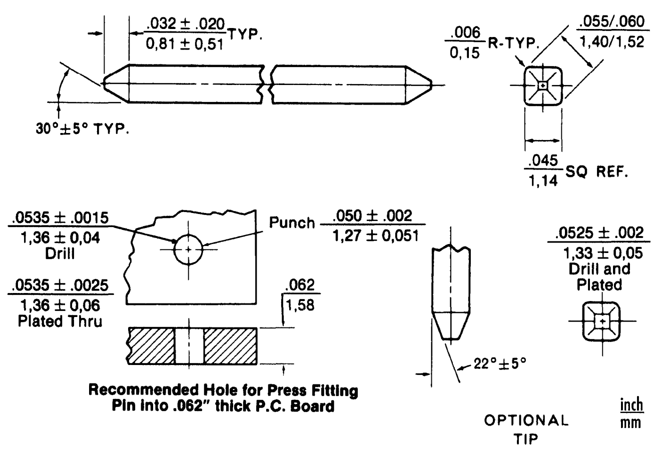


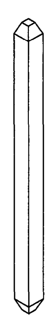
inch
mm

Series No.	Order No.	Contact	Plating	Length
2766	• 89-00-0051	Hard-Drawn Brass	.560	Tin
	• 89-00-0060		.560	Gold
	89-00-0068		.437	Tin
	89-00-0114		.437	Gold
4166	08-52-1201	Phosphor Bronze	.560	Tin
	08-58-0611		.560	Gold
	08-52-0602		.405	Tin
	08-58-0622		.405	Gold

Contact factory for other plating options

2161
1.14mm (.045") Square Pins





inch
mm

Series No.	Order No.	Contact	Plating	Length
2161	• 08-50-0401	Hard-Drawn Brass	Tin	.750
	• 08-56-0401		Gold	.750
	08-50-0404		Tin	.500
	08-56-0404		Gold	.500
	08-50-0410		Tin	.437
	08-56-0410		Gold	.437

• US Standard Product, available through Molex franchised distributors

PCB Connectors
J

FEATURES AND SPECIFICATIONS

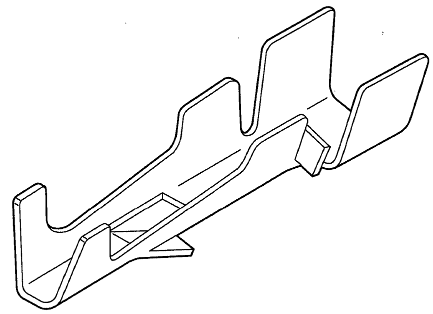
molex® PC Board Crimp Terminal

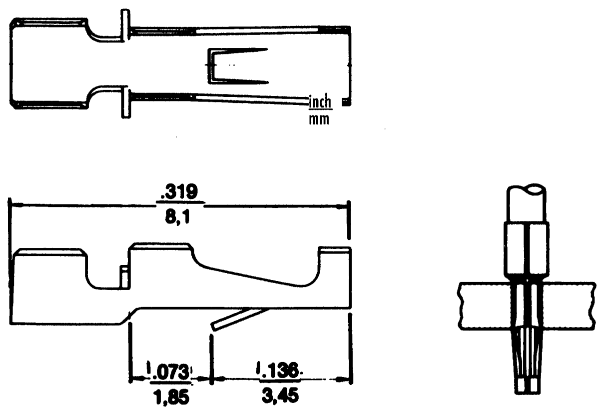
5190-01T
Stand Alone
Board-In

Features and Benefits
- Secures wire to PC board before wave soldering
- Rapid and economical means of hand wiring PC boards
- Wire solders directly to PC board
- No additional contact resistance
- Low profile
- Recommended PC board hole diameter 1.24 ± 0.08mm (.048 ± .003") for 1.57mm (.062") thick PC board

Physical
Contact: Brass
Plating: Tin

Reference Information
Packaging: Chain
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
Designed In: Millimeters





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Gauge AWG	Insulation Diameter	Terminal	Contact Material	Automatic Tooling	
					Press	Crimp Die
08-70-0060	22-26	1.70 max.	Chain form	Tin-Plated Brass	11-26-0033 M15A or 57117-4000	JM5865A 11-26-0093

FEATURES AND SPECIFICATIONS

PC Board Crimp Terminal

5298-T

Stand Alone Board-In

Features and Benefits

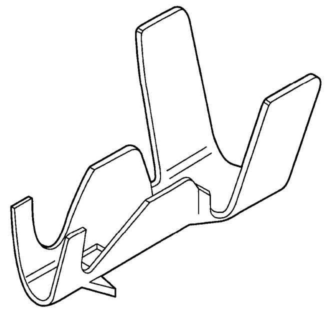
- Secures wire to PC board before wave soldering
- Rapid and economical means of hand wiring PC boards
- Wire solders directly to PC board
- No additional contact resistance
- Low profile
- Recommended PC board hole diameter 1.80 ± 0.10mm (.070 ± .003") for 1.57mm (.062") thick PC board

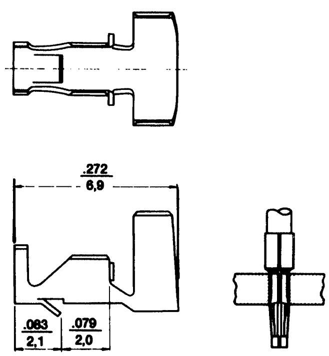
Physical

Contact: Brass
Plating: Tin

Reference Information

Packaging: Chain
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
CSA File No.: LR19980
Designed In: Millimeters





inch
mm

ORDERING INFORMATION

Order No.	Wire Gauge AWG	Insulation Diameter	Terminal	Contact Material	Automatic Tooling	
					Press	Crimp Die
08-70-0106	18-22	3.05 max.	Chain form	Tin-Plated Brass	11-26-0033 M15A or 57117-4000	JM5998A 11-26-0104

PC Board Crimp Terminal

90198
Stand Alone
Board-In

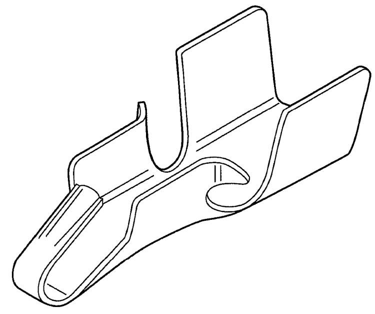
FEATURES AND SPECIFICATIONS

Features and Benefits
- Terminal locking lance holds wire in PCB for flow soldering
- Design allows both wire and terminal to be soldered and assures proper solder flow
- Insulation support prevents damage to the wire or solder joint
- Low profile—total height above PCB is less than most components (2.80mm/.106")
- No terminal resistance, resistance is limited to integrity of the solder joint

Reference Information
Product Specification: PS-90198
Packaging: Reel
Tooling Information: See pages J-169 and J-170
UL File No.: E29179
Designed In: Millimeters

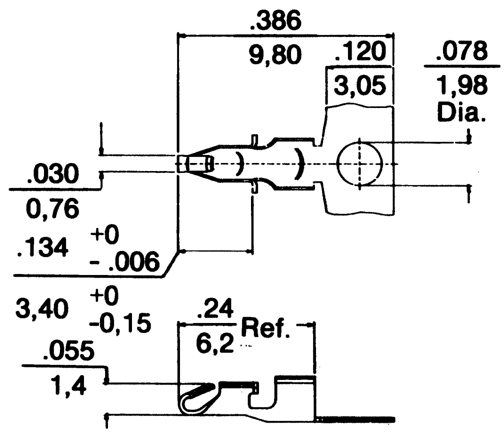
Mechanical
Insertion Force to PCB: 2.5 lb max.

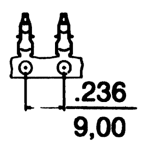
Physical
Contact: Phosphor Bronze
Plating: 1μm Hot Tin/Lead Dip
PCB Mounting Hole Diameter:
22 AWG—1.23-1.30mm (.048-.051")
24 and 26 AWG—1.17-1.25mm (.046-.049")
(for 1.37-1.77mm/.054-.070" thick PCB)



PCB Connectors

J





inch
mm

ORDERING INFORMATION

Order No.	Wire Gauge AWG	Insulation (Max.)	Terminal	Contact Material
90198-0001	22, 24, 26	1.52 (.060)	Reels of 10,000	Tin/Lead-Plated Phosphor Bronze

Application Tooling	
Description	**Order No.**
Complete Terminator Module Assembly	69001-1024
Applicator Only	69001-0171

Note: This product is a solder joint. Most of the spec details are dependent on the PCB solder and wire to be used.

ORDERING INFORMATION ***Preferred Version in the US***

Application Tooling PCB Connectors

Crimp Tooling Molex US

Presses	
Description	Order No.
TM-44 Press without Mini-Mac (220V)	11-09-2074
TM-42 Press without Dies (110V)	69002-5001
TM-144 Press and Stripper without Mini-Mac (220V)	11-09-2073
TM-7 Press without Mini-Mac (110V)	11-05-0043
TM-7 Press without Mini-Mac (220V)	11-05-0046

Terminal Series No.	Wire Gauge AWG (mm^2)	Insulation Diameter	Order No.								
			Hand Crimper	Extraction Tool	Insertion Tool	Terminator Die*	Terminator Die* Spare Tooling	Mini-Mac	Mini-Mac Spare Tooling	TM-144†	TM-80
2477-2478	18-24 (0.80-0.20)	2.80 (.110) max.	• 11-01-0026	• 11-03-0016		11-40-2096	11-40-3096	11-18-2210	11-18-3203	11-09-2082	69015-7000
2578	22-26 (0.35-0.12)	1.65 (.065) max.	• 11-01-0026	• 11-03-0016		11-40-2097	11-40-3097	11-18-2022	11-18-3021		
2759	22-30 (0.35-0.05)	1.57 (.062) max.	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2265	11-40-3267	11-18-2171	11-18-3162		
4809	22-30 (0.35-0.05)	1.57 (.062) max.	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2102	11-40-3102	11-18-2109	11-18-3103		
5103	22-28 (0.35-0.08)	1.90 (.075) max.	11-01-0189			11-40-2056	11-40-3056	11-18-2082	11-18-3077		69015-6094
5159	22-28 (0.35-0.08)	1.20-1.70 (.047-.067)	• 11-01-0185	11-26-0059	11-02-0004	11-40-2265	11-40-3267	11-18-2171	11-18-3162		
5167	18-24 (0.80-0.20)	2.50 (.098) max.	• 11-01-0026	• 11-03-0016		11-40-2181	11-40-3183	11-18-2084	11-18-3079		
5168	22-28 (0.35-0.08)	1.70 (.067) max.	• 11-01-0026	11-26-0059		11-40-2195	11-40-3196	11-18-2117	11-18-3111		
5190	22 (0.35)	1.52 (.060) max.				11-40-2039	11-40-3039				
5190	24-26 (0.80-0.12)	1.52 (.060) max.				11-40-2241	11-40-3244				
5194	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	11-01-0193	11-26-0100		11-40-2073	11-40-3073	11-18-2044	11-18-3044		
5225	22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	11-26-0089	11-26-0100		11-40-2074	11-40-3074	11-18-2045	11-18-3045		
5241	22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	• 11-01-0185	11-26-0660		11-40-2063	11-40-3063	11-18-2083	11-18-3078		
5263	22-28 (0.35-0.08)	1.90 (.075) max.	11-01-0194			11-40-2089	11-40-3056	11-18-2062	11-18-3058		
5298	18-24 (0.80-0.20)	3.05 (.120) max.				11-40-2246	11-40-3249	11-18-2203	11-18-3196		
6438	18-24 (0.80-0.20)	2.40 (.095) max.	• 11-01-0026	• 11-03-0016		11-40-2096	11-40-3096	11-18-2210	11-18-3203		
6459	22-30 (0.35-0.05)	1.57 (.062) max.	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2265	11-40-3267	11-18-2171	11-18-3162		
6838	18-24 (0.80-0.20)	2.80 (.110) max.	• 11-01-0210	• 11-03-0016		11-40-2096	11-40-3096	11-18-2210	11-18-3203		
7258	22-26 (0.35-0.12)	1.65 (.065) max.	• 11-01-0026	• 11-03-0016		11-40-2097	11-40-3097	11-18-2022	11-18-3021		
7879	22-30 (0.35-0.05)	1.57 (.062) max.	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2251	11-40-3253	11-18-2170	11-18-3161		
8818/8819	18-22 (0.80-0.35)	2.40 (.095) max.	• 11-01-0026	• 11-03-0016				11-18-2023	11-18-3022		
40455	22-30 (0.35-0.05)	1.57 (.062) max.	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2265	11-40-3267	11-18-2171	11-18-3162		
41572	22-30 (0.35-0.05)	1.57 (.062) max.	• 11-01-0185	• 11-03-0022	11-02-0004	11-40-2265	11-40-3267	11-18-2171	11-18-3162		
43030	26-30 (0.12-0.05)	1.52 (.060) max.	11-01-0200	11-03-0043		11-40-2258	11-40-3262	11-18-2176	11-18-3167		
43030	20-24 (0.50-0.20)	1.65 (.065) max.	11-01-0200	11-03-0043		11-40-2259	11-40-3263	11-18-2182	11-18-3174		
43031	26-30 (0.12-0.05)	1.52 (.060) max.	11-01-0201	11-03-0043		11-40-2258	11-40-3262	11-18-2176	11-18-3167		
43031	20-24 (0.50-0.20)	1.65 (.065) max.	11-01-0201	11-03-0043		11-40-2259	11-40-3263	11-18-2182	11-18-3174		
50038/50039	22 (0.35)	1.90 (.075) max.	AVS 0.3 57085-5000			11-40-2248	11-40-3251	11-18-2163	11-18-3154		
50038/50039	22 (0.35)	1.90 (.075) max.	CAVS 0.5 57086-5000			11-40-2248	11-40-3251	11-18-2163	11-18-3154		
90198-010X	22-26 (0.35-0.12)	1.70 (.067) max.				11-40-2196	11-40-3197				

• US Standard Product, available through Molex franchised distributors

* For use with TM-40, TM-42 or base unit

† Includes Mini-Mac

See Application Tooling Section W for additional information on these tools

Application Tooling PCB Connection

Crimp Tooling Molex Europe

Preferred Version in Europe—Not Available in the US

Terminal Series No.	Wire Gauge AWG (mm²)	Insulation Diameter	Order No.					
			Hand Crimper	Extraction Tool	Insertion Tool	Mini-Mac	Mini-Mac Spare Tooling	TM-80
2477-248	18-24 (0.80-0.20)	2.80 (.110) max.	69008-0953	• 11-03-0616		69037-1008	69037-2008	69015-7000
2578	22-26 (0.35-0.12)	1.65 (.065) max.	69008-0954	• 11-03-0016		69037-1010	69037-2010	
2759	22-30 (0.35-0.05)	1.57 (.062) max.	69008-0954	• 11-03-0022	11-02-0004	69037-1027	69037-2027	
4809	22-30 (0.35-0.05)	1.57 (.062) max.	69008-0956	• 11-03-0022	11-02-0004	69037-1002	69037-2002	
5103	22-28 (0.35-0.08)	1.90 (.075) max.	69008-0957			69037-1011	69037-2011	69015-6094
5159	22-28 (0.35-0.08)	1.20-1.70 (.047-.067)				69037-1027	69037-2027	
5167	18-24 (0.80-0.20)	2.50 (.098) max.				69037-1125	69037-2125	
5194	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)				69037-1013	69037-2013	
5241	22-28 (0.35-0.08)	1.30-1.60 (.052-.063)				69037-1012	69037-2012	
5263	22-28 (0.35-0.08)	1.90 (.075) max.				69037-1058	69037-2058	69015-6070
6438	18-24 (0.80-0.20)	2.40 (.095) max.				69037-1008	69037-2008	
6838	18-24 (0.80-0.20)	2.80 (.110) max.				69037-1008	69037-2008	
7258	22-26 (0.35-0.12)	1.65 (.065) max.				69037-1010	69037-2010	
7879	22-30 (0.35-0.05)	1.57 (.062) max.				69037-1136	69037-2136	
8818/8819	18-22 (0.80-0.35)	2.40 (.095) max.				69037-1122	69037-2122	
43030/43031	20-24 (0.50-0.20)	1.65 (.065) max.	69008-0982					
43030/43031	26-30 (0.12-0.05)	1.52 (.060) max.	69008-0983					
50038/50039	22 (0.35)	1.90 (.075) max.				69037-1048	69037-2048	
90198-010X	22-26 (0.35-0.12)	1.70 (.067) max.				69037-1004	69037-2004	

ORDERING INFORMATION

Preferred Version in Japan—Not Available in the US

Crimp Tooling Molex Japan

Presses	
Description	Order No.
Press for Crimp Die	M15
Press for Modular Crimp Die	M15A
Mini Press for Modular Crimp Die	57177-4000

Terminal Series No.	Wire Gauge AWG (mm²)	Insulation Diameter	Order No.				
			Hand Crimper	Extraction Tool	Insertion Tool	Modular Crimp Die	Crimp Die
2477-2478	18-24 (0.80-0.20)	2.80 (.110) max.	JHTR2445A	57092-6000		JM5868A	CDJ2442
2578	22-26 (0.35-0.12)	1.65 (.065) max.	JHTR2445A	57092-6000		JM5868A	CDJ2442
2759	22-26 (0.35-0.12)	1.30-1.70 (.051-.067)	JHTR2262A	J5800.04	11-02-0004	JM5858A	CDJ2810
2759	26-28 (0.12-0.08)	0.80-1.30 (.031-.051)	JHTR2262J	J5800-04	11-02-0004	JM5858A	CDJ5259
4809C	22-30 (0.35-0.05)	1.57 (.062) max.	JHTR2262A	11-03-0022		57156-3000	
5103	22-28 (0.35-0.08)	1.90 (.075) max.	JHTR5907			JM5857A	CDJ5851
5159	22-26 (.035-0.12)	1.30-1.70 (.051-.067)	JHTR2262A	J5800-004	11-02-0004	JM5858A	CDJ2810
5159	26-28 (0.12-0.08)	0.80-1.30 (.031-.051)	JHTR2262J	J5800-004	11-02-0004	JM5858A	CDJ5259
5167/5168	18-24 (0.80-0.20)	2.50 (.098) max.	JHTR2445A	J5800-004*		JM5868A	CDJ2442
5167/5168	18-24 (0.80-0.20)	2.50 (.098) max.	JHTR2445A	57092-6000*		JM5868A	CDJ2442
5190-01	24-26 (0.80-0.12)	1.52 (.060) max.				JM5865A	CDJ6164
5194	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	JHTR5904	J5800-009		JM5859A	
5225	22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	JHTR5906	J5800-009		JM5859A	
5241	22-26 (0.35-0.12)	1.30-1.70 (.051-.067)	JHTR2262A	J5800-005		JM5860A	
5241	26-28 (0.12-0.08)	0.80-1.30 (.031-.051)	JHTR2262J	J5800-005		JM5860A	
5263	22-28 (0.35-0.08)	1.90 (.075) max.	JHTR5974			JM5996A	
5298	18-24 (0.80-0.20)	3.05 (.120) max.				JM5998A	CDJ4997
50038/50039	22 (0.35)	1.90 (.075) max.	AVS 0.3 57085-5000			57084-3000	
50038/50039	22 (0.35)	1.90 (.075) max.	CAVS 0.5 57086-5000			57084-3000	

• US Standard Product, available through Molex franchised distributors

* J5800-004 applies to all except housing number 51011; 57092-6000 applies to this housing

IDT Tooling for 2.50mm (.079") Pitch SPOX™ and User-Friendly Connectors*

Termination Hand Tool for Discrete Wire

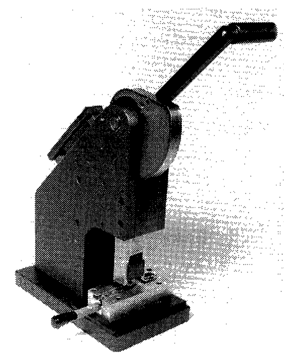
FEATURES

- Full cycle ratchet to assure complete termination
- For low volume, prototype and repair
- Automatic indexing to next position after insertion of discrete wire

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Pistol	11-21-5194	
Module for 2.50mm SPOX	11-31-8939	42219, 42254
Module for 2.50mm "User Friendly"	11-39-0264	90650, 90652

Discrete Wire Manual Press Terminator



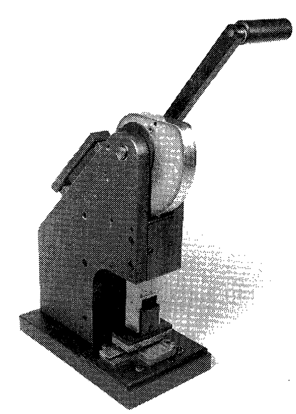
FEATURES

- Full cycle ratchet to assure complete termination
- For prototype and low-volume requirements
- Manual index to next position after termination

ORDERING INFORMATION

Description	Order No.		Use with Molex Connector
	Press Assembly	Tooling Only	
Manual Press for 2.50mm SPOX	11-20-1278	11-39-0001	42219, 42254
Manual Press for 2.50mm "User Friendly"	11-21-9963	11-21-9998	90650, 90652

Ribbon Cable Manual Press Terminator



FEATURES

- Full cycle ratchet to assure complete termination
- For prototype and low- to mid-volume needs
- Mass termination of prepared cable-to-connector

ORDERING INFORMATION

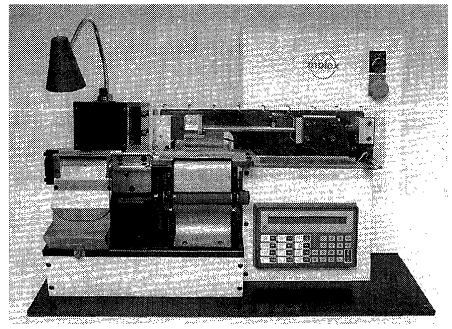
Description	Order No.		User with Molex Connector
	Press Assembly	Tooling Only	
Manual Press for 2.50mm SPOX	11-21-9757	11-32-1956	42219, 42254
Manual Press for 2.50mm "User Friendly"	11-20-1277	11-39-0002	90650, 90652

* See Application Tooling Section W for additional information on these tools

PCB Connectors
J

IDT Tooling for SPOX™ and User Friendly 2.50mm (.079") Connectors*

Semi-Automatic "Hawk" Terminator



FEATURES AND SPECIFICATIONS

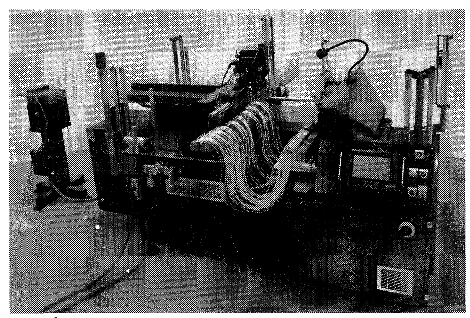
Features
- Assembles either discrete wire or cable
- Connector packaged in "Ammo-Pak" and linked together by terminal carrier strips
- Automatic connector loading
- Automatic carrier break off
- Programmable void capability
- Foot-pedal operated
- Tooled for 2 through 15 circuits
- Discrete wire and cable tooling come with the machine (Two 15 circuit tools supplied should be altered to your application circuit size. Specific circuit size tools available, see your manual for ordering information)

Specifications
Size: Width—760mm (30")
Depth—480mm (19")
Height—480mm (19")
Weight: 70kg (150 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—5.6L per minute (0.2 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—2A at 120V or 1A at 220V
Rate: Up to 1200 terminations per hour (discrete) and 350 assemblies per hour (cable), dependent on operator speed and wire length

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Semi-Automatic Terminator for Discrete Wire and Ribbon Cable	11-20-1252	42219, 42254
Semi-Automatic Terminator for Discrete Wire and Ribbon Cable	11-20-1280	90650, 90652

62000-0000 "Phoenix" Automatic Harness Assembly Machines†



FEATURES AND SPECIFICATIONS

Features
- Dereel system for discrete wire or cable available
- Double- or single-ended harness capabilities without strip
- Single-ended harness capabilities with strip (38.00mm/1.15" max.)
- Full strip for discrete wire
- Strip and retain for cable
- Discrete wire with variable-wire length capability (Harness length of 152mm/6" min. to 2400mm/95" max.)
- Missing wire and splice detector
- Welded-film unloader for mylar ammo pack
- Carrier strip break off
- Continuity testing (double-ended assemblies)
- Hot stamp marking
- Reject station to segregate rejected assemblies

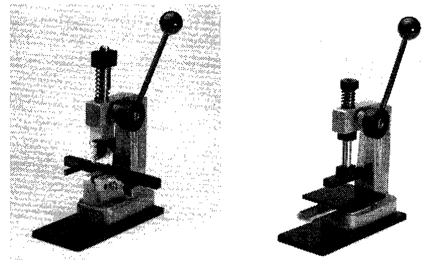
Specifications
Pneumatics: Pressure—5 BAR (80psig)
Consumption—142L per minute (5 CFM)
Electrical: Voltage—120V AC, 60 Hz or 220V AC, 50 Hz
Current—30A at 120V or 15A at 220V
Rate: 300 cycles per hour average, dependent on harness length, up to 60 terminations per cycle, dependent on circuit size

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable	Contact factory	42219, 42254
Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable	Contact factory	90650, 90652

* See Application Tooling Section W for additional information on these tools
† Due to the special nature of these machines, contact factory for information related to specific harness requirements

Manual Press for Ribbon Cable



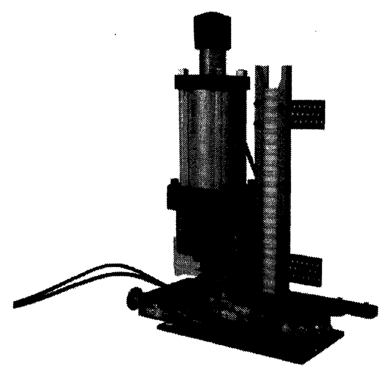
FEATURES

- For prototype and low-volume requirements
- Feed-through or feed-to assembly

ORDERING INFORMATION

Description	Order No.	Connector
.156" pitch manual press terminator	11-20-0314	7674, 7675
.100" pitch manual press terminator	11-20-0179	7720, 7720S, 40555
.098" pitch manual press terminator	11-20-0436	8160

Semi-Automatic Terminator for Ribbon Cable



FEATURES AND SPECIFICATIONS

Features

- Terminates pre-notched cable to pre-assembled connectors
- Bench mounted and operator controlled
- Feed-through and feed-to capabilities
- Connector magazine for increased output

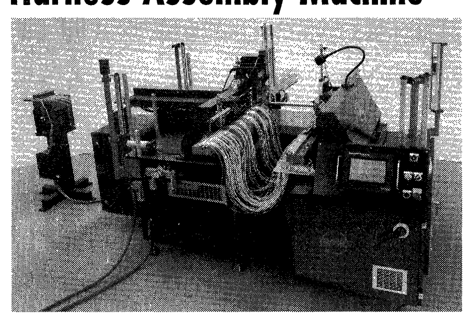
Specifications

Size: Width—152mm (6")
Depth—305mm (12")
Weight: 13.5kg (30 lb)
Pneumatics: Pressure—5 BAR (80-100psig) at 5.6L per minute (0.2 CFM)
Rate: Up to 350 assemblies per hour dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Connector
.156" pitch cable terminator	11-20-0418	7674, 7675
.100" pitch cable terminator	11-20-0412	7720
.100" pitch cable terminator for connectors with backwalls	11-20-0771	7720, 40555
.100" pitch cable terminator for 7720S	11-20-1004	7720S
Terminator for 7795 connector	11-20-0435	7795S
.100" pitch cable terminator (edge card)	11-20-0411	7822
Terminator for 8160 connector	11-20-0498	8160

62000-0000 "Phoenix" Automatic Harness Assembly Machine†



FEATURES AND SPECIFICATIONS

Features

- Dereel system for discrete wire or cable available
- Double- or single-ended harness capabilities without strip
- Single ended harness capabilities with strip (38mm/1.150")
- Full strip for discrete wire
- Strip and retain for cable
- Up to 56 terminations per cycle (dependent on circuit size)
- Discrete wire with variable length capability (Harness length of 152mm/6" min. to 2400mm/95" max.)
- Missing wire and splice detector
- Magazine feed for connector loading
- Continuity testing (double-ended assemblies)
- Hot stamp marking
- Reject station to segregate rejected assemblies

Specifications

Pneumatic: Pressure—5 BAR (80psig)
Consumption—142L per minute (5 CFM)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz
Current—30A at 120V or 15A at 220V
Rate: 300 cycles per hour average, dependent on harness length

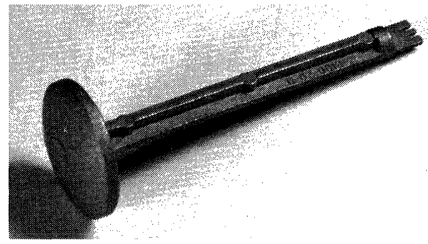
ORDERING INFORMATION

Description	Order No.	Connector
Fully Automatic Mass Terminator for Discrete Wire and Ribbon Cable	Contact factory	KK® Series IDT

* See Application Tooling Section W for additional information on these tools

† Due to the special nature of these machines, contact factory for information related to specific harness requirements

"T" Handle Hand Tool for Discrete Wire



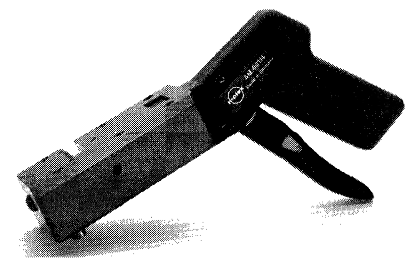
FEATURES

- For low volume, prototype and repair

ORDERING INFORMATION

Description	Order No.	Connector
"T" Tool for 2.50mm (.098") and 2.54mm (.100") pitch connectors	11-02-0016	7720, 7720S, 7795, 40555, 8160
"T" Tool for 3.96mm (.156"), 5.00mm (.197") and 5.08mm (.200") pitch connectors	11-02-0015	6952, 7674, 7675

Termination Hand Tool for Discrete Wire



FEATURES

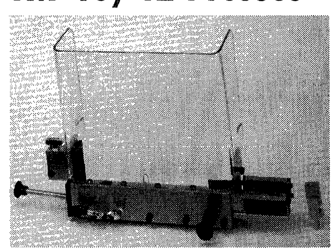
- For low volume, prototype and repair
- Auto indexing to next position after insertion of discrete wire

ORDERING INFORMATION

Description	Order No.	Connector
Pistol†	11-21-5194	
Module for 5.08mm (.200") pitch connectors, feed-to only	69008-0270	6952
Module for 3.96mm (.156") pitch connectors, feed-to only	11-21-5196	7674, 7675, 8160
Module for 3.96mm (.156") pitch connectors, feed-to or feed-through	62100-0400	7674, 7675
Module for 2.50mm (.098") and 2.54mm (.100") pitch connectors, feed-to only	11-21-5197	7720, 7720S, 7795S, 40555

† Pistol must be used with all modules

Discrete Wire Terminator for TM-40/42 Presses



FEATURES AND SPECIFICATIONS

Features

- Low-cost alternative for IDT termination
- Auto indexing to next position after insertion of discrete wire
- For feed to connectors only
- Fits in all existing TM-40 and TM-42 presses

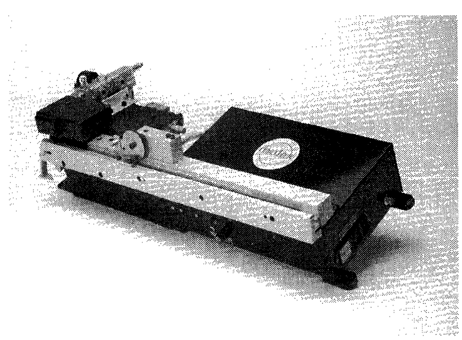
Specifications

Rate: Up to 850 terminations per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.	Connector
IDT Terminator for TM-40/42	11-39-0051	7720, 40555
IDT Terminator for TM-40/42	11-39-0052	7674, 7675

Semi-Automatic Mini-Cam III for Discrete Wire



FEATURES AND SPECIFICATIONS

Features

- Sizes 4 to 28 circuits with no adjustment
- Provides a fast and low-cost method of assembly
- Conveyor feed, belt type
- Release mechanism for stop pawl and feed finger
- Optional batch counter with certain connectors

Specifications

Size: Width—609mm (24")
Depth—203mm (8")
Height—203mm (8")
Weight: 18.2kg (40 lb)
Pneumatics: 5 BAR (80psig) at 0.5L per minute (0.02 CFM)
Electrical: 120V, 60 Hz, 5A
Rate: Up to 900 assemblies per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.			Connector
	Pneumatic Version	110V Electric Version	220V Electric Version	
Mini-Cam III for 5.08mm (.200")	11-20-0955	11-20-0694	11-20-0695	6952
Mini-Cam III for 3.96mm (.156") pitch	11-20-0953	11-20-0691	11-20-0692	7674, 7675
Mini-Cam III for 2.54mm (.100") pitch	11-20-0954	11-20-0688	11-20-0689	7720, 7720S, 7795S, 40555

* See Application Tooling Section W for additional information on these tools

Cutting Tools for Breakaway Headers

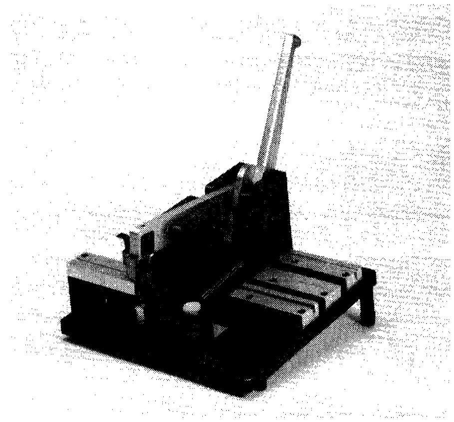
.100" Pitch Cutter

FEATURES

- Manually operated
- Interchangeable nests included for various header types

ORDERING INFORMATION

Description	Order No.	Header Series
Tool Assembly	11-20-1230	8624, 70203, 70343, 70344, 42225, 42226, 42227, 42228, 42375, 42376, 42377, 42624
Replacement Blade—Upper	11-32-4306	
Replacement Blade—Lower	11-32-4307	



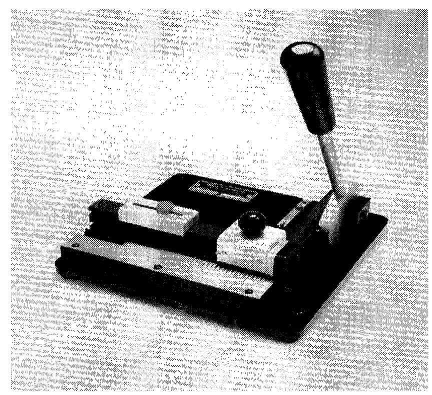
.156" Pitch Cutter

FEATURES

- Manually operated
- Tool indexes and cuts parts to variable lengths with simple set-up adjustment

ORDERING INFORMATION

Description	Order No.	Header Series
Tool Assembly	11-20-0901	41661, 41662, 41671, 41672, 41681, 41682, 41701, 41711, 41721
Replacement Blade	11-31-7504	



Hand Cutting Tool

FEATURES

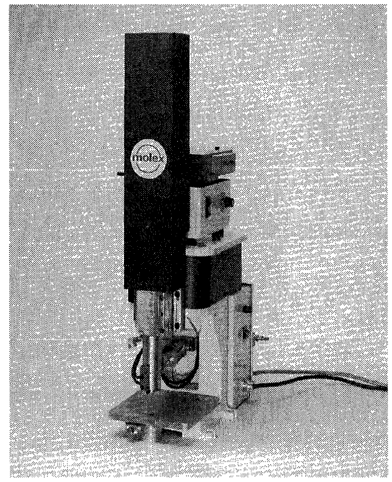
- Hand tool for 2.54mm (.100") and 3.96mm (.156") pitch header cutting to length
- Incorporates a graduated slideway and stop for presetting of required header length. Maximum length of header which can be cut is 40 position.

ORDERING INFORMATION

Description	Order No.	Header Series
Tool Assembly	69008-0350	8624, 70203, 70343, 70344, 42225, 42226, 42227, 42228, 42375, 42376, 42377, 42624, 41661, 41662, 41671, 41672, 41681, 41682
Replacement Blade—Upper	69008-0078	

Application Tooling
PCB Connectors
Single Pinsetter®

Pinsetting Equipment for 2766, 4166 and 2161 Pin Terminals



FEATURES AND SPECIFICATIONS

Features

- Accommodates 0.64mm (.025") through 1.14mm (.045") square wire pins with simple change parts kits
- Reliable pin feed
- Meets OSHA requirements for operator safety and noise

Specifications

Size: Width—300mm (12")
Depth—460mm (18")
Height—810mm (32")
Weight: 60kg (130 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—20L per minute (0.7 CFM)
Electrical: Voltage—120V, 60Hz or 220V, 50Hz
Current—6A at 120V or 3A at 220V
Maximum Pin-to-Pin Distance:
2.54mm (.100") for 0.64mm (.025") pins
3.96mm (.156") for 1.14mm (.045") pins
Maximum Pin Length: 25.40mm (1.000")
Minimum Pin Length: 6.35mm (.250")
Rate: Up to 3600 pins per hour, dependent on operator speed and application

ORDERING INFORMATION

To order contact your local sales engineer. Please have the following information: pin type (product number), pin length, pin height above the PCB, PCB thickness, PCB layout and estimated annual usage.

Multi Directional X-Y Table Accessory

FEATURES AND SPECIFICATIONS

Features

- Designed to increase productivity
- Maintains pin orientation
- No air or electric required for slide
- Minimizes operator fatigue
- Bench mountable

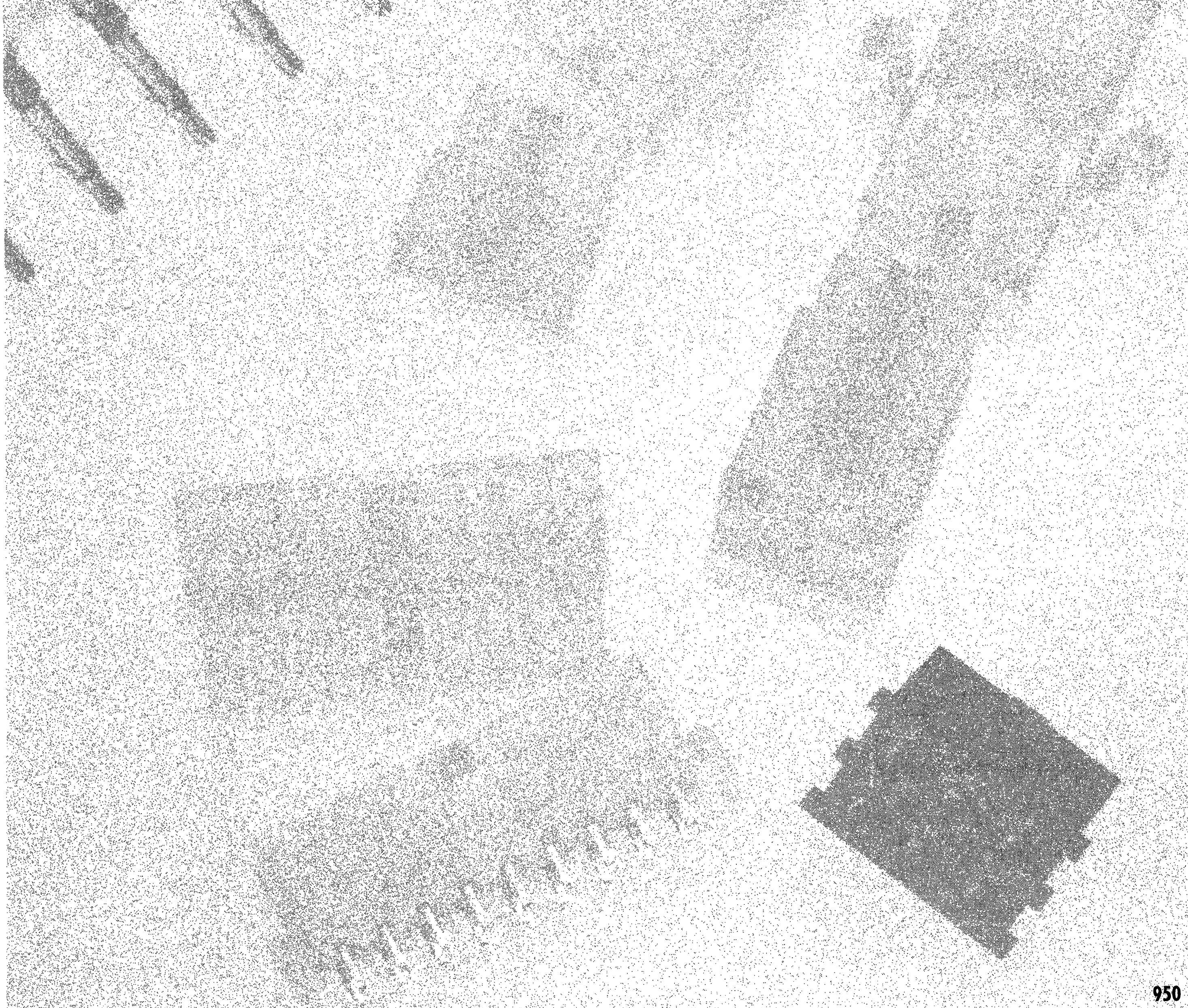
Specifications

Size: Width—1220mm (48")
Depth—610mm (24")
Height—152mm (6")
Slide Weight: 31.5kg (70 lb)
Maximum Board Size: 580 x 267mm (23 x 10.5")
Maximum Board Area That Can Be Pinned: 254 x 380mm (10 x 15")
Minimum Distance Board Edge to Pin Location: 95mm (3/8")
Board Thickness: 1.57mm (.062") (nonstandard thickness available on request)

ORDERING INFORMATION

To order contact your local sales engineer. Please have the following information: pin type (product number), pin length, pin height above the PCB, PCB thickness, PCB layout and estimated annual usage.

Power Connectors



K

CHOOSING THE RIGHT POWER CONNECTOR

The right power connector will assure the safety and integrity of your electrical and electronic products. Molex's broad line of power connectors allows you the design flexibility to choose the right connector. Is your decision driven by the downsizing of your products or the need to add capabilities? Do you require a smaller connector that can carry more current or a larger connector that can handle heavier gauge wire? Do you want a greater selection of printed circuit board mounted connectors? Molex is your source for the right power connector.

This cross reference was developed to make your selection easier. To assure you the highest performance in your application consider first:

- Current Rating (Current Density)
- Connector Size (Circuit Density)
- Engagement Force
- Wire Size
- Configuration and Circuit Size
- Operating Voltage

REFERENCE CHART

	Mini-Fit, Jr.	Standard .062"	Standard .093"	3191 Series	HCS-125
Current Density*					
Amperes/Circuit at smallest circuit size	9	5	12	12	20
at largest circuit size	6	4	7.5	6	20
Circuit Density†					
Circuits per inch	25-31	31-35	9-18	11-13	11-14
Operating Voltage—Maximum	600	250	250/600‡	600	600
Housing Lock Type					
Yes—Positive Lock	Yes	36-circuit only	2-, 3-, 4-, 5-circuit only‡	Yes	Yes
No—Passive Lock (Detent)	No	Yes	Yes	No	No
Wire-To-Wire	Yes	Yes	Yes	Yes	Yes
Header					
Straight	Yes	Yes	Yes§	Yes**	No
Right Angle	Yes	No	No	Contact Factory	No
Panel Mount (Mounting Ears)					
Plug	Yes	Yes	Yes	Yes	Yes
Receptacle	No	Yes	Yes	No	No
Connector Engaging Force					
Pounds/Circuit	1.54	2.3	3.5	3.5	5.75††
Connector Disengage Force					
Pounds/Circuit	0.7	0.8	2.75	2.75	3.4††
Fully Isolated Contacts	Yes	No	No	Yes	Yes
Agencies					
UL Recognized	Yes	Yes	Yes	Yes	Yes
CSA Certified	Yes	Yes	Yes	Yes	Yes
TUV Licensed	Yes	No	No	Yes	No
Circuits	2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	1, 2, 3, 4, 5, 6, 9, 12, 15, 24, 36	1, 2, 3, 4, 5, 6, 9, 12, 15	1, 2, 3, 4, 6, 9, 12, 15	1, 2, 3, 4
Wire Size—AWG	16, 18-24, 22-28	18-24, 24-30	14-20, 18-22, 22-24, 24-30	14-20, 18-22, 22-24, 24-30	10-14, 16-18
Flammability Rating					
94V-2	Yes	Yes	Yes	Yes	Yes
94V-0	Yes	No	No	Yes	C/F
Strain Relief Available‡‡	Yes, 2, 4, 6, 8, 12	Yes, 3, 9, 15	Yes, 2, 4, 15	Yes	C/F

* Based on largest listed wire size, other application factors may affect current density
† Use 5219 header
‡ Use 1816 or 6496
§ Use 1840 or 3099 header; use PC tail terminal in plug
** Use 5219 header; use PC tail terminal in plug
†† Low force terminals also available
‡‡ Available as a separate component, contact factory; for other sizes contact factory

Current Rating (Current Density)

Current rating is key to selecting the right connector. It is stated in amperes per circuit with each circuit of the connector carrying the rated current. The rating is based on the current level passing through the terminal resulting in a 30°C max. temperature rise. The current level is then derated due to adjacent terminal heating, based on the number of circuits in the housing (insulator).

Connector Size (Circuit Density)

Circuit density, expressed in circuits per square inch, is a relative measure of the size of a connector as reflected in the number of circuits that can be accommodated in 1 square inch of real estate. The higher the circuit density, the smaller the connector. Connector size is a major design consideration in printed circuit board applications and where equipment downsizing is required. When a connector is mounted in a panel or bulkhead, size may also be a factor.

Engagement Force

Engagement force, measured in pounds per circuit, is the effort required to mate the plug with the receptacle. Total connector engagement force is approximated by multiplying the number of circuits in the housing by the per circuit engagement force. (Due to other factors, actual force may be somewhat higher.) Engagement force can be a major concern in higher circuit count housings due to potentially high total mating forces and in printed circuit board applications where high mating forces could damage the printed circuit board. In these cases a connector family with a lower engagement force or a terminal having a lower engagement force within a family should be chosen.

Wire Size

The size of wire to which terminals are crimped is not generally a critical consideration. The Molex connectors listed on this chart will typically accommodate the range of 16 to 28 AWG. Should your application require a heavier wire gauge (a smaller AWG number) for mechanical strength or current carrying capability, choose a compatible connector family.

Configuration and Circuit Size

Molex power connector families are available in freehanging or panel mounted wire-to-wire configurations. Most are also offered in vertical printed circuit board header assembly configurations. PC tail terminals can be used to customize the standard plug with any combination of male and female PC (solder) tail terminals. Right angle header assemblies are also available in some connector families.
Choose the circuit size that meets your specifications based on:

1. Current rating
2. Number of module-to-module interconnects needed
3. Total connector engagement force
4. Size of the connector

Operating Voltage

The voltage rating is established by UL standards at either 250 or 600V. These voltage ratings are rms values (Root Mean Square) and therefore apply to both AC and DC voltages. Generally the higher voltage ratings are obtained by fully enclosing both the male and female terminals in the housing (insulator). Shrouded housings, or fully isolated contacts also offer protection of the contacts during assembly and handling of your products.

Materials and Plating

Housings are available in nylon with a flammability rating of UL 94V-2 and, in some families, a 94V-0 rating. The higher 94V-0 rating indicates that the material will extinguish itself (in case of fire) more rapidly than the 94V-2 material. A 94V-0 rating does not infer a higher operating temperature rating, but rather a higher resistance to flame continuance.
The standard terminal plating options available for Molex power connectors are Tin, Tin/Lead and overall or select Gold. Tin plating is appropriate for most applications where per circuit currents are above 0.5A. Gold plating should generally be specified in applications where signal or low current lines are used, high mating cycles (>30 cycles) are likely, or within harsh environments. Terminal base materials offered are Brass and Phosphor Bronze. Brass is the standard material and affords an excellent combination of strength and current carrying capability. Phosphor Bronze is recommended where:

1. High engagement/disengagement cycles are likely
2. Prolonged exposure to high ambient temperatures is likely

Mini-Fit™ Family High Current/High Density Power Connector System

The Mini-Fit Family of High Current/High Density Power Connectors is designed to meet your requirements for an interconnection system with the broadest possible configurations and options. The Mini-Fit Family allows you the greatest design flexibility in your product's interconnection system, allowing you to interconnect:

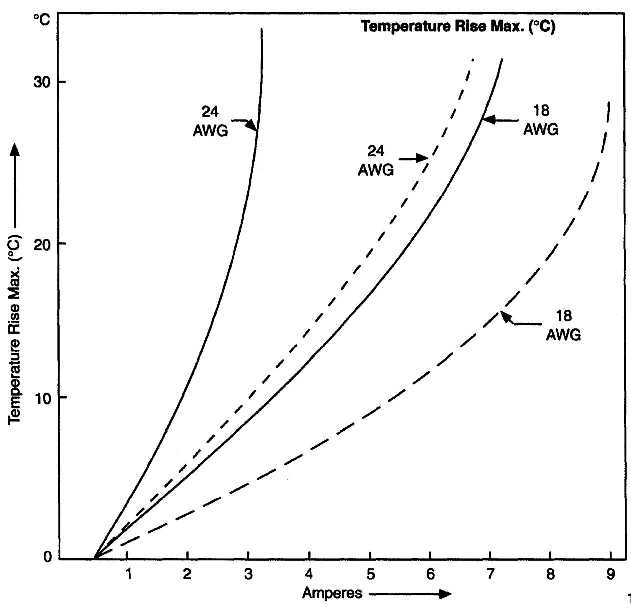
Mini-Fit, Jr.™
- Wire-to-Wire
- Wire-to-Board (vertical header)
- Wire-to-Board (right angle header)

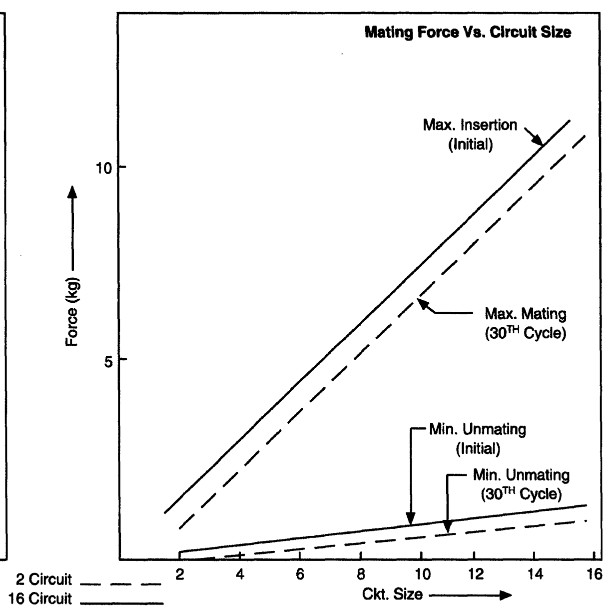
Mini-Fit, BMI™
- Blind Mating Wire-to-Wire
- Blind Mating Wire-to-Board (parallel mounting)
- Blind Mating Wire-to-Board (right angle mounting)
- Blind Mating Board-to-Board (parallel boards)
- Blind Mating Board-to-Board (right angle boards)

Mini-Fit, TPA™
- Wire-to-Wire with Secondary Terminal Retention (TPA)
- Wire-to-Board (vertical header) with TPA
- Wire-to-Board (right angle header) with TPA
- Secondary housing lock (CPA)

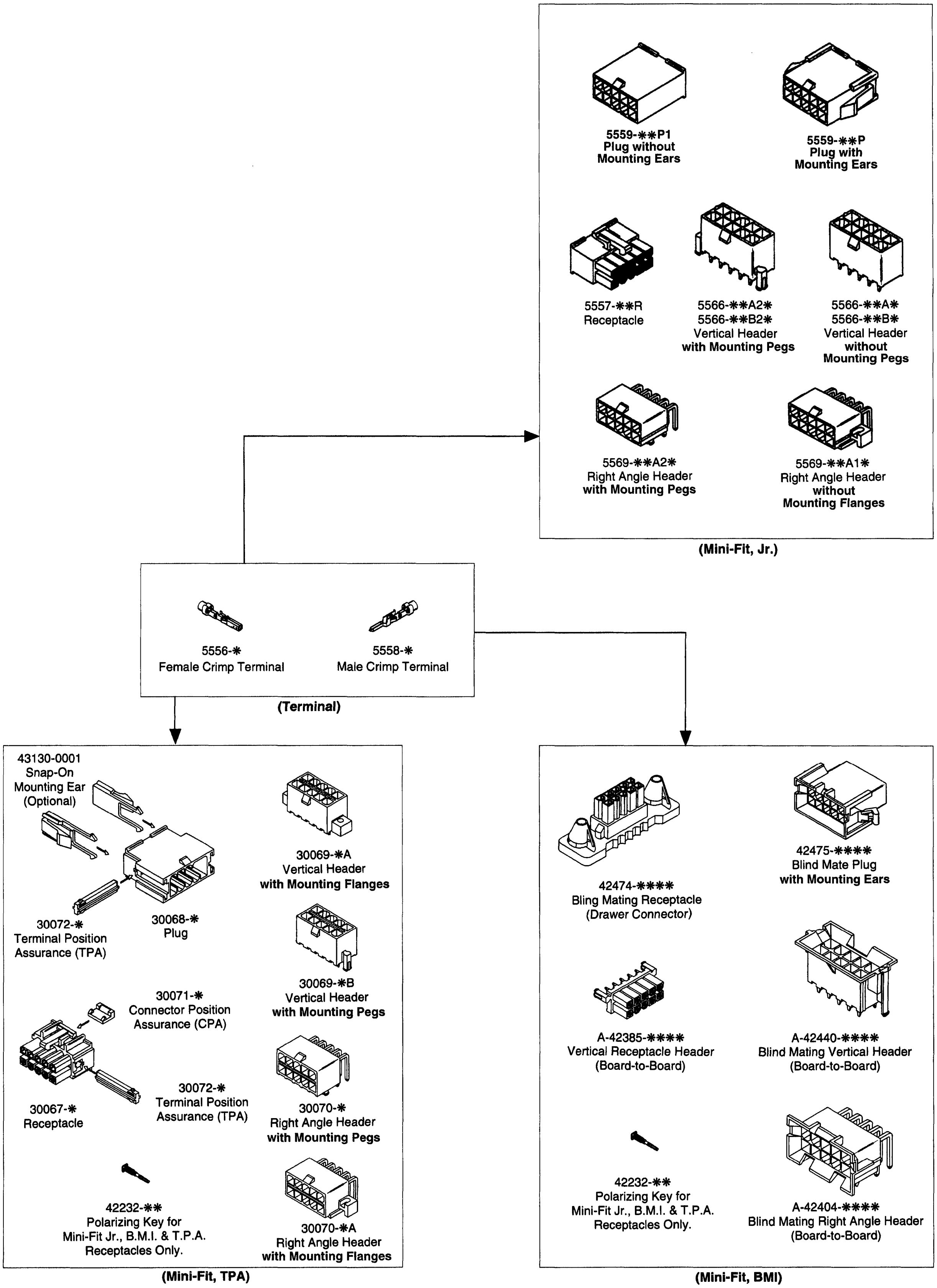
The Mini-Fit, Jr.; Mini-Fit, BMI; and Mini-Fit, TPA accept the same terminals and application tooling, further reducing your design and qualification effort.

The Mini-Fit Family also features:
- Current rating up to 9.0A per circuit
- 600V rating
- Positive housing locks
- Fully isolated terminals
- Low engagement force terminals
- Available in 94V-2 and 94V-0 materials
- UL recognized, CSA certified, TUV licensed
- 10mΩ contact resistance





molex®
Mini-Fit™ Family High Current/High Density Power Connector System



FEATURES AND SPECIFICATIONS

Features and Benefits
- Positive housing locks
- Fully isolated terminals
- Low engagement force terminals
- Available in 2 through 24 circuit housings
- Drain hole optional in vertical header

Reference Information
Product Specification: PS-5556-0001
Packaging: Tray or bag
UL File No.: E29179
CSA File No.: LR19980
TUV License No.: R75142
Use With: Standard Mini-Fit terminals
Designed In: Millimeters

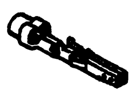
Electrical
Voltage: 600V
Current: 9.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Insertion Force to PCB: 5.0kg max.
Mating Force: 0.7kg (1.54 lb) per circuit max.
Unmating Force: 0.35kg (0.7 lb) per circuit min.
Normal Force: 200g min.
Durability: 30 cycles

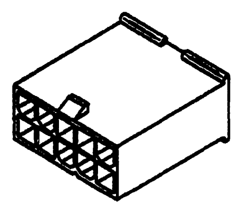
Physical
Housing: 6/6 nylon, UL 94V-2 or 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold or overall Gold
Temperature: -40 to +105°C

Mini-Fit, Jr.™

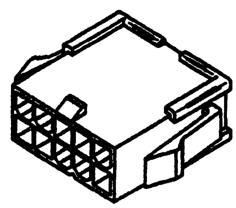
The Mini-Fit, Jr. Series is designed for high current/high density applications which require the design flexibility of wire-to-wire and wire-to-board configurations in the interconnection system. The Mini-Fit, Jr. is appropriate for both power and signal applications as it can carry currents of up to 9.0A per circuit and has a 10mΩ contact resistance.



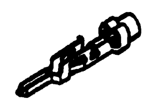
5556-*
Female Crimp Terminal



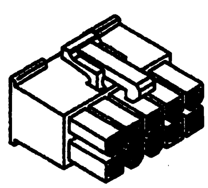
5559-**P1
Plug without
Mounting Ears



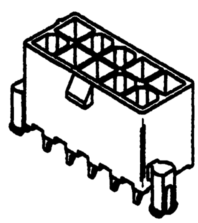
5559-**P
Plug with
Mounting Ears



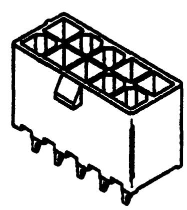
5558-*
Male Crimp Terminal



5557-**R
Receptacle

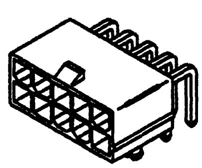


5566-**A2*(No Drain Holes)
5566-**B2*(Drain Holes)
Vertical Header
With Mounting Pegs

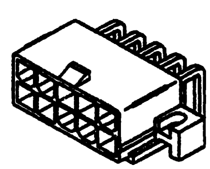


5566-**A*(No Drain Holes)
5566-**B*(Drain Holes)
Vertical Header
Without Mounting Pegs

42232-**
Polarizing Key
(For use with Standard
Plugs and Receptacles)

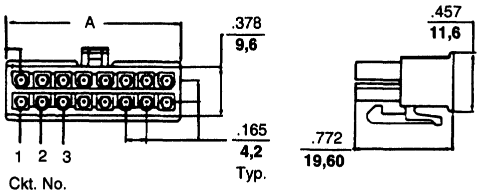


5569-**A2*
Right Angle Header
With Mounting Pegs



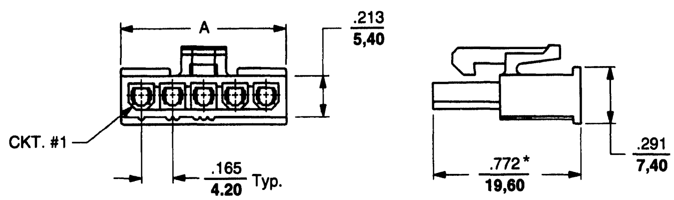
5569-**A1*
Right Angle Header
With Mounting Pegs

5557-NR Receptacle Housing, Dual Row
Uses 5556 Terminal



Mating Side Shown

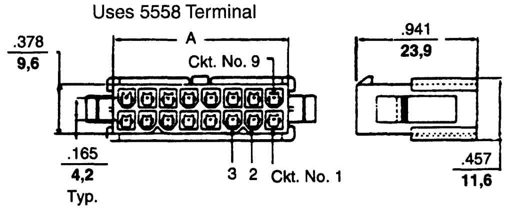
5557-NR2 Receptacle Housing, Single Row
Uses 5556 Terminal



Mating Side Shown
***For 3 circuit housing =** $\frac{.810}{20,6}$

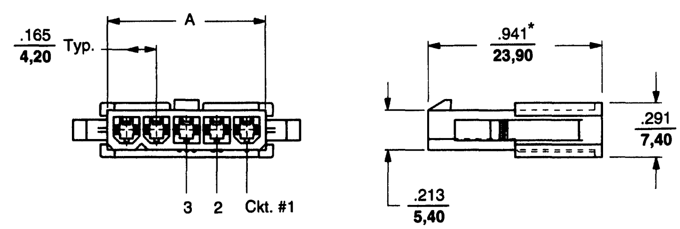
$\frac{\text{in}}{\text{mm}}$

5559-NP Plug Housing, Dual Row, Panel Mount
Uses 5558 Terminal

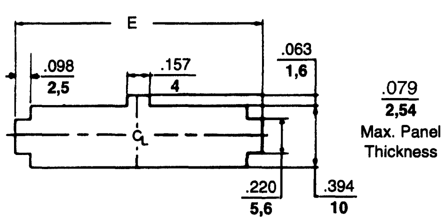


Mating Side Shown

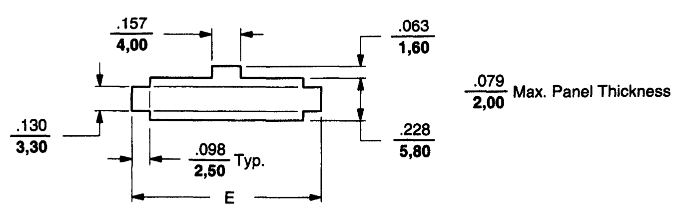
5559 NP2 Plug Housing, Single Row, Panel Mount
Uses 5558 Terminal



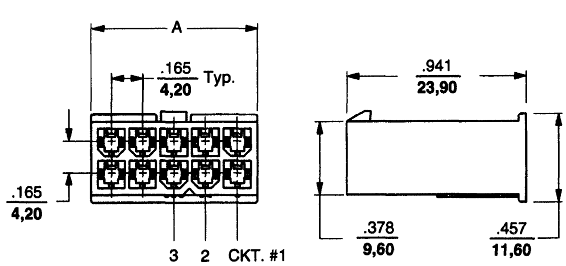
Mounting Hole Details for 5559-NP Plug Housing, Dual Row



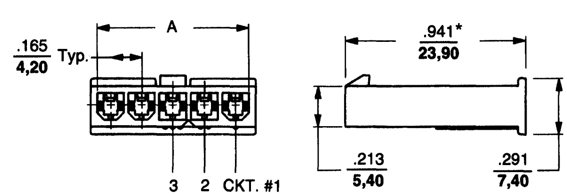
Mounting Hole Details for 5559-NP2 Plug Housing, Single Row



5559-NP1 Housing, Dual Row, Free Hanging
Uses 5558 Terminal

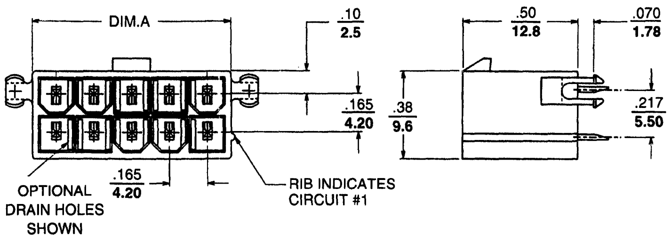


5559-NP3 Housing, Single Row, Free Hanging
Uses 5558 Terminal

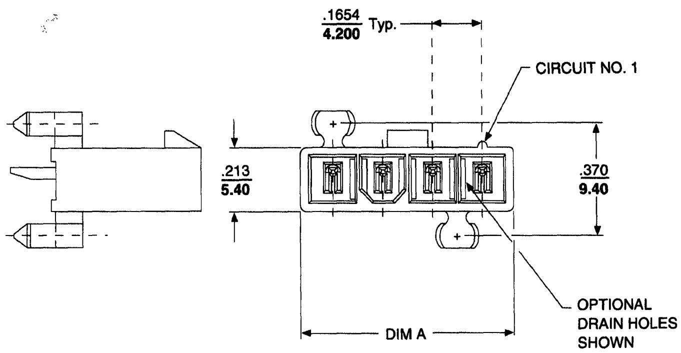


***For 3 circuit housing =** $\frac{.921}{23,4}$

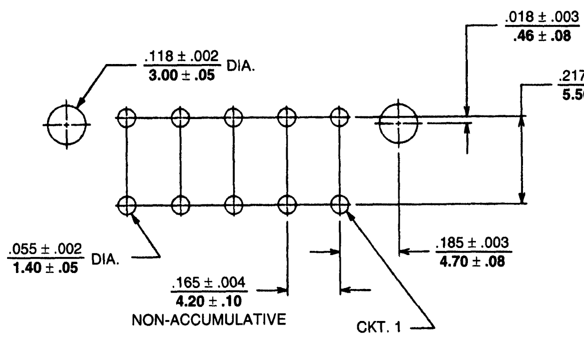
A-5566-N*2 Vertical Header, Dual Row
Peg Mounted, Drain Holes Optional



A-5566-N*3 Vertical Header, Single Row
Not Available Without Pegs, Drain Holes Optional

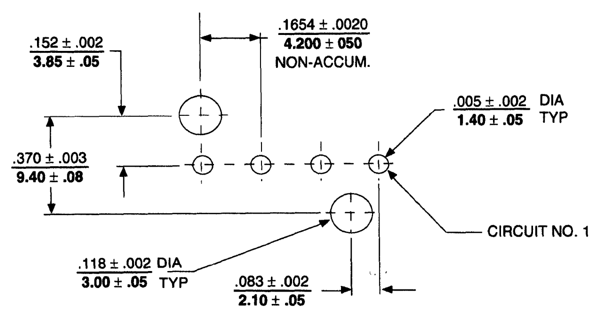


Vertical Header with Pegs
P.C. Board Layout

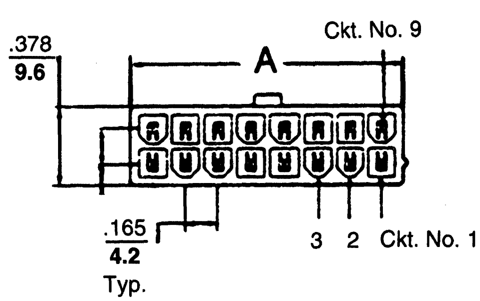


RECOMMENDED HOLE LAYOUT FOR .070/1.78 MAX. THICK P.C. BOARD

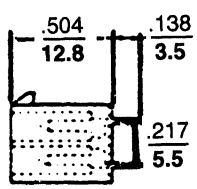
PC Board Layout for
A-5566-N*3 Vertical Header



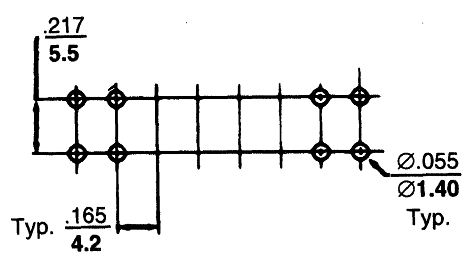
RECOMMENDED HOLE LAYOUT FOR .070/1.78 MAX. THICK P.C. BOARD



Vertical Header
without Pegs
P.C. Board Layout



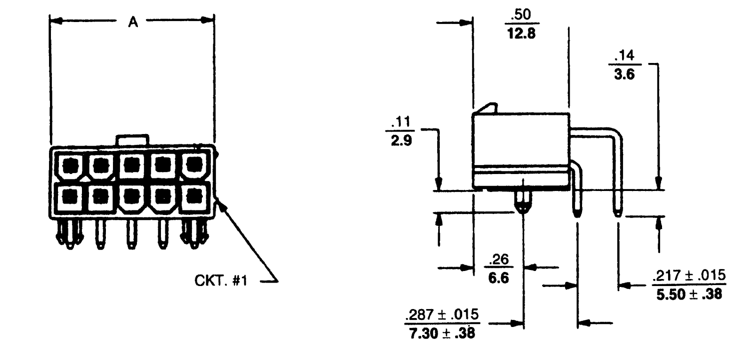
A-5566-N* Vertical Header, Dual Row
without pegs, Drain Holes Optional



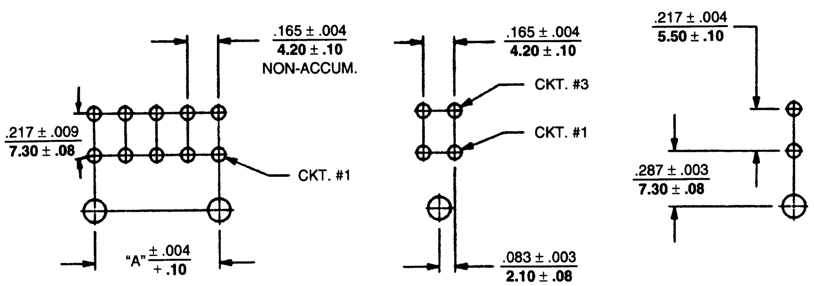
Power Connectors

K

A-5569-NA2 Right Angle Header, Dual Row
Peg Mounted

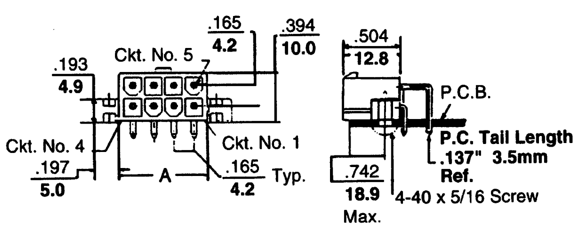


PC Board Layout for A-5569-NA2

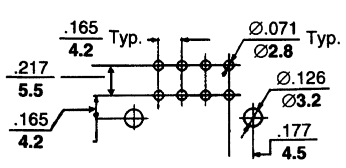


RECOMMENDED HOLE LAYOUT FOR
.070/1.78 MAX. THICK P.C. BOARD

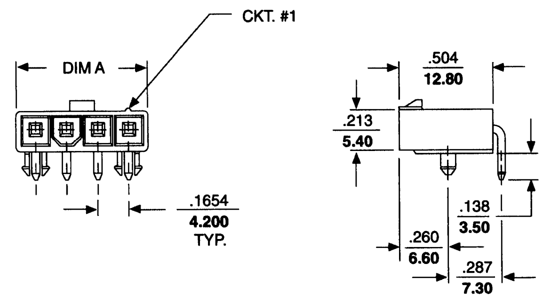
A-5569-NA1 Right Angle Header, Dual Row
Flange Mounted Version



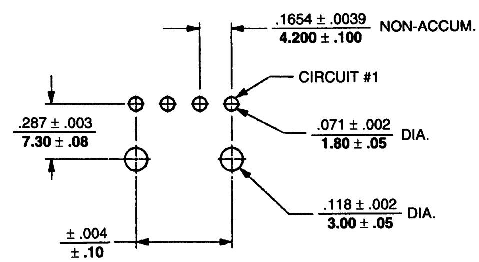
Right Angle Keader with
Flanges P.C. Board Layout



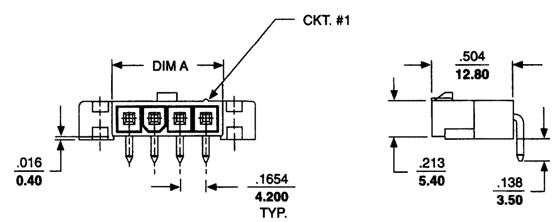
A-5569-NL4 Right Angle Header, Single Row
Peg Mounted



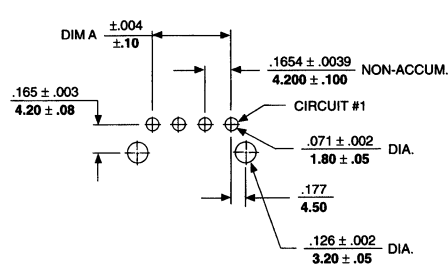
PC Board Layout for A-5569-NL4



A-5569-NL3 Right Angle Header, Single Row
Screw Mount



PC Board Layout for A-5569-NL3



RECOMMENDED HOLE LAYOUT FOR
.070/1.78 MAX. THICK P.C. BOARD

Mini-Fit, Jr.™

			Single Row			Dual Row			
Circuits			**3**	**4**	**5**	**2**	**4**	**6**	**8**
Amperes/Circuit (Maximum)*			9	9	8	9	8	8	7
Voltage Rating (Maximum)			600	600	600	600	600	600	600
Dimension A			13.80 (.543)	18.00 (.709)	22.20 (.874)	5.40 (.213)	9.60 (.378)	13.80 (.543)	18.00 (.709)
Receptacle (5557-NRX) Uses Female Terminal 5556									
	94V-2		• 39-01-4030	• 39-01-4040	• 39-01-4050	• 39-01-2020	• 39-01-2040	• 39-01-2060	• 39-01-2080
	94V-0		• 39-01-4031	• 39-01-4041	• 39-01-4051	• 39-01-2025	• 39-01-2045	• 39-01-2065	• 39-01-2085
Plug (5559-NPX) Uses Male Terminal 5558									
Panel Mount	94V-2		• 39-01-4032		• 39-01-4052	• 39-01-2021	• 39-01-2041	• 39-01-2061	• 39-01-2081
	94V-0		• 39-01-4033		• 39-01-4053	• 39-01-2026	• 39-01-2046	• 39-01-2066	• 39-01-2086
Free Hanging	94V-2		• 39-01-4036	• 39-01-4046	• 39-01-4056	• 39-01-3023	• 39-01-3043	• 39-01-3063	• 39-01-3083
	94V-0		• 39-01-4037		• 39-01-4057	• 39-01-3029	• 39-01-3049	• 39-01-3069	• 39-01-3089
Panel Cutout Dimension E			19.20 (.756)	23.40 (.921)	27.60 (1.087)	10.80 (.425)	15.00 (.591)	19.20 (.756)	23.40 (.921)
Strain Relief (41995)†						• 15-04-0340	• 15-04-0294	• 15-04-0296	• 15-04-0343
Polarizing Key (42232)			• 15-04-0211 (Use with 5557 Receptacle Housing)						
Vertical Header (5566-NXX) Tin Plated									
	PCB Pegs	**Drain Holes**							
94V-2	No	No				• 39-28-1023	• 39-28-1043	• 39-28-1063	• 39-28-1083
94V-0	No	No				• 39-28-8020	• 39-28-8040	• 39-28-8060	• 39-28-8080
94V-2	No	Yes				• 39-29-3026	• 39-29-3046	• 39-29-3066	• 39-29-3086
94V-0	No	Yes				• 39-31-0020	• 39-31-0040	• 39-31-0060	• 39-31-0080
94V-2	Yes	No	• 39-30-1039			• 39-29-9023	• 39-29-9043	• 39-29-9063	• 39-29-9083
94V-0	Yes	No	• 39-30-2030		• 39-30-2050	• 39-29-9027	• 39-29-9047	• 39-29-9067	• 39-29-9087
94V-2	Yes	Yes	• 39-30-2035			• 39-29-9022	• 39-29-9042	• 39-29-9062	• 39-29-9082
94V-0	Yes	Yes	• 39-30-2036		• 39-30-2056	• 39-29-9026	• 39-29-9046	• 39-29-9066	• 39-29-9086
Vertical Header (5566-NX) Gold Plated (30μ")									
	PCB Pegs	**Drain Holes**							
94V-2	No	No				• 39-29-0023	• 39-29-0043	• 39-29-0063	• 39-29-0083
94V-0	No	No				• 39-29-6028	• 39-29-6048	• 39-29-6068	• 39-29-6088
94V-2	No	Yes				• 39-31-0027	• 39-31-0047	• 39-31-0067	• 39-31-0087
94V-0	No	Yes				• 39-31-0028	• 39-31-0048	• 39-31-0068	• 39-31-0088
94V-2	Yes	No	• 39-30-2031			• 39-29-9025	• 39-29-9045	• 39-29-9065	• 39-29-9085
94V-0	Yes	No	• 39-30-2032		• 39-30-2052	• 39-29-9029	• 39-29-9049	• 39-29-9069	• 39-29-9089
94V-2	Yes	Yes	• 39-30-2037			• 39-29-9024	• 39-29-9044	• 39-29-9064	• 39-29-9084
94V-0	Yes	Yes	• 39-30-2038		• 39-30-2058	• 39-28-9028	• 39-28-9048	• 39-28-9068	• 39-28-9088
Right Angle Header (5569-NXX) Tin Plated									
94V-2	PCB Flanges		• 39-30-3031	• 39-30-3041		• 39-29-1028	• 39-29-1048	• 39-29-1068	• 39-29-1088
94V-0	PCB Flanges		• 39-30-3032			• 39-29-1027	• 39-29-1047	• 39-29-1067	• 39-29-1087
94V-2	PCB Pegs		• 39-30-3035	• 39-30-3045	• 39-30-3055	• 39-30-1020	• 39-30-1040	• 39-30-1060	• 39-30-1080
94V-0	PCB Pegs		• 39-30-3036		• 39-30-3056	• 39-30-0020	• 39-30-0040	• 39-30-0060	• 39-30-0080
Right Angle Header (5569-NXX) Gold Plated (30μ")									
94V-2	PCB Flanges		• 39-30-3033	• 39-30-3043		• 39-29-5023	• 39-29-5043	• 39-29-5063	• 39-29-5083
94V-0	PCB Flanges		• 39-30-3034			• 39-29-4029	• 39-29-4049	• 39-29-4069	• 39-29-4089
94V-2	PCB Pegs		• 39-30-3037	• 39-30-3047	• 39-30-3057	• 39-30-1021	• 39-30-1041	• 39-30-1061	• 39-30-1081
94V-0	PCB Pegs		• 39-30-3038		• 39-30-3058	• 39-30-1022	• 39-30-1042	• 39-30-1062	• 39-30-1082

• US Standard Product, available through Molex franchised distributors

* Rating based on fully loaded housings

† Strain relief accepts both plug and receptacle. Requires use of "Free Hanging" Plug without ears. Accepts standard receptacle in sizes 6 through 24. For 2 or 4 circuit, strain relief uses receptacle order no. 39-01-3XX2 (94V-2) or 39-01-3XX8 (94V-0).

Mini-Fit, Jr.

			Dual Row							
Circuits			**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**
Amperes/Circuit (Maximum)*			7	6	6	6	6	6	6	6
Voltage Rating (Maximum)*			600	600	600	600	600	600	600	600
Dimension A			22.20 (.874)	26.40 (1.039)	30.60 (1.205)	34.80 (1.370)	39.00 (1.535)	43.20 (1.701)	47.40 (1.866)	51.60 (2.031)
Receptacle (5557-NRX) Uses Female Terminal 5556										
94V-2			• 39-01-2100	• 39-01-2120	• 39-01-2140	• 39-01-2160	• 39-01-2180	• 39-01-2200	• 39-01-2220	• 39-01-2240
94V-0			• 39-01-2105	• 39-01-2125	• 39-01-2145	• 39-01-2165	• 39-01-2185	• 39-01-2205	• 39-01-2225	• 39-01-2245
Plug (5559-NPX) Uses Male Terminal 5558										
Panel Mount 94V-2			• 39-01-2101	• 39-01-2121	• 39-01-2141	• 39-01-2161	• 39-01-2181			
94V-0			• 39-01-2106	• 39-01-2126	• 39-01-2146	• 39-01-2166				
Free Hanging 94V-2			• 39-01-3103	• 39-01-3123	• 39-01-3143	• 39-01-3163				
94V-0			• 39-01-3109	• 39-01-3129	• 39-01-3149	• 39-01-3169				
Panel Cutout Dimension E			27.60 (1.087)	31.80 (1.252)	36.00 (1.417)	40.20 (1.583)	44.40 (1.748)			
Strain Relief (41995)†				• 15-04-0345						
Polarizing Key (42232)										
Vertical Header (5566-NXX) Tin Plated										
	PCB Pegs	**Drain Holes**								
94V-2	No	No	• 39-28-1103	• 39-28-1123	• 39-28-1143	• 39-28-1163	• 39-28-1183	• 39-28-1203	• 39-28-1223	• 39-28-1243
94V-0	No	No	• 39-28-8100	• 39-28-8120	• 39-28-8140	• 39-28-8160	• 39-28-8180	• 39-28-8200	• 39-28-8220	• 39-28-8240
94V-2	No	Yes	• 39-29-3106	• 39-29-3126	• 39-29-3146	• 39-29-3166		• 39-29-3206	• 39-29-3226	
94V-0	No	Yes	• 39-31-0100	• 39-31-0120	• 39-31-0140	• 39-31-0160				
94V-2	Yes	No	• 39-29-9103	• 39-29-9123	• 39-29-9143	• 39-29-9163	• 39-29-9183	• 39-29-9203		• 39-29-9243
94V-0	Yes	No	• 39-29-9107	• 39-29-9127	• 39-29-9147	• 39-29-9167	• 39-29-9187	• 39-29-9207		• 39-29-9247
94V-2	Yes	Yes	• 39-29-9102	• 39-29-9122	• 39-29-9142	• 39-29-9162	• 39-29-9182	• 39-29-9202		• 39-29-9242
94V-0	Yes	Yes	• 39-29-9106	• 39-29-9126	• 39-29-9146	• 39-29-9166	• 39-29-9186	• 39-29-9206		• 39-29-9246
Vertical Header (5566-NX) Gold Plated (30µ")										
	PCB Pegs	**Drain Holes**								
94V-2	No	No	• 39-29-0103	• 39-29-0123	• 39-29-0143	• 39-29-0163	• 39-29-0183	• 39-29-0203	• 39-29-0223	• 39-29-0243
94V-0	No	No	• 39-29-6108	• 39-29-6128	• 39-29-6148	• 39-29-6168	• 39-29-6188	• 39-29-6208	• 39-29-6223	• 39-29-6243
94V-2	No	Yes	• 39-31-0107	• 39-31-0127	• 39-31-0147	• 39-31-0167		• 39-21-0207	• 39-31-0227	
94V-0	No	Yes	• 39-31-0108	• 39-31-0128	• 39-31-0148	• 39-31-0168				
94V-2	Yes	No	• 39-29-9105	• 39-29-9125	• 39-29-9145	• 39-29-9165	• 39-29-9185	• 39-29-9205		• 39-29-9245
94V-0	Yes	No	• 39-29-9109	• 39-29-9129	• 39-29-9149	• 39-29-9169	• 39-29-9189	• 39-29-9209		• 39-29-9249
94V-2	Yes	Yes	• 39-29-9104	• 39-29-9124	• 39-29-9144	• 39-29-9164	• 39-29-9184	• 39-29-9204		• 39-29-9244
94V-0	Yes	Yes	• 39-28-9108	• 39-28-9128	• 39-28-9148	• 39-28-9168	• 39-28-9188	• 39-28-9208		• 39-28-9248
Right Angle Header (5569-NXX) Tin Plated										
94V-2	PCB Flanges		• 39-29-1108	• 39-29-1128	• 39-29-1148	• 39-29-1168	• 39-29-1188	• 39-29-1208	• 39-29-1228	• 39-29-1248
94V-0	PCB Flanges		• 39-29-1107	• 39-29-1127	• 39-29-1147	• 39-29-1167	• 39-29-1187	• 39-29-1207	• 39-29-1227	• 39-29-1247
94V-2	PCB Pegs		• 39-30-1100	• 39-30-1120	• 39-30-1140	• 39-30-1160	• 39-30-1180	• 39-30-1200	• 39-30-1220	• 39-30-1240
94V-0	PCB Pegs		• 39-30-0100	• 39-30-0120	• 39-30-0140	• 39-30-0160		• 39-30-0200		
Right Angle Header (5569-NXX) Gold Plated (30µ")										
94V-2	PCB Flanges		• 39-29-5103	• 39-29-5123	• 39-29-5143	• 39-29-5163	• 39-29-5183	• 39-29-5203	• 39-29-5223	• 39-29-5243
94V-0	PCB Flanges		• 39-29-4109	• 39-29-4129	• 39-29-4149	• 39-29-4169	• 39-29-4189	• 39-29-4209	• 39-29-4229	• 39-29-4249
94V-2	PCB Pegs		• 39-30-1101	• 39-30-1121	• 39-30-1141	• 39-30-1161	• 39-30-1181	• 39-30-1201	• 39-30-1221	• 39-30-1241
94V-0	PCB Pegs		• 39-30-1102	• 39-30-1122	• 39-30-1142	• 39-30-1162		• 39-30-1202		

• US Standard Product, available through Molex franchised distributors

* Rating based on fully loaded housings

† Strain relief accepts both plug and receptacle. Requires use of "Free Hanging" Plug (without ears). Accepts standard receptacle in sizes 6 to 24. For 2 or 4 circuit, strain relief uses receptacle order no. 39-01-3XX2 (94V-2) or 39-01-3XX8 (94V-0).

Power Connectors

K

Mini-Fit, BMI
Blind Mating Interconnect

Features and Benefits
- Blind mating wire-to-wire, wire-to-board (parallel mounting), wire-to-board (right angle mounting), board-to-board (parallel stacked boards) and board-to-board (right angle boards)
- Positive housing locks to mate with Mini-Fit, Jr.
- Fully isolated terminals
- Low engagement force terminals

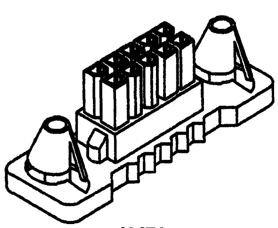
Reference Information
Product Specification: PS-5556-0002
Packaging: Tray and bag
UL File No.: E29179
CSA File No.: LR19980
TUV License No.: R75142
Use With: Standard Mini-Fit terminals
Designed In: Millimeters

Electrical
Voltage: 600V
Current: 9.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

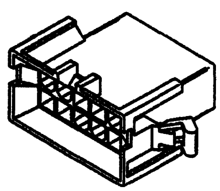
Mechanical
Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Insertion Force to PCB: 5.0kg max.
Mating Force: 0.7kg per circuit max.
Unmating Force: 0.35kg per circuit min.
Normal Force: 200g min.
Durability: 30 cycles

Physical
Housing: 6/6 nylon, UL 94V-2 or 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold, overall Gold
Temperature: -40 to +105°C

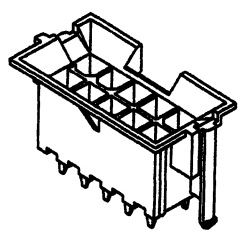
The Mini-Fit, BMI is designed for high current/high density applications requiring the blind mating of modules, subassemblies or printed circuit boards. The Mini-Fit, BMI allows a misalignment of up to .100". It is appropriate for both power and signal applications as it can carry currents of up to 9.0A per circuit and has a 10mΩ contact resistance.



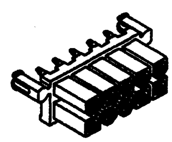
42474
Blind Mating Receptacle (Drawer Connector)



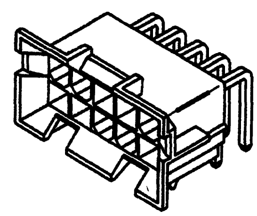
42475
Blind Mate Plug w/Mounting Ears



A-42440
Blind Mating Vertical Header

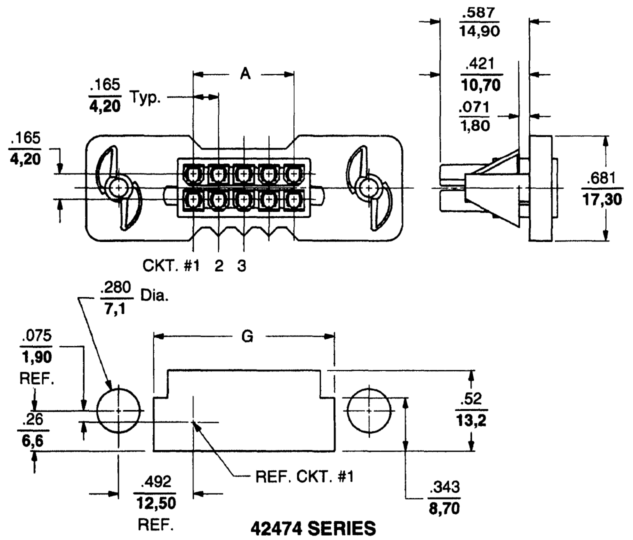


A-42385
Vertical Receptacle Header (Board-to-Board)

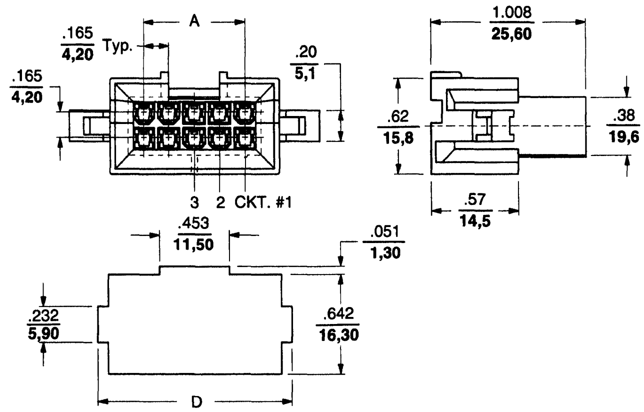


A-42404
Blind Mating Right Angle Header

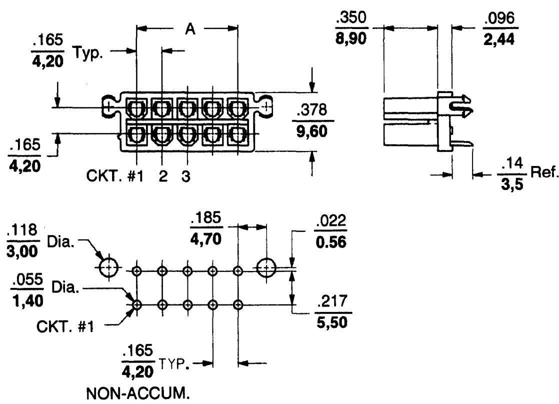
Mini-Fit, BMI



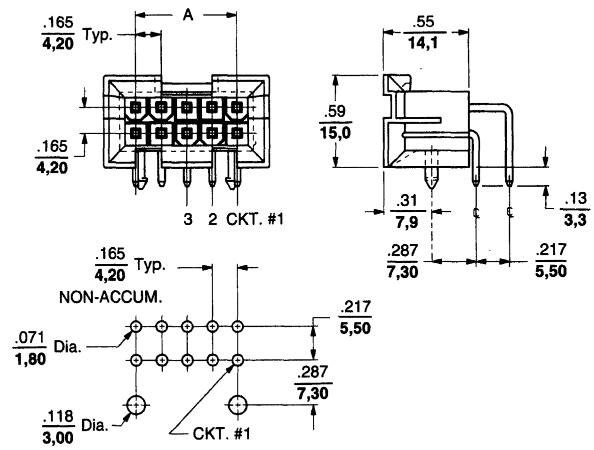
42474 SERIES



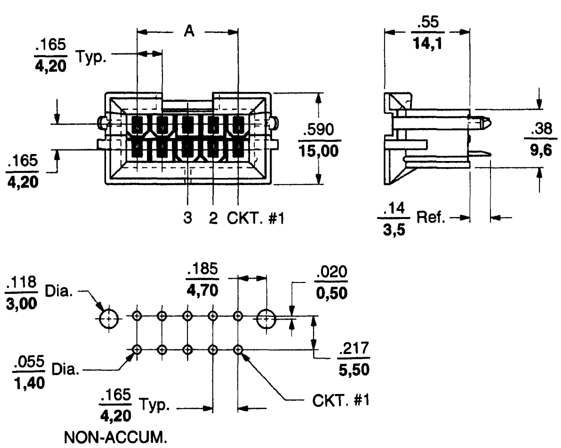
42475 SERIES



42385 SERIES



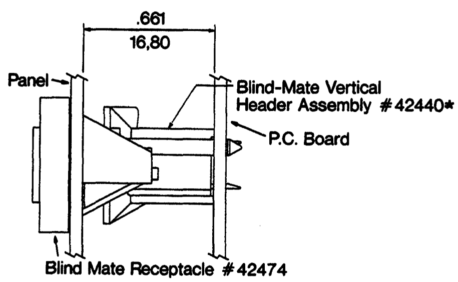
42404 SERIES



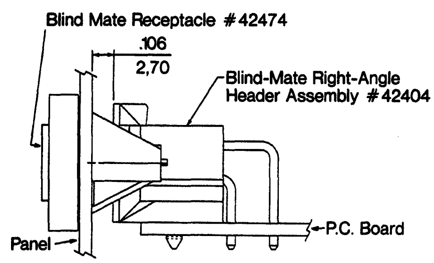
42440 SERIES

Power Connectors

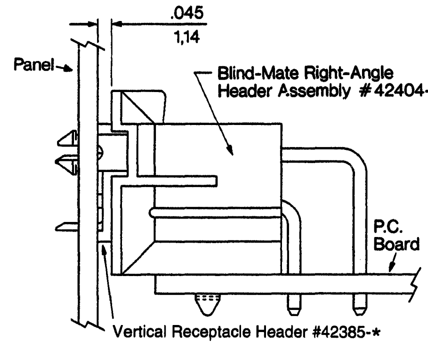
K



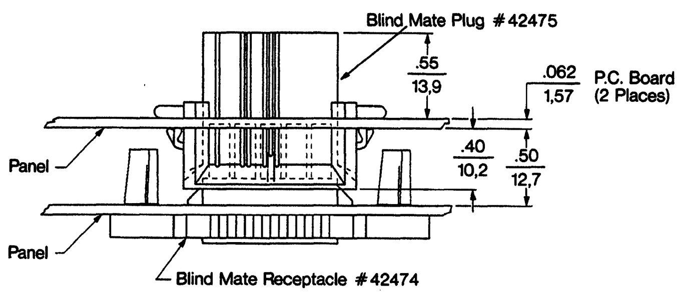
Wire-to-Board (Parallel Mounting)



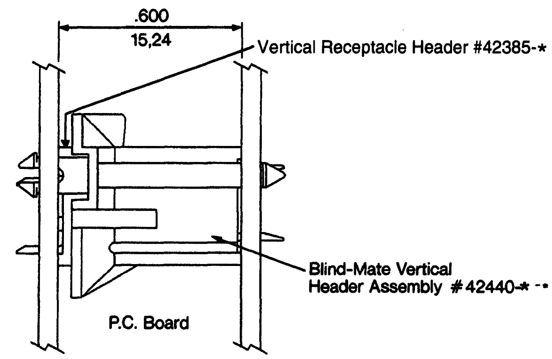
Wire-to-Board (Right Angle Mounting)



Board-to-Board (Right Angle Boards)



Wire-to-Wire



Board-to-Board (Parallel Boards)

ORDERING INFORMATION AND DIMENSIONS

Circuits			4	6	10	14	18	20	24
Amperes/Circuit (Maximum)			8	8	7	6	6	6	6
Voltage Rating (Maximum)			600	600	600	600	600	600	600
Dimension A			4.20 (.165)	8.40 (.330)	16.80 (.660)	25.20 (.990)	33.60 (1.320)		46.20 (1.815)
Receptacle—Panel Mounted (42474) Uses 5556 Terminal									
94V-2			• 15-06-0040	• 15-06-0060	• 15-06-0100	• 15-06-0140	• 15-06-0180		• 15-06-0240
94V-0			• 15-06-0041	• 15-06-0061	• 15-06-0101	• 15-06-0141	• 15-06-0181		• 15-06-0241
Panel Cutout Dimension G			17.60 (.693)	21.80 (.858)	30.23 (1.190)	38.60 (1.520)	47.00 (1.850)		59.60 (2.346)
Receptacle—Header Assembly (42385)									
94V-2	Tin Plated		• 15-24-7040	• 15-24-7060	• 15-24-7100	• 15-24-7140	• 15-24-7180		• 15-24-7240
94V-0	Tin Plated		• 15-24-7041	• 15-24-7061	• 15-24-7101	• 15-24-7141	• 15-24-7181		• 15-24-7241
94V-2	Gold Plated		• 15-24-7042	• 15-24-7062	• 15-24-7102	• 15-24-7142	• 15-24-7182		• 15-24-7242
94V-0	Gold Plated		• 15-24-7043	• 15-24-7063	• 15-24-7103	• 15-24-7143	• 15-24-7183		• 15-24-7243
Plug—Panel Mounted (42475) Uses 5558 Terminal									
94V-2			• 15-06-0045	• 15-06-0065	• 15-06-0105	• 15-06-0145	• 15-06-0185	• 15-06-0205	• 15-06-0245
94V-0			• 15-06-0046		• 15-06-0106	• 15-06-0146	• 15-06-0186		• 15-06-0246
Panel Cutout Dimension D			19.80 (.779)	24.00 (.945)	32.40 (1.276)	40.80 (1.606)	49.20 (1.937)		61.80 (2.443)
Vertical Header (42440)									
94V-2	Tin Plated		• 15-24-6041		• 15-24-6101	• 15-24-6141	• 15-24-6181		• 15-24-6241
94V-0	Tin Plated		• 15-24-6042		• 15-24-6102	• 15-24-6142	• 15-24-6182		• 15-24-6242
94V-2	Gold Plated		• 15-28-6041		• 15-28-6101	• 15-28-6141	• 15-28-6181		• 15-28-6241
94V-0	Gold Plated		• 15-28-6042		• 15-28-6102	• 15-28-6142	• 15-28-6182		• 15-28-6242
94V-2	Tin Plated	Drain Holes	• 15-24-6046	• 15-24-6066	• 15-24-6106	• 15-24-6146	• 15-24-6186		• 15-24-6246
94V-0	Tin Plated	Drain Holes	• 15-24-6047		• 15-24-6107	• 15-24-6147	• 15-24-6187		• 15-24-6247
94V-2	Gold Plated	Drain Holes	• 15-28-6046	• 15-28-6066	• 15-28-6106	• 15-28-6146	• 15-28-6186		• 15-28-6246
94V-0	Gold Plated	Drain Holes	• 15-28-6047		• 15-28-6107	• 15-28-6147	• 15-28-6187		• 15-28-6247
Right Angle Header (42404)									
94V-2	Tin Plated		• 15-24-6040	• 15-24-6060	• 15-24-6100	• 15-24-6140	• 15-24-6180		• 15-24-6240
94V-0	Tin Plated		• 15-24-9044	• 15-24-9064	• 15-24-9104	• 15-24-9144	• 15-24-9184		• 15-24-9244
94V-2	Gold Plated		• 15-24-9043	• 15-24-9063	• 15-24-9103	• 15-24-9143	• 15-24-9183		• 15-24-9243
94V-0	Gold Plated		• 15-24-9045	• 15-24-9065	• 15-24-9105	• 15-24-9145	• 15-24-9185		• 15-24-9245

FEATURES AND SPECIFICATIONS

Mini-Fit™ Family

Mini-Fit, TPA

Features and Benefits

- Wire-to-wire with secondary terminal retention (TPA), wire-to-board (vertical header) with TPA, wire-to-board (right angle header) with TPA
- Positive housing locks
- Fully isolated terminals
- Contrasting color TPA/CPA for high visibility (white)
- Redundant housing lock (CPA)

Reference Information

Product Specification: PS-5556-0003
Packaging: Tray and bag
UL File No.: E29179
CSA File No.: LR19980
TUV License No.: R75142
Use With: Standard Mini-Fit terminals
Designed In: Millimeters

Electrical

Voltage: 600V
Current: 9.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 MΩ min.

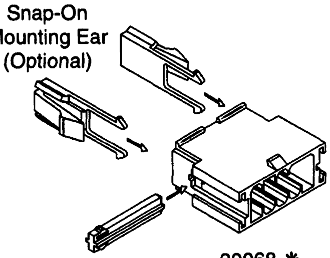
Mechanical

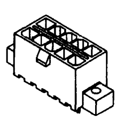
Contact Insertion Force: 1.5kg max.
Contact Retention to Housing: 3.0kg min.
Wire Pull-Out Force: 9.0kg min.
Insertion Force to PCB: 5.0kg max.
Mating Force: 0.7kg (1.54 lb) per circuit max.
Unmating Force: 0.35kg (0.7 lb) per circuit min.
Normal Force: 200g min.
Durability: 30 cycles

Physical

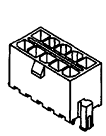
Housing: Black polyester, UL 94V-0
Contact: Brass or Phosphor Bronze
Plating: Tin, select Gold and overall Gold
Temperature: -40 to +105°C

The Mini-Fit, TPA series is designed for high current/high density applications that require a redundant terminal retention feature. This feature allows a highly visible indication that the terminal is fully seated in the housing and assures that it will not back out of the housing. The Mini-Fit, TPA also features a connector position assurance (CPA) lock that assures that the housing cannot be inadvertently disengaged.

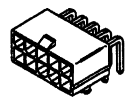




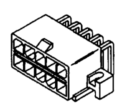
30069-✱A
Vertical Header
with Mounting Flanges



30069-✱B
Vertical Header
with Mounting Pegs

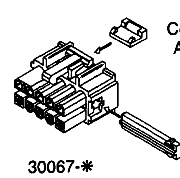


5569-✱✱A2✱
Right Angle Header
with Mounting Pegs



30070-✱A
Right Angle Header
with Mounting Flanges

42232-✱✱
Polarizing Key for
Mini-Fit Jr., B.M.I. & T.P.A.
Receptacles Only.



30067-✱
Receptacle

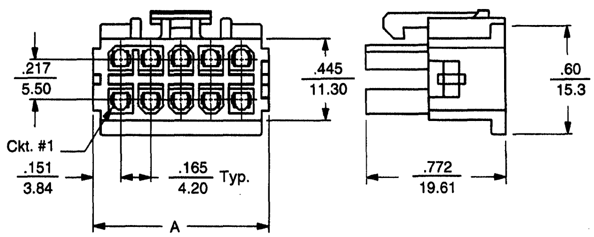
ORDERING INFORMATION AND DIMENSIONS

Circuits			2	4	6	8	10	12	14	16
Amperes/Circuit (Maximum)*			9	8	8	7	7	6	6	6
Voltage Rating			600	600	600	600	600	600	600	600
Dimension A			5.40 (.213)	9.60 (.378)	13.80 (.543)	18.00 (.709)	22.20 (.874)	26.40 (1.039)	30.60 (1.205)	34.80 (1.370)
B			11.86 (.467)	11.86 (.467)	16.08 (.633)	20.27 (.798)	24.46 (.963)	26.68 (1.129)	32.87 (1.294)	37.06 (1.459)
Receptacle 30067										
			• 15-97-5021†	• 15-97-5041†	• 15-97-5061†	• 15-97-5081	• 15-97-5101	• 15-97-5121		• 15-97-5161
Plug 30068										
			• 15-97-6021†	• 15-97-6041	• 15-97-6061	• 15-97-6081	• 15-97-6101	• 15-97-6121		• 15-97-6161
Vertical Header 30069 Tin Plated										
94V-0	Flanges	No Drain Holes	• 15-97-7022	• 15-97-7042	• 15-97-7062	• 15-97-7082	• 15-97-7102	• 15-97-7122		• 15-97-7162
94V-0	Flanges	Drain Holes		• 15-97-7046	• 15-97-7066	• 15-97-7086	• 15-97-7106	• 15-97-7126		• 15-97-7166
94V-0	Pegs	No Drain Holes			• 15-97-7063					
94V-0	Pegs	Drain Holes			• 15-97-7067					
Vertical Header 30069 Gold Plated										
94V-0	Flanges	No Drain Holes	• 15-97-7024	• 15-97-7044	• 15-97-7064	• 15-97-7084	• 15-97-7104	• 15-97-7124		• 15-97-7164
94V-0	Flanges	Drain Holes		• 15-97-7048	• 15-97-7068	• 15-97-7088	• 15-97-7108	• 15-97-7128		• 15-97-7168
94V-0	Pegs	No Drain Holes			• 15-97-7065					
94V-0	Pegs	Drain Holes			• 15-97-7069					
Right Angle Header 30070 Tin Plated										
Flange Mount (-XA)			• 15-97-8022	• 15-97-8042	• 15-97-8062	• 15-97-8082	• 15-97-8102	• 15-97-8122		• 15-97-8162
Peg Mount (-XB)			• 15-97-8023	• 15-97-8043						
Right Angle Header 30070 Gold Plated										
Flange Mount			• 15-97-8027	• 15-97-8047	• 15-97-8067	• 15-97-8087	• 15-97-8107	• 15-97-8127		• 15-97-8167
Peg Mount			• 15-97-8028	• 15-97-8048						
Terminal Position Assurance 30072										
			• 15-97-9041	• 15-97-9041	• 15-97-9061	• 15-97-9081	• 15-97-9101	• 15-97-9121		• 15-97-9161
Connector Position Assurance 30071 Fits All Receptacles										
All Circuit Sizes			• 15-97-0071	• 15-97-0071	• 15-97-0071	• 15-97-0071	• 15-97-0071	• 15-97-0071		• 15-97-0071
Snap-On Panel Mounting Ears 43130										
All Circuit Sizes (2 required per plug)			• 43130-0001	• 43130-0001	• 43130-0001	• 43130-0001	• 43130-0001	• 43130-0001		• 43130-0001

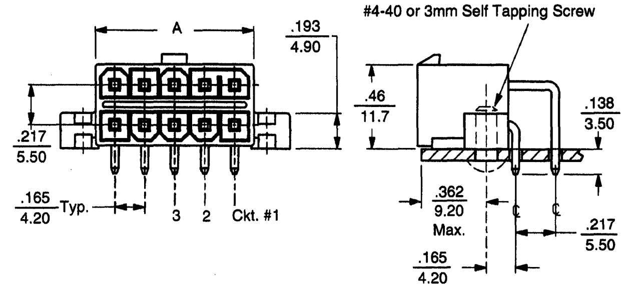
• *US Standard Product, available through Molex franchised distributors*
* Per circuit, based on fully loaded housings with 30°C temperature rise
† Receptacles have side pull tabs for use with strain reliefs

Mini-Fit, TPA™

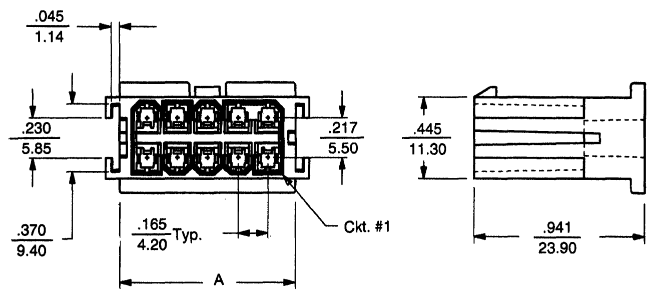
30067-* Receptacle Housing
Uses 5556 Terminal



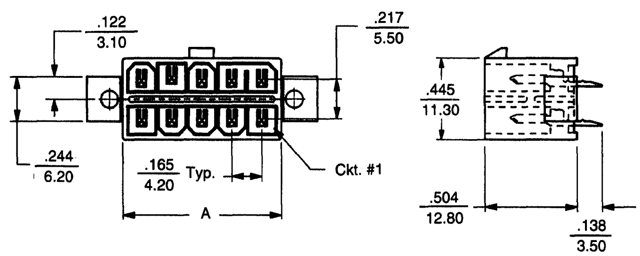
30070-* Right Angle Header with Flange
Peg Mounted Version Available



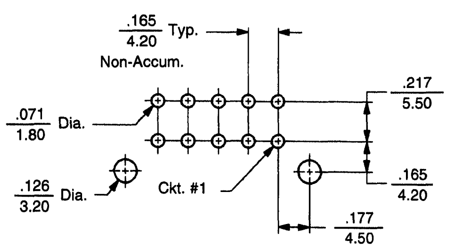
30068-* Plug Housing
Free Hanging
Uses 5558 Terminal



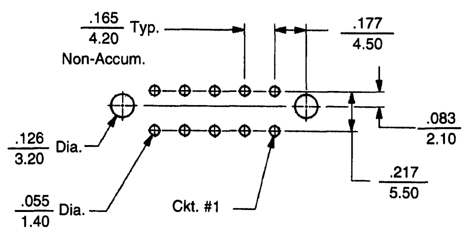
30069-* Vertical Header Assembly
Peg Mounted Version Available



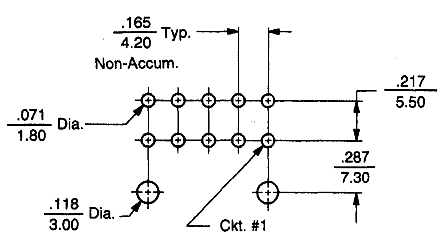
PCB Layouts



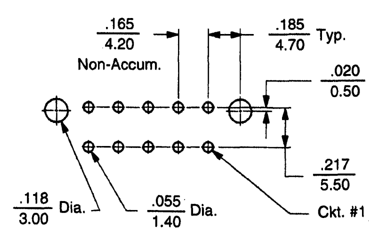
For 30070
Right Angle Header w/Flanges
Recommended P.C. Board Layout



For 30069
Vertical Header w/Flanges
Recommended P.C. Board Layout

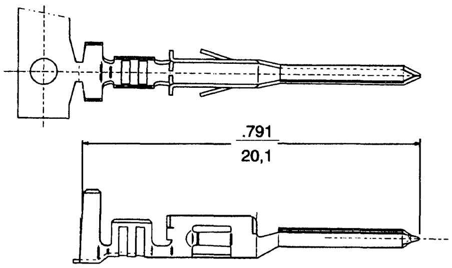


For 30070
Right Angle w/Pegs
Recommended P.C. Board Layout

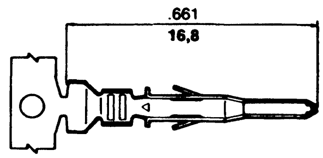


For 30069
Vertical Header w/Pegs
Recommended P.C. Board Layout

5556/5558

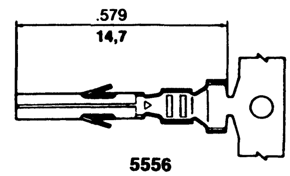


30490 Grounding Pin



5558

Use with housings:
5559
42475
30068



5556

Use with housings:
5557
42474
30067

NOTE: Terminals require proper orientation in housings and are not interchangeable in the housings.

ORDERING INFORMATION AND DIMENSIONS

Wire Size (AWG)	Insulation Range	Chain		Loose		Application Tooling			
		Male (5558)	Female (5556)	Male (5558)	Female (5556)	Hand Tool	TM-42 Die	Mini-Mac Die	Extraction Tool
Brass (Tin Plated)									
16	1.80-3.10 (.071-.122)	• 39-00-0081	• 39-00-0077	• 39-00-0082	• 39-00-0078	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	• 39-00-0040	• 39-00-0038	• 39-00-0041	• 39-00-0039	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	• 39-00-0048	• 39-00-0046	• 39-00-0049	• 39-00-0047	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Brass (Gold Plated 30µ" Preplate)									
16	1.80-3.10 (.071-.122)	N/A	• 39-00-0089	N/A	• 39-00-0090	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	N/A	• 39-00-0055	N/A	• 39-00-0056	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	N/A	• 39-00-0085	N/A	• 39-00-0086	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Brass (Post Plated Tin Over Nickel)									
16	1.80-3.10 (.071-.122)	• 39-00-0124	• 39-00-0211	• 39-00-0125	• 39-00-0212	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	• 39-00-0120	• 39-00-0207	• 39-00-0121	• 39-00-0208	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	• 39-00-0122	• 39-00-0209	• 39-00-0123	• 39-00-0210	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Brass (Post Plated 30µ" Gold)									
16	1.80-3.10 (.071-.122)	• 39-00-0095	• 39-00-0167	• 39-00-0096	• 39-00-0168	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	• 39-00-0053	• 39-00-0163	• 39-00-0054	• 39-00-0164	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	• 39-00-0087	• 39-00-0165	• 39-00-0088	• 39-00-0166	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Phosphor Bronze (Tin Plated)									
16	1.80-3.10 (.071-.122)	• 39-00-0083	• 39-00-0079	• 39-00-0084	• 39-00-0080	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	• 39-00-0061	• 39-00-0059	• 39-00-0062	• 39-00-0060	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	• 39-00-0067	• 39-00-0065	• 39-00-0068	• 39-00-0066	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Phosphor Bronze (Gold Plated 30µ" Preplate)									
16	1.80-3.10 (.071-.122)	N/A	• 39-00-0157	N/A	• 39-00-0158	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	N/A	• 39-00-0153	N/A	• 39-00-0154	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	N/A	• 39-00-0155	N/A	• 39-00-0156	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Phosphor Bronze (Post Plated Tin Over Nickel)									
16	1.80-3.10 (.071-.122)	• 39-00-0130	• 39-00-0217	• 39-00-0131	• 39-00-0218	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	• 39-00-0126	• 39-00-0213	• 39-00-0127	• 39-00-0214	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	• 39-00-0128	• 39-00-0215	• 39-00-0129	• 39-00-0216	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038
Phosphor Bronze (Post Plated 30µ" Gold)									
16	1.80-3.10 (.071-.122)	• 39-00-0223	• 39-00-0185	• 39-00-0224	• 39-00-0186	• 11-01-0145	11-40-2187	11-18-2069	• 11-03-0038
18-24	1.30-3.10 (.051-.122)	• 39-00-0219	• 39-00-0181	• 39-00-0220	• 39-00-0182	• 11-01-0197	11-40-2119	11-18-2002	• 11-03-0038
22-28	0.90-1.80 (.035-.071)	• 39-00-0221	• 39-00-0183	• 39-00-0222	• 39-00-0184	• 11-01-0125	11-40-2137	11-18-2003	• 11-03-0038

Grounding Pin (For Use With Mini-Fit, Jr. and Mini-Fit, TPA Only)									
Wire Size (AWG)	Insulation Range	Chain		Loose		Application Tooling			
		Male	Female	Male	Female	Hand Tool	TM-42 Die	Mini-Mac Die	Extraction Tool
Phosphor Bronze (Post Plated Tin Over Nickel)									
16	1.80-3.10 (.071-.122)								
18-24	1.30-3.10 (.051-.122)	• 30490-2002		• 30490-2012		• 11-01-0197	11-40-2249	11-18-2002	• 11-03-0044
22-28	0.90-1.80 (.035-.071)								
Phosphor Bronze (Post Plated 30µ" Select Gold)									
16	1.80-3.10 (.071-.122)								
18-24	1.30-3.10 (.051-.122)	• 30490-1002		• 30490-1012		• 11-01-0197	11-40-2249	11-18-2002	• 11-03-0044
22-28	0.90-1.80 (.035-.071)								

• US Standard Product, available through Molex franchised distributors

Power Connectors
K

FEATURES AND SPECIFICATIONS

2.36mm (.093") Diameter Power Connector

Plug and Receptacle

3191

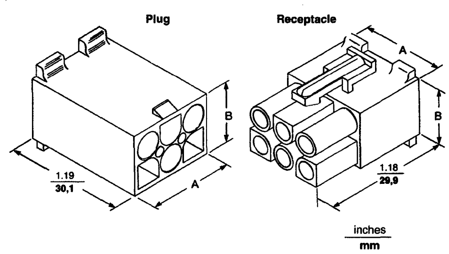
Features and Benefits
- Positive lock
- Fully isolated terminals
- Polarized housing assures proper mating
- Male and female terminals may be used in both plug and receptacle housings

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
TUV License No.: R-75107
Mates With: 5219 header
Designed In: Inches

Electrical
Voltage: 600V
Current: 12.0A per circuit
Dielectric Withstanding Voltage: 5000V AC rms

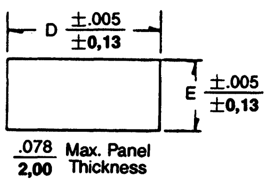
Mechanical
Contact Retention to Housing: 20 lb min.

Physical
Housing: 3191—Nylon, UL 94V-0 or 94V-2
5219—Nylon, UL 94V-2
Contact: 5219—Brass
Plating: 5219—Tin
Temperature: -40 to +105°C

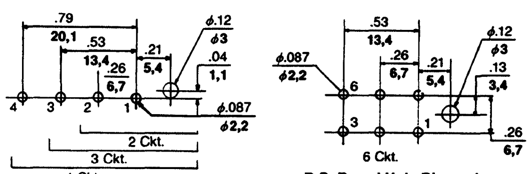


Header

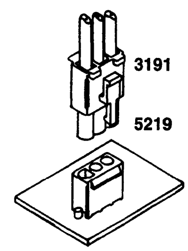
5219



Mounting Hole Detail



P.C. Board Hole Dimensions
Layout provides press fit



	Order No.
Polarizing Key	19-09-1101

(use in plug only)

ORDERING INFORMATION AND DIMENSIONS

Circuit ID Shown is Mating Side of Receptacle; Wire Side of Plug									
Series-Circuit		**3191-1**	**3191-2**	**3191-3**	**3191-4**	**3191-6**	**3191-9**	**3191-12**	**3191-15**
Amperes/Circuit (Maximum)*		12	12	11	9	9	9	9	9
Voltage Rating (Maximum)*		600	600	600	600	600	600	600	600
Receptacle									
	94V-2	• 19-09-1019	• 19-09-1029	• 19-09-1039	• 19-09-1049	• 19-09-1069	• 19-09-1099	• 19-09-1129	• 19-09-1159
	94V-0	• 19-09-1016	• 19-09-1026	• 19-09-1036	• 19-09-1046	• 19-09-1066	• 19-09-1096	• 19-09-1126	• 19-09-1156
Dimension	A	7.60 (.300)	14.30 (.560)	21.00 (.830)	27.70 (1.09)	21.00 (.830)	21.00 (.830)	27.70 (1.090)	34.40 (1.350)
	B	7.60 (.300)	7.60 (.300)	7.60 (.300)	7.60 (.300)	14.30 (.560)	21.00 (.830)	21.00 (.830)	21.00 (.830)
Plug									
Panel Mount	94V-2	• 19-09-2018	• 19-09-2028	• 19-09-2038	• 19-09-2048	• 19-09-2068	• 19-09-2098	• 19-09-2128	• 19-09-2158
	94V-0	• 19-09-2017	• 19-09-2027	• 19-09-2037	• 19-09-2047	• 19-09-2067	• 19-09-2097	• 19-09-2127	• 19-09-2157
Free Hanging	94V-2	• 19-09-2019	• 19-09-2029	• 19-09-2039	• 19-09-2049	• 19-09-2069	• 19-09-2099	• 19-09-2129	• 19-09-2159
	94V-0	• 19-09-2016	• 19-09-2026	• 19-09-2036	• 19-09-2046	• 19-09-2066	• 19-09-2096	• 19-09-2126	• 19-09-2156
Dimension	A	8.10 (.320)	14.90 (.590)	21.59 (.850)	28.30 (1.110)	21.60 (.850)	21.60 (.850)	28.20 (1.110)	35.10 (1.380)
	B		8.10 (.320)	8.20 (.320)	8.20 (.320)	14.90 (.590)	21.60 (.850)	22.10 (.870)	22.10 (.870)
Panel Cutout	D	12.30 (.484)	20.32 (.800)	25.90 (1.020)	32.26 (1.270)	26.60 (1.047)	26.62 (1.048)	33.02 (1.300)	39.42 (1.552)
	E	10.00 (.394)	9.27 (.365)	10.00 (.394)	10.00 (.394)	17.30 (.681)	23.09 (.909)	23.10 (.910)	23.11 (.910)
Header (5219 Series)									
Vertical		N/A	15-31-1026	15-31-1036	15-31-1046	15-31-1066	15-31-1096		

• US Standard Product, available through Molex franchised distributors
* Rating based on fully loaded housings

FEATURES AND SPECIFICATIONS

Features and Benefits
- Passive (friction) lock
- 1 to 15 circuit housings
- Panel and PCB mountable
- 1-piece strain reliefs available (42148 Series)
- Mating headers available
- Male and female terminals may be used in either plug or receptacle housings

Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 3099 header
Designed In: Inches

Electrical
Voltage: 250V
Current: 12.0A per circuit
Dielectric Withstanding Voltage: 1500V AC rms

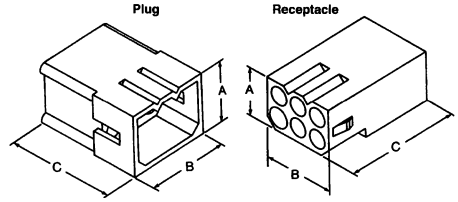
Mechanical
Contact Retention to Housing: 20 lb min.

Physical
Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C

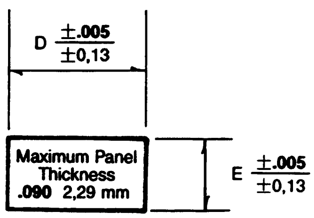
2.36mm (.093") Diameter Power Connector

Plug and Receptacle

Standard .093"



ORDERING INFORMATION AND DIMENSIONS



Mounting Hole Detail

42148 Strain Relief

Circuits	Strain Relief		Used With	
	Part No.	Order No.	Plug Order No.	Receptacle Order No.
2	42148-2AA	15-04-0222	03-09-2027	03-09-1021
4	42148-4LA	15-04-0223	03-09-2041	03-09-1041
15	42148-15AA	15-04-0389	03-09-2152	03-09-1151

ORDERING INFORMATION AND DIMENSIONS

Circuit ID Shown is Mating Side of Receptacle; Wire Side of Plug											
Series-Circuit	1951-1	1619-1	1545-2	1396-3	1490-4	2163-4	2629-5	1261-6	1292-9	1360-12	1375-15
Amperes/Circuit (Maximum)*	12	12	12	12	9	9	9	9	9	7.5	7.5
Voltage Rating (Maximum)*	250†	250	250	250	250	250	250	250	250	250	250
Vertical Headers	N/A	N/A	Notes ‡,††	Notes ‡,§,**,††	Notes §,††	Note ††	Notes **,††	Notes §,**,††	Notes §,**,††	Notes §,**,††	Notes §,††
Receptacle											
Panel Mount	N/A	N/A	• 03-09-1027	• 03-09-1031	• 03-09-1041	• 03-09-1040	N/A	• 03-09-1061	• 03-09-1091	• 03-09-1125	• 03-09-1154
Free Hanging	• 03-09-1014	• 03-09-1011	• 03-09-1022	• 03-09-1032	• 03-09-1042	• 03-09-1049	• 03-09-1052	• 03-09-1064	• 03-09-1094	• 03-09-1126	• 03-09-1157
Dimension A			13.60 (.540)	17.00 (.670)	22.10 (.870)	11.00 (.430)	27.20 (1.070)	11.00 (.430)	17.00 (.670)	22.10 (.870)	27.10 (1.07)
B	7.90 (.310)	5.80 (.230)	6.40 (.250)	6.10 (.240)	6.00 (.240)	11.00 (.430)	6.20 (.240)	16.00 (.630)	16.00 (.630)	16.00 (.630)	16.00 (.630)
C	47.10 (1.860)	26.20 (1.030)	26.20 (1.030)	25.70 (1.010)	26.20 (1.030)	26.20 (1.030)	25.40 (1.000)	25.90 (1.020)	26.20 (1.030)	25.90 (1.020)	25.90 (1.020)
Panel Cutout D			18.42 (.725)	21.10 (.830)	26.37 (1.038)	12.70 (.500)		17.22 (.678)	21.03 (.828)	26.67 (1.050)	31.50 (1.240)
E			7.92 (.312)	7.92 (.312)	7.92 (.312)	15.24 (.600)		15.24 (.600)	18.42 (.725)	18.42 (.725)	18.42 (.725)
Plug											
Panel Mount	N/A	N/A	• 03-09-2021	• 03-09-2031	• 03-09-2041	• 03-09-2040	N/A	• 03-09-2061	• 03-09-2091	• 03-09-2122	• 03-09-2152‡‡
Free Hanging	• 03-09-2014	• 03-09-2011	• 03-09-2022	• 03-09-2032	• 03-09-2042	• 03-09-2049	• 03-09-2052	• 03-09-2062	• 03-09-2092	• 03-09-2121	• 03-09-2154
Dimension A			16.30 (.640)	19.60 (.770)	24.70 (.970)	13.70 (.540)	30.00 (1.180)	13.70 (.540)	19.60 (.770)	24.90 (.980)	29.70 (1.170)
B	11.20 (.440)	9.10 (.360)	8.90 (.350)	8.60 (.340)	8.60 (.340)	13.70 (.540)	8.60 (.340)	18.60 (.730)	18.50 (.730)	18.80 (.740)	18.80 (.740)
C	57.20 (2.250)	25.40 (1.000)	25.40 (1.000)	25.40 (1.000)	25.40 (1.000)	26.00 (1.020)	25.40 (1.000)	25.40 (1.000)	25.40 (1.000)	24.90 (.980)	24.90 (.980)
Panel Cutout D			20.32 (.800)	23.70 (.933)	28.73 (1.131)	14.10 (.555)		19.05 (.750)	23.80 (.937)	29.34 (1.155)	34.11 (1.343)
E			9.53 (.375)	9.53 (.375)	9.53 (.375)	17.65 (.695)		17.65 (.695)	16.76 (.660)	19.30 (.760)	19.30 (.760)

• US Standard Product, available through Molex franchised distributors
* Rating based on fully loaded housings
† Tested to 5000V with no dielectric breakdown
‡ Positive lock configuration available
§ Vertical header (shrouded) available, see 3099 Series
** Vertical header (unshrouded) available, see 1840 Series
†† Vertical headers may be assembled using PC tail terminals in standard housings
‡‡ Part does not have lock windows, consult Molex sales drawing

Power Connectors

K

FEATURES AND SPECIFICATIONS

2.36mm (.093") Diameter Shrouded Pin and Socket Wafers

3099

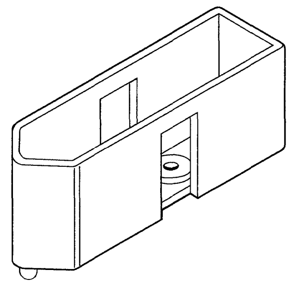
Features and Benefits
- 3, 4, 6, 9, 12 and 15 circuits available
- Pre-assembled
- Intermix of male and female terminals for polarization

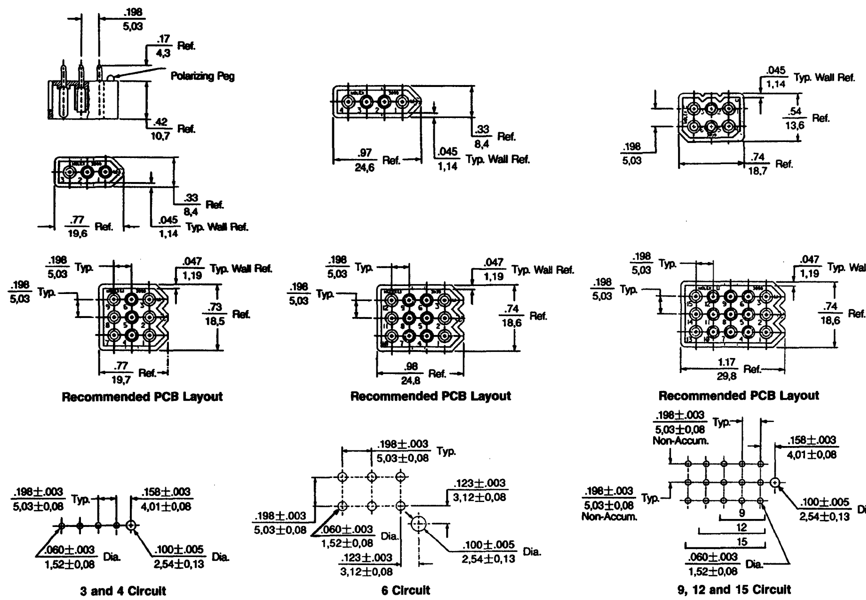
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: .093" Standard receptacles
Use With: 1840 header as a board-to-board connector
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC rms

Mechanical
Mating Force: 3.5 lb max.
Unmating Force: 1.5 lb min.
Durability: 25 cycles

Physical
Housing: Polyester, UL 94V-0
Contact: Brass
Plating: Electro-Tin (Gold available, contact factory)
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Order No.	Circuits	Terminal Pattern 1	2	3	4	5	6
10-18-1031	3	M	B	M			
10-18-1032	3	M	M	M			
10-18-1033	3	F	M	M			
10-18-1034	3	M	F	M			
10-18-1035	3	M	M	F			
10-18-1036	3	M	F	B			
10-18-1037	3	M	F	F			
10-18-1038	3	F	F	F			
50-29-1031	3	B	B	B			
10-18-1041	4	M	M	M	M		
10-18-1042	4	F	F	F	F		
10-18-1043	4	F	M	M	M		
10-18-1044	4	M	F	F	F		
10-18-1045	4	M	M	F	F		
10-18-1046	4	M	M	M	F		
10-18-1047	4	M	F	M	M		
10-18-1048	4	M	M	F	M		

Order No.	Circuits	Terminal Pattern 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
10-18-1049	4	M	F	M	F											
10-18-1050	4	F	F	M	M											
10-18-1040	4	F	M	B	B											
50-29-1041	4	B	B	B	B											
10-18-1061	6	M	M	M	M	M	M									
10-18-1063	6	M	F	M	M	F	M									
38-00-0589	6	F	M	M	M	F	M									
38-00-0590	6	M	M	M	F	M	M									
10-18-1064	6	M	M	M	M	M	F									
10-18-1065	6	F	M	M	M	M	M									
50-29-1061	6	B	B	B	B	B	B									
10-18-1090	9	M	M	M	M	M	M	M	M	M						
50-29-1409	9	B	B	B	B	B	B	B	B	B						
10-18-1120	12	M	M	M	M	M	M	M	M	M	M	M	M			
50-29-1412	12	B	B	B	B	B	B	B	B	B	B	B	B			
10-18-1150	15	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
50-29-1415	15	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Assembly Tooling*

Engineering No.	Order No.	Description
AM63106-1	11-20-1172	Arbor Press with Universal Tool Kit

Order No. for Loose Terminals

Male	43080-0001
Female	16-06-0002

* Used for assembling blank housings and loose terminals
M = Male terminal
F = Female terminal
B = Blank, no terminal

FEATURES AND SPECIFICATIONS

2.36mm (.093") Diameter Pin and Socket Wafers and Terminals

1840

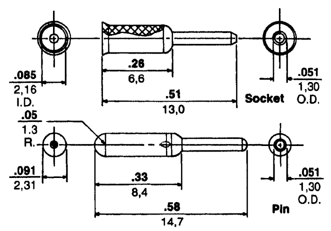
Discrete Terminals

Features and Benefits
- Use with 1840 and 3099 housings

Reference Information
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: .093" Standard housings

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 3mΩ max.

Physical
Temperature: -40 to +105°C



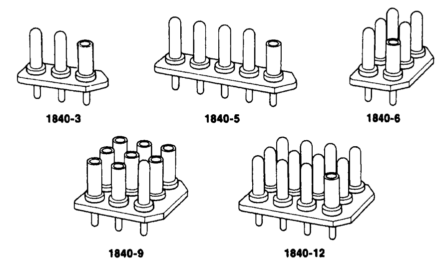
Type	Tin Plating Order No.
Socket (Female)	• 43080-0001
Pin (Male)	• 16-06-0002

FEATURES AND SPECIFICATIONS

Wafercon™ Base and Terminal Assemblies

Features and Benefits
- Sizes 3, 5, 6, 9 and 12 circuits
- Wafers pre-assembled with male, female or voids in a variety of combinations

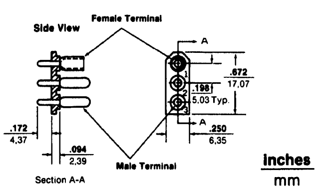
Reference Information
Mates With: .093" Standard receptacles



ORDERING INFORMATION AND DIMENSIONS

1840-3

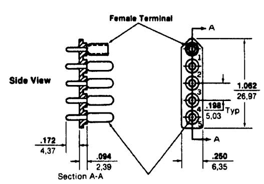
Mates with 1396R1 Receptacle Order No. 03-09-1032



Order No.	Terminal Pattern		
	1	2	3
• 09-18-5031	F	M	M
• 03-04-4031	B	B	B

1840-5

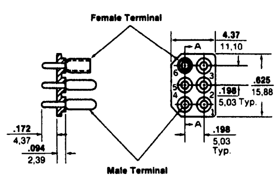
Mates with 1653-R1 Receptacle Order No. 03-09-1052



Order No.	Terminal Pattern				
	1	2	3	4	5
• 09-18-5051	F	M	M	M	M
• 03-04-4051	B	B	B	B	B

1840-6

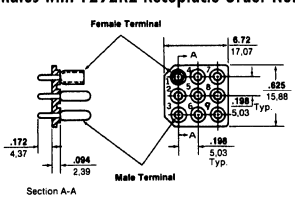
Mates with 1261R2 Receptacle Order No. 03-09-1063



Order No.	Terminal Pattern					
	1	2	3	4	5	6
• 09-18-5061	M	M	M	M	M	F
• 09-18-5069	F	M	M	M	M	M
• 03-04-4061	B	B	B	B	B	B

1840-9

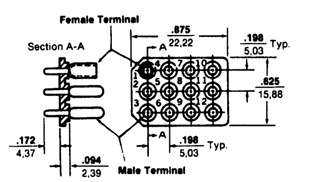
Mates with 1292R2 Receptacle Order No. 03-09-1093



Order No.	Terminal Pattern								
	1	2	3	4	5	6	7	8	9
• 09-18-5091	M	M	F	M	M	M	M	M	M
• 09-18-5094	F	M	M	M	M	M	M	M	M
• 03-04-4091	B	B	B	B	B	B	B	B	B

1840-12

Mates with 1360R1 Receptacle Order No. 03-09-1122



Order No.	Terminal Pattern											
	1	2	3	4	5	6	7	8	9	10	11	12
• 09-18-5121	F	M	M	M	M	M	M	M	M	M	M	M
• 03-04-4121	B	B	B	B	B	B	B	B	B	B	B	B

• US Standard Product, available through Molex franchised distributors
Polarization accomplished through intermix of male and female terminals
For other configurations, contact factory
M = Male terminal
F = Female terminal
B = Blank, no terminal

2.36mm (.093") Diameter Terminals

FEATURES AND SPECIFICATIONS

Features and Benefits

- Available in Tin or Gold platings
- Available in Brass or Phosphor Bronze base materials
- Accommodates 14 to 30 gauge wire
- Available in crimp or PC tail versions

Reference Information

Packaging: Chain or bulk
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Mechanical

Contact Insertion Force: 3.5 lb max. for .010"; 5 lb max. for .013"

Terminal Crimp Strength:

Minimum Pull-Out Force kg (lb)	AWG Wire Sizes
15.90 (35)	14
13.60 (30)	16
9.07 (20)	18
6.80 (15)	20
4.54 (10)	22
3.63 (8)	24
2.27 (5)	26
1.36 (3)	28
0.91 (2)	30

Engage/Disengage Forces: Standard terminal of 0.25mm (.010") stock 70/30 Brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in Kg (lb) by circuit:

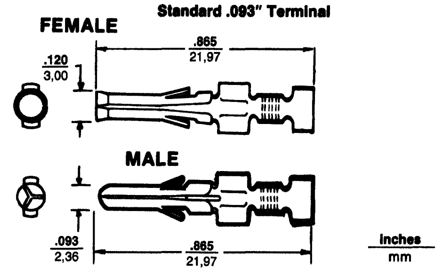
Circuits	Engage/Disengage Force kg (lb)
1	1.59/1.25 (3.5/2.75)
2	3.18/2.50 (7.0/5.5)
3	4.77/3.75 (9.5/8.26)
4	6.36/5.00 (14.00/11.02)
5	7.95/6.24 (17.5/13.7)
6	9.53/7.50 (21.0/16.5)
9	14.30/11.24 (31.5/24.8)
12	19.06/15.00 (42.0/33.07)
15	23.84/18.73 (52.5/41.3)

Durability: Tin plating—25 mating/unmating cycles max.
Gold plating—50 mating/unmating cycles max.

Physical

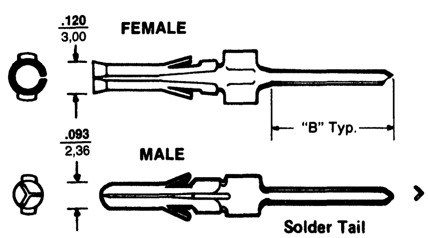
Contact: Brass or Phosphor Bronze
Plating: Tin or Gold
Temperature: -40 to +105°C

Standard .093" Terminal

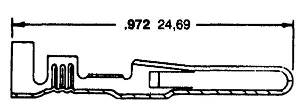


ORDERING INFORMATION AND DIMENSIONS

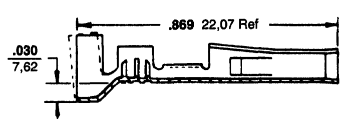
P.C. Tail



Grounding Pin "Make first-Break last"
1973 Series

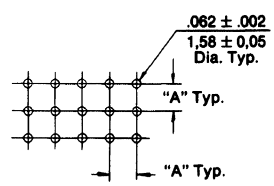


High Current/Low Force
42477 Series



Special Purpose .093" Diameter Terminals

Typical PCB Hole Layout



Housing	Dimension A	Dimension B* PC Tails	
		1376/1377	2605/2606
.093"	5.03 (.198)	3.68 (.145)	7.24 (.285)
3191	6.71 (.264)	N/A	5.33 (.210)

* Useable tail length when inserted into housing

molex 2.36mm (.093") Diameter Terminals

Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain Form*		Loose Form		Application Tooling			
			Male	Female	Male	Female	Hand Tool	TM-42 Die†	Mini Mac Die†	Extraction Tool
Standard Brass .010"										
Tin Plated										
14-20	1.65/4.06 (.065/.160)	1190/1189	• 02-09-2101	• 02-09-1102	• 02-09-2103	• 02-09-1104	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	1.52/3.05 (.060/.120)	1380/1381	• 02-09-2116	• 02-09-1117	• 02-09-2118	• 02-09-1119	11-01-0084	11-40-2002	11-18-2158 11-18-2007	11-03-0006
22-24	1.27/1.78 (.050/.070)	2870/2871	02-09-2136	02-09-1138	02-09-2137	02-09-1139	11-01-0097	11-40-2020	11-18-2102	11-03-0006
24-30	.076/1.52 (.030/.060)	1434/1433	• 02-09-2141	• 02-09-1142	• 02-09-2143	• 02-09-1144	11-01-0006	11-40-2003	11-18-2008	11-03-0006
Select Gold (.000015" min.)										
14-20	1.65/4.06 (.065/.160)	1190/1189	• 02-09-6100	• 02-09-5100	• 02-09-6106	• 02-09-5106	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	1.52/3.05 (.060/.120)	1380/1381	• 02-09-6122	• 02-09-5143	• 02-09-6123	• 02-09-5142	11-01-0084	11-40-2002	11-18-2158 11-18-2007	11-03-0006 11-03-0006
24-30	.076/1.52 (.030/.060)	1434/1433	• 02-09-6144	• 02-09-5146	• 02-09-6145	• 02-09-5147	11-01-0006	11-40-2003	11-18-2008	11-03-0006
Select Gold (.000050" min.)										
14-20	1.65/4.06 (.065/.160)	1190/1189	• 02-09-6101	• 02-09-5102	• 02-09-6110	• 02-09-5111	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	1.52/3.05 (.060/.120)	1380/1381	• 02-09-6125	• 02-09-5130	• 02-09-6126	• 02-09-5133	11-01-0084	11-40-2002	11-18-2158 11-18-2007	11-03-0006
Low Engagement Force‡										
Brass .008" Tin Plated										
18-22	1.52/3.05 (.060/.120)	4272/2273	02-09-1151	02-09-1122	02-09-1149	02-09-1123	11-01-0084	11-40-2002	11-18-2158	11-03-0006
Grounding Pin "Make First—Break Last"										
14-18	1.65/3.56 (.065/.140)	1973-2	02-09-8108		02-09-8109		11-01-0084	11-40-2214	11-18-2011	11-03-0017
18-22	1.52/3.05 (.060/.120)	1973	02-09-8103		02-09-8104		11-01-0084	11-40-2214	11-18-2011	11-03-0017
High Current/Low Engagement Force "End Carried"* (.013")										
14-18	3.56 .140 max.	42478/42477	• 02-09-2611	• 02-09-1615	• 02-09-2612	• 02-09-1616	11-01-0179	11-40-2234	11-18-2134	11-03-0006
PC Tail										
For Standard .093" Housing Only (Tin) Not for use with 3191 Series										
		1376/1377			• 02-09-2134	• 02-09-1134	N/A	N/A	N/A	N/A
For Standard .093" Housing Only (Select Gold .000030" min.) Not for use with 3191 Series										
		1376/1377			• 02-09-6132	• 02-09-5132	N/A	N/A	N/A	N/A
For 3191 Housing (Tin) May also be used in Standard .093" Housing										
		2606/2605			• 02-09-8113	• 02-09-1145	N/A	N/A	N/A	N/A
Phos-Bronze .010"										
Tin Plated										
14-20	1.65/4.06 (.065/.160)	/4550		02-09-1205		02-09-1206	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	1.52/3.05 (.060/.120)	/2151		02-09-1203		02-09-1204	11-01-0084	11-40-2002	11-18-2158	11-03-0006
Select Gold (.000030" min.)										
14-20	1.65/4.06 (.065/.160)	/4550		02-09-5169		02-09-5170	11-01-0084	11-40-2001	11-18-2143	11-03-0006
Phos-Bronze .008"										
Tin Plated										
14-20	1.65/4.06 (.065/.160)	/6310		02-09-1209		02-09-1211	11-01-0084	11-40-2001	11-18-2143	11-03-0006
18-22	1.52/3.05 (.060/.120)	/6271		02-09-1208		02-09-1212	11-01-0084	N/A	N/A	11-03-0006

• US Standard Product, available through Molex franchised distributors

* Not recommended for use with standard .093" housing when using 14 AWG wire

† Die only, does not include press or spare tooling

‡ Engagement force is approximately 2.5 lb per circuit. Current rating is derated from standard terminals by 2.0A per circuit.

FEATURES AND SPECIFICATIONS

1.57mm (.062") Diameter Power Connector Plug and Receptacle

Standard .062"

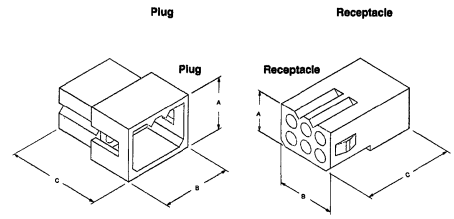
Features and Benefits
- Friction lock
- Panel and PCB mountable
- 1-piece strain relief available, 41316 series
- Polarized housing assures proper mating
- Male and female terminals may be used in both plug and receptacle housings

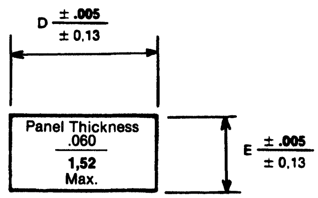
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Dielectric Withstanding Voltage: 1500V AC rms

Mechanical
Contact Retention to Housing: 20 lb min.

Physical
Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuit ID Shown is Mating Side of Receptacle; Wire Side of Plug								
Series-Circuits		**1625-1**	**1625-2**	**1625-3**	**1625-4**	**2004-4**	**1625-5**	**1625-6**
Amperes/Circuit (Maximum)*		5	5	5	5	5	5	5
Voltage Rating (Maximum)*		250	250	250	250	250	250	250
Receptacle								
Panel Mount		N/A	• 03-06-1022	• 03-06-1031	• 03-06-1041	• 03-06-1043	• 03-06-1055	• 03-06-1061
Free Hanging		• 03-06-1011	• 03-06-1023	• 03-06-1032	• 03-06-1042	• 03-06-1044	• 03-06-1056	• 03-06-1062
Dimension	A	4.90 (.190)	8.60 (.340)	12.30 (.480)	16.00 (.630)	8.60 (.340)	19.70 (.780)	8.70 (.340)
	B	N/A	4.90 (.190)	4.90 (.190)	4.90 (.190)	8.60 (.340)	4.90 (.190)	12.50 (.490)
	C	19.80 (.780)	20.60 (.810)	19.80 (.780)	19.80 (.780)	19.60 (.770)	19.80 (.780)	19.80 (.780)
Panel Cutout	D	N/A	12.83 (.505)	16.51 (.650)	19.94 (.785)	12.85 (.506)	23.88 (.940)	14.02 (.552)
	E	N/A	6.73 (.265)	6.73 (.265)	6.60 (.260)	10.16 (.400)	6.73 (.265)	12.83 (.505)
Plug								
Panel Mount		N/A	• 03-06-2024	• 03-06-2033	• 03-06-2041	• 03-06-2043	• 03-06-2054	• 03-06-2062
Free Hanging		• 03-06-2011	• 03-06-2023	• 03-06-2032	• 03-06-2042	• 03-06-2044	• 03-06-2055	• 03-06-2061
Dimension	A	7.60 (.300)	11.20 (.440)	15.00 (.590)	18.50 (.730)	11.20 (.440)	22.60 (.890)	11.40 (.450)
	B	N/A	7.60 (.300)	7.60 (.300)	7.50 (.290)	11.20 (.440)	7.90 (.310)	15.20 (.600)
	C	19.10 (.750)	19.80 (.780)	19.10 (.750)	19.10 (.750)	19.60 (.770)	19.10 (.750)	19.10 (.750)
Panel Cutout	D	N/A	15.47 (.609)	19.15 (.754)	21.97 (.865)	15.62 (.615)	26.52 (1.044)	15.62 (.615)
	E	N/A	8.08 (.318)	8.08 (.318)	7.93 (.312)	11.80 (.465)	8.08 (.318)	15.42 (.607)

• US Standard Product, available through Molex franchised distributors
* Rating based on fully loaded housings, (order terminals on page K-26 of this catalog)

1.57mm (.062") Diameter Power Connector Plug and Receptacle

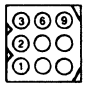
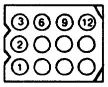
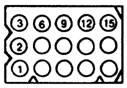
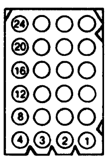
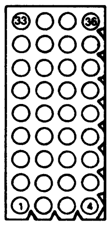
Standard .062"

ORDERING INFORMATION

41316 Strain Relief

Circuits	Strain Relief Order No.	Used With Plug Order No.	Used With Receptacle Order No.
3	15-04-0323	03-06-2033	03-06-1031
9	15-04-0327	03-06-2091	03-06-1091 or 03-06-1094
15	15-04-0329	03-06-2151	03-06-1151

ORDERING INFORMATION AND DIMENSIONS

Circuit ID Shown is Mating Side of Receptacle; Wire Side of Plug					
Series-Circuits	**1625-9**	**1625-12**	**1625-15**	**1625-24**	**1772-36**
Amperes/Circuit (Maximum)*	5	5	5	5	5
Voltage Rating (Maximum)*	250	250	250	250	250
Receptacle					
Panel Mount	• 03-06-1091	• 03-06-1121	• 03-06-1151	• 03-06-1241	• 03-06-1361
Free Hanging	• 03-06-1092	• 03-06-1122	• 03-06-1152	N/A	• 03-06-1362
Dimension A	12.40 (.490)	16.10 (.630)	19.50 (.770)	23.30 (.920)	38.20 (1.510)
B	12.40 (.490)	12.50 (.490)	12.40 (.490)	16.10 (.630)	17.50 (.690)
C	19.80 (.780)	19.80 (.780)	19.80 (.780)	19.10 (.750)	19.80 (.780)
Panel Cutout D	16.51 (.650)	20.19 (.795)	23.62 (.930)	27.41 (1.079)	42.60 (1.677)
E	14.02 (.552)	14.30 (.563)	14.45 (.569)	18.16 (.715)	17.96 (.707)
Plug					
Panel Mount	• 03-06-2091	• 03-06-2121	• 03-06-2151	• 03-06-2241	• 03-06-2361
Free Hanging	• 03-06-2092	• 03-06-2122	• 03-06-2152	• 03-06-2242	• 03-06-2362
Dimension A	15.00 (.590)	18.80 (.740)	22.10 (.870)	25.90 (1.020)	41.20 (1.620)
B	15.00 (.590)	15.00 (.590)	15.00 (.590)	18.80 (.740)	20.30 (.800)
C	19.00 (.750)	19.10 (.750)	19.00 (.750)	19.10 (.750)	19.10 (.750)
Panel Cutout D	19.10 (.752)	22.94 (.903)	26.21 (1.032)	30.02 (1.182)	45.59 (1.795)
E	15.62 (.615)	15.60 (.614)	15.75 (.620)	19.43 (.765)	20.96 (.825)

• US Standard Product, available through Molex franchised distributors

* Rating based on fully loaded housings, (order terminals on page K-26 of this catalog)

FEATURES AND SPECIFICATIONS

Features and Benefits
- Available in Tin or Gold platings
- Available in Brass or Phosphor Bronze base materials
- Accommodates 18 to 30 gauge wire

Reference Information
Packaging: Chain or bulk
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Contact Resistance: 3.2mΩ max.

Mechanical
Contact Insertion Force: 3.5 lb max.
Terminal Crimp Strength: Minimum pull-out force in kg (lb) for AWG wire sizes:

AWG Wire Size	Minimum Pull-out Force kg (lb)
18	9.07 (20)
20	6.80 (15)
22	4.54 (10)
24	3.63 (8)
26	2.27 (5)
28	1.36 (3)
30	0.91 (2)

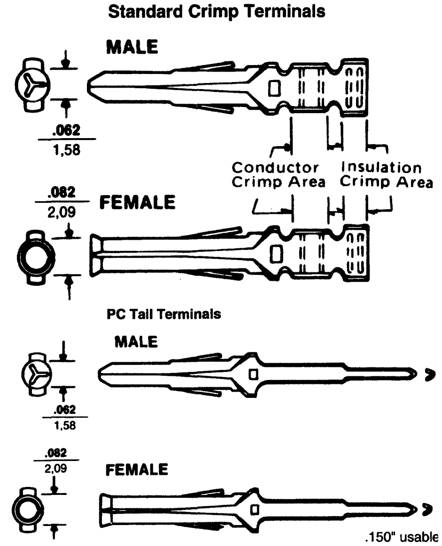
Engage/Disengage Forces: Miniature terminal of 0.20mm (.008") stock 70/30 Brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in kg (lb) by circuit:

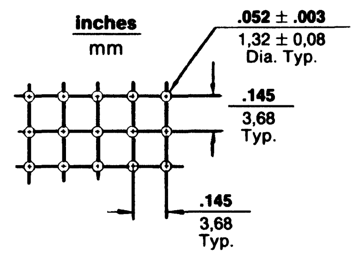
Circuits	Engage/Disengage Force	
1	1.04/0.36	(2.30/0.80)
2	2.09/0.73	(4.60/1.60)
3	3.13/1.09	(6.90/2.40)
4	4.17/1.45	(9.20/3.20)
5	5.22/1.81	(11.50/4.00)
6	6.26/2.18	(13.80/4.80)
8	8.35/2.90	(18.40/6.40)
9	9.39/3.27	(20.70/7.20)
12	12.43/4.35	(27.40/9.60)
15	15.65/5.44	(34.50/12.00)
24	25.04/8.71	(55.20/19.20)
36	37.56/13.08	(82.80/28.80)

.006 Phosphor Bronze stock recommended for versions 15 circuits and larger

Durability: Tin plating—25 mating/unmating cycles max.
Gold plating—50 mating/unmating cycles max.

Physical
Contact: Brass or Phosphor Bronze
Plating: Tin or Gold
Temperature: -40 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain		Loose Form		Application Tooling			
			Male	Female	Male	Female	Hand Tool	TM-42 Die*	Mini-Mac Die*	Extraction Tool
Standard Brass .008"										
Tin Plated										
18-24	1.52/3.05 (.060/.120)	1560/1561	• 02-06-2101	• 02-06-1101	• 02-06-2103	• 02-06-1103	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	1.02/2.29 (.040/.090)	1854/1855	• 02-06-2131	• 02-06-1131	• 02-06-2132	• 02-06-1132	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000015" min.)										
18-24	1.52/3.05 (.060/.120)	1560/1561	• 02-06-6100	• 02-06-5100	• 02-06-6103	• 02-06-5103	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	1.02/2.29 (.040/.090)	1854/1855	• 02-06-6130	• 02-06-5130	• 02-06-6135	• 02-06-5135	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000030" min.)										
18-24	1.52/3.05 (.060/.120)	1560/1561	02-06-6101	02-06-5101	02-06-6102	02-06-5102	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	1.02/2.29 (.040/.090)	1854/1855	02-06-6138	02-06-5138	02-06-6139	02-06-5139	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000030") in Contact Area—Tin/Lead Crimp Area										
18-24	1.52/3.05 (.060/.120)	1560/1561	02-06-6118	02-06-5108	02-06-6119	02-06-5109	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	1.02/2.29 (.040/.090)	1854/1855	02-06-6143	02-06-5147	02-06-6144	02-06-5148	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Phos-Bronze										
.006" Tin Plated—Recommended for Housings of 15 Circuits and Larger										
18-24	1.52/3.05 (.060/.120)	/4529		• 02-06-1104		• 02-06-1105	11-01-0008	11-40-2106	11-18-2027	11-03-0002
24-30	1.02/2.29 (.040/.090)	/4559		• 02-06-1109		• 02-06-1110	11-01-0185	11-40-2006	11-18-2024	11-03-0002
.008" Tin Plated										
18-24	1.52/3.05 (.060/.120)	1786/1787	• 02-06-2201	• 02-06-1201	• 02-06-2202	• 02-06-1202	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	1.02/2.29 (.040/.090)	2190/2189	• 02-06-2231	• 02-06-1231	• 02-06-2232	• 02-06-1232	11-01-0037	11-40-2006	11-18-2024	11-03-0002
.006" Select Gold (.000015" min.)—Recommended for Housings of 15 Circuits and Larger										
18-24	1.52/3.05 (.060/.120)	/4529		• 02-06-5207		• 02-06-5208	11-01-0008	11-40-2106	11-18-2027	11-03-0002
24-30	1.02/2.29 (.040/.090)	/4559		• 02-06-5211			11-01-0185	11-40-2006	11-18-2024	11-03-0002
.008" Select Gold (.000015" min.)										
18-24	1.52/3.05 (.060/.120)	1786/1787	02-06-6201	02-06-5201	02-06-6202	02-06-5202	11-01-0008	11-40-2004	11-18-2017	11-03-0002
PC Tail Brass .008" for Standard .062 Housings Only										
Tin Plated										
		1778/1779			• 02-06-8103	• 02-06-7103	N/A			
Select Gold (.000020" min. Tin/Lead Tail Area)										
		1778/1779			02-06-6122	02-06-7104	N/A			

• US Standard Product, available through Molex franchised distributors
* Die only, does not include press or spare tooling

FEATURES AND SPECIFICATIONS

3.18mm (.125") Diameter Power Connector

HCS-125

Features and Benefits

- Meets the need for a connector system rated at greater than the industry-standard 12.0A per circuit. The HCS-125 is an enhanced version of Molex's proven .125" system
- Positive locks prevent accidental unmating
- Fully isolated terminals protect terminals
- Pull tabs
- 1, 2, 3 and 4 circuit housings

Reference Information

Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
TUV License No.: R9151436
Use With: .125" terminals
Designed In: Inches

Electrical

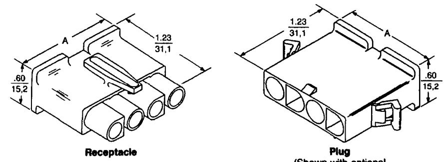
Voltage: 600V
Current: 20.0A
Dielectric Withstanding Voltage: 1500V AC rms

Mechanical

Contact Retention to Housing: 20 lb min.

Physical

Housing: Nylon, UL 94V-2
Temperature: -40 to +105°C
Wire Accommodation: 10 to 18 AWG

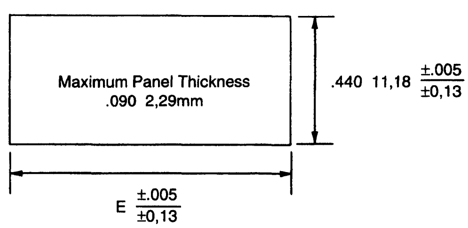


Receptacle

Plug (Shown with optional panel mounting ears)

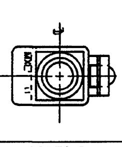
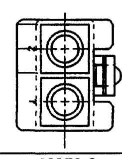
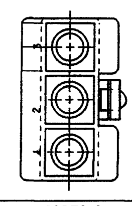
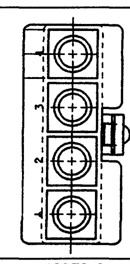
Power Connectors

K



Mounting Hole Detail

ORDERING INFORMATION AND DIMENSIONS

Circuit ID Shown Is Mating Side of Receptacle; Wire Side of Plug				
Series-Circuits	**42179-1**	**42179-2**	**42179-3**	**42179-4**
Amperes/Circuit (Maximum)*	20	20	20	20
Voltage Rating*	600	600	600	600
Dimension A	9.10 (.360)	17.50 (.690)	25.90 (1.02)	34.30 (1.350)
Receptacle (42179-NR1) Uses Either Male or Female Standard .125" Terminal				
94V-2	03-12-1016	03-12-1026	03-12-1036	03-12-1046
Plug (42179-NP) Uses Either Male or Female Standard .125" Terminal				
Panel Mount 94V-2	03-12-2015	03-12-2025	03-12-2035	03-12-2045
Free Hanging 94V-2	03-12-2016	03-12-2026	03-12-2036	03-12-2046
Panel Cutout Dimension E	13.23 (.521)	21.62 (.851)	30.00 (1.181)	38.38 (1.511)

* Rating is based on fully loaded housings

FEATURES AND SPECIFICATIONS

3.18mm (.125") Diameter Terminals

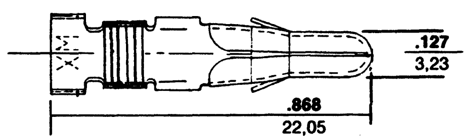
Reference Information
Packaging: Chain or bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: HCS-125 and standard .125" housings
Designed In: Inches

Electrical
Contact Resistance: 10mΩ max.

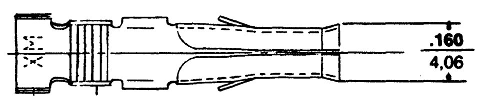
Mechanical
Contact Insertion Force: 9.25 lb max.
Contact Retention to Housing: 20 lb min.
Wire Pull-Out Force: 10 AWG—78 lb
12 AWG—70 lb
Mating Force: 5.75 lb max.
Unmating Force: 2.0 lb min.
Durability: 25 mating/unmating cycles max.

Physical
Contact: Brass or Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C

Male



Female



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Maximum Insulation Diameter	Male/Female Series	Chain Form		Loose Form		Application Tooling			
			Male	Female	Male	Female	Hand Tool	TM-42 Die*	Mini-Mac Die*	Extraction Tool
Brass										
10-14	4.57 (.180)	1900/1901	18-12-2601	18-12-1601	18-12-2602	18-12-1602	11-01-0040	11-40-2163	11-18-2147	11-03-0008
16-18	3.04 (.120)	2046/2047	18-12-2221	18-12-1221	18-12-2222	18-12-1222	11-01-0084	11-40-2164	11-18-2146	11-03-0008
16-18	4.57 (.180)	42554/42555	18-12-2405	18-12-1605				11-40-2223	11-18-2119	11-03-0008
Phosphor Bronze										
10-14	4.57 (.180)	42546/42547	18-12-1607	18-12-1603		18-12-1604	11-01-0040	11-40-2163	11-18-2147	11-03-0008
16-18	3.04 (.120)	8946/8947	CF	CF	CF	CF	CF	CF	CF	CF

*Die only; does not include spare tooling

FEATURES AND SPECIFICATIONS

2.13mm (.084") Diameter Power Connector

MLX

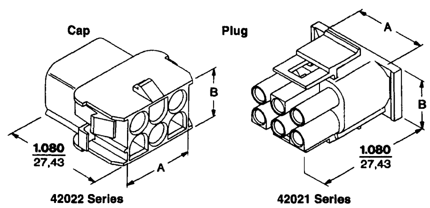
Features and Benefits
- Intermateable, intermountable and interchangeable with industry-standard versions
- Cross tested to assure industry compatibility
- Positive locks
- Fully isolated contacts
- Circuit ID grooves to reduce assembly errors
- Anti-stress positioning tabs to reduce breakage

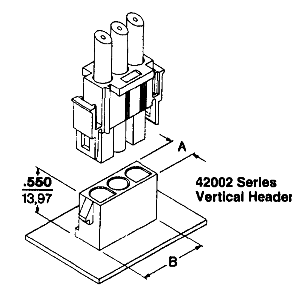
Reference Information
Product Specification: PS-42022-0001
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 600V*
Current: 13.5A*
Contact Resistance: 3.5mΩ max.
Dielectric Withstanding Voltage: 2900V (Header), 5000V (Wire-To-Wire)
Insulation Resistance: 1000 MΩ min.

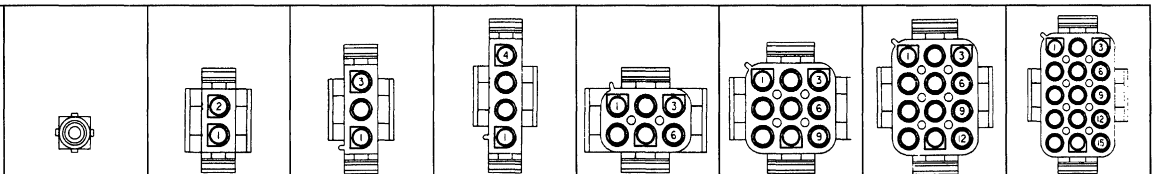
Mechanical
Contact Retention to Housing: 15 lb
Insertion Force to PCB: 10 lb

Physical
Plug and Cap Housing: Nylon, 94V-2 or 94V-0
Header Housing: Polyester, UL 94V-0
Header Contact: Brass or Phosphor Bronze
Plating: Tin or Gold
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS



Circuit ID Shown is Mating Side of Plug; Wire Side of Cap									
Circuits		1	2	3	4	6	9	12	15
Amperes/Circuit (Maximum)		13.5	13.5	13.5	13.5	11	11	11	11
Voltage Rating (Maximum)		600	600	600	600	600	600	600	600
Plug Housing 42021 Series									
94V-2 (White)		50-84-1010	50-84-1020	50-84-1030	50-84-1040	50-84-1060	50-84-1090	50-84-1120	50-84-1150
94V-0 (Brick Red)			50-84-1021	50-84-1031	50-84-1041	50-84-1061	50-84-1091		
Dimension	A	7.37 (.290)	7.62 (.300)	7.62 (.300)	7.62 (.300)	20.32 (.800)	20.32 (.800)	20.32 (.800)	20.32 (.800)
	B	7.37 (.290)	13.97 (.550)	20.32 (.800)	26.67 (1.050)	13.97 (.550)	20.32 (.800)	26.67 (1.050)	33.02 (1.300)
Cap Housing 42022 Series									
94V-2 (White)		50-84-2010	50-84-2020	50-84-2030	50-84-2040	50-84-2060	50-84-2090	50-84-2120	50-84-2150
94V-0 (Brick Red)			50-84-2021	50-84-2031	50-84-2041	50-84-2061	50-84-2091		
Dimension	A	9.65 (.380)	7.62 (.300)	7.62 (.300)	7.62 (.300)	20.32 (.800)	20.32 (.800)	20.32 (.800)	20.32 (.800)
	B	9.65 (.380)	13.97 (.550)	20.32 (.800)	26.67 (1.050)	13.97 (.550)	20.32 (.800)	26.67 (1.050)	33.02 (1.300)
Panel Cutout	C†	N/A	8.64 (.340)	8.64 (.340)	8.64 (.340)	12.19 (.480)	12.19 (.480)	12.19 (.480)	12.19 (.480)
	D	N/A	2.41 (.095)	2.41 (.095)	2.41 (.095)	6.99 (.275)	6.99 (.275)	6.99 (.275)	6.99 (.275)
	E	N/A	6.35 (.250)	6.35 (.250)	6.35 (.250)	6.35 (.250)	6.35 (.250)	8.89 (.350)	8.89 (.350)
	F	N/A	13.46 (.530)	13.46 (.530)	13.46 (.530)	26.16 (1.030)	26.16 (1.030)	26.16 (1.030)	26.16 (1.030)
	G	N/A	14.35 (.565)	20.70 (.815)	27.05 (1.065)	14.35 (.565)	20.70 (.815)	27.05 (1.065)	33.40 (1.315)
Vertical Header Assembly A-42002 Series (Contacts are Phosphor Bronze)									
White Tin	Male	N/A	10-84-4020	10-84-4030	10-84-4040	10-84-4060	10-84-4090	10-84-4120	10-84-4150
White Tin	Female	N/A	10-84-4022	10-84-4032	10-84-4042	10-84-4062	10-84-4092	10-84-4122	10-84-4152
White Select Gold	Male	N/A	10-84-4024	10-84-4034	10-84-4044	10-84-4064	10-84-4094	10-84-4124	10-84-4154
White Select Gold	Female	N/A	10-84-4026	10-84-4036	10-84-4046	10-84-4066	10-84-4096	10-84-4126	10-84-4156
Black Tin	Male	N/A	10-84-4021	10-84-4031	10-84-4041	10-84-4061	10-84-4091	10-84-4121	10-84-4151
Black Tin	Female	N/A	10-84-4023	10-84-4033	10-84-4043	10-84-4063	10-84-4093	10-84-4123	10-84-4153
Black Select Gold	Male	N/A	10-84-4025	10-84-4035	10-84-4045	10-84-4065	10-84-4095	10-84-4125	10-84-4155
Black Select Gold	Female	N/A	10-84-4027	10-84-4037	10-84-4047	10-84-4067	10-84-4097	10-84-4127	10-84-4157
Dimension	A	N/A	7.62 (.300)	7.62 (.300)	7.62 (.300)	20.32 (.800)	20.32 (.800)	20.32 (.800)	20.32 (.800)
	B	N/A	13.97 (.550)	20.32 (.800)	26.67 (1.050)	13.97 (.550)	20.32 (.800)	26.67 (1.050)	33.02 (1.300)
Vertical Header Assembly with Polarizing Peg A-43255 Series (Contacts are Phosphor Bronze)									
White Tin	Female					43255-0027	43255-0035		
Black Tin	Male					43255-0025	43255-0033		
White Select Gold	Female					43255-0028	43255-0036		
Black Select Gold	Male					43255-0026	43255-0034		
Dimension	A					20.32 (.800)	20.32 (.800)		
	B					20.32 (.800)	26.67 (1.050)		

* Ratings are per circuit, based on fully loaded housings

† Cap housing should be installed into panel in the same direction as the panel cutout is punched

See page XX for recommended panel cutout and PC board layout dimensions

FEATURES AND SPECIFICATIONS

2.13mm (.084") Diameter Power Connector Terminals

42023/42024

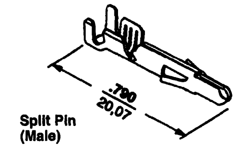
Features and Benefits
- Cross tested to assure industry compatibility
- Can be terminated with Molex or commercially available terminating equipment
- Split pin (male) for reduced mating forces

Reference Information
Product Specification: PS-42022-0001
Packaging: Chain or bulk (24" reels)
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

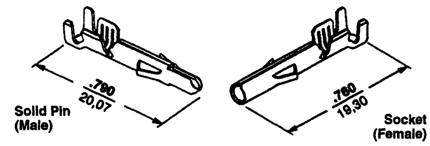
Electrical
Voltage: 600V
Current: 13.5A
Contact Resistance: 3.5mΩ max.

Mechanical
Contact Insertion Force: 2 lb
Wire Pull-Out Force: 14 lb min.
Mating Force: 1.5 lb max.
Unmating Force: 0.5 lb min.
Durability: Tin plating—25 mating/unmating cycles
Gold plating—50 mating/unmating cycles

Physical
Contact: Brass or Phosphor Bronze
Plating: Tin or Gold
Temperature: -55 to +105°C



42023 Series

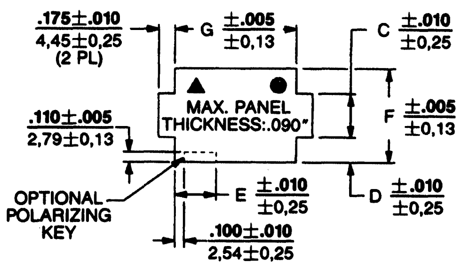


42024 Series

MOUNTING HOLE DETAIL

Mounting Hole Detail

Cap Panel Cutout (Refer to Order Chart for dimensions)



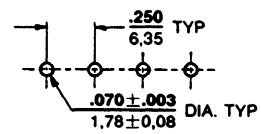
NOTE: Cap Housing should be installed into panel in the same direction as the panel cutout is punched.

▲ - Circuit #1 location when using polarizing key option with 2, 3, and 4 circuit housings.

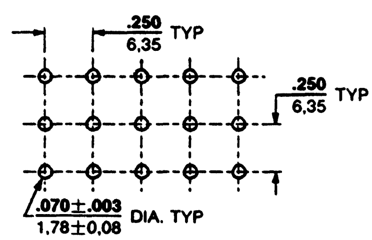
● - Circuit #1 location when using polarizing key option with 6, 9, 12 and 15 circuit housings.

Vertical Header
P.C. Board
Layout Dimensions

2, 3, & 4 Position Header Assemblies



6, 9, 12, & 15 Position Header Assemblies



ORDERING INFORMATION AND DIMENSIONS

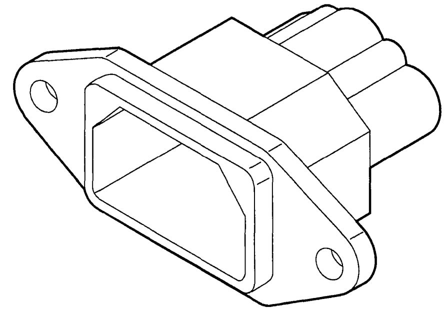
Wire Size AWG	Insulation Diameter	Male/Female Series	Chain Form Split Pin (Male)	Chain Form Socket (Female)	Loose Form Split Pin (Male)	Loose Form Socket (Female)	Application Tooling Mini-Mac Die	Application Tooling TM-40/42 Terminating Die	Application Tooling Hand Tool	Application Tooling Extraction Tool
Standard Brass .012"										
Tin Plated										
14-20	1.52 (.060) min. 3.30 (.130) max.	42023/42024	• 02-08-2003	• 02-08-1001	• 02-08-2004	• 02-08-1002	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
18-24	1.52 (.040) min. 3.30 (.100) max.	42023/42024								11-01-0168
Select Gold										
14-20	1.52 (.060) min. 3.30 (.130) max.	42023/42024	• 02-08-2007	• 02-08-1005	• 02-08-2008	• 02-08-1006	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
18-24	1.52 (.040) min. 3.30 (.100) max.	42023/42024								11-01-0168
Phosphor Bronze .012"										
Tin Plated										
14-20	1.52 (.060) min. 3.30 (.130) max.	42023/42024	• 02-08-2005	• 02-08-1003	• 02-08-2006	• 02-08-1004	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
18-24	1.52 (.040) min. 3.30 (.100) max.	42023/42024								11-01-0168
Select Gold										
14-20	1.52 (.060) min. 3.30 (.130) max.	42023/42024	• 02-08-2009	• 02-08-1007	• 02-08-2010	• 02-08-1008	11-18-2087 (14-20 AWG)	11-40-2197 (14-16 AWG) 11-40-2198 (16-20 AWG)	11-01-0167	11-01-0168
18-24	1.52 (.040) min. 3.30 (.100) max.	42023/42024								11-01-0168

• US Standard product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

7.00mm (.276") Pitch AC Receptacle

4274

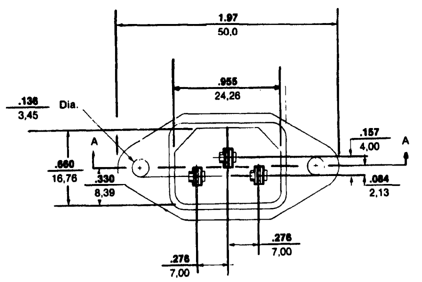


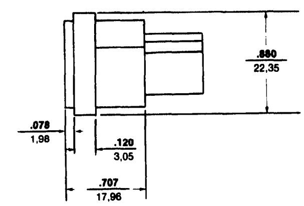
Features and Benefits
- Terminals become insulated when inserted
- Mount on either side of mounting hole
- Crimp-type terminals for lower installed cost
- Excellent mating characteristics
- Available with solder loops on terminals for filter components
- Dual terminal locks

Reference Information
Product Specification: PS-4274
UL File No.: E59333
CSA File No.: LR19980
VDE File No.: 5692-1550-1001
Mates With: 4296 pin
Designed In: Millimeters

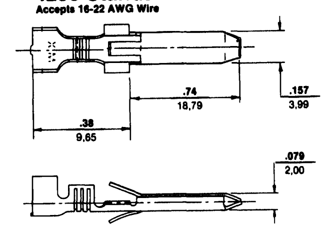
Electrical
Current: 15.0A (UL, CSA) 6.0A (VDE)

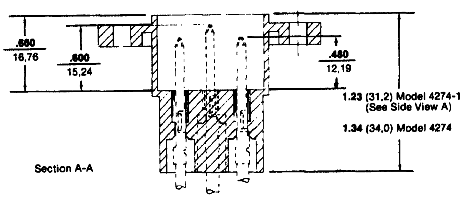
Physical
Housing: Nylon, UL 94V-0
Contact: Brass
Plating: Tin



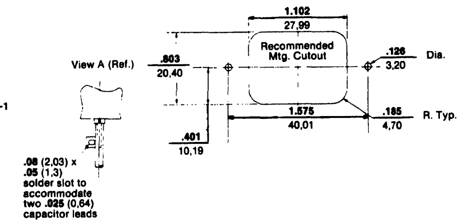


4296 Standard Terminal
Accepts 16-22 AWG Wire

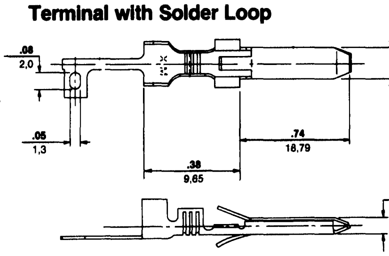




Section A-A



Terminal with Solder Loop



ORDERING INFORMATION AND DIMENSIONS

	Description				Hand Tool		Extraction Tool		TM-40/42 Crimp Terminating Machine					
	Standard—3 Prong		With Solder Loops for Filter Components						Terminator Die Only		TM-40/42 Press and Die		Spare Tooling Kit	
	Engineering No.	Order No.	Engineering No.	Order No.	Engineering No.	Order No.	Engineering No.	Order No.	Engineering No.	Order No.	Engineering No.	Order No.	Engineering No.	Order No.
Housing	4274	• 15-04-0703	4274-1	15-04-0603										
Chain Form Terminals*	4296	• 16-02-1103	4296-1	• 16-02-1104	HTR1031E	11-01-0084	HT-4981	11-03-0025	T8325A	11-40-2047	TM40D8325A	11-04-0310	K8325A	11-40-3047
Loose Piece Terminals	4296L	16-02-1105	4296-1L	16-02-1106										

• US Standard Product, available through Molex franchised distributors
* Terminals Pre-Tinned Brass

FEATURES AND SPECIFICATIONS

4.57mm (.180") Wire Trap-LITE Wire-To-Board Wire Trap

42732 Single-Row, Vertical

Features and Benefits

The rugged Low cost Interconnection TEchnology (LITE) wire trap connector is designed for quick connect/disconnect applications. This allows for easy installation in the plant or in the field. Vertical orientation of this interconnect allows easy access to insert and remove stripped wires. With the built-in alignment shelf, the LITE easily orients itself to the case.

- Allows fast interconnect to PCB
- Mounting pegs for PCB polarization
- Wire insertion/extraction from vertical direction
- Can be robotically inserted into PCB

Reference Information

Product Specification: PS-42732
Packaging: Tube
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches
Suggested Wire Types: 16 AWG Solid, 18 AWG Solid or Stranded with Top Coat, 20 AWG Stranded with Top Coat
Suggested UL Styles: 16 to 18 AWG: UL 1007, 1316, 1452 or 1569; 18 to 20 AWG: UL 1015

Electrical

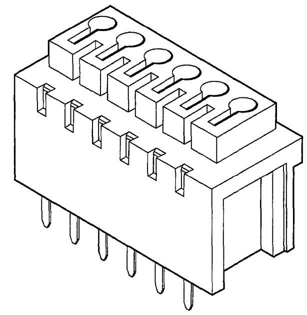
Voltage: 600V
Current: 6.0A
Contact Resistance: 10mΩ max., 20mΩ max. per circuit (18 AWG wire)
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

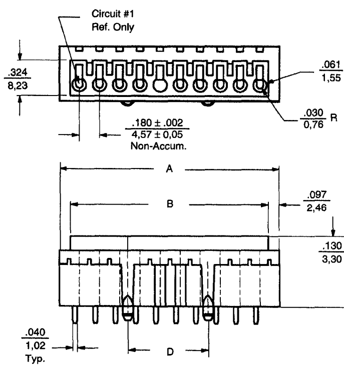
Mechanical

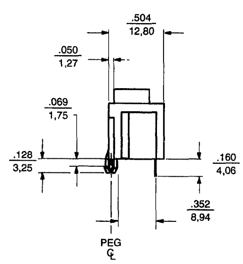
Wire Pull-Out Force: 10 lb min.
Durability: 5 cycles

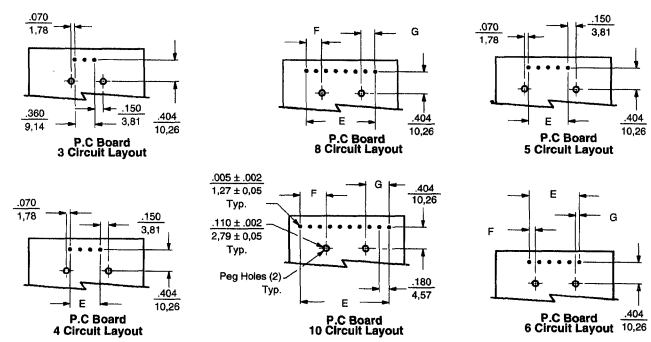
Physical

Housing: White polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C
Conductor Diameter Range: .038 to .060"
Insulation Range: .079 to .118"
Wire Accommodation: 16 to 20 AWG wire









ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Wire Extraction Tool*	Dimension A	B	C	D	E	F	G
3	• 22-45-4036	• 11-03-0040	18.14 (.714)	13.21 (.520)	1.70 (.067)	14.73 (.580)	9.14 (.360)	See Drawing	See Drawing
4	22-45-4046	• 11-03-0040	22.71 (.894)	17.78 (.700)	1.70 (.067)	19.30 (.760)	13.72 (.540)	See Drawing	See Drawing
5	22-45-4056	• 11-03-0040	27.28 (1.074)	22.35 (.880)	1.70 (.067)	23.88 (.940)	18.29 (.720)	See Drawing	See Drawing
6	• 22-45-4066	• 11-03-0040	31.85 (1.254)	26.92 (1.060)	6.27 (.247)	18.29 (.720)	22.86 (.900)	2.79 (.110)	1.78 (.070)
8	• 22-45-4086	• 11-03-0040	41.00 (1.614)	36.07 (1.420)	10.85 (.427)	18.29 (.720)	32.00 (1.260)	7.37 (.290)	6.35 (.250)
10	• 22-45-4106	• 11-03-0040	50.14 (1.974)	45.21 (1.780)	15.42 (.607)	18.29 (.720)	41.15 (1.620)	11.94 (.470)	10.92 (.430)

• US Standard Product, available through Molex franchaised distributors
* The extraction tool allows the wires to be removed either one at a time or all at once
The power should be removed before servicing the product

ORDERING INFORMATION *Preferred Version in the US*

Application Tooling Crimp Tooling for Pin and Socket Connectors

Crimp Tooling Molex US

Presses	
Description	**Order No.**
TM-44 Press without Mini-Mac (220V)	11-09-2074
TM-42 Press without Dies (110V)	69002-5001
TM-144 Press and Stripper without Mini-Mac (220V)	11-09-2073
TM-7 Press without Mini-Mac (110V)	11-05-0043
TM-7 Press without Mini-Mac (220V)	11-05-0046

Terminal Series No.	Order No.									Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Terminator Die*	Terminator Die Spare Tooling*	Mini-Mac	Mini-Mac Spare Tooling	TM-144†	TM-80		
1189/1190	• 11-01-0084 11-01-0014‡	• 11-03-0006	• 11-02-0003	11-40-2001	11-40-3001	11-18-2143	11-18-3134	11-09-2090		14-20 (2.00-0.50)	1.50-4.06 (.065-.160)
1189/1190		• 11-03-0006	• 11-02-0003			11-18-2009	11-18-3009	11-09-2091		18 Doubles (0.80-0.50)	1.50-4.06 (.065-.110)
1380/1381	• 11-01-0084 11-01-0014‡	• 11-03-0006	• 11-02-0003	11-40-2002	11-40-3002	11-18-2158	11-18-3149	11-09-2093		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
1380/1381		• 11-03-0006	• 11-02-0003			11-18-2007	11-18-3007	11-09-2094		18-22 (0.80-0.50)	2.29 (.090) max.
1433/1434	• 11-01-0006 11-01-0015‡	• 11-03-0006	• 11-02-0003	11-40-2003	11-40-3003	11-18-2008	11-18-3008			24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
1450-1451	• 11-01-0084	• 11-03-0006	• 11-02-0003	11-40-2001	11-40-3001	11-18-2143	11-18-3134			14-20 (2.00-0.50)	3.56 (.140) max.
1560/1561	• 11-01-0008 11-01-0015‡	• 11-03-0002	• 11-02-0001	11-40-2004	11-40-3004	11-18-2017	11-18-3017	11-09-2081		18-24 (0.80-0.20)	1.20-3.05 (.060-3.05)
1786/1787	• 11-01-0008	• 11-03-0002	• 11-02-0001	11-40-2004	11-40-3004	11-18-2017	11-18-3017	11-09-2081		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1854/1855	• 11-01-0185	• 11-03-0002	• 11-02-0001	11-40-2006	11-40-3006	11-18-2024	11-18-3024		69015-6060	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)
1900/1901	11-01-0202	11-03-0008		11-40-2163	11-40-3155	11-18-2147	11-18-3138			10-12 (5.00-3.30)	4.57 (.180) max.
1973	• 11-01-0084	11-03-0017	• 11-02-0003	11-40-2214	11-40-3216	11-18-2011	11-18-3011			18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
1973-2	• 11-01-0084	11-03-0017	• 11-02-0003							14-18 (2.00-0.80)	1.50-3.56 (.065-.140)
2046/2047	• 11-01-0084	11-03-0008	• 11-02-0003	11-40-2164	11-40-3156	11-18-2146	11-18-3137			16-18 (1.30-0.80)	3.05 (.120) max.
2151-2152	• 11-01-0084	• 11-03-0006	• 11-02-0003	11-40-2002	11-40-3002	11-18-2158	11-18-3149	11-09-2093		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
2189/2190	• 11-01-0185	• 11-03-0002	• 11-02-0001	11-40-2006	11-40-3006	11-18-2024	11-18-3024			24-30 (0.20-0.05)	1.00-2.30 (.040-.090)
2273	• 11-01-0084	• 11-03-0006	• 11-02-0003	11-40-2002	11-40-3002	11-18-2158	11-18-3149	11-09-2093		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
2870/2871	11-01-0097	• 11-03-0006	• 11-02-0003	11-40-2020	11-40-3020	11-18-2012	11-18-3012			22-24 (0.35-0.20)	1.27-1.78 (.050-.070)
4272	• 11-01-0084	• 11-03-0006	• 11-02-0003	11-40-2002	11-40-3002	11-18-2158	11-18-3149	11-09-2093		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
4296	• 11-01-0084	11-03-0025		11-40-2047	11-40-3047					16-22 (1.30-0.35)	1.20-3.05 (.060-.120)
4529	• 11-01-0008	• 11-03-0002	• 11-02-0001	11-40-2230	11-40-3231	11-18-2167	11-18-3158			18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
4549/4550	• 11-01-0084	• 11-03-0006	• 11-02-0003	11-40-2001	11-40-3001	11-18-2143	11-18-3134	11-09-2090		14-20 (2.00-0.50)	3.55 (.140) max.
4559	• 11-01-0185	• 11-03-0002	• 11-02-0001	11-40-2006	11-40-3006	11-18-2024	11-18-3024			24-30 (0.20-0.05)	1.00-2.30 (.040-.090)
5556/5558	11-01-0197	11-03-0044		11-40-2119	11-40-3117	11-18-2002	11-18-3002	11-09-2085		18-24 (0.80-0.20)	1.30-3.10 (.051-.122)
5556-2/5558	11-01-0198	11-03-0044		11-40-2137	11-40-3133	11-18-2003	11-18-3003	11-09-2086		22-28 (0.35-0.08)	0.90-1.80 (.035-.070)
5556-3/5558	11-01-0199	11-03-0044		11-40-2187	11-40-3189	11-18-2069	11-18-3065	11-09-2087		16 (1.30)	1.00-3.10 (.071-.122)
5558-13/5558		11-03-0044	63812-0000	11-41-2263	11-40-3266					26-30 (0.12-0.05)	0.90-1.80 (.035-.070)
6271	• 11-01-0084	• 11-03-0006	• 11-02-0003							18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
6310	• 11-01-0084	• 11-03-0006	• 11-02-0003	11-40-2001	11-40-3001	11-18-2143	11-18-3134	11-09-2090		14-20 (2.00-0.50)	1.50-4.06 (.065-.160)
8946/8947	• 11-01-0084	11-03-0008	• 11-02-0003	11-40-2164	11-40-3156	11-18-2146	11-18-3137			16-18 (1.30-0.80)	3.05 (.120) max.
42023/42024	11-01-0167	11-01-0168		11-40-2198	11-40-3199	11-18-2087	11-18-3082			14-16 (2.00-1.30)	1.20-3.30 (.060-.130)
42023/42024	11-01-0167	11-01-0168		11-40-2197	11-40-3198	11-18-2087	11-18-3082			16-20 (1.30-0.50)	1.20-3.30 (.060-.130)
42023/42024		11-01-0168								18-24 (0.80-0.20)	1.00-2.54 (.040-.100)
42477/42478	11-01-0207	• 11-03-0006	• 11-02-0003	11-40-2270	11-40-3272	11-18-2178 11-18-2201	11-18-3170 11-18-3194	11-09-2088		14-18 (2.00-0.80)	3.56 (.140) max.
42546/42547	11-01-0202	11-03-0008		11-40-2163	11-40-3155	11-18-2147	11-18-3138			10-12 (5.00-3.30)	4.57 (.180) max.

• US Standard Product, available through Molex franchised distributors
* For use with TM-40/42 or Base Unit
† Includes Mini-Mac
‡ Nonratchet hand tool

Application Tooling Crimp Tooling for Pin and Socket Connectors

Crimp Tooling Molex Europe

Preferred Version in Europe—Not Available in the US

Terminal Series No.	Order No.						Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Mini-Mac	Mini-Mac Spare Tooling	TM-80		
1189/1190	69008-0950			69037-1100	69037-2100		14-20 (2.00-0.50)	1.50-4.06 (.065-.600)
1380/1381	69008-0951	• 11-03-0006	• 11-02-0003	69037-1103	69037-2103		18-22 (0.80-0.50)	3.05 (.120) max.
1433/1434				69037-1105	69037-2105		24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
1450-1451				69037-1100	69037-2100		14-20 (2.00-0.50)	3.56 (.140) max.
1560/1561	69008-0952	• 11-03-0002	• 11-02-0001	69037-1108	69037-2108		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1786/1787				69037-1108	69037-2108		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1854/1855	69008-0958			69037-1110	69037-2110	69015-6060	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)
1973				69037-1114	69037-2114		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
2151-2152				69037-1103	69037-2103		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
2189/2190				69037-1110	69037-2110		24-30 (0.20-0.05)	1.00-2.30 (.040-.090)
2273				69037-1103	69037-2103		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
5556/5558	69008-0724	11-03-0038		69037-1131	69037-2131		18-24 (0.80-0.20)	1.30-3.10 (.051-.122)
5556-2/5558	69008-0724			69037-1132	69037-2132		22-28 (0.35-0.08)	0.90-1.80 (.035-.070)
5556-3/5558	69008-0724			69037-1133	69037-2133		16 (1.30)	1.00-3.10 (.071-.122)
6310				69037-1100	69037-2100		14-20 (2.00-0.50)	1.50-4.06 (.065-.160)

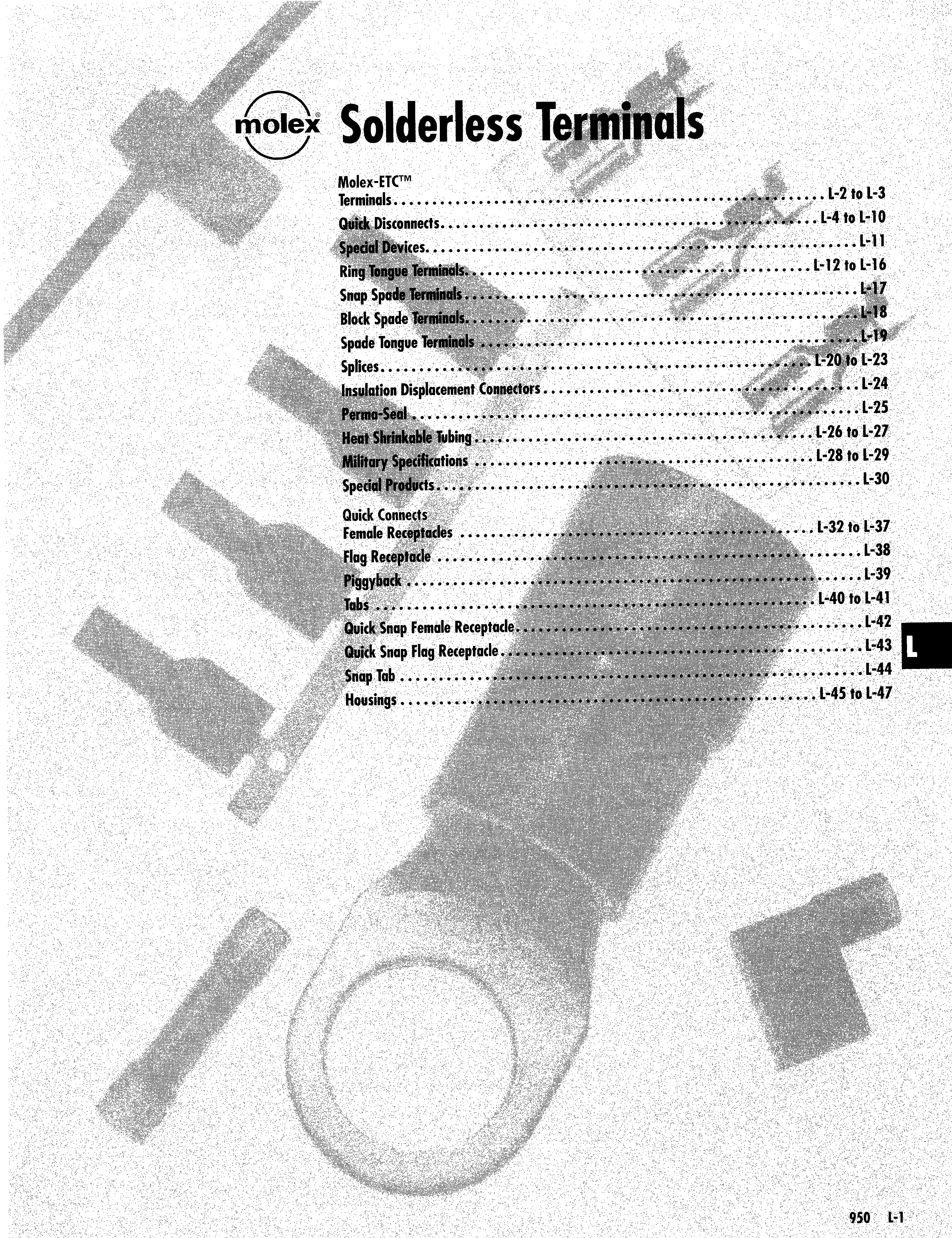
ORDERING INFORMATION

Preferred Version in Japan—Not Available in the US

Crimp Tooling Molex Japan

Presses	
Description	Order No.
Press for Crimp Die	M15
Press for Modular Crimp Die	M15A
Mini Press for Modular Crimp Die	57177-4000

Terminal Series No.	Order No.					Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Modular Crimp Die	Crimp Die		
1189/1190	JHTR1031C	J5800-0003	11-02-0003	JM5866A	CDJ1487	18-20 (0.80-0.50)	1.50-4.06 (.065-.600)
1380/1381	JHTR1031C	J5800-0003	11-02-0003	JM5866A	CDJ1487	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
1433/1434	JHTR2262	J5800-0003	11-02-0003	JM5866A	CDJ1487	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
1560/1561	JHTR1719C	J5800-0002	11-02-0001	JM5867A	CDJ1739	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
1854/1855	JHTR2262A	J5800-0002	11-02-0001	JM5867A	CDJ1739	22-26 (0.35-0.12)	1.30-1.70
1854/1855	JHTR2262J	J5800-0002	11-02-0001	JM5867A	CDJ1739	26-28 (0.12-0.08)	0.80-1.30
2151-2152	JHTR1031C	J5800-0003		JM5866A	CDJ1487	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
2273	11-01-0084	J5800-0003	11-02-0005	JM5866A	CDJ1487	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)
5556/5558	57026-5000	57031-6000		57022-3000		18-24 (0.80-0.20)	1.50-2.20
5556/5558	57027-5000	57031-6000		57022-3000		18-24 (0.80-0.20)	2.30-3.10
5556-2/5558	57064-5000	57031-6000		57058-3000		22-28 (0.35-0.08)	0.90-1.80 (.035-.070)

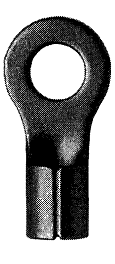


Solderless Terminals

L

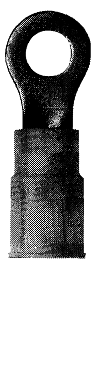
Barrel Styles

KRIMPTITE®



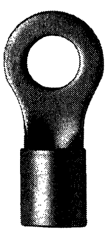
This is the basic Molex-ETC barrel style. It is noninsulated and features a quality, 1-piece design. It is also the most economical style and has the greatest variety of uses where special features are not required. The Krimptite is available in wire range 10 to 26 AWG (0.10 to 6.60mm^2).

INSULKRIMP®



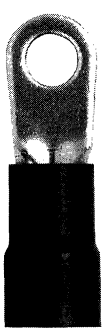
These terminals and splices feature a rigid insulation sleeve of polyvinyl chloride (PVC) affixed permanently to the Krimptite barrel in (10 to 22 AWG) or the brazed-seam Versakrimp barrel (in 4/0 to 22 AWG). It attaches to the wire with 1 quick crimp and the insulation sleeve protects against vibration damage by preventing wire flex at the crimp point. The funnel entrance into the electrical barrel eliminates wire strand "hang up," increases crimping rates and enhances wire termination reliability. Wire range 4/0 to 22 AWG (0.10 to 117.00mm^2).

VERSAKRIMP™



When the butted-seam Krimptite barrel is bonded with a special brazing alloy, it becomes a Versakrimp barrel. These brazed-seam barrel terminals and splices will not open under conditions of stress or wire pull. As versatile as it is tough, it can be crimped under most adverse conditions by many types of tooling. The Versakrimp is ideal for hard-to-crimp solid and stranded wires. It is available in wire range 4/0 to 22 AWG.

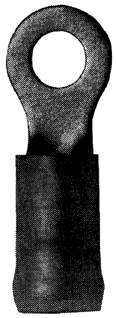
NYLAKRIMP®



This terminal was designed specifically for larger wire applications when both high temperature and vibration levels are expected. The color-coded barrel is formed by affixing a permanent, rigid, color-coded nylon insulating sleeve to the barrel. The insulation has a funnel entrance into the electrical barrel that eliminates wire strand "hang up," increases crimping rates and enhances wire termination.

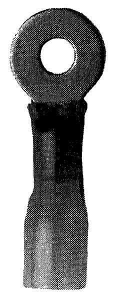
Nylakrimp terminals withstand continuous operating temperatures of -55 to 105°C (-67 to 221°F). Available in wire range 4/0 to 8 AWG.

AVIKRIMP®



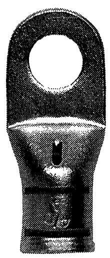
This color-coded barrel style offers you the ultimate in high-performance terminal design and rugged construction. The Tin-plated Brass sleeve strengthens the barrel and secures the wire to protect against stress and high vibration. The permanently attached, color-coded nylon insulating sleeve extends beyond the metal support sleeve. A funnel ferrule wire entrance into the electrical barrel prevents wire strand "hang up" for increased crimping rates and added wire termination reliability in the standard barrel length. Wire range 10 to 26 AWG (0.10 to 6.60mm^2).

PERMA-SEAL



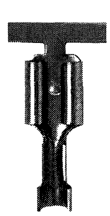
This is the ultimate in terminations and splicing. The insulation is a nylon shrink tubing with an inner wall of hot-melt adhesive. It has a funnel entry for ease of wire insertion. After the wire is crimped, heat is applied and the insulation shrinks and melts to give the crimp area a complete environmental seal. Wire range 10 to 22 AWG (0.10 to 6.60mm^2).

EYELET



Our color-coded eyelet terminals can be used in place of standard compression terminals because they are deep drawn from CDA-110 electrolytic tough pitch Copper stock and then Tin plated for corrosion resistance. Combined with seamless barrels and pad, these parts are extra tough and reliable. Features such as flared barrel entry, inspection sight hole and industry standard color coding make these terminals drop-in replacements for tubular compression lugs.

OPEN BARREL STRIP



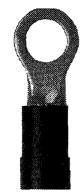
Quick Disconnects, Rings and Star Rings are available on metal "T" carried strip. These parts feature open barrels with an insulation support and are made of Brass.

94V-0 TERMINALS

These terminals are used extensively in the telecommunications industry. 94V-0 parts consist of a PVC-insulated Avikrimp part. The PVC insulation has a 94V-0 Flammability Rating and an Oxygen Index Rating above 28%. These terminals exceed all UL and Bellcore requirements. Contact the factory for more information.

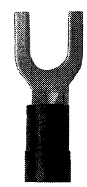
Tongue Styles

RING



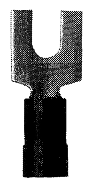
The basic tongue type. It is the safest and most reliable because it cannot be disconnected unless the screw is completely removed.

SPADE



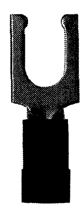
The open tongue end is for rapid insertion on the mounting screw. The spade is usually used on free standing studs.

BLOCK SPADE



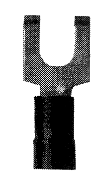
This tongue style is similar to the spade. However, note the longer and flatter sides. Block Spades are designed for use in terminal blocks.

SNAP SPADE



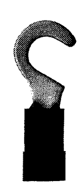
The spring-like tongue snaps around the screw like a Quick Disconnect and the terminal is locked into place until the mounting screw can be tightened down.

FLANGED SPADE



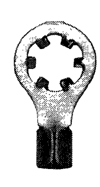
The turned up edges give this spade more safety and reliability. The flanges also give both a location and locking action that aid greatly in installation.

HOOK

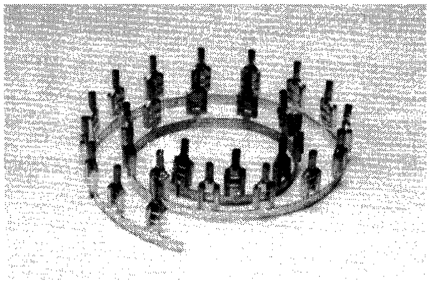


This tongue type combines the security advantage of the ring with the easy-handling characteristics of the spade.

STAR RING

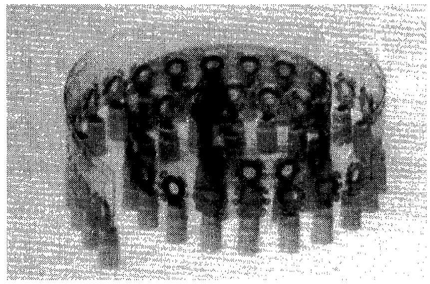


This tongue style is a ring with serrated edges that bite into the applied surface insuring a good connection or ground.



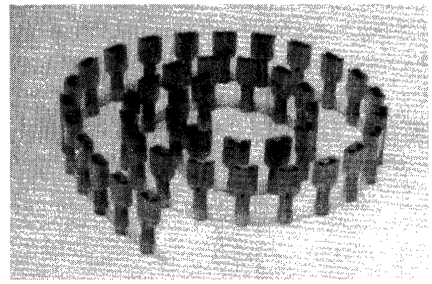
METAL STRIP

Quick Disconnects are available on a continuous metal carrier. They are made in the traditional "T" carrier. These products are crimped in Molex-ETC Crimping Presses, Mini-Mac Applicators and Molex TM-40 Presses, and are used for high speed, low cost production.



MYLAR TAPE CARRIER

Most Molex-ETC terminals in the 4 to 26 AWG wire range and Fully Insulated Quick Disconnects can be tape-mounted and, when used with one of our air powered, automatic tape crimping presses, can deliver up to 3600 crimps per hour. This carrier gives the most flexibility in the production area.



CONTINUOUS MOLDED STRIP

The fully insulated line of Quick Disconnects is also available in easy-to-identify, color-coded, continuous molded nylon strips. When used with the Molex-ETC ATP-101CBC air powered crimping press, these strips can help you make up to 3600 crimps per hour, greatly reducing your overall applied costs.

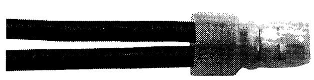
Special reel sizes available upon request. For high speed, volume production crimping, many companies in a wide range of industries have come to rely on Molex-ETC's Metal Strip, Tape-Mounted, and Continuous Molded Strip terminals and automatic crimping presses to give them the highest quality end-product at the lowest applied cost.

SPLICES

Molex-ETC offers standard and special splices for nearly every type of wiring need.

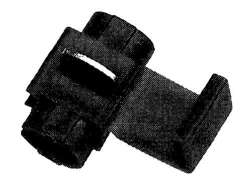
BUTT SPLICE

Stripped wires are inserted from each end and "butt" in the center. Then a crimp at each end secures the connection.



NYLON CLOSED-END CONNECTOR

Used in a wide variety of situations to "pigtail" or tie together 2 or more wires.

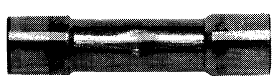


MULTI-LOCK

These color-coded connectors make quick, reliable and pre-insulated splices without stripping, twisting, soldering or the need for special tools.

STEP DOWN BUTT SPLICE

The Step Down Butt Splice is the perfect solution when 2 wires need to be inserted in one end of a splice and a single wire in the other end.

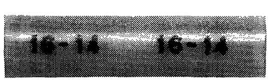


FUNNEL ENTRY BUTT SPLICE

In the past, the crimping of machine terminated butt splices has been difficult and nearly impossible if attempted on a piece of robotic equipment. Now, with our new Funnel Entry Butt Splice, the end that will be crimped by the crimping press is funneled to allow quick and easy wire insertion.

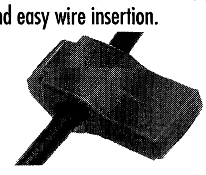
PARALLEL SPLICE

Stripped wires lie side-by-side in the splice and are secured by a single crimp in the middle.



AVIKRIMP® BUTT SPLICE

With the extra metal sleeve and nylon insulation, these splices should be used when heavy vibration is anticipated and a strong strain relief is needed.



WIRE TAP

The quick and easy way to splice into a wire.

WINDOW BUTT SPLICE

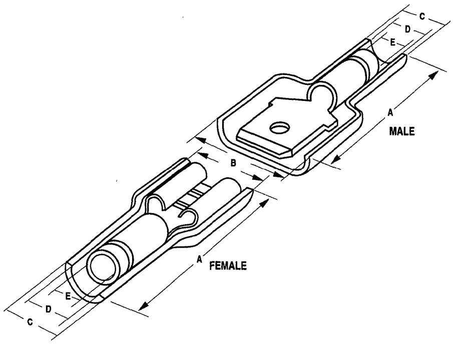
QPL'd to Mil-T-7928/5

Molex-ETC™ Fully Insulated Quick Disconnects

LISTED UL CSA

The Avikrimp version of the Fully Insulated Quick Disconnects gives you the extra advantage of the secure metal support sleeve. These parts fulfill the double crimp (support) requirements of VDE and other DIN specifications. They are the premier line when full insulation and strain relief are required.

TÜV Rheinland



Fully Insulated Male Quick Disconnects

Wire Range AWG (mm²)	Male Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Max.	C Max.	D MWID	E Min.
18-22 (0.30-1.40)	.250 by .032	AA-5260	Red	.031	.960	.450	.220	.140	.056
	.187 by .020	AA-5266	Red	.020	.900	.380	.220	.140	.056
14-16 (1.30-2.30)	.250 by .032	BB-5262	Blue	.031	.960	.450	.250	.170	.084
	.187 by .020	BB-5268	Blue	.020	.900	.380	.250	.170	.084
10-12 (3.00-6.00)	.250 by .032	C-5264	Yellow	.031	1.080	.450	.310	.230	.144

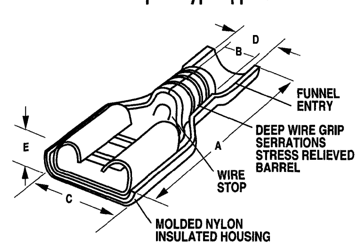
Fully Insulated Female Quick Disconnects

Wire Range AWG (mm²)	Accepts Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Min.	C Max.	D MWID	E Max.
18-22 (0.30-1.40)	.250 by .032	AA-5261	Red	.016	.890	.380	.190	.125	.062
	.187 by .020	AA-5267	Red	.016	.800	.320	.190	.125	.062
	.187 by .032	AA-5271	Red	.016	.800	.320	.190	.125	.056
	.205 by .020	AA-5283	Red	.016	.800	.320	.190	.125	.062
	.205 by .032	AA-5285	Red	.016	.800	.320	.190	.125	.062
	.110 by .020	AA-5275	Red	.012	.800	.230	.190	.125	.056
	.110 by .032	AA-5279	Red	.012	.800	.230	.190	.125	.056
14-16 (1.30-2.30)	.250 by .032	BB-5263	Blue	.016	.890	.380	.220	.155	.082
	.187 by .020	BB-5269	Blue	.016	.800	.320	.220	.155	.082
	.187 by .032	BB-5273	Blue	.016	.800	.320	.220	.155	.082
	.205 by .020	BB-5287	Blue	.016	.800	.320	.220	.155	.082
	.205 by .032	BB-5289	Blue	.016	.800	.320	.220	.155	.082
	.110 by .020	BB-5277	Blue	.012	.800	.230	.220	.155	.082
	.110 by .032	BB-5281	Blue	.012	.800	.230	.220	.155	.082
10-12 (3.00-6.00)	.250 by .032	C-5265	Yellow	.018	1.040	.380	.310	.245	.144

Note: For parts on mylar tape, add "T" at the end of loose piece order no. For parts on metal strip, add "Z" at the end of loose piece order no.

INSULKRIMP®

- Designed for dense packaging requirements; the profile height is lower than other competing products on the market
- Integrity of mechanical/electrical performance is assured for wire secureness, operating temperatures, tensile strength, dielectric parameters and insertion/extraction forces by meeting UL 310 standards (Approved under UL File No. E79133)
- Color-coded translucent insulator allows easy identification of terminal size and wire gauge: red for 18 to 22 AWG, blue for 14 to 16 AWG and yellow for both 24 to 26 AWG and 10 to 12 AWG (wire size is also stamped on the terminal and visible through the insulator)
- Translucent "see-through" insulator provides fast, on-line quality control inspection by allowing a quick visual check of the wire/terminal assembly
- Terminal's funnel entrance is designed for increased crimping rates by speeding wire delivery into the crimp section and eliminating wire strand stubbing
- A wire stop stamped into the crimp barrel prevents insertion of over-stripped wires
- During crimping, a die identification code is stamped into the housing to facilitate quality control inspection
- Molex-ETC's automatic terminating equipment meets a full range of volume requirements, from 3600 terminations per hour to low-volume prototype applications



Fully Insulated Insulkrimp Female Quick Disconnects (Standard Flare)

Wire Range AWG (mm²)	Accepts Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Min.	C Max.	D MWID	E Max.
24-26 (0.10-0.28)	.250 by .032	M-2212	Yellow	.016	.860	.030	.380	.075	.180
	.187 by .032	M-2211	Yellow	.016	.780	.030	.316	.075	.160
	.187 by .020	M-2210	Yellow	.016	.780	.030	.316	.075	.160
18-22 (0.30-1.40)	.250 by .032	AA-2201	Red	.016	.860	.058	.380	.135	.180
	.187 by .020	AA-2202	Red	.016	.780	.058	.316	.135	.160
	.187 by .032	AA-2203	Red	.016	.780	.058	.316	.135	.160
	.205 by .020	AA-2213	Red	.016	.780	.058	.316	.135	.160
	.205 by .032	AA-2214	Red	.016	.780	.058	.316	.135	.160
	.110 by .020	AA-2204	Red	.012	.780	.058	.230	.135	.150
	.110 by .032	AA-2205	Red	.012	.780	.058	.230	.135	.150
14-16 (1.30-2.30)	.250 by .032	BB-2206	Blue	.016	.860	.083	.380	.145	.180
	.187 by .020	BB-2207	Blue	.016	.780	.083	.316	.160	.170
	.187 by .032	BB-2208	Blue	.016	.780	.083	.316	.160	.170
	.205 by .020	BB-2215	Blue	.016	.780	.083	.316	.160	.170
	.205 by .032	BB-2216	Blue	.016	.780	.083	.316	.160	.170

Fully Insulated Insulkrimp Female Quick Disconnects (Expanded Flare)

Wire Range AWG (mm²)	Accepts Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Min.	C Max.	D MWID	E Max.
18-22 (0.30-1.40)	.250 by .032	AA-2201X	Red	.016	.935	.058	.380	.230	.180
	.187 by .020	AA-2202X	Red	.016	.860	.058	.316	.230	.160
	.187 by .032	AA-2203X	Red	.016	.860	.058	.316	.230	.160
	.110 by .020	AA-2204X	Red	.012	.860	.058	.230	.230	.150
	.110 by .032	AA-2205X	Red	.012	.860	.058	.230	.230	.150
14-16 (1.30-2.30)	.250 by .032	BB-2206X	Blue	.016	.935	.083	.380	.260	.180
	.187 by .020	BB-2207X	Blue	.016	.860	.083	.316	.260	.170
	.187 by .032	BB-2208X	Blue	.016	.860	.083	.316	.260	.170
10-12 (3.00-6.00)	.250 by .032	C-2265	Yellow	.018	1.040	.150	.380	.275	.290

Note: For parts on mylar tape, add "T" at the end of loose piece order no. For parts on continuous molded carrier, add "C" at the end of loose piece order no.

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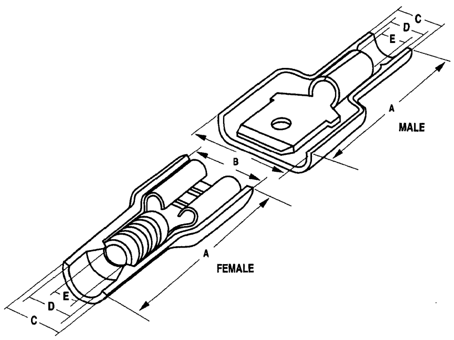
COUPLERS

These parts are available in 18 to 22 AWG through 10 to 12 AWG. These fully insulated nylon couplers are precision engineered, allowing the female terminal to fit precisely into the corresponding male housing, allowing a fully insulated in-line splice. This splice may be connected and disconnected without damage to the nylon insulation.



Fully Insulated Male Couplers

Wire Range AWG (mm²)	Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Max.	C Max. Dia.	D MWID	E Min.
18-22 (0.30-1.40)	.250 by .032	AA-2260	Red	.031	.970	.450	.230	.145	.064
14-16 (1.30-2.30)	.250 by .032	BB-2262	Blue	.031	.970	.450	.230	.170	.083
10-12 (3.00-6.00)	.250 by .032	C-2264	Yellow	.031	1.120	.460	.340	.275	.145

Fully Insulated Female Couplers

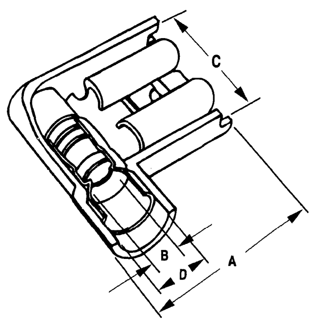
Wire Range AWG (mm²)	Accepts Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Max.	C Max.	D MWID	E Min.
18-22 (0.30-1.40)	.250 by .032	AA-2261	Red	.018	.890	.380	.230	.165	.083
14-16 (1.30-2.30)	.250 by .032	BB-2263	Blue	.018	.890	.380	.230	.165	.083
10-12 (3.00-6.00)	.250 by .032	C-2265	Yellow	.018	1.040	.380	.340	.275	.150

Note: The male is available loose piece and mylar tape mounted only (add suffix "T"). The female is available loose piece, mylar tape mounted (add suffix "T"), and on continuous molded carrier (add suffix "C").

FLAGS

This right angle nylon, fully insulated quick disconnect terminal provides space saving design.

TÜV Rheinland

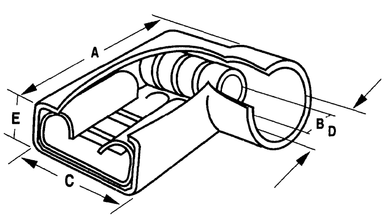


Avikrimp® Fully Pre-Insulated Quick Disconnect Flags

Wire Range AWG (mm²)	Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)			
					A Max.	B Min.	C Max.	D MWID
18-22 (0.30-1.40)	.250 by .032	AA-5220	Red	.016	.635	.067	.390	.150
14-16 (1.30-2.50)	.250 by .032	BB-5221	Blue	.016	.635	.084	.390	.170
18-22 (0.30-1.40)	.187 by .032	AA-5223	Red	.016	.635	.067	.390	.150
14-16 (1.30-2.50)	.187 by .032	BB-5225	Blue	.016	.635	.084	.390	.170
18-22 (0.30-1.40)	.187 by .020	AA-5222	Red	.016	.635	.067	.390	.150
14-16 (1.30-2.50)	.187 by .020	BB-5224	Blue	.016	.635	.084	.390	.170

Fully Insulated Flag Quick Disconnects

Wire Range AWG (mm²)	Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Min.	C Max.	D MWID	E Max.
18-22 (0.30-1.40)	.250 by .032	AA-2220	Red	.016	.630	.067	.380	.175	.200
14-16 (1.30-2.50)	.250 by .032	BB-2221	Blue	.016	.630	.089	.380	.200	.200
18-22 (0.30-1.40)	.187 by .032	AA-2223	Red	.016	.630	.067	.380	.175	.200
14-16 (1.30-2.50)	.187 by .032	BB-2225	Blue	.016	.630	.089	.380	.200	.200
18-22 (0.30-1.40)	.187 by .020	AA-2222	Red	.016	.630	.067	.380	.175	.200
14-16 (1.30-2.50)	.187 by .020	BB-2224	Blue	.016	.630	.089	.380	.200	.200

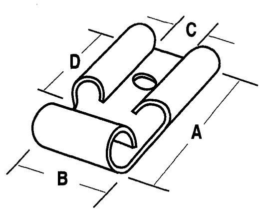


Fully Insulated Flag Quick Disconnects (Expanded Flare)

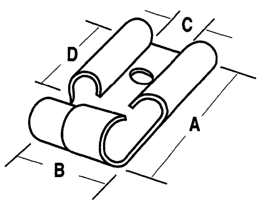
Wire Range AWG (mm²)	Tab Size (in.)	Order No.	Color	Stock (in.)	Dimension (in.)				
					A Max.	B Min.	C Max.	D MWID	E Max.
18-22 (0.30-1.40)	.250 by .032	AA-2220X	Red	.016	.660	.067	.380	.240	.200
14-16 (1.30-2.50)	.250 by .032	BB-2221X	Blue	.016	.660	.089	.380	.265	.200
18-22 (0.30-1.40)	.187 by .032	AA-2223X	Red	.016	.660	.067	.380	.240	.200
14-16 (1.30-2.50)	.187 by .032	BB-2225X	Blue	.016	.660	.089	.380	.265	.200
18-22 (0.30-1.40)	.187 by .020	AA-2222X	Red	.016	.660	.067	.380	.240	.200
14-16 (1.30-2.50)	.187 by .020	BB-2224X	Blue	.016	.660	.089	.380	.265	.200

Note: Flags available on metal strip, add "Z" at the end of order no. For parts on mylar tape, add "T" at the end of loose piece order no.

FLAG TERMINALS



Krimptite® Uninsulated						
Wire Range AWG (mm²)	Order No.	Tab Size	Dimension			
			A Max.	B Max.	C Ref.	D
18-22 (0.30-1.40)	AA-1158	6.30 by 0.80 (.250 by .032)	14.30 (.562)	8.10 (.321)	2.00 (.079)	7.70 (.305)
14-16 (1.30-2.50)	BB-1159	6.30 by 0.80 (.250 by .032)	14.30 (.562)	8.10 (.321)	2.00 (.079)	7.70 (.305)
18-22 (0.30-1.40)	AA-1147-032	4.70 by 0.80 (.187 by .032)	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)
14-16 (1.30-2.50)		4.70 by 0.80 (.187 by .032)	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)
18-22 (0.30-1.40)	AA-1147	4.70 by 0.50 (.187 by .020)	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)
14-16 (1.30-2.50)	BB-1148	4.70 by 0.50 (.187 by .020)	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)



LISTED UL

Vibrakrimp® with Wire Grip							
Wire Range AWG (mm²)	Order No.	Tab Size	Dimension				
			A Max.	B Max.	C Ref.	D	Max. Wire Insul. Dia.
18-22 (0.30-1.40)	AA-4168	6.30 by 0.80 (.250 by .032)	15.10 (.594)	9.80 (.385)	2.00 (.079)	7.70 (.305)	3.40 (.135)
14-16 (1.30-2.50)	BB-4169	6.30 by 0.80 (.250 by .032)	15.10 (.594)	9.80 (.385)	2.00 (.079)	7.70 (.305)	3.70 (.145)
18-22 (0.30-1.40)		4.70 by 0.80 (.187 by .032)	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.40 (.135)
14-16 (1.30-2.50)	BB-4171-032	4.70 by 0.80 (.187 by .032)	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.70 (.145)
18-22 (0.30-1.40)	AA-4170	4.70 by 0.50 (.187 by .020)	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.40 (.135)
14-16 (1.30-2.50)	BB-4171	4.70 by 0.50 (.187 by .020)	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.70 (.145)

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

FLAG QUICK DISCONNECTS

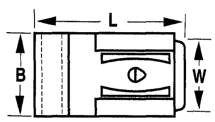
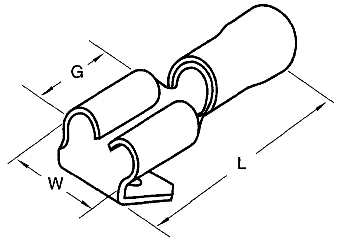


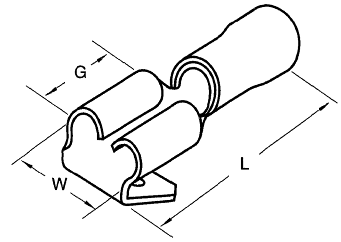
Fig. 1

Krimptite Economical—No Vibration Support					
Wire Range AWG (mm²)	Order No.	Use with Tab Size	Width W	Crimp B	Length L
12-14 (1.60-4.00)	B-175	6.40 by 0.80 (.250 by .032)	7.90 (.312)	7.80 (.307)	15.10 (.593)

Material: Tin-plated Brass

PIGGYBACK QUICK DISCONNECTS



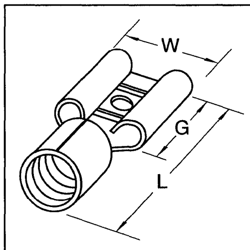


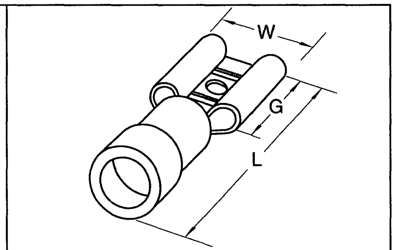
Wire Range AWG (mm²)	Tab Size	Insulkrimp® PVC Insulated with Funnel Wire Entry					Avikrimp® Nylon Insulated with Vibration Support Funnel Ferrule Wire Entry				
		Order No.	MWID	Max. Width W	Grip G	Max. Length L	Order No.	MWID	Max. Width W	Grip G	Max. Length L
18-22 (0.25-1.30)	.250 by .032	AA-2301	3.40 (.135)	7.60 (.301)	7.90 (.310)	22.00 (.865)	AA-8301	3.20 (.125)	7.60 (.301)	7.90 (.310)	22.00 (.865)
14-16 (1.00-2.60)	.250 by .032	BB-2302	3.70 (.145)	7.60 (.301)	7.90 (.310)	22.00 (.865)	BB-8302	3.60 (.142)	7.60 (.301)	7.90 (.310)	22.00 (.865)
10-12 (2.60-6.60)	.250 by .032	C-2303	6.40 (.250)	7.60 (.301)	7.90 (.310)	25.40 (1.000)	C-8303	5.60 (.220)	7.60 (.301)	7.90 (.310)	25.40 (1.000)

Note: For parts on mylar tape, add "T" at the end of loose piece order no. (except B-175)

Molex-ETC™ Tape-Fed and Loose Piece Quick Disconnects

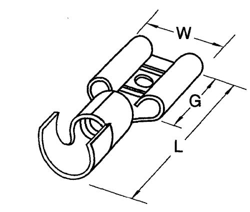
You can order the Quick Disconnect terminals charted here in either loose piece or tape-mounted form. Loose piece versions are individually fed into the dies of manual and powered hand crimping tools. Tape-fed versions are the same terminals mounted on belts of mylar tape for automatic feeding into air- or electric-powered bench crimping presses. You can crimp at rates up to 3600 finished terminations per hour with tape-feds. The press operator's hands are left free to do nothing but feed wires into terminal barrels. Tape-fed receptacles are ideal for applications where there are too many terminals for hand tool crimping and too few for strip press crimping. All loose piece and tape-fed terminals have a fully Tin-plated Brass construction with closed electrical barrels. Tape-fed terminals are supplied 1500 per reel with some exceptions (contact our Customer Service Department). You can find complete data on the powered and manual crimping application tools in the last pages of this catalog. Remember to write for evaluation samples and specification drawings for your standards engineers. Samples, drawings and tooling demonstrations come to you completely free.



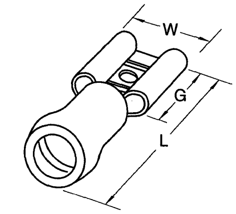


Tab Size	Wire Range AWG (mm²)	Dimension Max. Width W	Grip G	Krimptite® Butted Seam Order No.	Max. Length L	Insulkrimp® PVC Insulated Order No.	Max. Wire Insulation Dia.	Max. Length L
6.30 by 0.80 (.250 by .032)	18-22 (0.30-1.40)	7.60 (.301)	7.90 (.310)	AA-1140	16.70 (.658)	AA-2140	3.40 (.135)	22.00 (.865)
	14-16 (1.30-2.30)	7.60 (.301)	7.90 (.310)	BB-1141	16.70 (.658)	BB-2141	3.70 (.145)	22.00 (.865)
	12-14 (1.90-3.60)	7.60 (.301)	7.90 (.310)	P-1142	16.70 (.658)	P-2142	4.40 (.175)	22.00 (.865)
	10-12 (3.00-6.00)	7.70 (.305)	7.90 (.310)	C-1143	17.80 (.700)	C-2143	6.40 (.250)	25.70 (1.011)
4.70 by 0.80 (.187 by .032)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	M-1136-032	13.90 (.550)			
	18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)	AA-1137-032	14.60 (.573)	AA-2137-032	3.40 (.135)	20.00 (.789)
	14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)	BB-1138-032	14.60 (.573)	BB-2138-032	3.70 (.145)	20.00 (.789)
	12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)	P-1139-032	14.60 (.573)	P-2139-032	4.40 (.175)	20.00 (.789)
4.70 by 0.50 (.187 by .020)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	M-1136	13.90 (.550)			
	18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)	AA-1137	14.60 (.573)	AA-2137	3.40 (.135)	20.00 (.789)
	14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)	BB-1138	14.60 (.573)	BB-2138	3.70 (.145)	20.00 (.789)
	12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)	P-1139	14.60 (.573)	P-2139	4.40 (.175)	20.00 (.789)
5.20 by 0.80 (.205 by .032)	18-22 (0.30-1.40)	6.40 (.251)	6.30 (.250)	AA-1190-032	14.60 (.573)	AA-2190-032	3.40 (.135)	20.00 (.789)
	14-16 (1.30-2.30)	6.40 (.251)	6.30 (.250)	BB-1191-032	14.60 (.573)	BB-2191-032	3.70 (.145)	20.00 (.789)
5.20 by 0.50 (.205 by .020)	18-22 (0.30-1.40)	6.40 (.251)	6.30 (.250)	AA-1190	14.60 (.573)	AA-2190	3.40 (.135)	20.00 (.789)
	14-16 (1.30-2.30)	6.40 (.251)	6.30 (.250)	BB-1191	14.60 (.573)	BB-2191	3.70 (.145)	20.00 (.789)
2.80 by 0.80 (.110 by .032)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)	M-1133	13.50 (.535)			
	18-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AA-1134	14.60 (.573)	AA-2134	3.40 (.135)	20.00 (.789)
	14-16 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BB-1135	14.60 (.573)	BB-2135	3.70 (.145)	20.00 (.789)
2.80 by 0.50 (.110 by .020)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)		13.50 (.535)			
	18-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AA-1131	14.60 (.573)	AA-2131	3.40 (.135)	20.00 (.789)
	14-16 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BB-1132	14.60 (.573)	BB-2132	3.70 (.147)	20.00 (.789)

Molex-ETC™ Tape-Fed and Loose Piece Quick Disconnects



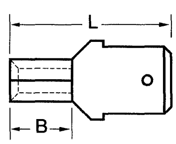
Vibrakrimp® Butted Seam With Vibration Support



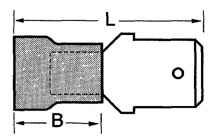
Avikrimp® Nylon Insulated With Vibration Support

Tab Size	Wire Range AWG (mm²)	Dimension Max. Width W	Dimension Grip G	Vibrakrimp® Butted Seam With Vibration Support Order No.	Max. Wire Insulation Dia.	Max. Length L	Avikrimp® Nylon Insulated With Vibration Support Order No.	Max. Wire Insulation Dia.	Max. Length L
6.30 by 0.80 (.250 by .032)	18-22 (0.30-1.40)	7.60 (.301)	7.90 (.310)	AA-4176	1.50/3.20 (.060/.125)	20.40 (.802)	AA-8140	2.90 (.115)	22.00 (.865)
	14-16 (1.30-2.30)	7.60 (.301)	7.90 (.310)	BB-4177	2.10/3.70 (.085/.145)	20.40 (.802)	BB-8141	3.50 (.138)	22.00 (.865)
	12-14 (1.90-3.60)	7.60 (.301)	7.90 (.310)	P-4178	2.50/4.40 (.100/.175)	20.40 (.802)	P-8142	4.30 (.170)	22.00 (.865)
	10-12 (3.00-6.00)	7.70 (.305)	7.90 (.310)				C-8143	5.70 (.225)	25.70 (1.011)
4.70 by 0.80 (.187 by .032)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)		1.00/2.40 (.040/.095)	17.50 (.690)	M-8136-032	1.80 (.072)	17.60 (.694)
	18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)	AA-4173-032	1.50/3.20 (.060/.125)	18.20 (.717)	AA-8137-032	2.90 (.115)	20.00 (.789)
	14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)		2.20/3.70 (.085/.145)	18.20 (.717)	BB-8138-032	3.50 (.138)	20.00 (.789)
	12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)	P-4175-032	2.50/4.40 (.100/.175)	18.20 (.717)	P-8139-032	4.30 (.170)	20.00 (.789)
4.70 by 0.50 (.187 by .020)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	M-4172	1.02/2.40 (.040/.095)	17.50 (.690)	M-8136	1.80 (.072)	17.60 (.694)
	18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)	AA-4173	1.50/3.20 (.060/.125)	18.20 (.717)	AA-8137	2.90 (.115)	20.00 (.789)
	14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)	BB-4174	2.20/3.70 (.085/.145)	18.20 (.717)	BB-8138	3.50 (.138)	20.00 (.789)
	12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)		2.50/4.40 (.100/.175)	18.20 (.717)	P-8139	4.30 (.170)	20.00 (.789)
5.20 by 0.80 (.205 by .032)	18-22 (0.30-1.40)	6.40 (.251)	6.30 (.250)				AA-8190-032	2.90 (.115)	20.00 (.789)
	14-16 (1.30-2.30)	6.40 (.251)	6.30 (.250)				BB-8191-032	3.50 (.138)	20.00 (.789)
5.20 by 0.50 (.205 by .020)	18-22 (0.30-1.40)	6.40 (.251)	6.30 (.250)				AA-8190	2.90 (.115)	20.00 (.789)
	14-16 (1.30-2.30)	6.40 (.251)	6.30 (.250)				BB-8191	3.50 (.138)	20.00 (.789)
2.80 by 0.80 (.110 by .032)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)	M-4179-032	1.00/2.40 (.040/.095)	17.50 (.690)		1.80 (.072)	17.60 (.694)
	18-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AA-4180-032	1.50/3.20 (.060/.125)	18.20 (.717)	AA-8134	2.90 (.115)	20.00 (.789)
	14-16 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BB-4181-032	2.20/3.70 (.085/.145)	18.20 (.717)	BB-8135	3.50 (.138)	20.00 (.789)
2.80 by 0.50 (.110 by .020)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)		1.00/2.40 (.040/.095)	17.50 (.690)	M-8130	1.80 (.072)	17.60 (.694)
	18-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AA-4180	1.50/3.20 (.060/.125)	18.20 (.717)	AA-8131	2.90 (.115)	20.00 (.789)
	14-16 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BB-4181	2.20/3.70 (.085/.145)	18.20 (.717)	BB-8132	3.50 (.138)	20.00 (.789)

MALE QUICK DISCONNECTS

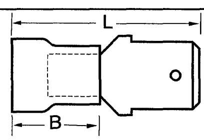


Krimptite®
Economical, No Vibration Support

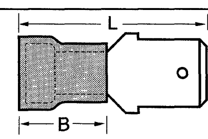


Insulkrimp®
PVC Insulated with Funnel Entry

Tab Size	Wire Range AWG (mm²)	Krimptite® Order No.	Max. Wire Insulation Dia.	Max. Length L	Barrel B	Insulkrimp® Order No.	Max. Wire Insulation Dia.	Max. Length L	Barrel B
.250 by .032	18-22 (0.30-1.40)	AMCT-1		18.00 (.710)	6.50 (.254)	AMCT-2X	3.70 (.145)	23.20 (.915)	11.40 (.450)
	14-16 (1.30-2.30)	MCT-1		18.40 (.725)	6.50 (.254)	MCT-2X	4.40 (.175)	23.20 (.915)	11.40 (.450)
	10-12 (3.00-6.00)	CMCT-1		19.60 (.770)	6.50 (.254)	CMCT-2X	6.40 (.250)	26.80 (.106)	13.80 (.545)
.187 by .020	18-22 (0.30-1.40)	AMCT-17		16.00 (.630)	6.50 (.254)	AMCT-27X	3.70 (.145)	20.80 (.820)	11.40 (.450)
	14-16 (1.30-2.30)	MCT-17		16.00 (.630)	6.50 (.254)	MCT-27X	4.40 (.175)	20.80 (.820)	11.40 (.450)



Vibrakrimp
Brass Sleeve with Funnel Ferrule Wire Entry Vibration Supprt



Avikrimp
Nylon Insulated with Vibration Support, Funnel Ferrule Wire Entry

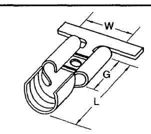
Tab Size	Wire Range AWG (mm²)	Vibrakrimp Order No.	Max. Wire Insulation Dia.	Max. Length L	Barrel B	Avikrimp Order No.	Max. Wire Insulation Dia.	Max. Length L	Barrel B
.250 by .032	18-22 (0.30-1.40)	AMCT-4	3.60 (.140)	21.90 (.863)	10.20 (.402)	AMCT-5	6.30 (.140)	23.00 (.904)	11.10 (.438)
	14-16 (1.30-2.30)	MCT-4	4.30 (.170)	22.30 (.878)	10.20 (.402)	MCT-5	4.30 (.170)	23.30 (.919)	11.10 (.438)
	10-12 (3.00-6.00)	CMCT-4	5.80 (.230)	25.90 (1.021)	14.00 (.550)	CMCT-5	5.70 (.225)	26.90 (1.061)	13.60 (.535)
.187 by .020	18-22 (0.30-1.40)	AMCT-47	3.60 (.140)	21.90 (.863)	10.20 (.402)	AMCT-57	6.30 (.140)	23.00 (.904)	11.10 (.438)
	14-16 (1.30-2.30)	MCT-47	4.30 (.170)	22.30 (.878)	10.20 (.402)	MCT-57	4.30 (.170)	23.30 (.919)	11.10 (.438)

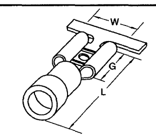
Molex-ETC™ Metal Strip Quick Disconnects

Strip Female Quick Disconnect terminals can boost your production rates to as high as 5000 finished terminations per hour. Their "T"-shape carrier, linking each terminal, automatically delivers them into crimping press dies. All your operator does is feed in wires and pull out crimped terminations. Added speed is afforded by the larger target area of the open barrels on noninsulated Krimptites®.

Number of terminals per reel varies from 4000 to 10,000 depending on terminal size. Reel capacities are given in the Price List. Strip product can be crimped in Molex-ETC Presses and Mini-Mac Applicators. This product runs in the Molex 3BF and TM-40 Presses. Combine this usage with your Molex pin and socket requirements.

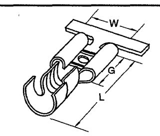
Material: Brass

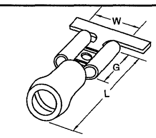




Tab Size	Wire Range AWG (mm²)		Common Dimensions		Krimptite® Open Barrel			Insulkrimp® PVC Insulated		
					Order No.		Max. Length L	Tin-Plated Brass Order No.	Max. Wire Insulation Dia.	Max. Length L
	Krimptite Vibrakrimp®	Insulkrimp Avikrimp®	Max. Width W	Grip G	Brass	Tin-Plated				
6.30 by 0.80 (.250 by .032)		18-22 (0.30-1.40)	7.60 (.301)	7.90 (.310)				AAZ-2140	3.40 (.135)	22.00 (.865)
	16-22 (0.30-1.50)		7.60 (.301)	7.90 (.310)	AAZ-0163	AAZ-1163	16.70 (.658)			
	12-18 (0.80-3.60)		7.60 (.301)	7.90 (.310)	BBZ-0164	BBZ-1164	16.70 (.658)			
		14-16 (1.30-2.30)	7.60 (.301)	7.90 (.310)				BBZ-2141	3.70 (.145)	22.00 (.865)
		12-14 (1.90-3.60)	7.60 (.301)	7.90 (.310)				PZ-2142	4.40 (.175)	22.00 (.865)
4.70 by 0.80 (.187 by .032)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	MZ-0182-032	MZ-1182-032	13.90 (.550)			
		18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)				AAZ-2137-032	3.40 (.135)	20.00 (.789)
	16-22 (0.30-1.50)		6.00 (.238)	6.30 (.250)	AAZ-0160-032	AAZ-1160-032	14.60 (.573)			
	12-18 (0.80-3.60)		6.00 (.238)	6.30 (.250)	BBZ-0161-032	BBZ-1161-032	14.60 (.573)			
		14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)				BBZ-2138-032	3.70 (.145)	20.00 (.789)
		12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)				PZ-2139-032	4.40 (.175)	20.00 (.789)
4.70 by 0.50 (.187 by .020)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	MZ-0182	MZ-1182	13.90 (.550)			
		18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)				AAZ-2137	3.40 (.135)	20.00 (.789)
	16-22 (0.30-1.50)		6.00 (.238)	6.30 (.250)	AAZ-0160	AAZ-1160	14.60 (.573)			
	12-18 (0.80-3.60)		6.00 (.238)	6.30 (.250)	BBZ-0161	BBZ-1161	14.60 (.573)			
		14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)				BBZ-2138	3.70 (.145)	20.00 (.789)
		12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)				PZ-2139	4.40 (.175)	20.00 (.789)
5.20 by 0.80 (.205 by .032)	16-22 (0.30-1.50)		6.30 (.250)	6.30 (.250)						
	12-18 (0.80-3.60)		6.30 (.250)	6.30 (.250)						
5.20 by 0.50 (.205 by .020)	16-22 (0.30-1.50)		6.30 (.250)	6.30 (.250)						
	12-18 (0.80-3.60)		6.30 (.250)	6.30 (.250)						
2.80 by 0.80 (.110 by .032)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)	MZ-0183-032	MZ-1183-032	13.50 (.535)			
		18-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AAZ-0184-032	AAZ-1184-032	14.60 (.573)	AAZ-2134	3.40 (.135)	20.00 (.789)
		14-16 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BBZ-0185-032	BBZ-1185-032	14.60 (.573)	BBZ-2135	3.70 (.145)	20.00 (.789)
2.80 by 0.50 (.110 by .020)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)	MZ-0183	MZ-1183	13.50 (.535)			
		18-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AAZ-0184	AAZ-1184	14.60 (.573)	AAZ-2131	3.40 (.135)	20.00 (.789)
		14-16 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BBZ-0185	BBZ-1185	14.60 (.573)	BBZ-2132	3.70 (.145)	20.00 (.789)

Material: Brass

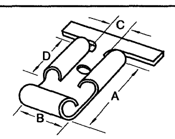


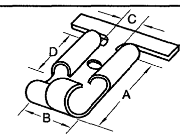


Tab Size	Wire Range AWG (mm²)		Common Dimensions		Vibrakrimp® Open Barrel with Vibration Support				Avikrimp® Nylon Insulated with Vibration Support		
	Krimptite® Vibrakrimp	Insulkrimp® Avikrimp	Max. Width W	Grip G	Order No. Brass	Order No. Tin-Plated	Max. Wire Insulation Dia.	Max. Length L	Tin-Plated Brass Order No.	Max. Wire Insulation Dia.	Max. Length L
6.30 by 0.80 (.250 by .032)		18-22 (0.30-1.40)	7.60 (.301)	7.90 (.310)					AAZ-8140	2.90 (.115)	22.00 (.865)
	16-22 (0.30-1.50)		7.60 (.301)	7.90 (.310)	AAZ-0153	AAZ-4153	3.70 (.145)	20.40 (.802)			
	12-18 (0.80-3.60)		7.60 (.301)	7.90 (.310)	BBZ-0154	BBZ-4154	4.60 (.180)	20.40 (.802)			
		14-16 (1.30-2.30)	7.60 (.301)	7.90 (.310)					BBZ-8141	3.50 (.138)	22.00 (.865)
		12-14 (1.90-3.60)	7.60 (.301)	7.90 (.310)					PZ-8142	4.30 (.170)	22.00 (.865)
4.70 by 0.80 (.187 by .032)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	MZ-0149-032	MZ-4149-032	2.40 (.095)	17.50 (.690)	MZ-8136-032	1.80 (.072)	17.60 (.694)
		18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)					AAZ-8137-032	2.90 (.115)	20.00 (.789)
	16-22 (0.30-1.50)		6.00 (.238)	6.30 (.250)	AAZ-0150-032	AAZ-4150-032	3.70 (.145)	18.20 (.717)			
	12-18 (0.80-3.60)		6.00 (.238)	6.30 (.250)	BBZ-0151-032	BBZ-4151-032	4.60 (.180)	18.20 (.717)			
		14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)					BBZ-8138-032	3.50 (.138)	20.00 (.789)
		12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)					PZ-8139-032	4.30 (.170)	20.00 (.789)
4.70 by 0.50 (.187 by .020)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	6.00 (.238)	6.30 (.250)	MZ-0149	MZ-4149	2.40 (.095)	17.50 (.690)	MZ-8136	1.80 (.072)	17.60 (.694)
		18-22 (0.30-1.40)	6.00 (.238)	6.30 (.250)					AAZ-8137	2.90 (.115)	20.00 (.789)
	16-22 (0.30-1.50)		6.00 (.238)	6.30 (.250)	AAZ-0150	AAZ-4150	3.70 (.145)	18.20 (.717)			
	12-18 (0.80-3.60)		6.00 (.238)	6.30 (.250)	BBZ-0151	BBZ-4151	4.60 (.180)	18.20 (.717)			
		14-16 (1.30-2.30)	6.00 (.238)	6.30 (.250)					BBZ-8138	3.60 (.142)	20.00 (.789)
		12-14 (1.90-3.60)	6.00 (.238)	6.30 (.250)					PZ-8139	4.30 (.170)	20.00 (.789)
5.20 by 0.80 (.205 by .032)	16-22 (0.30-1.50)		6.30 (.250)	6.30 (.250)	AAZ-0198-032	AAZ-4198-032	3.70 (.145)	18.20 (.717)			
	12-18 (0.80-3.60)		6.30 (.250)	6.30 (.250)	BBZ-0199-032	BBZ-4199-032	4.60 (.180)	18.20 (.717)			
5.20 by 0.50 (.205 by .020)	16-22 (0.30-1.50)		6.30 (.250)	6.30 (.250)	AAZ-0198	AAZ-4198	3.70 (.145)	18.20 (.717)			
	12-18 (0.80-3.60)		6.30 (.250)	6.30 (.250)	BBZ-0199	BBZ-4199	4.60 (.180)	18.20 (.717)			
2.80 by 0.80 (.110 by .032)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)	MZ-0186-032	MZ-4186-032	2.40 (.095)	17.50 (.690)	MZ-8133	1.80 (.072)	17.60 (.694)
		16-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AAZ-0187-032	AAZ-4187-032	3.20 (.125)	18.20 (.717)	AAZ-8134	2.90 (.115)	20.00 (.789)
		12-18 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BBZ-0188-032	BBZ-4188-032	3.70 (.145)	18.20 (.717)	BBZ-8135	3.50 (.138)	20.00 (.789)
2.80 by 0.50 (.110 by .020)	24-26 (0.10-0.40)	24-26 (0.10-0.28)	4.10 (.163)	6.30 (.250)	MZ-0186	MZ-4186	2.40 (.095)	17.50 (.690)	MZ-8130	1.80 (.072)	17.60 (.694)
		16-22 (0.30-1.40)	4.10 (.163)	6.30 (.250)	AAZ-0187	AAZ-4187	3.20 (.125)	18.20 (.717)	AAZ-8131	2.90 (.115)	20.00 (.789)
		12-18 (1.30-2.30)	4.10 (.163)	6.30 (.250)	BBZ-0188	BBZ-4188	3.70 (.145)	18.20 (.717)	BBZ-8132	3.50 (.138)	20.00 (.789)

FLAG QUICK DISCONNECTS

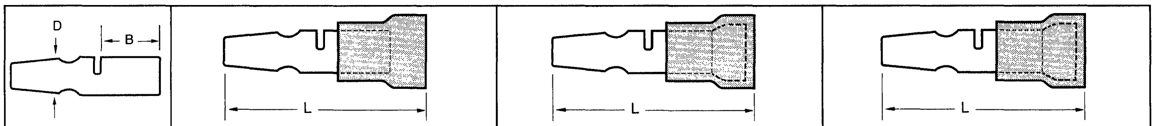
Material: Brass





Tab Size	Wire Range AWG (mm²)	Krimptite (Uninsulated) Order No.	A Max.	B Max.	C Ref.	D	Vibrakrimp (with Wire Grip) Order No.	A Max.	B Max.	C Ref.	D	Max. Wire Insul. Dia.
6.30 by 0.80 (.250 by .032)	18-22 (0.30-1.40)	AAZ-1158	14.30 (.562)	8.10 (.321)	2.00 (.079)	7.70 (.305)	AAZ-4168	15.10 (.594)	9.80 (.385)	2.00 (.079)	7.70 (.305)	3.40 (.135)
4.70 by 0.80 (.187 by .032)	18-22 (0.30-1.40)	AAZ-1147-032	14.30 (.562)	8.10 (.321)	2.00 (.079)	7.70 (.305)	AAZ-4170-032	15.10 (.594)	9.80 (.385)	2.00 (.079)	7.70 (.305)	3.70 (.145)
4.70 by 0.50 (.187 by .020)	18-22 (0.30-1.40)	AAZ-1147	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)	AAZ-4170	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.40 (.135)
6.30 by 0.80 (.250 by .032)	14-16 (1.30-2.50)	BBZ-1159	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)	BBZ-4169	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.70 (.145)
4.70 by 0.80 (.187 by .032)	14-16 (1.30-2.50)	BBZ-1148-032	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)	BBZ-4171-032	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.40 (.135)
4.70 by 0.50 (.187 by .020)	14-16 (1.30-2.50)	BBZ-1148	14.30 (.562)	8.10 (.321)	1.00 (.040)	6.30 (.250)	BBZ-4171	15.10 (.594)	9.80 (.385)	1.00 (.040)	6.30 (.250)	3.70 (.145)

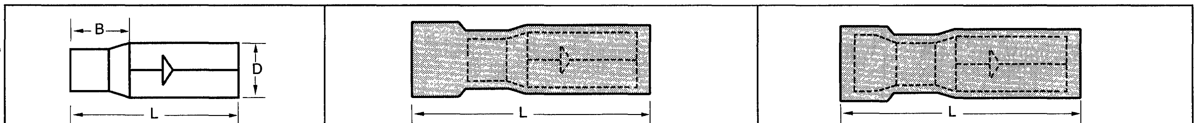
SNAP PLUGS



Material: Copper Thickness: 0.80mm (.032") max.			Krimptite®		Insulkrimp® (PVC Insulation)			Avikrimp® (Nylon Insulation)			Avikrimp (Nylon Insulation)		
	Dimension				Order No.			Order No.			Order No.		
Wire Range AWG	Barrel Length B	Diameter D	Order No.	Length L (in.)	3.60 (.140) Max. Wire Insul. Dia.	4.40 (.175) Max. Wire Insul. Dia.	Max. Length L	3.60 (.140) Max. Wire Insul. Dia.	4.30 (.170) Max. Wire Insul. Dia.	Max. Length L	3.60 (.140) Max. Wire Insul. Dia.	4.30 (.170) Max. Wire Insul. Dia.	Max. Length L
18-22	.254	.180		.754	A-259X		24.10 (.950)	A-559		24.10 (.948)	A-859		24.30 (.957)
18-22	.254	.156		.694	A-269X		22.60 (.890)	A-569		22.60 (.888)	A-869		22.80 (.897)
14-16	.254	.180	B-179	.754		B-279X	24.10 (.950)		B-579	24.10 (.948)		B-879	24.30 (.957)
14-16	.254	.156	B-189	.694		B-289X	22.60 (.890)		B-589	22.60 (.888)		B-889	22.80 (.897)

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

SNAP PLUG RECEPTACLES



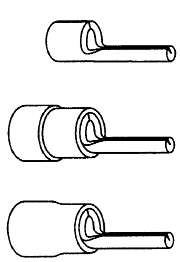
Material: Brass		Krimptite			Insulkrimp (PVC Insulation)				Avikrimp (PVC Insulation)			
Wire Range AWG	Snap Plug Dia.	Order No.	Barrel Length B	Max. Length L	Order No.	Barrel Length B	Max. Wire Insulation Dia.	Max. Length L	Order No.	Barrel Length B	Max. Wire Insulation Dia.	Max. Length L
18-22	3.90 (.156)	AA-1121	5.10 (.200)	16.20 (.640)	BRA-2156	10.60 (.420)	3.50 (.140)	25.60 (1.010)	BRA-8156	10.60 (.420)	3.20 (.125)	25.60 (1.010)
14-16	3.90 (.156)	BB-1122	5.10 (.200)	16.20 (.640)	BRB-2156	10.60 (.420)	4.30 (.170)	25.60 (1.010)	BRB-8156	10.60 (.420)	3.80 (.150)	25.60 (1.010)
18-22	4.60 (.180)	AA-1120	5.10 (.200)	17.80 (.700)	BRA-2180	10.60 (.420)	3.50 (.140)	25.60 (1.010)	BRA-8180	10.60 (.420)	3.20 (.125)	25.60 (1.010)
14-16	4.60 (.180)	BB-1123	5.10 (.200)	17.80 (.700)	BRB-2180	10.60 (.420)	4.30 (.170)	25.60 (1.010)	BRB-8180	10.60 (.420)	3.80 (.150)	25.60 (1.010)

Note: For nylon-insulated part, add "N" to the end of the loose piece order no. For terminals on mylar tape, add "T" at the end of loose piece order no.

WIRE PIN TERMINALS

Wire Pin Terminals offer quick and easy connections in applications where set screws or clamps are used to make electrical contact with the wire. Wire Pins simplify the insertion of stranded wire into European style terminal blocks and other components, by preventing wire strand foldback, assuring a proper electrical contact and a stronger connection than just wire alone.

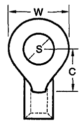
- Fits all popular pin-type (European) terminal blocks
- Available in wire sizes 10 to 22 AWG noninsulated, PVC insulated and nylon insulated
- Provides a reliable, vibration-proof connection
- Allows for quick wire connects and disconnects from components
- Can be used/clamped repeatedly without damaging the pin
- Made of pure electrolytic Copper
- Electro Tin plated per Mil-T-10727
- Conveniently allows for multiple wires to be inserted into 1 terminal block contact



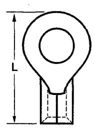
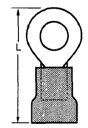
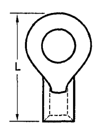
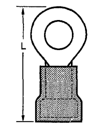
Wire Range AWG	Molex-ETC Order No.	Insulation Color	Max. Insul. Dia. (in.)	Overall Length (in.)	Pin Length (in.)	Pin Dia. (in.)
Krimptite						
18-22	WP-1218			.670	.370	.080
14-16	WP-1614			.670	.370	.080
10-12	WP-1210			.820	.460	.120
Insulkrimp						
18-22	WP-2218X	Red	.145	.890	.370	.080
14-16	WP-2614X	Blue	.175	.890	.370	.080
10-12	WP-2210X	Yellow	.250	1.140	.460	.120
Avikrimp						
18-22	WP-8218	Red	.140	.860	.370	.080
14-16	WP-8614	Blue	.170	.930	.370	.080
10-12	WP-8210	Yellow	.225	1.130	.460	.120

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

Molex-ETC™ Ring Tongue Terminals



Material: Copper

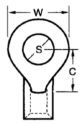





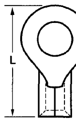
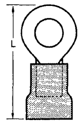
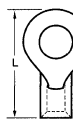
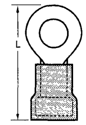
Wire Range AWG	Stud Size S	Max. Width W	Min. Clearance C	Krimptite® Order No.	Krimptite® Max. Length L	Insulkrimp® (PVC Insulation) Order No.	Insulkrimp® Max. Length L	Versakrimp® Order No.	Versakrimp® Max. Length L	Avikrimp® (Nylon Insulation) Order No.	Avikrimp® Max. Length L
24-26 (0.10-0.28)	0 (1.5)	3.80 (.150)	3.10 (.121)	M-1122-00	9.30 (.366)						13.60 (.536)
	2 (2)	3.80 (.150)	3.10 (.121)	M-1122-02	9.30 (.366)					M-8122-02	13.60 (.536)
		5.40 (.213)	5.50 (.215)	M-1113-02	12.50 (.492)						16.80 (.662)
		3.80 (.150)	5.50 (.215)	M-1114-02	11.70 (.460)					M-8114-02	16.00 (.630)
	4 (2.6)	5.40 (.213)	5.50 (.215)	M-1113-04	12.50 (.492)					M-8113-04	16.80 (.662)
	6 (3.5)	5.40 (.213)	5.50 (.215)	M-1113-06	12.50 (.492)					M-8113-06	16.80 (.662)
		6.60 (.260)	7.40 (.290)	M-1118-06	15.00 (.590)					M-8118-06	19.30 (.760)
	8 (4)	6.60 (.260)	7.40 (.290)	M-1118-08	15.00 (.590)					M-8118-08	19.30 (.760)
	10 (-)	6.60 (.260)	7.40 (.290)	M-1118-10	15.00 (.590)						19.30 (.760)
18-22 (0.30-1.00)	1-2 (2)	5.00 (.197)	4.40 (.173)		12.40 (.490)		18.20 (.715)		12.40 (.490)		18.20 (.715)
		6.00 (.235)	3.90 (.157)	AA-120-02	12.30 (.484)	AA-220-02X	18.00 (.709)		12.30 (.484)	AA-820-02	18.00 (.709)
	3-4 (2.6)	5.00 (.197)	4.40 (.173)	AA-1111-04	12.40 (.490)		18.20 (.715)		12.40 (.490)	AA-8111-04	18.20 (.715)
		6.00 (.235)	3.90 (.157)	AA-120-04	12.30 (.484)	AA-220-04X	18.00 (.709)	AA-320-04	12.30 (.484)	AA-820-04	18.00 (.709)
		6.70 (.264)	6.10 (.240)	AA-132-04	14.80 (.582)	AA-232-04X	20.50 (.807)		14.80 (.582)	AA-832-04	20.50 (.807)
	5-6 (3-3.5)	6.00 (.235)	3.90 (.157)	AA-120-06	12.30 (.484)	AA-220-06X	18.00 (.709)	AA-320-06	12.30 (.484)	AA-820-06	18.00 (.709)
		6.70 (.264)	6.10 (.240)	AA-132-06	14.80 (.582)	AA-232-06X	20.50 (.807)	AA-332-06	14.80 (.582)	AA-832-06	20.50 (.807)
		8.20 (.322)	7.60 (.300)	AA-121-06	17.00 (.671)	AA-221-06X	22.80 (.896)	AA-321-06	17.00 (.671)	AA-821-06	22.80 (.896)
	8 (4)	6.70 (.264)	6.10 (.240)	AA-132-08	14.80 (.582)	AA-232-08X	20.50 (.807)	AA-332-08	14.80 (.582)	AA-832-08	20.50 (.807)
		8.20 (.322)	7.60 (.300)	AA-121-08	17.00 (.671)	AA-221-08X	22.80 (.896)	AA-321-08	17.00 (.671)	AA-821-08	22.80 (.896)
	10 (-)	7.20 (.283)	6.10 (.240)	AA-133-10	15.00 (.591)	AA-233-10X	20.70 (.816)	AA-333-10	15.00 (.591)	AA-833-10	20.70 (.816)
		8.20 (.322)	7.60 (.300)	AA-121-10	17.00 (.671)	AA-221-10X	22.80 (.896)	AA-321-10	17.00 (.671)	AA-821-10	22.80 (.896)
		12.10 (.477)	9.80 (.386)		21.20 (.835)	AA-222-10X	26.90 (1.060)		21.20 (.835)		26.90 (1.060)
	1/4 (6)	12.10 (.477)	9.80 (.386)	AA-122-14	21.20 (.835)	AA-222-14X	26.90 (1.060)	AA-322-14	21.20 (.835)	AA-822-14	26.90 (1.060)
	5/16 (8)	12.10 (.477)	9.80 (.386)	AA-122-56	21.20 (.835)	AA-222-56X	26.90 (1.060)	AA-322-56	21.20 (.835)	AA-822-56	26.90 (1.060)
	3/8 (9)	13.80 (.544)	14.00 (.552)	AA-126-38	26.30 (1.034)	AA-226-38X	31.90 (1.259)		26.30 (1.034)	AA-826-38	31.90 (1.259)
14-16 (1.30-2.30)	1-2 (2)	6.60 (.260)	5.30 (.209)		14.20 (.560)	BB-223-02X	19.90 (.785)	BB-323-02	14.20 (.560)		20.30 (.800)
	3-4 (2.6)	6.00 (.260)	5.30 (.209)	BB-123-04	14.20 (.560)	BB-223-04X	19.90 (.785)		14.20 (.560)	BB-823-04	20.30 (.800)
		8.20 (.322)	6.10 (.275)		16.30 (.640)		22.00 (.865)		16.30 (.640)		22.30 (.880)
	5-6 (3-3.5)	6.60 (.260)	5.30 (.209)	BB-123-06	14.20 (.560)	BB-223-06X	19.90 (.785)		14.20 (.560)	BB-823-06	22.30 (.880)
		8.20 (.322)	6.10 (.275)	BB-137-06	16.30 (.640)	BB-237-06X	22.00 (.865)	BB-337-06	16.30 (.640)	BB-837-06	22.30 (.880)
		8.90 (.352)	7.90 (.310)		17.70 (.696)		23.40 (.921)		17.70 (.696)		23.80 (.936)
	8 (4)	6.60 (.260)	5.30 (.209)	BB-123-08	14.20 (.560)	BB-223-08X	19.90 (.785)		14.20 (.560)	BB-823-08	22.30 (.800)
		8.20 (.322)	6.10 (.275)	BB-137-08	16.30 (.640)	BB-237-08X	22.00 (.865)	BB-337-08	16.30 (.640)	BB-837-08	22.30 (.880)
		8.90 (.352)	7.90 (.310)	BB-139-08	17.70 (.696)	BB-239-08X	23.40 (.921)	BB-339-08	17.70 (.696)	BB-839-08	23.80 (.936)
	10 (-)	8.20 (.322)	6.10 (.275)	BB-137-10	16.30 (.640)	BB-237-10X	22.00 (.865)	BB-337-10	16.30 (.640)	BB-837-10	22.30 (.880)
		8.90 (.352)	7.90 (.310)	BB-139-10	17.70 (.696)	BB-239-10X	23.40 (.921)	BB-339-10	17.70 (.696)	BB-839-10	23.80 (.936)
		12.10 (.477)	9.90 (.388)	BB-125-10	21.20 (.837)	BB-225-10X	26.10 (1.062)		21.20 (.837)	BB-825-10	27.40 (1.077)
	1/4 (6)	12.10 (.477)	9.90 (.388)	BB-125-14	21.20 (.837)	BB-225-14X	26.10 (1.062)	BB-325-14	21.20 (.837)	BB-825-14	27.40 (1.077)
	1/4 (6)	13.80 (.544)	13.60 (.535)		25.70 (1.010)		31.40 (1.235)		25.70 (1.010)		31.80 (1.250)
	5/16 (8)	12.10 (.477)	9.90 (.388)	BB-125-56	21.20 (.837)	BB-225-56X	26.10 (1.062)	BB-325-56	21.20 (.837)	BB-825-56	27.40 (1.077)
		13.80 (.544)	13.60 (.535)	BB-118-56	25.70 (1.010)	BB-218-56X	31.40 (1.235)		25.70 (1.010)	BB-818-56	31.80 (1.250)
	3/8 (9)	13.80 (.544)	13.60 (.535)	BB-118-38	25.70 (1.010)	BB-218-38X	31.40 (1.235)	BB-318-38	25.70 (1.010)	BB-818-38	31.80 (1.250)
14-16 (1.30-3.60) Heavy Duty (Also suitable for 12 AWG)	3-4 (2.6)	9.80 (.385)	7.70 (.303)		19.90 (.785)		27.30 (1.076)				27.70 (1.091)
	5-6 (3-3.5)	9.80 (.385)	7.70 (.303)		19.90 (.785)	B-228-06HDX	27.30 (1.076)				27.70 (1.091)
	8 (4)	9.80 (.385)	7.70 (.303)		19.90 (.785)	B-228-08HDX	27.30 (1.076)			B-828-08HD	27.70 (1.091)
	10 (-)	9.80 (.385)	7.70 (.303)	B-128-10HD	19.90 (.785)	B-228-10HDX	27.30 (1.076)			B-828-10HD	27.70 (1.091)
		13.70 (.540)	10.00 (.393)		24.20 (.952)	B-230-10HDX	31.60 (1.243)			B-830-10HD	32.00 (1.258)
	1/4 (6)	13.70 (.540)	10.00 (.393)	B-130-14HD	24.20 (.952)	B-230-14HDX	31.60 (1.243)			B-830-14HD	32.00 (1.258)
		15.20 (.598)	11.80 (.466)		26.80 (1.056)		34.20 (1.347)				34.60 (1.362)
	5/16 (8)	13.70 (.540)	10.00 (.393)	B-130-56HD	24.20 (.952)	B-230-56HDX	31.60 (1.243)			B-830-56HD	32.00 (1.258)
		15.20 (.598)	11.80 (.466)	B-140-56HD	26.80 (1.056)		34.20 (1.347)				34.60 (1.362)
	3/8 (9)	15.20 (.598)	11.80 (.466)	B-140-38HD	26.80 (1.056)	B-240-38HDX	34.20 (1.347)			B-840-38HD	34.60 (1.362)
		19.30 (.760)	15.50 (.611)	B-101-38HD	32.50 (1.280)	B-201-38HDX	39.90 (1.571)				40.30 (1.586)
	7/16 (11)	19.30 (.760)	15.50 (.611)	B-101-76HD	32.50 (1.280)	B-201-76HDX	39.90 (1.571)			B-801-76HD	40.30 (1.586)
	1/2 (12)	19.30 (.760)	15.50 (.611)	B-101-12HD	32.50 (1.280)	B-201-12HDX	39.90 (1.571)			B-801-12HD	40.30 (1.586)

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

Molex-ETC™ Ring Tongue Terminals

LISTED



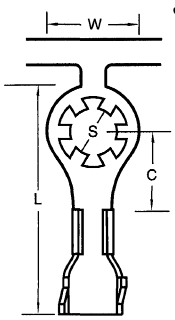





Material: Copper				Krimptite®		Insulkrimp® (PVC Insulation)		Versakrimp™		Avikrimp® (Nylon Insulation)	
Wire Range AWG (mm²)	Stud Size S	Maximum Width W	Minimum Clearance C	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L
10-12 (3.00-5.40)	3-4 (2.6)	9.80 (.385)	7.70 (.303)		19.90 (.785)		27.30 (1.076)		19.80 (.785)		27.70 (1.091)
	5-6 (3-3.5)	7.40 (.292)	7.80 (.306)	C-136-06	18.80 (.741)	C-236-06X	26.20 (1.032)	C-336-06	18.80 (.741)	C-836-06*	27.00 (1.047)
		9.80 (.385)	7.70 (.303)	C-128-06	19.90 (.785)	C-228-06X	27.30 (1.076)	C-328-06	19.90 (.785)	C-828-06*	27.70 (1.091)
	8 (4)	7.40 (.292)	7.80 (.306)	C-136-08	18.80 (.741)	C-236-08X	26.20 (1.032)	C-336-08	18.80 (.741)	C-836-08*	27.00 (1.047)
		9.80 (.385)	7.70 (.303)	C-128-08	19.90 (.785)	C-228-08X	27.30 (1.076)	C-328-08	19.90 (.785)	C-828-08*	27.70 (1.091)
	10 (-)	9.80 (.385)	7.70 (.303)	C-128-10	19.90 (.785)	C-228-10X	27.30 (1.076)	C-328-10	19.90 (.785)	C-828-10*	27.70 (1.091)
		13.70 (.540)	10.00 (.393)	C-130-10	24.20 (.952)	C-230-10X	31.60 (1.243)	C-330-10	24.20 (.952)	C-830-10*	32.00 (1.258)
		15.20 (.598)	14.40 (.566)		26.80 (1.056)	C-240-10X	34.20 (1.347)		26.80 (1.056)	C-840-10*	34.60 (1.362)
	1/4 (6)	13.70 (.540)	10.00 (.393)	C-130-14	24.20 (.952)	C-230-14X	31.60 (1.243)	C-330-14	24.20 (.952)	C-830-14*	32.00 (1.258)
		15.20 (.598)	14.40 (.566)	C-140-14	26.80 (1.056)	C-240-14X	34.20 (1.347)	C-340-14	26.80 (1.056)	C-840-14*	34.60 (1.362)
	5/16 (8)	13.70 (.540)	10.00 (.393)	C-130-56	24.20 (.952)	C-230-56X	31.60 (1.243)	C-330-56	24.20 (.952)	C-830-56*	32.00 (1.258)
		15.20 (.598)	14.40 (.566)	C-140-56	26.80 (1.056)	C-240-56X	34.20 (1.347)	C-340-56	26.80 (1.056)	C-840-56*	34.60 (1.362)
	3/8 (9)	15.20 (.598)	14.40 (.566)	C-140-38	26.80 (1.056)	C-240-38X	34.20 (1.347)	C-340-38	26.80 (1.056)	C-840-38*	34.60 (1.362)
		19.30 (.760)	15.50 (.611)		32.50 (1.280)	C-201-38X	39.90 (1.571)	C-301-38	32.50 (1.280)		40.30 (1.586)
	7/16 (11)	19.30 (.760)	15.50 (.611)		32.50 (1.280)	C-201-76X	39.90 (1.571)	C-301-76	32.50 (1.280)		40.30 (1.586)
	1/2 (12)	19.30 (.760)	15.50 (.611)	C-101-12	32.50 (1.280)	C-201-12X	39.90 (1.571)	C-301-12	32.50 (1.280)	C-801-12*	40.30 (1.586)

* For heavier wire insulation the maximum wire insulation diameter can be expanded to 6.50mm (.255") by adding "X" to the end of the order no.

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

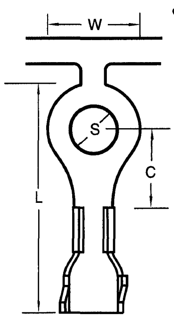
METAL STRIP OPEN BARREL STAR RINGS WITH VIBRATION SUPPORT



Material	Order No.	Wire Size AWG (mm²)	Stud Size S	Maximum Width W (in.)	Minimum Clearance C (in.)	Maximum Length L (in.)
Brass	SRZ-0129-06	14-18 (0.80-3.60)	6	.385	.275	.949
Brass	SRZ-0129-08	14-18 (0.80-3.60)	8	.385	.275	.949
Brass	SRZ-0129-10	14-18 (0.80-3.60)	10	.385	.275	.949
Tin-Plated Brass	SRZ-4129-06	14-18 (0.80-3.60)	6	.385	.275	.949
Tin-Plated Brass	SRZ-4129-08	14-18 (0.80-3.60)	8	.385	.275	.949
Tin-Plated Brass	SRZ-4129-10	14-18 (0.80-3.60)	10	.385	.275	.949
Tin-Plated Steel	SRZ-S-4129-06	14-18 (0.80-3.60)	6	.385	.275	.949
Tin-Plated Steel	SRZ-S-4129-08	14-18 (0.80-3.60)	8	.385	.275	.949
Tin-Plated Steel	SRZ-S-4129-10	14-18 (0.80-3.60)	10	.385	.275	.949
Tin-Plated Steel	SPL-0189	24 (0.10-0.28)	10	.480	.386	.965

Note: 14-18 part will accept 12 gauge wire

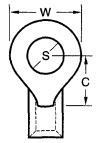
METAL STRIP OPEN BARREL RINGS WITH VIBRATION SUPPORT



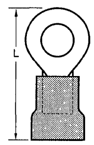
Material	Order No.	Wire Size AWG (mm²)	Stud Size S	Maximum Width W (in.)	Minimum Clearance C (in.)	Maximum Length L (in.)
Brass	RZ-0129-06	14-18 (0.80-3.60)	6	.385	.275	.949
Brass	RZ-0129-08	14-18 (0.80-3.60)	8	.385	.275	.949
Brass	RZ-0129-10	14-18 (0.80-3.60)	10	.385	.275	.949
Tin-Plated Brass	RZ-4129-06	14-18 (0.80-3.60)	6	.385	.275	.949
Tin-Plated Brass	RZ-4129-08	14-18 (0.80-3.60)	8	.385	.275	.949
Tin-Plated Brass	RZ-4129-10	14-18 (0.80-3.60)	10	.385	.275	.949
Tin-Plated Steel	RZ-S-4129-06	14-18 (0.80-3.60)	6	.385	.275	.949
Tin-Plated Steel	RZ-S-4129-08	14-18 (0.80-3.60)	8	.385	.275	.949
Tin-Plated Steel	RZ-S-4129-10	14-18 (0.80-3.60)	10	.385	.275	.949

Note: 14-18 part will accept 12 gauge wire

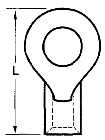
Molex-ETC™ Ring Tongue Terminals



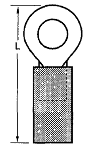
Material: Copper



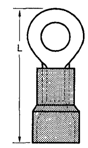
Insulkrimp® (PVC Insulation)



Versakrimp™



Nylakrimp® (Nylon Insulation)



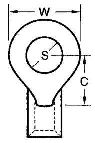
Funnel Entry Nylakrimp (Nylon Insulation)

				Insulkrimp® (PVC Insulation)		Versakrimp™		Nylakrimp® (Nylon Insulation)		Funnel Entry Nylakrimp (Nylon Insulation)	
Wire Range AWG	Stud Size S	Maximum Width W	Minimum Clearance C	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L
8	6 (3.5)	9.90 (.389)	9.40 (.368)	D-656-06X	31.80 (1.252)	D-356-06	23.80 (.937)	D-756-06	31.30 (1.232)	D-956-06	34.30 (1.352)
	8 (4)	12.30 (.483)	9.40 (.368)	D-650-08X	33.00 (1.299)	D-350-08	25.00 (.984)		32.50 (1.279)	D-950-08	35.50 (1.399)
		9.90 (.389)	9.40 (.368)	D-656-08X	31.80 (1.252)	D-356-08	23.80 (.937)	D-756-08	31.30 (1.232)	D-956-08	34.30 (1.352)
	10 (-)	12.30 (.483)	9.40 (.368)	D-650-10X	33.00 (1.299)	D-350-10	25.00 (.984)	D-750-10	32.50 (1.279)	D-950-10	35.50 (1.399)
		15.30 (.603)	11.00 (.433)	D-651-10X	36.10 (1.421)	D-351-10	28.10 (1.106)		35.60 (1.401)	D-951-10	38.60 (1.521)
		9.90 (.389)	9.40 (.368)	D-656-10X	31.80 (1.252)	D-356-10	23.80 (.937)	D-756-10	31.30 (1.232)	D-956-10	34.30 (1.352)
	1/4 (6)	12.30 (.483)	9.40 (.368)	D-650-14X	33.00 (1.299)	D-350-14	28.10 (.984)	D-750-14	32.50 (1.279)	D-950-14	35.50 (1.399)
		15.30 (.603)	11.00 (.433)	D-651-14X	36.10 (1.421)	D-351-14	28.10 (1.106)		35.60 (1.401)	D-951-14	38.60 (1.521)
		9.90 (.389)	9.30 (.368)	D-656-14X	31.80 (1.252)	D-356-14	23.80 (.937)	D-756-14	31.30 (1.232)	D-956-14	34.30 (1.352)
	5/16 (8)	12.30 (.483)	9.40 (.368)	D-650-56X	33.00 (1.299)	D-350-56	25.00 (.984)	D-750-56	32.50 (1.279)	D-950-56	35.50 (1.399)
		15.30 (.603)	11.00 (.433)	D-651-56X	36.10 (1.421)	D-351-56	28.10 (1.106)	D-751-56	35.60 (1.401)	D-951-56	38.60 (1.521)
	3/8 (9)	15.30 (.603)	11.00 (.433)	D-651-38X	36.10 (1.421)	D-351-38	28.10 (1.106)	D-751-38	35.60 (1.401)	D-951-38	38.60 (1.521)
		21.00 (.825)	15.60 (.616)	D-652-38X	42.60 (1.718)	D-352-38	35.60 (1.403)	D-752-38	43.10 (1.698)	D-952-38	46.20 (1.818)
	7/16 (11)	15.30 (.603)	11.00 (.433)		36.10 (1.421)		28.10 (1.106)		35.60 (1.401)	D-951-76	38.60 (1.521)
		21.00 (.825)	15.60 (.616)	D-652-76X	42.60 (1.718)	D-352-76	35.60 (1.403)	D-752-76	43.10 (1.698)	D-952-76	46.20 (1.818)
	1/2 (2)	21.00 (.825)	15.60 (.616)	D-652-12X	42.60 (1.718)	D-352-12	35.60 (1.403)	D-752-12	43.10 (1.698)	D-952-12	46.20 (1.818)
		29.00 (1.140)	25.20 (.993)		57.20 (2.253)		49.20 (1.938)	D-753-12	56.70 (2.233)	D-953-12	59.80 (2.353)
	5/8 (16)	21.00 (.825)	15.60 (.616)	D-652-58X	42.60 (1.718)	D-352-58	35.60 (1.403)		43.10 (1.698)	D-952-58	46.20 (1.818)
		29.00 (1.140)	25.20 (.993)	D-653-58X	57.20 (2.253)	D-353-58	49.20 (1.938)	D-753-58	56.70 (2.233)	D-953-58	59.80 (2.353)
	3/4 (18)	29.00 (1.140)	25.20 (.993)		57.20 (2.253)	D-353-34	49.20 (1.938)		56.70 (2.233)	D-953-34	59.80 (2.353)
6	8 (4)	12.30 (.485)	13.20 (.518)	E-660-08X	40.50 (1.593)	E-360-08	30.20 (1.188)	E-760-08	39.60 (1.558)	E-960-08	41.20 (1.623)
	10 (-)	16.40 (.645)	13.20 (.518)	E-657-10X	42.50 (1.673)	E-357-10	32.20 (1.268)	E-757-10	41.60 (1.638)	E-957-10	43.30 (1.703)
		12.30 (.485)	13.20 (.518)	E-660-10X	40.50 (1.593)	E-360-10	30.20 (1.188)	E-760-10	39.60 (1.558)	E-960-10	41.20 (1.623)
	1/4 (6)	16.40 (.645)	13.20 (.518)	E-657-14X	42.50 (1.673)	E-357-14	32.20 (1.268)	E-757-14	41.60 (1.638)	E-957-14	43.30 (1.703)
		21.30 (.837)	15.50 (.610)		47.30 (1.861)	E-358-14	37.00 (1.456)		46.40 (1.826)	E-958-14	48.90 (1.926)
		12.30 (.485)	13.20 (.518)	E-660-14X	40.50 (1.593)	E-360-14	30.20 (1.188)	E-760-14	39.60 (1.558)	E-960-14	41.20 (1.623)
	5/16 (8)	16.40 (.645)	13.20 (.518)	E-657-56X	42.50 (1.673)	E-357-56	32.20 (1.268)	E-757-56	41.60 (1.638)	E-957-56	43.30 (1.703)
		12.30 (.485)	13.20 (.518)	E-660-56X	40.50 (1.593)	E-360-56	30.20 (1.188)		39.60 (1.558)	E-960-56	41.20 (1.623)
	3/8 (9)	16.40 (.645)	13.20 (.518)	E-657-38X	42.50 (1.673)	E-357-38	32.20 (1.268)	E-757-38	41.60 (1.638)	E-957-38	43.30 (1.703)
		21.30 (.837)	15.50 (.610)	E-658-38X	47.30 (1.861)	E-358-38	37.00 (1.456)		46.40 (1.826)	E-958-38	48.00 (1.891)
	7/16 (11)	16.40 (.645)	13.20 (.518)		42.50 (1.673)		32.20 (1.268)		41.60 (1.638)	E-957-76	43.30 (1.703)
		21.30 (.837)	15.50 (.610)	E-658-76X	47.30 (1.861)	E-358-76	37.00 (1.456)		46.40 (1.826)	E-958-76	36.20 (1.426)
	1/2 (12)	21.30 (.837)	15.50 (.610)	E-658-12X	47.30 (1.861)	E-358-12	37.00 (1.456)	E-758-12	46.40 (1.826)	E-958-12	36.20 (1.426)
		28.90 (1.136)	25.20 (.991)		60.90 (2.396)		50.60 (1.991)		60.60 (2.361)		49.80 (1.961)
	5/8 (16)	21.30 (.837)	15.50 (.610)		47.30 (1.861)	E-358-58	37.00 (1.456)	E-758-58	46.40 (1.826)	E-958-58	36.20 (1.426)
		28.90 (1.136)	25.20 (.991)		60.90 (2.396)		50.60 (1.991)		60.60 (2.361)		49.80 (1.961)
	3/4 (18)	28.90 (1.136)	25.20 (.991)	E-659-34X	60.90 (2.396)	E-359-34	50.60 (1.991)	E-759-34	60.60 (2.361)	E-959-34	49.80 (1.961)
4	10 (-)	17.30 (.680)	13.40 (.527)	F-666-10X	46.70 (1.840)	F-366-10	34.50 (1.357)	F-766-10	45.30 (1.785)	F-966-10	49.00 (1.928)
		12.40 (.490)	13.40 (.527)	F-667-10X	44.30 (1.744)	F-367-10	32.00 (1.261)		42.90 (1.689)	F-967-10	46.50 (1.832)
	1/4 (6)	17.30 (.680)	13.40 (.527)	F-666-14X	46.70 (1.840)	F-366-14	34.50 (1.357)	F-766-14	45.30 (1.785)	F-966-14	49.00 (1.928)
		12.40 (.490)	13.40 (.527)	F-667-14X	44.30 (1.744)	F-367-14	32.00 (1.261)	F-767-14	42.90 (1.689)	F-967-14	46.50 (1.832)
	5/16 (8)	17.30 (.680)	13.40 (.527)	F-666-56X	46.70 (1.840)	F-366-56	34.50 (1.357)	F-766-56	45.30 (1.785)	F-966-56	49.00 (1.928)
		12.40 (.490)	13.40 (.527)		44.30 (1.744)	F-367-56	33.00 (1.261)	F-767-56	42.90 (1.689)	F-967-56	46.50 (1.832)
	3/8 (9)	17.30 (.680)	13.40 (.527)	F-666-38X	46.70 (1.840)	F-366-38	34.50 (1.357)	F-766-38	45.30 (1.785)	F-966-38	49.00 (1.928)
		22.90 (.900)	25.30 (.996)		61.40 (2.418)	F-369-38	49.10 (1.935)		60.00 (2.363)	F-969-38	63.70 (2.506)
	7/16 (11)	17.30 (.680)	13.40 (.527)		46.70 (1.840)	F-366-76	34.50 (1.357)	F-766-76	45.30 (1.785)	F-966-76	49.00 (1.928)
		22.90 (.900)	25.30 (.996)		61.40 (2.418)		49.10 (1.935)		60.00 (2.363)		63.70 (2.506)
	1/2 (12)	17.30 (.680)	13.40 (.527)	F-666-12X	46.70 (1.840)	F-366-12	34.50 (1.357)	F-766-12	45.30 (1.785)	F-966-12	49.00 (1.928)
		22.90 (.900)	25.30 (.996)	F-669-12X	61.40 (2.418)	F-369-12	49.10 (1.935)		60.00 (2.363)	F-969-12	63.70 (2.506)
	5/8 (16)	22.90 (.900)	25.30 (.996)		61.40 (2.418)	F-369-58	49.10 (1.935)		60.00 (2.363)	F-969-58	63.70 (2.506)
		32.40 (1.275)	25.30 (.996)	F-670-58X	66.20 (2.606)	F-370-58	53.90 (2.123)		64.80 (2.551)	F-970-58	68.40 (2.694)
	3/4 (18)	32.40 (1.275)	25.30 (.996)		66.20 (2.606)	F-370-34	53.90 (2.123)	F-770-34	64.00 (2.551)	F-970-34	68.40 (2.694)

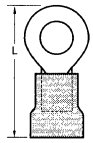
Note: For terminals on mylar tape, add "T" at the end of loose piece order no. Above 8 AWG contact factory.

molex Molex-ETC™ Ring Tongue Terminals

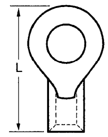
LISTED



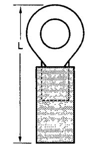
Material: Copper



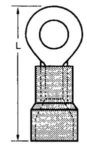
Insulkrimp® (PVC Insulation)



Versakrimp™



Nylakrimp® (Nylon Insulation)



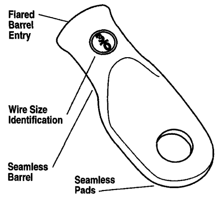
Funnel Entry Nylakrimp (Nylon Insulation)

		Material: Copper		Insulkrimp® (PVC Insulation)		Versakrimp™		Nylakrimp® (Nylon Insulation)		Funnel Entry Nylakrimp (Nylon Insulation)	
Wire Range AWG	Stud Size S	Maximum Width W	Minimum Clearance C	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L
2	10 (-)	16.40 (.645)	17.90 (.703)	G-675-10X	53.20 (2.093)	G-375-10	40.20 (1.583)		52.80 (2.078)	G-975-10	55.50 (2.186)
	1/4 (6)	22.30 (.879)	17.90 (.703)	G-674-14X	56.10 (2.210)	G-374-14	43.20 (1.700)	G-774-14	55.80 (2.195)	G-974-14	58.50 (2.303)
		16.40 (.645)	17.90 (.703)	G-675-14X	53.20 (2.093)	G-375-14	40.20 (1.583)	G-775-14	52.80 (2.078)	G-975-14	55.50 (2.186)
	5/16 (8)	22.30 (.879)	17.90 (.703)		56.10 (2.210)	G-374-56	43.20 (1.700)		55.80 (2.195)	G-974-56	58.50 (2.303)
		16.40 (.645)	17.90 (.703)	G-675-56X	53.20 (2.093)	G-375-56	40.20 (1.583)	G-775-56	52.80 (2.078)	G-975-56	55.50 (2.186)
	3/8 (9)	22.30 (.879)	17.90 (.703)		56.10 (2.210)	G-374-38	43.20 (1.700)		55.80 (2.195)	G-974-38	58.50 (2.303)
		16.40 (.645)	17.90 (.703)	G-675-38X	53.20 (2.093)	G-375-38	40.20 (1.583)	G-775-38	52.80 (2.078)	G-975-38	55.50 (2.186)
	7/16 (11)	22.30 (.879)	17.90 (.703)		56.10 (2.210)	G-374-76	43.20 (1.700)		55.80 (2.195)	G-974-76	58.50 (2.303)
	1/2 (12)	22.30 (.879)	17.90 (.703)	G-674-12X	56.10 (2.210)	G-374-12	43.20 (1.700)	G-774-12	55.80 (2.195)	G-974-12	58.50 (2.303)
	5/8 (16)	22.30 (.879)	17.90 (.703)	G-674-58X	56.10 (2.210)		43.20 (1.700)	G-774-58	55.80 (2.195)	G-974-58	58.50 (2.303)
		32.30 (1.270)	25.10 (.990)		68.40 (2.693)	G-377-58	55.40 (2.183)		68.00 (2.678)	G-977-58	70.80 (2.786)
	3/4 (18)	32.30 (1.270)	25.10 (.990)		68.40 (2.693)	G-377-34	55.40 (2.183)	G-377-34	68.00 (2.678)	G-977-34	70.80 (2.786)
1/0	1/4 (6)	21.30 (.840)	19.10 (.750)	H-681-14X	66.80 (2.630)	H-381-14	48.80 (1.920)	H-781-14	64.60 (2.544)		66.80 (2.628)
	5/16 (8)	21.30 (.840)	19.10 (.750)	H-681-56X	66.80 (2.630)	H-381-56	48.80 (1.920)	H-781-56	64.60 (2.544)	H-981-56	66.80 (2.628)
	3/8 (9)	21.30 (.840)	19.10 (.750)	H-681-38X	66.80 (2.630)	H-381-38	48.80 (1.920)	H-781-38	64.60 (2.544)		66.80 (2.628)
		22.90 (.902)	19.10 (.750)		67.60 (2.661)	H-380-38	49.60 (1.951)	H-780-38	65.40 (2.575)	H-980-38	67.50 (2.659)
		32.40 (1.277)	32.60 (1.282)	H-682-38X	85.90 (3.381)		67.80 (2.671)		83.70 (3.295)	H-982-38	85.80 (3.379)
	7/16 (11)	22.90 (.902)	19.10 (.750)	H-680-76X	67.60 (2.661)	H-380-76	49.60 (1.951)	H-780-76	65.40 (2.575)	H-980-76	67.50 (2.659)
	1/2 (12)	22.90 (.902)	19.10 (.750)		67.60 (2.661)	H-380-12	49.60 (1.951)	H-780-12	65.40 (2.575)		67.50 (2.659)
		32.40 (1.277)	32.60 (1.282)	H-682-12X	85.90 (3.381)		67.80 (2.671)	H-782-12	65.40 (2.575)	H-982-12	67.50 (2.659)
	5/8 (16)	32.40 (1.277)	32.60 (1.282)	H-682-58X	85.90 (3.381)		67.80 (2.671)		83.70 (2.295)	H-982-58	67.50 (2.659)
	3/4 (18)	32.40 (1.277)	32.60 (1.282)	H-682-34X	85.90 (3.381)	H-382-34	67.80 (2.671)		83.70 (2.295)	H-982-34	67.50 (2.659)
2/0	1/4 (6)	24.10 (.948)	19.60 (.770)	J-685-14X	67.40 (2.654)	J-385-14	51.30 (2.019)	J-785-14	67.40 (2.654)	J-985-14	69.30 (2.727)
	5/16 (8)	24.10 (.948)	19.60 (.770)	J-685-56X	67.40 (2.654)	J-385-56	51.30 (2.019)	J-785-56	67.40 (2.654)	J-985-56	69.30 (2.727)
	3/8 (9)	24.10 (.948)	19.60 (.770)	J-685-38X	67.40 (2.654)	J-385-38	51.30 (2.019)	J-785-38	67.40 (2.654)	J-985-38	69.30 (2.727)
	7/16 (11)	24.10 (.948)	19.60 (.770)	J-685-76X	67.40 (2.654)	J-385-76	51.30 (2.019)	J-785-76	67.40 (2.654)	J-985-76	69.30 (2.727)
	1/2 (12)	24.10 (.948)	19.60 (.770)		67.40 (2.654)	J-385-12	51.30 (2.019)		67.40 (2.654)	J-985-12	69.30 (2.727)
		32.40 (1.275)	32.40 (1.275)	J-687-12X	84.40 (3.322)	J-387-12	68.20 (2.687)	J-787-12	84.40 (3.322)	J-987-12	86.20 (3.395)
	5/8 (16)	32.40 (1.275)	32.40 (1.275)	J-687-58X	84.40 (3.322)	J-387-58	68.20 (2.687)	J-787-58	84.40 (3.322)	J-987-58	86.20 (3.395)
	3/4 (18)	32.40 (1.275)	32.40 (1.275)	J-687-34X	84.40 (3.322)	J-387-34	68.20 (2.687)	J-787-34	84.40 (3.322)	J-987-34	86.20 (3.395)
3/0	5/16 (8)	27.10 (1.067)	20.40 (.805)		76.90 (3.029)	K-390-56	54.70 (2.154)		74.40 (2.929)	K-990-56	76.40 (3.008)
	3/8 (9)	27.10 (1.067)	20.40 (.805)		76.90 (3.029)	K-390-38	54.70 (2.154)	K-790-38	74.40 (2.929)	K-990-38	76.40 (3.008)
	7/16 (11)	27.10 (1.067)	20.40 (.805)		76.90 (3.029)		54.70 (2.154)	K-790-76	74.40 (2.929)	K-990-76	76.40 (3.008)
	1/2 (12)	27.10 (1.067)	20.40 (.805)	K-690-12X	76.90 (3.029)	K-390-12	54.70 (2.154)	K-790-12	74.40 (2.929)	K-990-12	76.40 (3.008)
	5/8 (16)	27.10 (1.067)	20.40 (.805)	K-690-58X	76.90 (3.029)	K-390-58	54.70 (2.154)	K-790-58	74.40 (2.929)	K-990-58	76.40 (3.008)
	3/4 (18)	32.00 (1.260)	32.40 (1.274)	K-692-34X	91.30 (3.594)		69.00 (2.719)	K-792-34	88.70 (3.494)	K-992-34	90.80 (3.573)
4/0	3/8 (9)	28.80 (1.135)	21.10 (.830)			L-395-38	52.30 (2.215)		75.70 (2.980)	L-995-38	78.00 (3.069)
	7/16 (11)	28.80 (1.135)	21.10 (.830)				52.30 (2.215)	L-795-76	75.70 (2.980)	L-995-76	78.00 (3.069)
	1/2 (12)	28.80 (1.135)	21.10 (.830)			L-395-12	52.30 (2.215)	L-795-12	75.70 (2.980)	L-995-12	78.00 (3.069)
	5/8 (16)	28.80 (1.135)	21.10 (.830)			L-395-58	52.30 (2.215)	L-795-58	75.70 (2.980)	L-995-58	78.00 (3.069)
		40.30 (1.260)	33.00 (1.300)				69.50 (2.738)		89.00 (3.503)	L-998-58	91.20 (3.592)
	3/4 (18)	40.30 (1.260)	33.00 (1.300)				69.50 (2.738)		89.00 (3.503)	L-998-34	91.20 (3.592)

Product Specifications

Wire Range AWG	Barrel Length	Material Thickness	Insulation Color	Maximum Wire Insulation Diameter				Inside Barrel Diameter	Circular Mil Area
				Insulkrimp	Avikrimp®	Nylakrimp "7" Barrel	Nylakrimp "9" Barrel		
24-26	3.70 (.145)	0.40 (.020)	Yellow		1.90 (.075)				254-642
18-22	4.40 (.175)	0.80 (.032)	Red	3.70 (.145)	3.60 (.140)				509-2600
14-16	4.40 (.175)	0.80 (.032)	Blue	4.40 (.175)	4.30 (.170)				2050-5180
14-16 Heavy Duty	6.40 (.250)	1.27 (.050)	Green	6.40 (.250)	5.70 (.225)				2050-9030
12-14	6.40 (.250)	1.00 (.040)	Yellow						3260-8230
10-12	6.40 (.250)	1.00 (.040)	Yellow	6.40 (.250)	5.70 (.225)				5180-13,100
8	8.40 (.330)	1.30 (.050)	Red	6.70 (.265)		6.70 (.265)	8.80 (.346)	4.50 (.176) min.	13,100-20,800
6	9.80 (.385)	1.40 (.057)	Blue	11.20 (.440)		8.80 (.345)	10.80 (.424)	6.00 (.235) min.	20,800-33,100
4	11.40 (.447)	1.90 (.075)	Yellow	13.10 (.515)		10.90 (.430)	12.80 (.506)	7.20 (.285) min.	33,100-52,600
2	13.10 (.515)	1.90 (.075)	Red	16.50 (.650)		12.90 (.510)	15.20 (.598)	9.30 (.367) min.	52,600-83,700
1/0	17.70 (.700)	1.90 (.075)	Blue	17.50 (.690)		15.00 (.592)	17.20 (.678)	10.90 (.430) min.	83,700-119,500
2/0	18.40 (.725)	2.10 (.083)	Yellow	18.40 (.725)		17.10 (.672)	19.40 (.762)	12.90 (.510) min.	119,500-150,500
3/0	19.40 (.765)	2.30 (.091)	Red	22.10 (.870)		18.60 (.733)	22.00 (.867)	13.80 (.545) min.	150,500-190,000
4/0	19.40 (.765)	2.60 (.102)	Blue			21.00 (.833)	23.80 (.936)	15.90 (.625) min.	190,000-231,000

4/0 to 8 Wire Range Heavy Duty for 600V Applications



- Deep drawn eyelet style
- 600V rated
- UL listed, CSA certified
- Crimps in industry standard tooling
- Seamless barrel design
- Can be easily soldered or crimped
- Flared barrel entry for easy wire insertion
- Seamless pads prevent wicking and other types of corrosion*
- AWG wire size identification on barrel
- Made of CDA-110 Copper stock offering 100% conductivity
- Because of the manufacturing process, they are economically priced

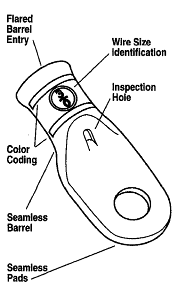
Wire Range AWG	Stud Size	Order No.	Length (in.)	Width (in.)
8	10	BCL-810-PL	1.200	.445
	1/4	BCL-814-PL	1.200	.445
	5/16	BCL-8516-PL	1.305	.445
	3/8	BCL-838-PL	1.305	.605
6	1/4	BCL-614-PL	1.270	.605
	5/16	BCL-6516-PL	1.410	.605
	3/8	BCL-638-PL	1.410	.605
4	1/4	BCL-414-PL	1.500	.525
	5/16	BCL-4516-PL	1.530	.525
	3/8	BCL-438-PL	1.530	.525
2	5/16	BCL-2516-PL	1.620	.615
	3/8	BCL-238-PL	1.620	.615
	1/2	BCL-212-PL	1.750	.755
1	5/16	BCL-1516-PL	1.720	.655
	3/8	BCL-138-PL	1.720	.655
	1/2	BCL-112-PL	1.830	.755
1/0	5/16	BCL-10516-PL	1.830	.725
	3/8	BCL-1038-PL	1.830	.725
	1/2	BCL-1012-PL	1.830	.725

Wire Range AWG	Stud Size	Order No.	Length (in.)	Width (in.)
2/0	5/16	BCL-20516-PL	2.062	.815
	3/8	BCL-2038-PL	2.062	.815
	1/2	BCL-2012-PL	2.062	.815
3/0	5/16	BCL-30516-PL	2.160	.895
	3/8	BCL-3038-PL	2.160	.895
	1/2	BCL-3012-PL	2.160	.895
4/0	3/8	BCL-4038-PL	2.350	.985
	1/2	BCL-4012-PL	2.350	.985
Butt Connectors				
8		BCL-8	1.000	
6		BCL-6	1.075	
4		BCL-4	1.215	
2		BCL-2	1.350	
1		BCL-1	1.350	
1/0		BCL-1/0	1.550	
2/0		BCL-2/0	1.800	
3/0		BCL-3/0	1.900	
4/0		BCL-4/0	2.000	

To order unplated parts remove "-PL" from order no. Example: BCL-238. For inspection sight holes, please contact factory. Butt splices are available only as Tin-plated Copper.

EYELET STYLE COPPER TERMINALS AND SPLICES

4/0 to 8 Wire Range Heavy Duty for 600V Applications



- Color coded to industry standards
- 600V rated
- UL listed, CSA certified
- Crimps in industry standard tooling
- Seamless barrel design
- Flared barrel entry for easy wire insertion
- Available with and without inspection sight holes
- Seamless pads prevent wicking and other types of corrosion*
- CDA-110 Copper stock offers 100% conductivity
- Our manufacturing technique allows for a lower selling price

Wire Range AWG	Stud Size	Order No.	Length (in.)	Width (in.)	Color Code
8	10	BCL-810-CC	1.200	.445	Red
	1/4	BCL-814-CC	1.305	.605	Red
	5/16	BCL-8516-CC	1.305	.605	Red
	1/2	BCL-812-CC	1.500	.760	Red
6	1/4	BCL-614-CC	1.270	.445	Blue
	5/16	BCL-6516-CC	1.410	.605	Blue
	3/8	BCL-638-CC	1.410	.605	Blue
	1/2	BCL-612-CC	1.530	.760	Blue
4	1/4	BCL-414-CC	1.500	.525	Gray
	5/16	BCL-4516-CC	1.530	.625	Gray
	3/8	BCL-438-CC	1.530	.625	Gray
2	1/4	BCL-214-CC	1.620	.615	Brown
	5/16	BCL-2516-CC	1.620	.615	Brown
	3/8	BCL-238-CC	1.750	.755	Brown
1	1/4	BCL-114-CC	1.720	.655	Green
	3/8	BCL-138-CC	1.720	.655	Green
1/0	1/4	BCL-1014-CC	1.830	.725	Pink
	5/16	BCL-10516-CC	1.830	.725	Pink
	3/8	BCL-1038-CC	1.900	.825	Pink
	1/2	BCL-1012-CC	1.900	.825	Pink

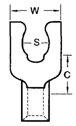
Wire Range AWG	Stud Size	Order No.	Length (in.)	Width (in.)	Color Code
2/0	1/4	BCL-2014-CC	2.062	.815	Black
	5/16	BCL-20516-CC	2.062	.815	Black
	3/8	BCL-2038-CC	2.062	.815	Black
	1/2	BCL-2012-CC	2.062	.815	Black
3/0	3/8	BCL-3038-CC	2.160	.895	Orange
	1/2	BCL-3012-CC	2.160	.895	Orange
4/0	5/16	BCL-40516-CC	2.350	.985	Purple
	3/8	BCL-40381-CC	2.350	.985	Purple
	1/2	BCL-4012-CC	2.350	.985	Purple
250 MCM	1/2	BCL-25012-CC	2.410	1.050	Purple
Butt Connectors					
8		BCL-8-CC	1.000		Red
6		BCL-6-CC	1.075		Blue
4		BCL-4-CC	1.215		Gray
2		BCL-2-CC	1.350		Brown
1		BCL-1-CC	1.350		Green
1/0		BCL-1/0-CC	1.550		Pink
2/0		BCL-2/0-CC	1.800		Black
3/0		BCL-3/0-CC	1.900		Orange
4/0		BCL-4/0-CC	2.000		Purple

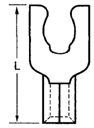
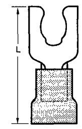
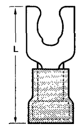
To order without inspection sight hole, add "W" to end of order no. Example: BCL-238-CCW. Please contact factory for minimum order.

* Certain terminals with "wide pads" will have a seam, but maintain a constant wall thickness

Molex-ETC™ Snap Spade Terminals

LISTED



									
Material: Copper				Krimptite®		Insulkrimp® (PVC Insulation)		Avikrimp® (Nylon Insulation)	
Stud Wire Range AWG (mm²)	Maximum Size S	Minimum Width W	Clearance C	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L
18-22 (0.30-1.00)	5 (3)	6.60 (.260)	5.80 (.230)	AA-1704-05	14.80 (.585)	AA-2704-05X	20.60 (.810)	AA-8704-05	20.60 (.810)
	5-6 (3-3.5)	6.60 (.260)	5.80 (.230)	AA-1704-06	14.80 (.585)	AA-2704-06X	20.60 (.810)	AA-8704-06	20.60 (.810)
		6.80 (.270)	6.00 (.235)	AA-1190-06	16.40 (.645)	AA-2190-06X	22.10 (.870)	AA-8190-06	22.10 (.870)
	8 (4)	7.60 (.300)	6.00 (.235)	AA-1191-08	16.60 (.655)	AA-2191-08X	22.40 (.880)	AA-8191-08	22.40 (.880)
		8.10 (.320)	6.60 (.261)	AA-1714-08	16.40 (.646)	AA-2714-08X	22.10 (.871)	AA-8714-08	22.10 (.871)
	10 (-)	8.60 (.338)	6.00 (.235)	AA-1192-10	17.90 (.705)	AA-2192-10X	23.60 (.930)	AA-8192-10	23.60 (.930)
		8.60 (.340)	6.60 (.261)	AA-1715-10	17.60 (.694)	AA-2715-10X	23.30 (.919)	AA-8715-10	23.30 (.919)
14-16 (1.30-2.30)	5 (3)	6.60 (.260)	5.80 (.230)	BB-1707-05	14.80 (.585)	BB-2707-05X	20.60 (.810)	BB-8707-05	21.00 (.825)
	5-6 (3-3.5)	6.60 (.260)	5.80 (.230)	BB-1707-06	14.80 (.585)	BB-2707-06X	20.60 (.810)	BB-8707-06	21.00 (.825)
		6.80 (.270)	6.00 (.235)	BB-1193-06	16.40 (.645)	BB-2193-06X	22.10 (.870)	BB-8193-06	22.50 (.885)
	8 (4)	7.60 (.300)	6.00 (.235)	BB-1194-08	16.60 (.655)	BB-2194-08X	22.40 (.880)	BB-8194-08	22.70 (.895)
		8.10 (.320)	6.60 (.261)	BB-1716-08	16.40 (.646)	BB-2716-08X	22.10 (.871)	BB-8716-08	22.50 (.886)
	10 (-)	8.60 (.338)	6.00 (.235)	BB-1195-10	17.90 (.705)	BB-2195-10X	23.60 (.930)	BB-8195-10	24.00 (.945)
		8.60 (.340)	6.60 (.261)	BB-1717-10	17.60 (.694)	BB-2717-10X	23.30 (.919)	BB-8717-10	23.70 (.934)
10-12 (3.00-5.40)	5 (3)	6.60 (.260)	5.80 (.230)		16.90 (.664)		24.30 (.995)	C-8710-05	24.60 (.970)
	5-6 (3-3.5)	6.60 (.260)	5.80 (.230)	C-1710-06	16.90 (.664)	C-2710-06X	24.30 (.995)	C-8710-06	24.60 (.970)
		7.60 (.300)	7.80 (.305)	C-1196-06	20.50 (.806)	C-2196-06X	27.90 (1.097)	C-8196-06	28.20 (1.112)
	8 (4)	8.40 (.330)	7.80 (.305)	C-1197-08	21.20 (.834)	C-2197-08X	28.50 (1.125)	C-8197-08	29.00 (1.140)
		8.10 (.320)	6.60 (.261)		18.40 (.725)	C-2718-08X	25.70 (1.016)	C-8718-08	26.20 (1.031)
	10 (-)	8.40 (.330)	7.80 (.305)	C-1198-10	21.70 (.854)	C-2198-10X	29.10 (1.145)	C-8198-10	29.50 (1.160)
		8.60 (.340)	6.60 (.261)	C-1719-10	19.60 (.773)	C-2719-10X	27.00 (1.064)	C-8719-10	27.40 (1.079)
	1/4 (6)	10.80 (.425)	9.50 (.375)	C-1199-14	24.90 (.980)	C-2199-14X	32.30 (1.271)	C-8199-14	32.30 (1.286)

Product Specifications						
Wire Range AWG	Barrel Length	Material Thickness	Insulation Color	Maximum Wire Insulation Diameter		Circular Mil Area
				Insulkrimp	Avikrimp	
18-22	4.40 (.175)	0.80 (.032)	Red	3.70 (.145)	3.60 (.140)	509-2600
14-16	4.40 (.175)	0.80 (.032)	Blue	4.40 (.175)	4.30 (.170)	2050-5180
10-12	6.40 (.250)	1.00 (.040)	Yellow	6.40 (.250)	5.70 (.225)	5180-13,100

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

CRIMP TIP

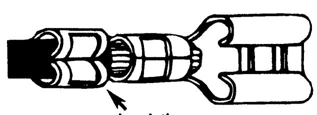
CHECKING MACHINE CRIMPS FOR QUALITY

Visual inspection of OPEN BARREL crimps

Insulation Not Damaged— Be sure that the conductor insulation has not been pierced or crushed by the crimp.

Crimp the insulation just enough (may have a slight indentation to hold the wire in place). If the insulation has been pierced or crushed, the wires inside may have been damaged also.

ACCEPT



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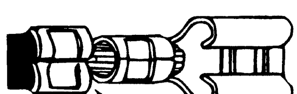
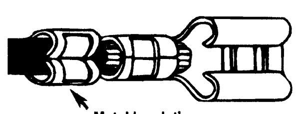


Insulation Support Crimp— Be sure that the insulation barrel tabs are not bent. Form the tabs properly.

If one of the tabs is bent, the insulation crimp will not be strong enough to provide the needed stress relief.

ACCEPT



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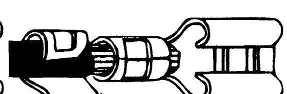
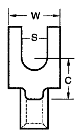
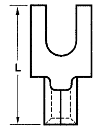
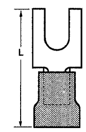
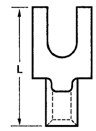
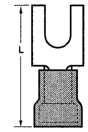


Molex-ETC™ Block Spade Terminals

LISTED



Material: Copper				Krimptite®		Insulkrimp® (PVC Insulation)		Versakrimp™		Avikrimp® (Nylon Insulation)	
Wire Range AWG (mm²)	Stud Size S	Maximum Width W	Minimum Clearance C	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L
18-22 (0.30-1.00)	1-2 (2)	5.00 (.197)	4.60 (.183)	AA-1109-02	12.80 (.502)	AA-2109-02X	18.40 (.727)	AA-3109-02	12.80 (.502)	AA-8109-02	18.40 (.727)
	3-4 (2.6)	5.00 (.197)	4.60 (.183)	AA-1109-04	12.80 (.502)	AA-2109-04X	18.40 (.727)	AA-3109-04	12.80 (.502)	AA-8109-04	18.40 (.727)
		6.50 (.255)	5.30 (.207)	AA-138-04	14.20 (.560)	AA-238-04X	19.90 (.785)		14.20 (.560)	AA-838-04	19.90 (.785)
		7.60 (.301)	5.30 (.207)		14.20 (.560)		19.90 (.785)		14.20 (.560)		19.90 (.785)
		8.50 (.335)	6.00 (.235)		16.20 (.640)		21.90 (.865)		16.20 (.640)		21.90 (.865)
	5-6 (3-3.5)	6.50 (.255)	5.30 (.207)	AA-138-06	14.20 (.560)	AA-238-06X	19.90 (.785)	AA-338-06	14.20 (.560)	AA-838-06	19.90 (.785)
		6.50 (.260)	7.70 (.305)	AA-1118-06	17.00 (.670)	AA-2118-06X	22.70 (.895)		17.00 (.670)	AA-8118-06	22.70 (.895)
		7.60 (.301)	5.30 (.207)	AA-134-06	14.20 (.560)	AA-234-06X	19.90 (.785)	AA-334-06	14.20 (.560)	AA-834-06	19.90 (.785)
	8 (4)	6.50 (.260)	7.70 (.305)		17.00 (.670)		22.70 (.895)		17.00 (.670)		22.70 (.895)
		7.60 (.301)	5.30 (.207)	AA-134-08	14.20 (.560)	AA-234-08X	19.90 (.785)	AA-334-08	14.20 (.560)	AA-834-08	19.90 (.785)
	10 (-)	7.60 (.301)	5.30 (.207)	AA-134-10	14.20 (.560)	AA-234-10X	19.90 (.785)	AA-334-10	14.20 (.560)	AA-834-10	19.90 (.785)
		9.80 (.385)	6.00 (.235)	AA-194-10	16.30 (.643)	AA-294-10X	22.00 (.868)	AA-394-10	16.30 (.643)	AA-894-10	22.00 (.868)
14-16 (1.30-2.30)	3-4 (2.6)	6.40 (.255)	5.30 (.209)		14.20 (.559)	BB-2471-04X	19.90 (.784)	BB-3471-04	14.20 (.559)	BB-8471-04	20.30 (.799)
		7.70 (.305)	5.40 (.211)		14.10 (.556)		19.80 (.781)		14.10 (.556)		20.20 (.796)
	5-6 (3-3.5)	6.40 (.255)	5.30 (.209)	BB-1471-06	14.20 (.559)	BB-2471-06X	19.90 (.784)	BB-3471-06	14.20 (.559)		20.30 (.779)
		7.70 (.305)	5.40 (.211)		14.10 (.556)	BB-2781-06X	19.80 (.781)		14.10 (.556)		20.20 (.796)
		8.50 (.335)	6.00 (.235)		16.30 (.643)	BB-287-06X	22.10 (.868)		16.30 (.643)	BB-887-06	22.40 (.883)
	8 (4)	7.70 (.305)	5.40 (.211)	BB-1781-08	14.10 (.556)	BB-2781-08X	19.80 (.781)	BB-3781-08	14.10 (.556)	BB-8781-08	20.20 (.796)
		8.50 (.335)	6.00 (.235)		16.30 (.643)	BB-287-08X	22.10 (.868)		16.30 (.643)	BB-887-08	22.40 (.883)
	10 (-)	7.70 (.305)	5.40 (.211)	BB-1781-10	14.10 (.556)	BB-2781-10X	19.80 (.781)	BB-3781-10	14.10 (.556)	BB-8781-10	20.20 (.796)
		9.80 (.385)	6.00 (.235)		16.40 (.645)		22.10 (.870)		16.40 (.645)		22.40 (.885)
10-12 (3.00-5.40)	5-6 (3-3.5)	8.40 (.330)	7.80 (.305)	C-1105-06	19.90 (.784)	C-2105-06X	27.30 (1.075)		19.90 (.784)	C-8105-06*	27.70 (1.090)
	8 (4)	8.40 (.330)	7.80 (.305)	C-1105-08	19.90 (.784)	C-2105-08X	27.30 (1.075)	C-3105-08	19.90 (.784)	C-8105-08*	27.70 (1.090)
	10 (-)	8.40 (.330)	7.80 (.305)	C-1105-10	19.90 (.784)	C-2105-10X	27.30 (1.075)	C-3105-10	19.90 (.784)	C-8105-10*	27.70 (1.090)

Product Specifications

Wire Range AWG	Barrel Length	Material Thickness	Insulation Color	Maximum Wire Insulation Diameter		Circular Mil Area
				Insulkrimp	Avikrimp	
18-22	4.40 (.175)	0.80 (.032)	Red	3.70 (.145)	3.60 (.140)	509-2600
14-16	4.40 (.175)	0.80 (.032)	Blue	4.40 (.175)	4.30 (.170)	2050-5180
10-12	6.40 (.250)	1.00 (.040)	Yellow	6.40 (.250)	5.70 (.225)	5180-13,100

* For heavier wire insulation the maximum wire insulation diameter can be expanded to 6.50mm (.255") by adding "X" to the end of the order no.

Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

Solderless Terminals

L

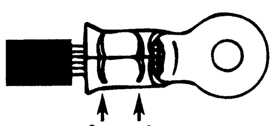
CRIMP TIP

CHECKING MACHINE CRIMPS FOR QUALITY

Visual inspection of CLOSED BARREL crimps

Crimp To Be Centered— On all crimped terminals the conductor crimp should be centered on the conductor barrel. This insures even pressure on the entire length of the barrel.

ACCEPT



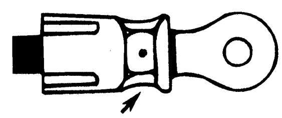
Centered

REJECT

Not Centered Too Far Forward

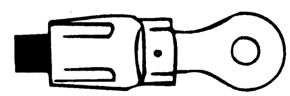
Good Bell Mouth Present— Be sure that a good bell mouth is present on the wire barrel.

ACCEPT



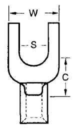
Bell Mouth

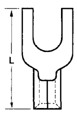
REJECT

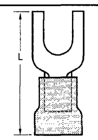


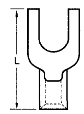
No Bell Mouth

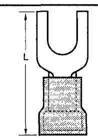
Molex-ETC™ Spade Tongue Terminals











Material: Copper				Krimptite®		Insulkrimp® (PVC Insulation)		Avikrimp® (Nylon Insulation)		Avikrimp® (Nylon Insulation)	
Wire Range AWG (mm²)	Stud Size S	Maximum Width W	Minimum Clearance C	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L	Order No.	Maximum Length L
24-26 (0.10-0.28)	0 (1.5)	3.40 (.135)	3.10 (.121)		9.20 (.362)					M-8123-00	13.50 (.532)
	2 (2)	4.90 (.192)	5.50 (.215)	M-1116-02	12.60 (.496)					M-8116-02	16.90 (.666)
	4 (2.6)	5.40 (.213)	5.50 (.215)	M-1121-04	12.40 (.487)					M-8121-04	16.70 (.657)
18-22 (0.30-1.00)	5-6 (3-3.5)	8.30 (.326)	7.70 (.303)	AA-135-06	17.50 (.690)	AA-235-06X	23.20 (.915)	AA-335-06	17.50 (.690)	AA-835-06	23.20 (.915)
	8 (4)	8.30 (.326)	7.70 (.303)	AA-135-08	17.50 (.690)	AA-235-08X	23.20 (.915)	AA-335-08	17.50 (.690)	AA-835-08	23.20 (.915)
	10 (-)	8.30 (.326)	7.70 (.303)	AA-135-10	17.50 (.690)	AA-235-10X	23.20 (.915)		17.50 (.690)	AA-835-10	23.20 (.915)
14-16 (1.30-2.30)	3-4 (2.6)	6.50 (.255)	5.30 (.209)		14.40 (.565)	BB-207-04X	20.10 (.790)		14.40 (.565)		20.50 (.805)
	5-6 (3-3.5)	6.50 (.255)	5.30 (.209)	BB-107-06	14.40 (.565)	BB-207-06X	20.10 (.790)		14.40 (.565)	BB-807-06	20.50 (.805)
		7.70 (.305)	5.40 (.211)	BB-124-06	14.30 (.564)	BB-224-06X	20.00 (.789)		14.30 (.564)	BB-824-06	20.40 (.804)
	8 (4)	7.70 (.305)	5.40 (.211)	BB-124-08	14.30 (.564)	BB-224-08X	20.00 (.789)		14.30 (.564)	BB-824-08	20.40 (.804)
		9.40 (.372)	6.80 (.269)	BB-127-08	17.40 (.687)	BB-227-08X	23.20 (.912)		17.40 (.687)	BB-827-08	23.60 (.927)
	10 (-)	9.40 (.372)	6.80 (.269)	BB-127-10	17.40 (.687)	BB-227-10X	23.20 (.912)		17.40 (.687)	BB-827-10	23.60 (.927)
14-16 (1.30-3.60) Heavy Duty	5-6 (3-3.5)	9.80 (.385)	7.70 (.301)		20.60 (.812)		28.00 (1.103)			B-841-06HD*	28.40 (1.118)
	8 (4)	9.80 (.385)	7.70 (.301)		20.60 (.812)		28.00 (1.103)			B-841-08HD*	28.40 (1.118)
	10 (-)	9.80 (.385)	7.70 (.301)		20.60 (.812)	B-241-10HDX	28.00 (1.103)			B-841-10HD*	28.40 (1.118)
	1/4 (6)	13.80 (.543)	10.00 (.393)	B-168-14HD	24.50 (.965)	B-268-14HDX	31.90 (1.256)				32.30 (1.271)
	5/16 (8)	13.80 (.543)	10.00 (.393)	B-168-56HD	24.50 (.965)		31.90 (1.256)				32.30 (1.271)
10-12 (3.00-5.40)	5-6 (3-3.5)	9.80 (.385)	7.60 (.301)	C-141-06	20.60 (.812)	C-241-06X	28.00 (1.103)		20.60 (.812)	C-841-06*	28.40 (1.118)
	8 (4)	9.80 (.385)	7.60 (.301)	C-141-08	20.60 (.812)	C-241-08X	28.00 (1.103)	C-341-08	20.60 (.812)	C-841-08*	28.40 (1.118)
	10 (-)	9.80 (.385)	7.60 (.301)	C-141-10	20.60 (.812)	C-241-10X	28.00 (1.103)	C-341-10	20.60 (.812)	C-841-10*	28.40 (1.118)
	1/4 (6)	13.80 (.543)	10.00 (.393)	C-168-14	24.50 (.965)	C-241-14X	31.90 (1.256)		24.50 (.965)	C-868-14*	32.30 (1.271)
	5/16 (8)	13.80 (.543)	10.00 (.393)	C-168-56	24.50 (.965)		31.90 (1.256)	C-368-56	24.50 (.965)		32.30 (1.271)

Product Specifications

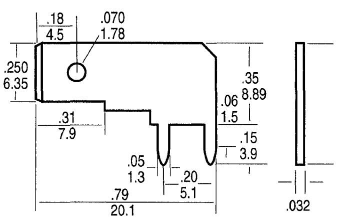
Wire Range AWG	Barrel Length	Material Thickness	Insulation Color	Maximum Wire Insulation Diameter		Circular Mil Area
				Insulkrimp	Avikrimp	
24-26	3.70 (.145)	1.90 (.020)	Yellow	1.90 (.075)		254-642
18-22	4.40 (.175)	0.80 (.032)	Red	3.70 (.145)	3.60 (.140)	509-2600
14-16 Heavy Duty	6.40 (.250)	1.30 (.050)	Yellow	6.40 (.250)	5.70 (.225)	2050-9030
14-16	4.40 (.175)	0.80 (.032)	Blue	4.40 (.175)	4.30 (.170)	2050-5180
10-12	6.40 (.250)	1.00 (.040)	Yellow	6.40 (.250)	5.70 (.225)	5180-13,100

* For heavier wire insulation the maximum wire insulation diameter can be expanded to 6.50mm (.255") by adding "X" to the end of the order no.

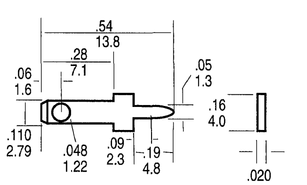
Note: For terminals on mylar tape, add "T" at the end of loose piece order no.

QUICK DISCONNECT TAB PRINTED CIRCUIT TYPE

MATERIAL: BRASS



4000
.250 x .032



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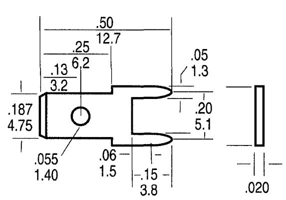

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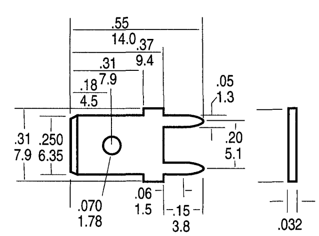

4003
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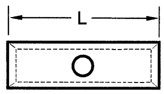
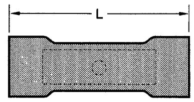
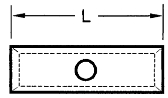
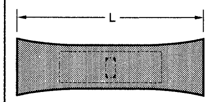
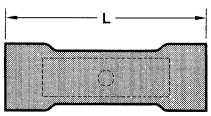
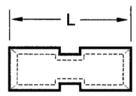
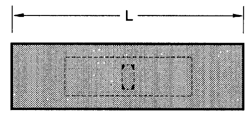
BUTT SPLICES

Molex-ETC™ Splices

LISTED

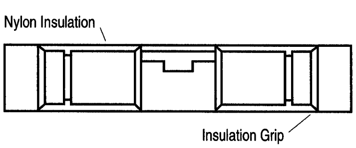





Material: Copper	Krimptite®				Insulkrimp® (PVC Insulation)		Versakrimp™				Nylakrimp® (Nylon Insulation)	
Wire Range AWG	Order No.	ID	OD	Maximum	Order No.	Maximum Length	Order No.	ID	OD	Maximum	Order No.	Maximum Length
18-22	A-145	1.40 (.056)	3.40 (.135)	14.70 (.580)	A-245X	24.40 (.960)	AS-345*	1.50 (.059)	3.30 (.130)	17.10 (.675)	AS-N-345*	26.30 (1.035)
	A-L145	1.40 (.056)	3.40 (.135)	17.10 (.675)	A-L245X	26.30 (1.035)						
					AS-V-345X*	26.30 (1.035)						
14-16	B-131	2.10 (.083)	4.10 (.160)	14.70 (.580)	B-231X	24.80 (.975)	BS-331*	2.30 (.091)	4.10 (.160)	17.10 (.675)	BS-N-331*	27.40 (1.080)
	B-L131	2.10 (.083)	4.10 (.160)	17.10 (.675)	B-L231X	27.40 (1.080)						
					BS-V-331X*	27.40 (1.080)						
10-12	C-146	3.30 (.129)	5.60 (.220)	14.90 (.585)	C-246X	28.80 (1.135)	CS-346*	3.50 (.138)	5.70 (.223)	21.00 (.827)	CS-N-346*	33.00 (1.300)
	C-L146	3.30 (.129)	5.60 (.220)	21.20 (.835)	C-L246X	32.50 (1.280)						
					CS-V-346X*	33.10 (1.305)						

	Insulkrimp (PVC Insulation)			Versakrimp				Nylakrimp (Nylon Insulation)		
Wire Size AWG	Order No.	Maximum Length	Max. Wire Insulation Dia.	Order No.	ID Minimum	OD Maximum	Maximum Length	Order No.	Maximum Length	Max. Wire Insulation Dia.
8	D-654X	38.40 (1.510)	9.80 (.385)	D-354	4.20 (.165)	7.50 (.295)	21.90 (.864)	D-754	36.60 (1.440)	6.70 (.265)
6	E-662X	47.10 (1.855)	11.20 (.440)	E-362	5.80 (.230)	9.50 (.374)	26.50 (1.045)	E-762	45.50 (1.790)	8.80 (.345)
4	F-664X	51.80 (2.036)	13.10 (.515)	F-364	7.00 (.277)	11.60 (.457)	29.30 (1.155)	F-764	51.80 (2.040)	10.90 (.430)
2	G-672X	32.40 (1.277)	16.50 (.650)	G-372	9.10 (.357)	13.70 (.538)	32.50 (1.280)		57.80 (2.275)	12.90 (.510)
1/0				H-383†	11.20 (.439)	15.70 (.620)	36.60 (1.440)			
2/0				J-388†	12.60 (.496)	17.70 (.697)	36.60 (1.440)			
3/0				K-393†	13.80 (.545)	19.30 (.760)	39.10 (1.540)			
4/0				L-378†	15.80 (.621)	21.80 (.860)	39.10 (1.540)			

AVIKRIMP® BUTT SPLICES

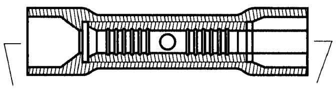


Wire Range AWG	Molex-ETC Order No.	Maximum Length (in.)	Maximum Wire Insulation Diameter (in.)	Insulation Color
18-22	A-845	1.260	.140	Red
14-16	B-831	1.260	.170	Blue
10-12	C-846	1.620	.228	Yellow

* Part has seamless barrel instead of butted seam

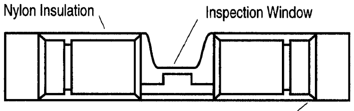
† Seamless barrel ID-OD dimensions denote averages

FUNNEL ENTRY NYLON BUTT SPLICES



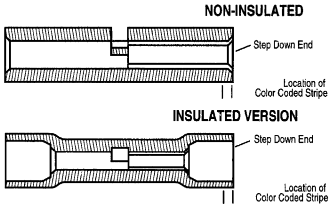
Wire Range AWG	Order No.	Maximum Length (in.)	Maximum Wire Insulation Diameter (in.)		Seam Type
			Funnel End	Standard End	
18-22	AS-932-DK	1.070	.147	.161	Seamless
14-16	BS-942-DK	1.070	.185	.199	Seamless
10-12	CS-952-DK	1.150	.262	.276	Seamless
18-22	A-945-DK	1.070	.147	.161	Butted
14-16	B-931-DK	1.070	.185	.199	Butted
10-12	CS-946-DK	1.150	.262	.276	Butted

WINDOW BUTT SPLICES



Wire Size AWG	Order No.		Maximum Length (in.)	Maximum Wire Insulation Diameter (in.)	Insulation Color
	Mil Spec	Molex-ETC			
18-22	M7928/5-3	WA-840	1.260	.140	Red
14-16	M7928/5-4	WB-841	1.260	.170	Blue
10-12	M7928/5-5	WC-842	1.620	.228	Yellow

STEP DOWN BUTT CONNECTORS

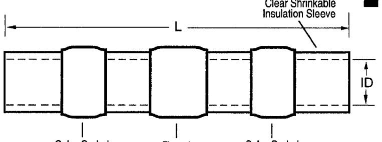


LISTED

Wire Size AWG	Order No.	Insulation Color	CMA Range
14/16-18/22	BA-331	Noninsulated	2050-5180 to 509-2600
10/12-14/16	CB-346	Noninsulated	5180-13,100 to 2050-5180
8-10/12	DC-354	Noninsulated	13,100-20,800 to 5180-13,100
6-8	ED-362	Noninsulated	20,800-33,100 to 13,100-20,800
14/16-18/22	BA-631X	Blue with red stripe	2050-5180 to 509-2600
10/12-14/16	CB-646X	Yellow with blue stripe	5180-13,100 to 2050-5180
8-10/12	DC-654X	Red with yellow stripe	13,100-20,800 to 5180-13,100
6-8	ED-662X	Blue with red stripe	20,800-33,100 to 13,100-20,800

The Step Down Butt Splice is the perfect solution when 2 wires need to be inserted in one end of a splice and a single wire in the other end.

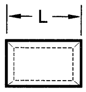
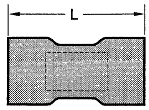
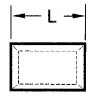
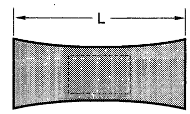
SOLDER SPLICES



Wire Range AWG	Order No.	Total Circular Mil Area	Color Code	Maximum Wire Insulation Diameter (in.)	Length L ± .150 (in.)
24-26	SSC-2624	450-1450	Clear	.060	1.500
18-22	SSC-2218	1450-3500	Red	.110	1.500
14-16	SSC-1614	2900-7200	Blue	.175	1.500
10-12	SSC-1210	7000-25,000	Yellow	.230	1.500

PARALLEL SPLICES

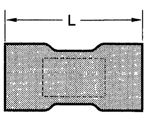
LISTED UL

												
Material: Copper	**Krimptite®**				**Insulkrimp®** (PVC Insulation)		**Versakrimp™**				**Nylakrimp®** (Nylon Insulation)	
Wire Range AWG	**Order No.**	**ID Minimum**	**OD Maximum**	**Maximum L**	**Order No.**	**Maximum Length L**	**Order No.**	**ID Minimum**	**OD Maximum**	**Maximum L**	**Order No.**	**Maximum Length L**
18-22					AS-V-302X*	18.10 (.712)	AS-302*	1.50 (.060)		8.40 (.332)	AS-N-302*	17.00 (.670)
14-16	B-104	2.10 (.084)	4.20 (.165)	8.60 (.340)	B-204X	18.70 (.735)	BS-304*	2.30 (.091)	4.10 (.160)	8.40 (.330)	BS-N-304*	16.40 (.645)
					BS-V-304X*	18.70 (.735)						
10-12	C-103	3.30 (.128)	5.80 (.230)	8.40 (.330)	C-203X	12.10 (.831)	CS-303*	3.30 (.130)	5.70 (.225)	8.40 (.330)	CS-N-303*	17.50 (.688)
					CS-V-303X*	12.10 (.831)						
8							D-355	4.20 (.165)	7.50 (.295)	10.40 (.408)		
6							E-361	5.80 (.230)	9.50 (.374)	12.10 (.477)		
4							F-365	7.00 (.277)	11.60 (.457)	13.90 (.547)		
2							G-373	9.00 (.357)	13.70 (.538)	17.20 (.680)		
1/0							H-384†	11.20 (.439)	15.70 (.620)	20.10 (.790)		
2/0							J-389†	12.60 (.496)	17.70 (.697)	19.80 (.779)		
3/0							K-394†	13.80 (.545)	19.30 (.760)	20.30 (.800)		
4/0							L-379†	15.80 (.621)	21.80 (.860)	20.80 (.820)		

Product Specifications

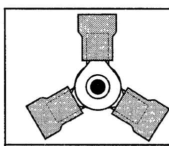
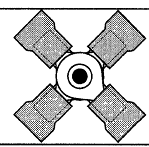
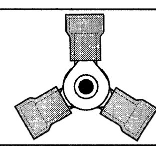
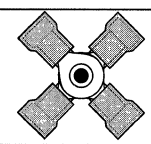
Wire Range AWG	Insulation Color	Maximum Wire Insulation Diameter	
		Insulkrimp	Avikrimp®
18-22	Red	3.70 (.145)	3.00 (.120)
14-16	Blue	4.40 (.175)	3.80 (.150)
10-12	Yellow	6.60 (.260)	5.30 (.210)

OVAL PARALLEL SPLICES



Material: Copper	Insulkrimp		
Wire Range AWG	**Order No.**	**Maximum Wire Insulation Diameter**	**Maximum L**
14-16	B-2040V	3.60 by 6.40 (.140 by .250)	18.70 (.735)
10-12	C-2030V	3.90 by 7.50 (1.550 by .295)	21.00 (.826)

3 AND 4 WAY CONNECTORS

				
Material: Copper	**Insulkrimp** (PVC Insulation)	**Insulkrimp** (PVC Insulation)	**Avikrimp** (Nylon Insulation)	**Avikrimp** (Nylon Insulation)
Wire Range AWG	**Order No.**			
18-22	A-2YCX	A-2XCX	A-5YC	A-5XC
14-16	B-2YCX	B-2XCX	B-5YC	B-5XC
10-12	C-2YCX	C-2XCX	C-5YC	C-5XC

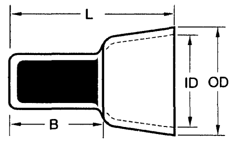
* Part has seamless barrel instead of butted seam

† Seamless barrel ID-OD dimensions denote averages

Note: Many parts on this page can be mounted on mylar tape, please contact factory

NYLON-INSULATED, CLOSED-END CONNECTORS

Molex-ETC Nylon Closed-End Connectors feature 2-piece construction. A translucent nylon-molded insulation is adhered to the metal connector insert. The connector's insert is annealed, Tin-plated, seamless, pure electrolytic, tough pitch Copper. Individual design and performance requirements dictate the use of Copper inserts. These connectors are all rated for a maximum of 600V.



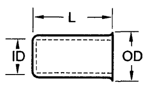
MATERIAL: COPPER

Nylon-Insulated, Closed-End Connectors						
Wire Range AWG (mm²)	Order No.	Outside Diameter OD	Overall Length L	Barrel Length B	Inside Diameter ID	Circular Mil Area
14-22 (0.25-2.60)	NC-2214	7.80 (.310)	15.50 (.610)	7.80 (.310)	6.60 (.260)	600-5180
12-22 (0.25-4.00)	NC-2212	8.90 (.350)	19.00 (.750)	8.20 (.320)	7.10 (.280)	600-8230
10-16 (1.00-6.60)	NC-1610	11.20 (.440)	18.30 (.720)	8.60 (.340)	9.60 (.380)	2200-13,100
8 (6.60-10.50)	NC-8	14.20 (.560)	27.70 (1.090)	10.90 (.430)	12.70 (.500)	13,100-20,800

Note: For parts on mylar tape, add "T" at the end of loose piece order no.

CONNECTOR INSERTS

Molex-ETC Connector Inserts are the same annealed, Tin-plated, seamless pieces used in the nylon-insulated, closed-end connectors above. These inserts are used in applications where insulation is not essential.

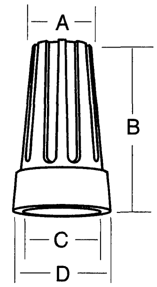


MATERIAL: COPPER

Connector Inserts					
Wire Range AWG (mm²)	Order No.	Outside Diameter OD	Overall Length L	Inside Diameter ID	Circular Mil Area
14-22 (0.25-2.60)	CE-2214	3.20 (.126)	8.30 (.327)	2.30 (.092)	600-5180
12-22 (0.25-2.70)	CE-2212	4.20 (.164)	8.10 (.317)	2.70 (.106)	600-8230
10-16 (1.00-6.60)	CE-1610	5.20 (.203)	8.60 (.337)	3.90 (.153)	2200-13,100
8 (6.60-10.50)	CE-8	6.80 (.270)	8.40 (.330)	4.60 (.180)	13,100-20,800

TWIST LOCK WIRE CONNECTORS

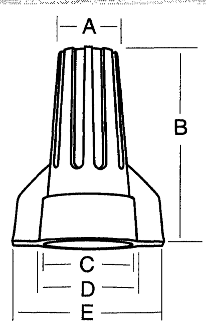
A cone shaped, plated Steel spring conforms to the inside contour of the insulating shell, which supports the spring as the conductor is driven up into the cone. Requiring no pretwisting, the wires are automatically twisted together for a secure connection and maximum contact. Fixed spring wire connectors may be used to make branch circuit or fixture wire connections on numerous combinations of solid and/or stranded wire.



Twist Lock Wire Connectors							
Order No.	Copper Wire Only			Dimension			
	Wire Range AWG	Minimum	Maximum	A	B	C	D
TL-G	14/22	1 No. 22 with 1 No. 20	2 No. 16	3/16	9/16	1/4	11/32
TL-B	14/22	3 No. 20	3 No. 16	1/4	23/32	5/16	13/32
TL-O	14/22	4 No. 20	3 No. 16 with No. 18	1/4	27/32	11/32	15/32
TL-Y	10/18	1 No. 16 with 2 No. 18	4 No. 14 with 1 No. 16	5/16	5/16	7/16	9/16
TL-R	8/18	2 No. 14	2 No. 10 with 2 No. 12	11/32	1-1/16	17/32	5/8

WING LOCK WIRE CONNECTORS

A square wire, coiled spring expands freely within the tough plastic shell and can accommodate a wide range of wire combinations. The angled edges of the spring attach to the conductor as the connector is twisted on for an easily secured joint. The spring applies even pressure over the entire contact area and provides a low resistance connection and mechanical strength against pull and vibration.

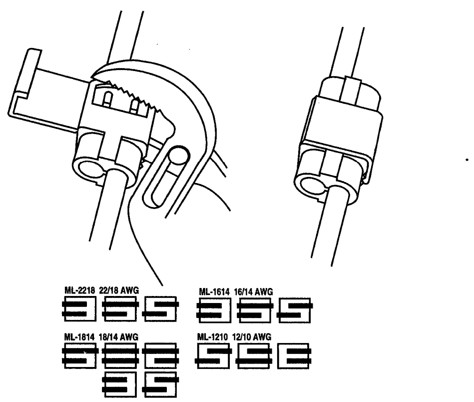


Wing Lock Wire Connectors								
Order No.	Copper Wire Only			Dimension				
	Wire Range AWG	Minimum	Maximum	A	B	C	D	E
WL-Y	10/18	2 No. 18	3 No. 12	11/32	1-1/32	3/8	1/2	23/32
WL-R	10/18	2 No. 14	5 No. 12	11/32	1-1/4	17/32	5/8	29/32
WL-G	8/18	2 No. 12	3 No. 10 with 1 No. 12	15/32	1-5/16	9/16	11/16	1
WL-B	6/14	3 No. 12	1 No. 6 with 2 No. 8	9/16	1-5/16	21/32	25/32	1-7/32

Molex-ETC connectors must withstand extreme dielectric voltage tests to determine performance. All connectors are UL listed and CSA approved as Pressure-Type wire connectors for 600V max., building wire; 1000V max., signs or fixtures and comply with Federal Specification W-S-610d. Temperature rating 105°C (221°F) max.

Multi-Lock

LISTED UL



Self-tapping (IDC) Tap-And-Run connectors

The quick, convenient Multi-Lock connectors have many uses. Using only ordinary channel-lock pliers, these color-coded connectors make quick, reliable, pre-insulated splices without stripping, twisting, soldering or the need for special tools.

They will tap-splice, pigtail-splice, parallel splice or in-line splice insulated Copper wire conductors for a wide range of applications.

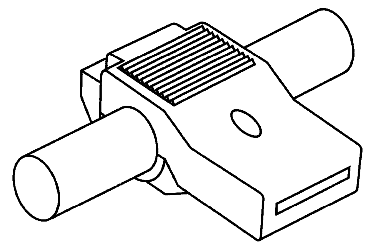
Automotive: automobile, bus, truck and trailer wiring for lights, horns, gauges and speakers, etc.

Mobile: boat wiring systems, trailer wiring, mobile homes and recreational vehicles such as campers and ATV's.

In the Home and Office: shop equipment, burglar and fire alarms.

Wire Tap

LISTED UL



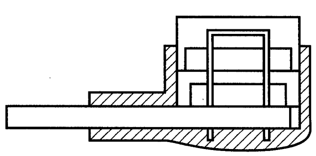
The Wire Tap makes tapping into an existing wire quick, easy and reliable. This Tap-And-Run splice is actually a fully insulated female quick disconnect that can be spliced onto a wire and then mated with a fully insulated* male quick disconnect, all without stripping, twisting, soldering or the need for special tools.

Wire Range AWG	Order No.	Insulation Color
18-22	WT-2218	Red
14-18	WT-1814	Blue
12	WT-12	Yellow

* Also mates with partially or noninsulated quick disconnects

Quick Seal Splice

LISTED UL



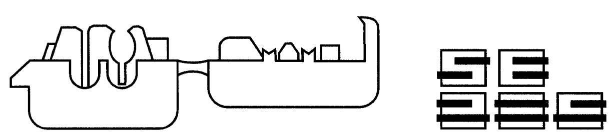
For the quick and permanent connection of 2 Copper conductors where the connection must be protected against possible damage from moisture, the Quick Seal Splice is perfect for the manufacture, installation and repair of telecom equipment.

- 2 IDT connectors per wire
- "U"-shaped IDT prevents overdistortion of large conductors while ensuring deformation of small conductors
- Silicone sealant prevents moisture from entering ports and damaging connection
- Clear 6/6 nylon material permits visual examination before and after closing
- Accepts all solid conductors from 0.40 to 0.63mm dia. (22 to 26 AWG). Accepts a maximum OD of 1.30mm (.051").
- UL-listed

Order no. 36065-2000 (Tin plated with sealant)

Order no. 36065-3000 (Tin plated without sealant)

Block Splice



The Block Splice is a self-tapping, Tap-And-Run connector very similar to our Multi-Locks. It differs, however, because it is for small 26 gauge solid wire. Applications for this product could include anywhere there is low voltage (12V or lower) lighting such as garden lighting, walkway lighting and lights working off of dimmer switches.

- No wire stripping necessary
- No special tools needed
- Wire size 26 AWG solid

Order no. 70080

Molex-ETC™ Perma-Seal

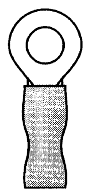
Perma-Seal NYLON terminals and splices provide a rugged, environmentally sealed connection for wire sizes 8 to 22 AWG that will insulate, seal and protect joints from physical abuse and abrasion, water, salt and other corrosive compounds.

Waterproof adhesive seal

Perma-Seal terminals and splices give you long-lasting, moisture-proof connections that withstand water, salt, condensation, corrosion and heat, all of which cause serious problems for conventional, unsealed splices. The inner wall of the heat-shrinkable NYLON Perma-Seal sleeve is lined with a special hot-melt adhesive that is inert at room temperature, permitting wires to be inserted easily into the splices and terminals. As the sleeve is heated, the adhesive melts and flows under pressure from the tubing. This action fills any existing voids and creates a seal that repels moisture incursion even during pressure cycling, and stands up to some of the most rigorous tests that can be applied to high-performance splices.

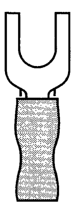
Tough and durable

The tough NYLON sleeve of Perma-Seal splices and terminals resists abrasion and cutting. This protection helps to maintain the insulation and sealing properties even in the most hostile environments, inside and out.



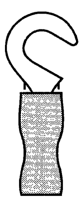
Ring

Wire Range AWG	Stud Size	Order No.
18-22	6	SA-221-06
	8	SA-221-08
	10	SA-221-10
	1/4	SA-222-14
	3/8	SA-226-38
14-16	6	SB-237-06
	8	SB-239-08
	10	SB-239-10
	1/4	SB-225-14
	5/16	SB-225-56
	3/8	SB-218-38
10-12	6	SC-228-06
	8	SC-228-08
	10	SC-230-10
	1/4	SC-230-14
	5/16	SC-230-56
	3/8	SC-240-38
	1/2	SC-201-12
8	10	SD-810
	1/4	SD-814
	5/16	SD-8516
	3/8	SD-838



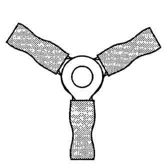
Spade

Wire Range AWG	Stud Size	Order No.
18-22	6	SA-235-06
	8	SA-235-08
	10	SA-235-10
14-16	6	SB-227-06
	8	SB-227-08
	10	SB-227-10
10-12	6	SC-241-06
	8	SC-241-08
	10	SC-268-10
	1/4	SC-268-14



Hook

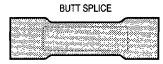
Wire Range AWG	Stud Size	Order No.
14-16	10	SB-219-10



3-Way

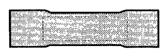
Wire Range AWG	Stud Size	Order No.
18-22		SA-2YCX
14-16		SB-2YCX
10-12		SC-2YCX

BUTT SPLICE



Butt Splices

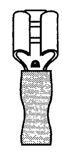
Wire Range AWG	Stud Size	Order No.
18-22		SAA-22-18
14-16		SBB-16-14
10-12		SC-12-10
8		SD-8



STEP DOWN BUTT

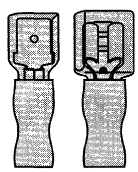
Step Down Butt

Wire Range AWG	Stud Size	Order No.
14-16 to 18-22		SBA-631
10-12 to 14-16		SCB-646



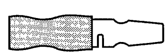
Quick Disconnects

Wire Range AWG	Fits Tab Size (in.)	Order No.
18-22	.250 by .032	SAA-2140
14-16	.250 by .032	SBB-2141
10-12	.250 by .032	SC-2143



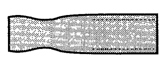
Quick Disconnect Couplers

Wire Range AWG	Tab Size (in.)	Order No.
18-22	.250 by .032	SAA-9260 Male
	.250 by .032	SAA-9261 Female
14-16	.250 by .032	SBB-9262 Male
	.250 by .032	SBB-9263 Female
10-12	.250 by .032	SC-9280 Male
	.250 by .032	SC-9281 Female



Snap Plug

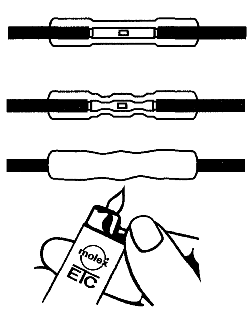
Wire Range AWG	Diameter (in.)	Order No.
18-22	.156	SA-269
14-16	.156	SB-289



Snap Plug Receptacle

Wire Range AWG	Diameter (in.)	Order No.
18-22	.156	SBRA-8156 N
	.180	SBRA-8180 N
14-16	.156	SBRB-8156 N
	.180	SBRB-8180 N

Simple Installation

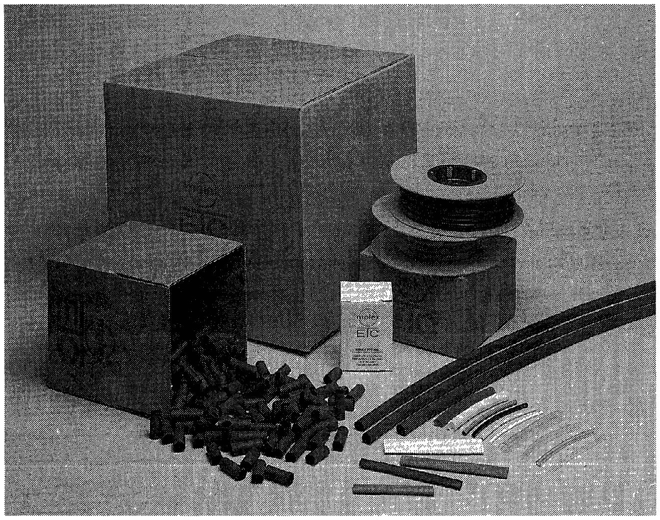


Select the correct splice size for the wire gauge. Strip the wires 7.60mm (.300") from the end and insert into the crimp barrel.

Making sure the wire end is properly seated, make the crimp connection using a tool designed for insulated splices.

Apply heat directly to the splice, working from the center out to the edges, using a hot air gun or other heat source, until the tubing shrinks and the adhesive flows. Allow to cool before inspecting splice and checking the integrity.

Molex-ETC™ Perma-Fit Heat Shrinkable Tubing



Polyolefin Thin-Wall Heat Shrink Tubing Irradiated and Cross-Linked

PF thin wall is a high quality tubing with a wide variety of uses. It is made from flame-retardant Polyolefin, giving PF excellent physical, chemical and electrical properties that meet industrial and military requirements for highly reliable, general-purpose tubing.

- Industry standard flexible Polyolefin
- Meets MIL-I-23053/5 Class 1 (colors), Class 2 (clear)
- Meets UL and CSA specifications
- Standard Colors: Black (all sizes), white, red, blue, yellow (3/64-3") and clear
- Shrink Ratio: 2:1
- Minimum Shrink Temperature: 90°C
- Continuous Operating Temperature: -55 to +135°C

Perma-Fit PF

Order No. and Size	Internal Diameter: Minimum Expand. (in.)	Internal Diameter: Maximum Recov. (in.)	Nominal Recov. Wall Thk (in.)	Standard Packaging: 4' Lengths (25/Pkg) Total ft	6" Lengths (200/Pkg) Total ft	12" Lengths (100/Pkg) Total ft	Large Spool (1/Pkg) Total ft	Small Spool (1/Pkg) Total ft
PF-3/64	.046	.023	.016	100	100	100	1000	100
PF-1/16	.063	.031	.017	100	100	100	1000	100
PF-3/32	.093	.046	.020	100	100	100	500	100
PF-1/8	.125	.062	.020	100	100	100	500	100
PF-3/16	.187	.093	.020	100	100	100	500	100
PF-1/4	.250	.125	.025	100	100	100	250	100
PF-3/8	.375	.187	.025	100	100	100	200	100
PF-1/2	.500	.250	.025	100	100	100	150	100
PF-3/4	.750	.375	.030	100	100	100	250	100
PF-1	1.000	.500	.035	100	100	100	250	100
PF-1-1/2	1.500	.750	.040	100	100	100	125	100
PF-2	2.000	1.000	.045	100	100	100	125	100
PF-3	3.000	1.500	.050	100	100	100	100	100
PF-4	4.000	2.000	.055	100	100	100	75	75

To specify size and color, add the appropriate dash (-) number and color to the order no. (-1 for 4' lengths, -2 for 6" lengths, -3 for 12" lengths, -4 for large spool and -5 for small spool). Example: PF 1/4-3WT.

Molex-ETC™ Perma-Fit Heat Shrinkable Tubing

PERMA-FIT PF3

Dual-Wall Polyolefin Shrink Tubing with an Adhesive Melt Liner

PF3 is a tough but flexible radiation cross-linked, Polyolefin heat shrinkable tubing that offers excellent resistance to vibration, abrasion and corrosion while providing superior strain relief. As PF3 shrinks, the adhesive liner melts and flows to seal and encapsulate components or splices contained within.

- Meets MIL-I-23053/4† CL3 (Black)
- Meets UL 224 requirements (jacket only)
- Shrink Ratio: 3:1
- Continuous Operating Temperature: -30 to +110°C
- Standard Colors: Black and clear
- Minimum Shrink Temperature: 125°C

Perma-Fit PF3

Order No. and Size	Internal Diameter: Minimum Expand. (in.)	Internal Diameter: Maximum Recov. (in.)	Nominal Recov. Wall Thk* (in.)	Standard Packaging: 4' Lengths (25/Pkg) Total ft	Standard Packaging: 6" Lengths (200/Pkg) Total ft	Standard Packaging: 12" Lengths (100/Pkg) Total ft
PF3-1/8	.125	.040	.040	100	100	100
PF3-3/16	.187	.060	.055	100	100	100
PF3-1/4	.250	.080	.057	100	100	100
PF3-3/8	.375	.120	.065	100	100	100
PF3-1/2	.500	.157	.070	100	100	100
PF3-3/4	.750	.230	.080	100	100	100
PF3-1	1.000	.320	.100	100	100	100

PERMA-FIT PFV

PVC Heat Shrink Tubing Standard Wall

PFV is a heat shrinkable PVC meeting the requirements of MIL-I- 23053/2 Class 2, as well as UL VW-1 and CSA. It has a longitudinal shrinkage of approximately 20% allowing ripple-free conformance around sharp bends such as appliance handles and bus bars. PFV will resist most chemicals and oils as well as sunlight, moisture and fungus.

Due to a low shrink temperature, PFV provides outstanding dielectric and mechanical protection without damage to enclosed or adjacent components.

- Standard Colors: Black, white, red, yellow and clear
- Shrink Ratio: 2:1
- Minimum Shrink Temperature: 93°C

Perma-Fit PFV

Order No. and Size	Internal Diameter: Minimum Expand. (in.)	Internal Diameter: Maximum Recov. (in.)	Nominal Recov. Wall Thk (in.)	Standard Packaging: 4' Lengths (25/Pkg) Total ft	Standard Packaging: 6" Lengths (200/Pkg) Total ft	Standard Packaging: 12" Lengths (100/Pkg) Total ft	Standard Packaging: Large Spool (1/Pkg) Total ft	Standard Packaging: Small Spool (1/Pkg) Total ft
PFV-3/64	.046	.023	.020	100	100	100	1000	100
PFV-1/16	.063	.032	.020	100	100	100	1000	100
PFV-3/32	.093	.046	.025	100	100	100	1000	100
PFV-1/8	.125	.063	.025	100	100	100	1000	100
PFV-3/16	.187	.093	.025	100	100	100	1000	100
PFV-1/4	.250	.125	.025	100	100	100	1000	100
PFV-5/16	.313	.157	.028	100	100	100	500	100
PFV-3/8	.375	.187	.028	100	100	100	500	100
PFV-1/2	.500	.250	.028	100	100	100	250	100
PFV-5/8	.625	.313	.033	100	100	100	250	100
PFV-3/4	.750	.375	.033	100	100	100	250	100
PFV-1	1.000	.500	.038	100	100	100	250	100
PFV-1-1/4	1.250	.630	.043	100	100	100	250	100
PFV-1-1/2	1.500	.750	.043	100	100	100	100	100
PFV-2	2.000	1.000	.048	100	100	100	100	100
PFV-3	3.000	1.500	.068	100	100	100	50	50
PFV-4	4.000	2.000	.073	100	100	100	50	50

PERMA-FIT PFB

Battery Cable Tubing

PFB heavy wall tubing is a thermally stabilized and modified Polyolefin heat shrinkable tubing made especially for battery terminals and cables. PFB provides a more positive sealing method that offers greater protection under the most adverse environmental conditions. Seals may be made over Lead, Steel, Copper, Aluminum and all standard plastic and elastomeric insulating materials.

- Dual wall
- Provides additional strain relief
- Thick-wall insulation and abrasion protection
- Eliminates greases, tape and epoxy methods
- For applications up to 2000V, 90°C rating
- Meets UL Rating 600V, 75°C
- Shrink Temperature: 121 to 135°C
- Colors: Red and black
- Shrink Ratio: Approximately 3:1
- Continuous Operating Temperature: 90°C
- Meets MIL-I-23053/15 Class 1 and 2

Perma-Fit PFB

Order No. and Size	Internal Diameter: Minimum Expand. (in.)	Internal Diameter: Maximum Recov. (in.)	Recov. Wall Thk (in.)	Standard Packaging: 4' Lengths (25/Pkg) Total ft	Standard Packaging: 6" Lengths (200/Pkg) Total ft	Standard Packaging: 12" Lengths (100/Pkg) Total ft	Recommended Cable Range for 600V Cable
PFB-04	.400	.150	.060	100‡	100	100	10-14 AWG
PFB-07	.750	.220	.095	100	100	100	1-8 AWG
PFB-11	1.100	.375	.120	100	100	100	4/0-2 AWG
PFB-15	1.500	.500	.140	100	100	100	2/0 AWG-500 MCM
PFB-20	2.000	.750	.155	100	100	100	350-1000 MCM
PFB-30	3.000	1.250	.155	100	100	100	900-1500 MCM
PFB-40	4.000	1.750	.155	100	100	100	1500-2500 MCM

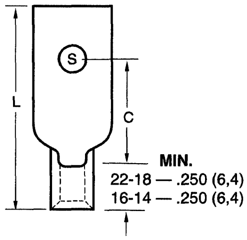
* Nominal wall measurement includes adhesive

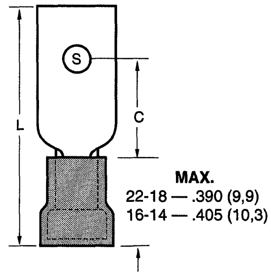
† With the exception of low temperature flexibility, elongation and tensile strength after fluid resistance

‡ 40 pieces (PFB-04 is 30" long)

To specify size and color, add the appropriate dash (-) number and color to the order no. (-1 for 4' lengths, -2 for 6" lengths, -3 for 12" lengths, -4 for large spool and -5 for small spool). Example: PFL-1/4-3WT.

MS-21004 (SHIPS) covers noninsulated, brazed-barrel, rectangular tongue terminals. Insulated versions of these terminals are covered by MS-17143 (SHIPS). Since Navy and AWG sizes, tongue width, clearance and stud size are the same for both specifications, these common basic dimensions are in the center section of the chart below. The left and right sections of the chart list the individual military specification, the Molex-ETC order number, length and the maximum wire insulation diameter (for MS-17143).





			Common Basic Dimensions												
Military Type P/N	(Mil-E-16366) Tongue Shape	Molex-ETC Order No.	Navy Military Wire Range AWG	(SHIPS) Wire Range	Stud No.	Navy Wire Size	Wire Range AWG (mm²)	Stud Size S	Maximum Width W	Minimum Clearance C	Maximum Length L	Maximum Wire Insulation Diameter	Molex-ETC Order No.	MS-17143 Dash No.	Class
MS-21004-1	L-86	A-L86-04	18-22	1-2	4	1-2	18-22 (0.25-1.30)	8 (4)	10.00 (.395)	15.90 (.625)	33.90 (1.359)	3.60 (.140)	AA-880-1	-1	1 and 2
MS-21004-2	L-83	A-L83-05			5	1-2	18-22 (0.25-1.30)	6 (3-3.5)	7.80 (.307)	11.90 (.468)	28.20 (1.109)	3.60 (.140)	AA-881-1	-4	1 and 2
MS-21004-3	L-82	A-L82-08			8	1-2	18-22 (0.25-1.30)	8 (4)	7.80 (.307)	11.90 (.468)	28.20 (1.109)	3.60 (.140)	AA-882-1	-7	1 and 2
MS-21004-4	L-81	A-L81-06			6	1-2	18-22 (0.25-1.30)	5 (3-3.5)	7.20 (.282)	7.10 (.281)	21.70 (.855)	3.60 (.140)	AA-883-1	-10	1 and 2
MS-21004-5	L-85	A-L85-04			4	1-2	18-22 (0.25-1.30)	6 (3-3.5)	6.10 (.242)	10.30 (.406)	25.80 (1.015)	3.60 (.140)	AA-884-1	-13	1 and 2
MS-21004-6	L-84	A-L84-06			6	1-2	18-22 (0.25-1.30)	4 (2.6)	6.10 (.242)	10.30 (.406)	25.80 (1.015)	3.60 (.140)	AA-885-1	-16	1 and 2
MS-21004-7	L-80	A-L80-08			8	1-2	18-22 (0.25-1.30)	4 (2.6)	6.10 (.242)	6.30 (.250)	20.20 (.796)	3.60 (.140)	AA-886-1	-19	1 and 2
MS-21004-8	L-86	B-L86-04	14-16	2-1/2-4	4	2-1/2-4	14-16 (1.00-2.60)	8 (4)	10.00 (.395)	15.90 (.625)	33.90 (1.359)	4.30 (.170)	BB-880-2	-2	1 and 2
MS-21004-9	L-83	B-L83-05			5	2-1/2-4	14-16 (1.00-2.60)	6 (3-3.5)	7.80 (.307)	11.90 (.468)	28.20 (1.109)	4.30 (.170)	BB-881-2	-5	1 and 2
MS-21004-10	L-82	B-L82-08			8	1-1/2-4	14-16 (1.00-2.60)	8 (4)	7.80 (.307)	11.90 (.468)	28.20 (1.109)	4.30 (.170)	BB-882-2	-8	1 and 2
MS-21004-11	L-81	B-L81-06			6	2-1/2-4	14-16 (1.00-2.60)	5 (3-3.5)	7.20 (.282)	7.10 (.281)	21.70 (.855)	4.30 (.170)	BB-883-2	-11	1 and 2
MS-21004-12	L-85	B-L85-04			4	2-1/2-4	14-16 (1.00-2.60)	6 (3-3.5)	6.10 (.242)	10.30 (.406)	25.80 (1.105)	4.30 (.170)	BB-884-2	-14	1 and 2
MS-21004-13	L-84	B-L84-06			6	1-1/2-4	14-16 (1.00-2.60)	4 (2.6)	6.10 (.242)	10.30 (.406)	25.80 (1.105)	4.30 (.170)	BB-885-2	-17	1 and 2
MS-21004-14	L-80	B-L80-08			8	2-1/2-4	14-16 (1.00-2.60)	4 (2.6)	6.10 (.242)	6.30 (.250)	20.20 (.796)	4.30 (.170)	BB-886-2	-20	1 and 2

Note: All actual insulated parts are color-coded red, blue or yellow to military standard

MIL-T-7928

Molex-ETC solderless terminals and splices have long contributed to our nation's defense as high quality components in a wide variety of weapons systems and defense equipment.

MIL-T-7928 is the specification most commonly used by the various government agencies, military prime and ordinance contractors and many original-equipment-manufacturers (OEM) as well as the aircraft and aerospace industries. This specification encompasses and governs several military standards: MS-20659, Uninsulated Ring Terminals; MS-25036, Insulated Ring Terminals; MS-21004, Uninsulated Rectangular Terminals; and MS-17143, Insulated Rectangular Terminals. The following quick-reference charts indicate some of the more popular Molex-ETC military terminals and splices that are manufactured to meet or exceed military specifications and performance standards.

QUALIFIED PRODUCTS LIST (QPL) APPROVALS

Class 1 approved terminals and splices conform to all dimensional requirements and meet all performance standards of the military specification when crimped with QPL-approved crimping tools.

Class 2 approved terminals and splices meet all performance standards of the military specifications when crimped with the manufacturer's QPL-recognized crimping tools.

Types I and II further classify military terminals and splices as noninsulated and insulated. Type I indicates "uninsulated" while Type II refers to "insulated" terminals and splices. Contact your Molex-ETC customer service representative for additional information and military cross-references, as well as details on all Molex-ETC crimping tools.

MS-20659 Type I Noninsulated		
MS-20659 Dash No.	**Molex-ETC Order No.**	**Class**
-101	AA-420-06	2
-102	AA-421-10	2
-103	BB-437-06	2
-104	BB-437-10	2
-105	C-328-10	1 and 2
-106	C-330-56	1 and 2
-107	D-356-10	2
-108	D-351-56	2
-109	E-360-14	2
-110	E-357-38	2
-111	F-367-14	2
-112	F-366-38	2
-113	G-375-14	2
-114	G-375-38	2
-115	H-381-14	2
-116	H-381-38	2
-117	H-381-14	2
-118	H-381-38	2
-119	J-385-56	2
-120	J-385-38	2
-121	K-390-38	2
-122	K-390-12	2
-123ASG	L-395-38	2
-124	L-395-12	2
-125	AA-426-38	2
-126	BB-423-06	2
-127	BB-418-38	2
-128	C-340-38	1 and 2
-129	D-351-38	2
-130	E-360-10	2
-131	E-357-56	2
-132	F-366-56	2

MS-20659 Type I Noninsulated		
MS-20659 Dash No.	**Molex-ETC Order No.**	**Class**
-133	G-374-12	2
-134	H-380-12	2
-135	H-380-12	2
-136	J-385-12	2
-137	L-398-78	2
-138	AA-420-04	2
-139	BB-423-04	2
-140	D-356-08	2
-141	D-350-14	2
-142	D-352-12	2
-143	E-358-12	2
-144	F-367-10	2
-145	F-369-12	2
-146ASG	G-375-10	2
-147	G-375-56	2
-148	G-374-76	2
-149	H-381-56	2
-150	H-380-76	2
-151	H-381-56	2
-152	H-380-76	2
-153	J-385-14	2
-154	J-385-76	2
-155ASG	K-390-56	2
-156		2
-158		2
-159	L-395-58	2
-160		2
-161	AA-426-56	2
-163	BB-418-56	2
-165	C-336-06	2
-166	C-301-12	2

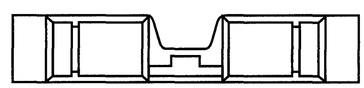
MS-25036 Type II Insulated		
MS-25036 Dash No.	**Molex-ETC Order No.**	**Class**
-101	AA-820-06	1 and 2
-102	AA-832-06	1 and 2
-103	AA-821-10	1 and 2
-104	AA-822-56	1 and 2
-105	AA-826-38	1 and 2
-106	BB-823-06	1 and 2
-107	BB-837-06	1 and 2
-108	BB-837-10	1 and 2
-109	BB-825-56	1 and 2
-110	BB-818-38	1 and 2
-111	C-828-06	1 and 2
-112	C-828-10	1 and 2
-113	C-830-56	1 and 2
-114	C-840-38	1 and 2
-115ASG	D-750-10	2
-116	D-750-14	2
-117	D-751-56	2
-118	D-751-38	2
-119	E-760-10	2
-120	E-760-14	2
-121	E-757-56	2
-122	E-757-38	2
-123	F-767-14	2
-124	F-766-56	2
-125	F-766-38	2
-126	G-775-14	2
-127	G-775-38	2

MS-25036 Type II Insulated		
MS-25036 Dash No.	**Molex-ETC Order No.**	**Class**
-128	G-774-12	2
-129	H-781-14	2
-130	H-781-38	2
-131	H-780-12	2
-132	H-781-14	2
-133	H-781-38	2
-134	H-780-12	2
-135	J-785-56	2
-136	J-385-38	2
-137		2
-138	K-790-38	2
-139	K-790-12	2
-140		2
-141	L-795-12	2
-143	M-8114-02	2
-144	M-8113-04	2
-145	M-8118-06	2
-146	M-8118-08	2
-147	M-8118-10	2
-148	AA-820-04	1 and 2
-149	AA-821-08	1 and 2
-150	AA-822-14	1 and 2
-152	BB-823-04	1 and 2
-153	BB-837-08	1 and 2
-154	BB-825-14	1 and 2
-156	C-828-08	1 and 2
-157	C-830-14	1 and 2
-159	AA-820-02	1 and 2

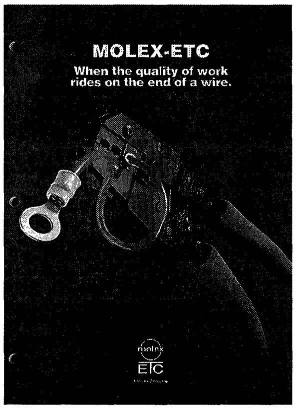
WINDOW BUTT SPLICES/MIL-T-7928/5

Window butt splices have military approval to withstand the most harsh environments. The window guarantees proper wire insertion and crimp tool alignment. They are nylon insulated and have an insulation grip that provides superior strain relief.

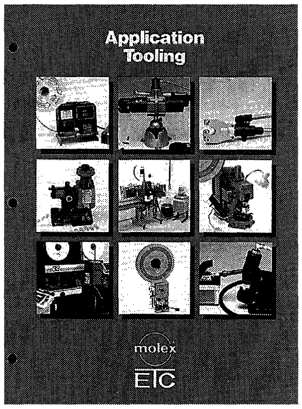
MS-7928/5 Dash No.	Molex-ETC Order No.
-3	WA-840
-4	WB-841
-5	WC-842



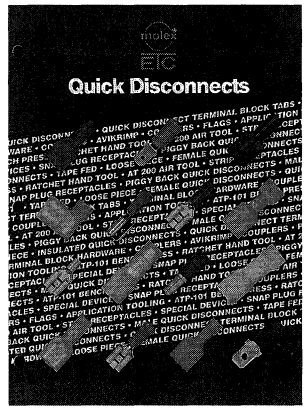
Molex-ETC offers a wide selection of precision engineered terminals, quick disconnects and splices, along with application tooling and other wiring accessories. *If you would like to receive any of the catalogs shown below, please call 1-800-800-0449, ext. 206.*



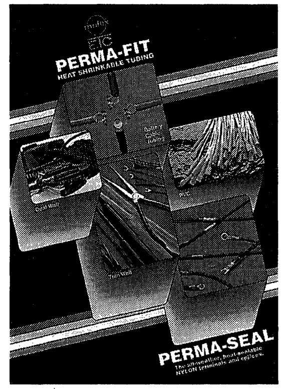
FULL LINE CATALOG
Call us and request your copy of our complete solderless terminal and wire accessory catalog.



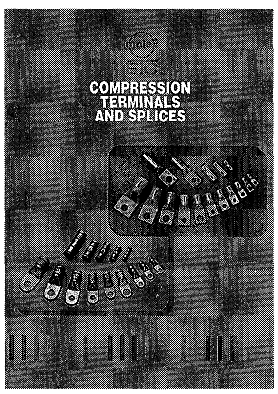
APPLICATION TOOLING BROCHURE
Molex-ETC offers a complete line of application tooling from hand tools to electric crimping presses.



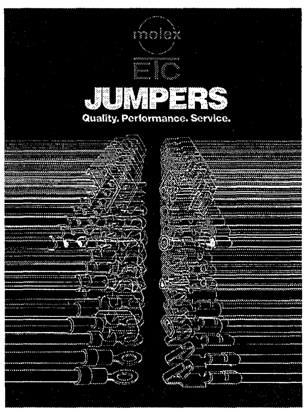
QUICK DISCONNECT BROCHURE
We offer the most complete line of noninsulated and fully insulated quick disconnects.



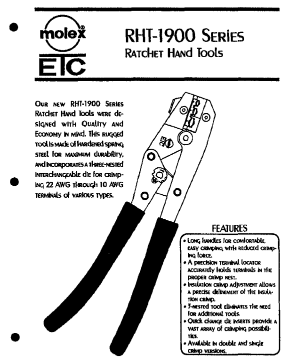
SHRINK TUBING FOLDER
Shrink tubing on bulk reels, standard lengths or custom cut, with marking available.



COMPRESSION LUG FOLDER
Industry standard terminals and splices that are tough and reliable, yet affordable.



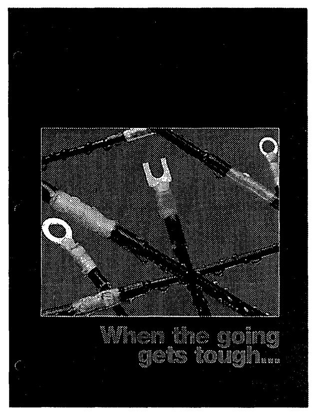
JUMPER BROCHURE
Custom jumpers, assemblies and battery cables.


RHT-1900 Series
Ratchet Hand Tools

Our new RHT-1900 Series Ratchet Hand Tools were designed with Quality and Economy in mind. This rugged tool is made of hardened spring steel for maximum durability, and incorporates a three-nested interchangeable die for crimping 22 AWG through 10 AWG terminals of various types.

FEATURES
- Long handles for comfortable, easy crimping with reduced crimping force.
- A precision terminal locator accurately holds terminals in the proper crimp nest.
- Insulation crimp adjustment allows a precise definement of the insulation crimp.
- 3-nested tool eliminates the need for additional tools.
- Quick change die inserts provide a vast array of crimping possibilities.
- Available in double and single crimp versions.

RHT-1900 DATA SHEET
Try our new 3-nested ratchet hand tool with interchangeable crimping dies.



PERMA-SEAL BROCHURE
Perma-Seal, the all-weather, heat-sealable nylon terminals and splices from Molex-ETC.

Molex-ETC Inc.
4650 62nd Avenue North
Pinellas Park, FL 34665
800-800-0449
813-521-2700
Fax: 813-528-1010

Quick Connects

Available Primarily in Europe—Distributed by Molex Incorporated, not Molex-ETC

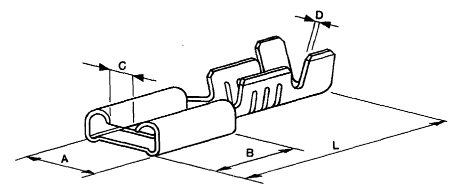
FEATURES AND SPECIFICATIONS

Quick Connect Female Receptacle

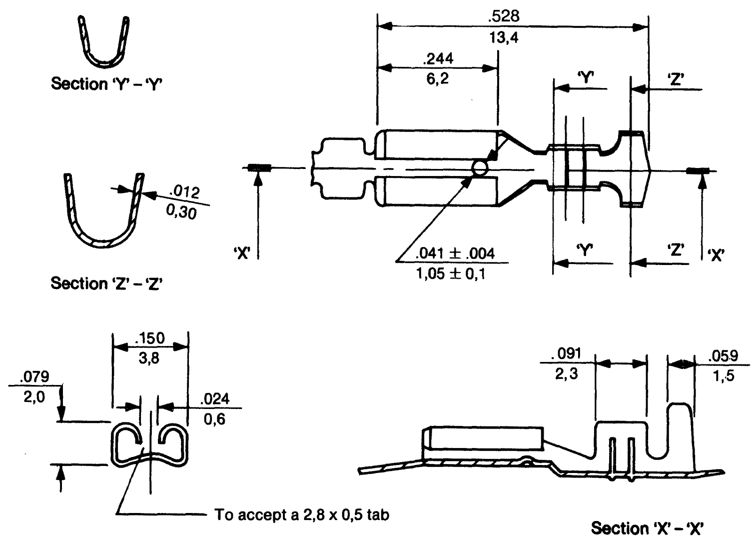
For 2.80 by 0.50mm (.110 by .020") Tabs

Features and Benefits

- Wire range from 0.05 through 0.15mm² to 0.50 through 1.00mm²
- Insulation range from 0.70 through 1.50∅mm to 2.70 through 3.30∅mm
- The product is designed to achieve a quick method of electrical connection/disconnection
- The female receptacle has opening walls at the rear to prevent over insertion of corresponding tab



Available Primarily in Europe—Distributed by Molex Incorporated, not Molex-ETC™



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
16-20 (0.50-1.50)	2.00-3.60 (.079-.142)	94030-4920	94030-4921	3.80 (.150)	6.20 (.244)	0.60 (.024)	0.30 (.012)	13.40 (.528)
20-24 (0.25-0.50)	1.00-2.00 (.039-.079)	94030-4170	94030-4171	3.80 (.150)	6.20 (.244)	0.60 (.024)	0.30 (.012)	13.40 (.528)
24-30 (0.05-0.20)	0.70-1.30 (.028-.051)	94030-4940	94030-4941	3.80 (.150)	6.40 (.252)	0.60 (.024)	0.30 (.012)	13.40 (.528)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

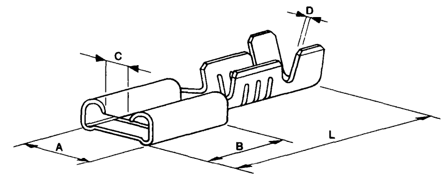
FEATURES AND SPECIFICATIONS

Features and Benefits
- Wire range from 0.25 through 0.50mm² to 0.50 through 1.50mm²
- Insulation range from 1.20 through 2.10∅mm to 2.00 through 3.60∅mm

molex®

Quick Connect Female Receptacle

For 2.80 by 0.80mm (.110 by .032") Tabs



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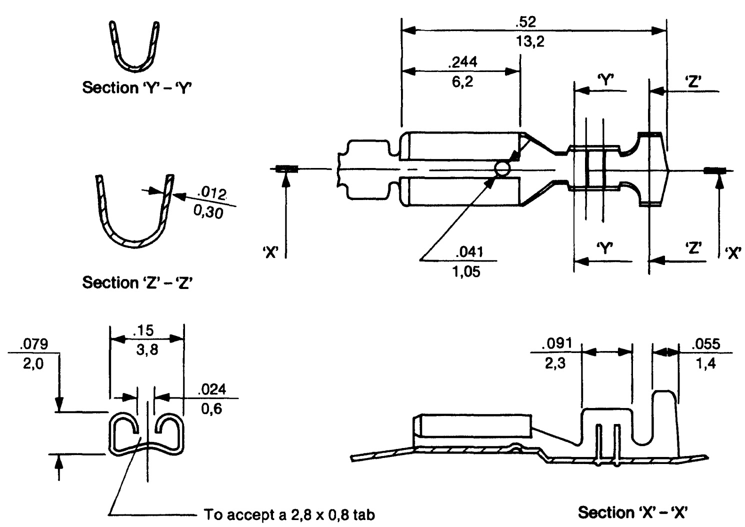


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
16-20 (0.50-1.50)	2.00-3.60 (.079-.142)	94030-4930	94030-4931	3.80 (.150)	6.20 (.244)	0.60 (.024)	0.30 (.012)	13.20 (.520)
20-24 (0.25-0.50)	1.20-2.10 (.047-.083)	94030-4200	94030-4201	3.80 (.150)	6.20 (.244)	0.60 (.024)	0.30 (.012)	13.20 (.520)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

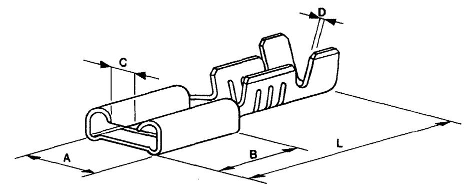
FEATURES AND SPECIFICATIONS

Quick Connect Female Receptacle

For 4.80 by 0.50mm (.187 by .020") Tabs

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 1.00 through 2.50mm²
- Insulation range from 2.00 through 3.30∅mm to 2.70 through 4.30∅mm



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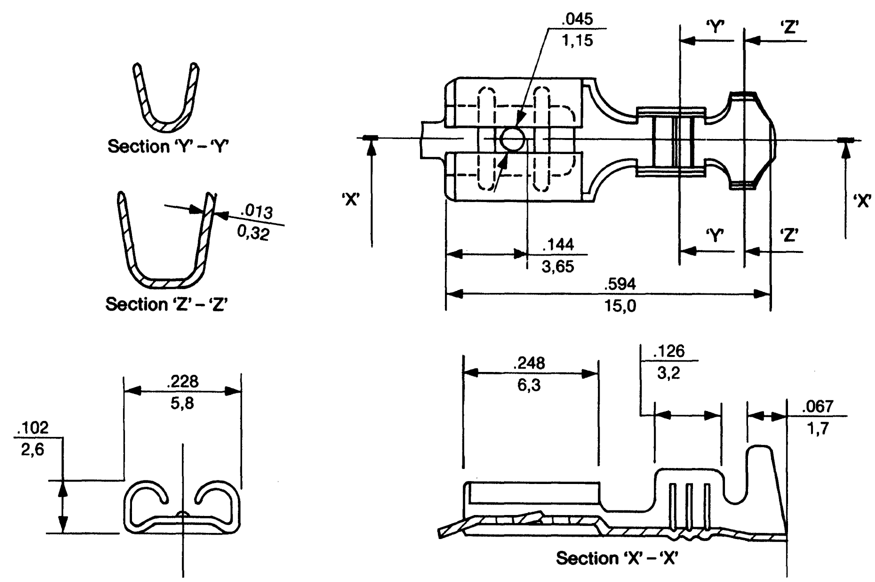


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-4530	94030-4531	5.80 (.228)	6.30 (.248)	1.20 (.047)	0.32 (.013)	15.10 (.594)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-4540	94030-4541	5.80 (.228)	6.30 (.248)	1.20 (.047)	0.32 (.013)	15.10 (.594)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

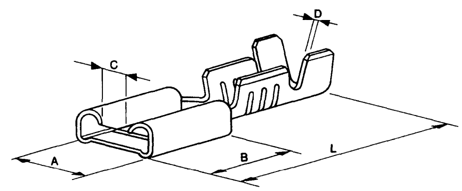
FEATURES AND SPECIFICATIONS

Quick Connect Female Receptacle

For 4.80 by 0.80mm (.187 by .032") Tabs

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 1.00 through 2.50mm²
- Insulation range from 2.00 through 3.30∅mm to 2.70 through 4.30∅mm



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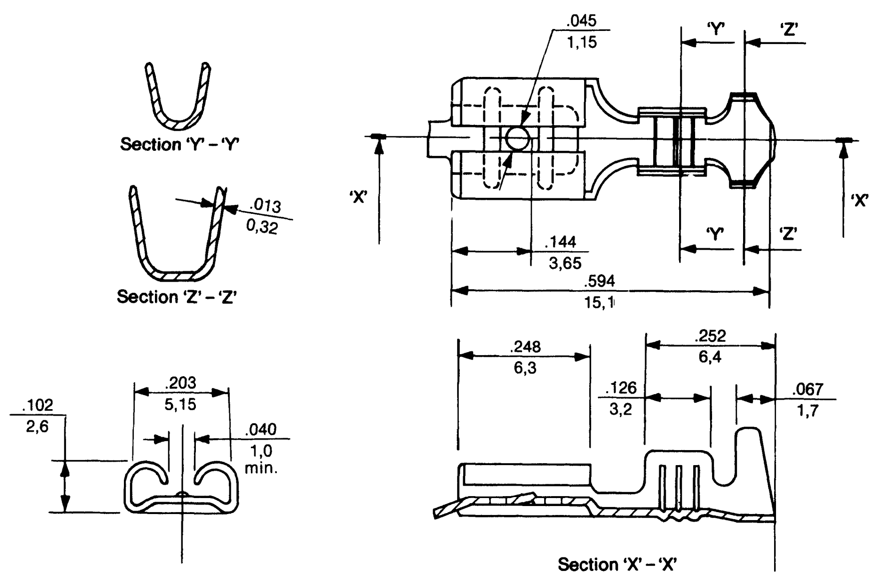


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-4020	94030-4021	5.15 (.203)	6.30 (.248)	1.20 (.047)	0.32 (.013)	15.10 (.594)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-4030	94030-4031	5.15 (.203)	6.30 (.248)	1.20 (.047)	0.32 (.013)	15.10 (.594)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

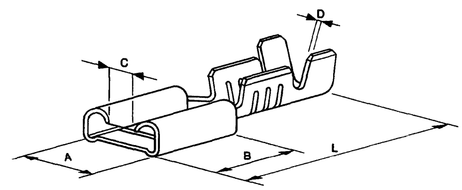
FEATURES AND SPECIFICATIONS

Quick Connect Female Receptacle

For 6.30 by 0.80mm (.250 by .032") Tabs

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 4.00 through 6.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm



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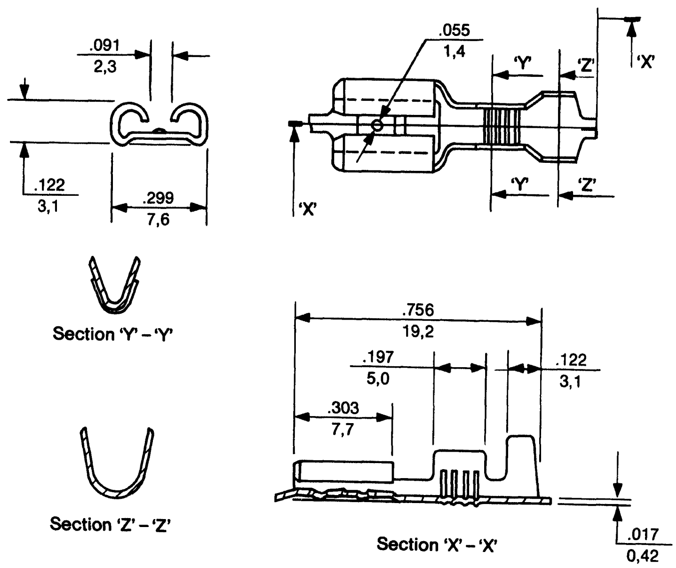


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94512-0100	94512-0101	7.60 (.299)	7.70 (.303)	2.30 (.091)	0.42 (.017)	19.20 (.756)
14-18 (1.00-2.50)	2.70-4.30 (.106-.168)	94512-0200	94512-0201	7.60 (.299)	7.70 (.303)	2.30 (.091)	0.42 (.017)	19.20 (.756)
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94512-0300	94512-0301	7.60 (.299)	7.70 (.303)	2.30 (.091)	0.42 (.017)	19.20 (.756)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

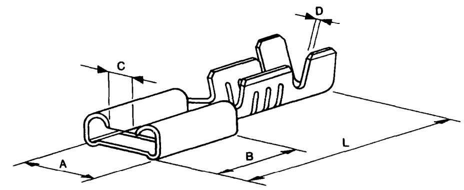
FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire range 4.00 through 6.00mm²
- Insulation range 3.80 through 5.10∅mm

Quick Connect Female Receptacle

For 9.50 by 1.20mm (.374 by .047") Tabs



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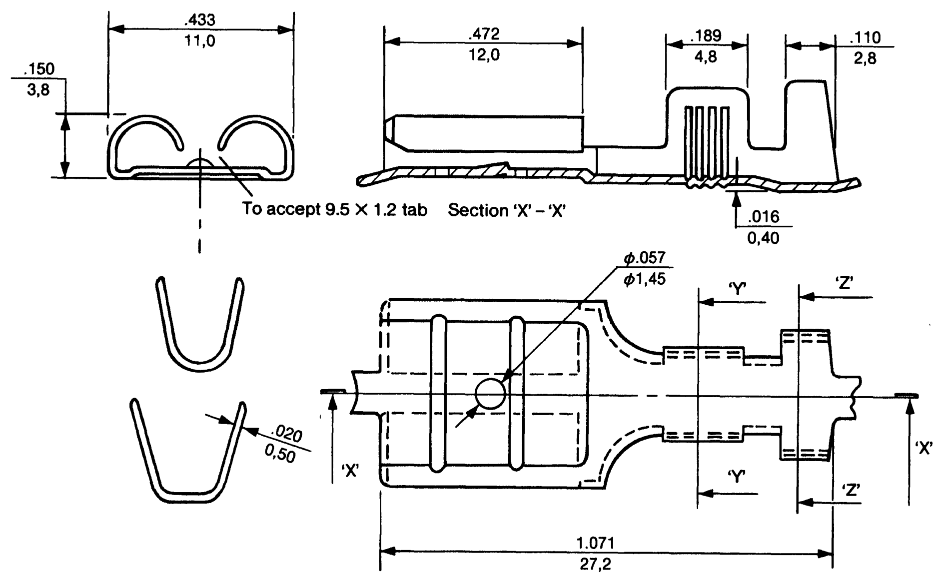


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94030-4220	94030-4221	11.00 (.433)	12.00 (.472)	2.50 (.098)	0.50 (.020)	27.20 (1.071)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

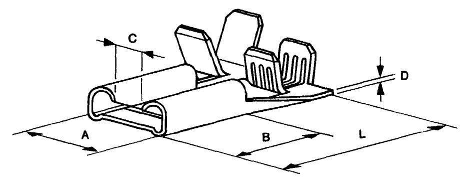
FEATURES AND SPECIFICATIONS

Quick Connect Flag Receptacle

For 6.30 by 0.80mm (.250 by .032") Tabs

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 1.00 through 2.50mm²
- Insulation range from 2.00 through 3.30∅mm to 2.70 through 4.30∅mm
- The product is designed to overcome problems where space is a critical factor



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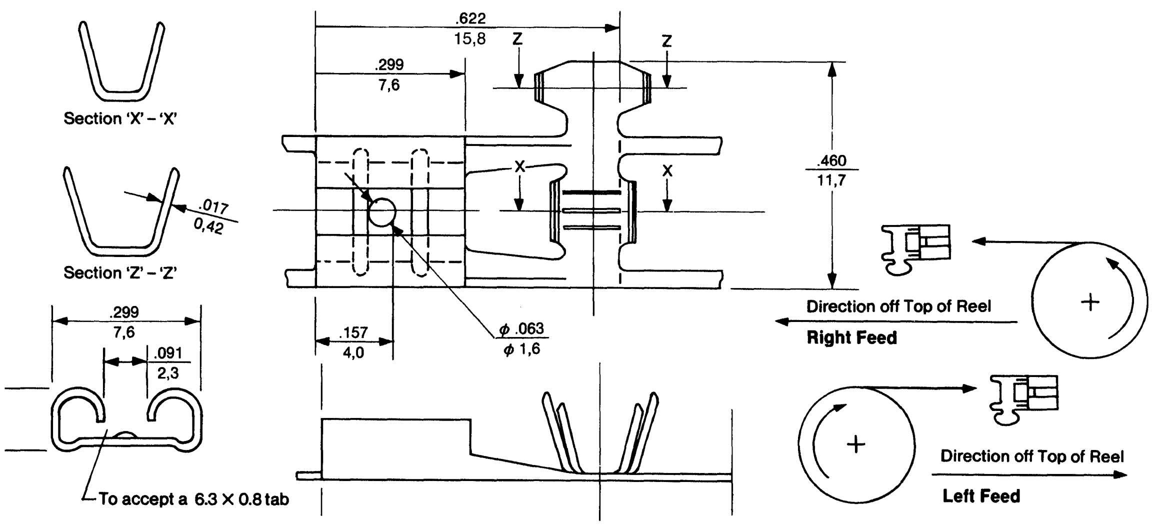


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Left Feed Order No.*		Right Feed Order No.*		Dimension				
		Brass/Plain	Brass/Tin	Brass/Plain	Brass/Tin	A	B	C	D	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-5000	94030-5001	94030-3970	94030-3971	7.60 (.299)	7.60 (.299)	2.30 (.091)	0.42 (.017)	15.30 (.602)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-5010	94030-5011	94030-3980	94030-3981	7.60 (.299)	7.60 (.299)	2.30 (.091)	0.42 (.017)	15.80 (.622)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

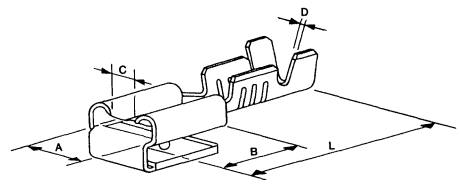
FEATURES AND SPECIFICATIONS

Features and Benefits

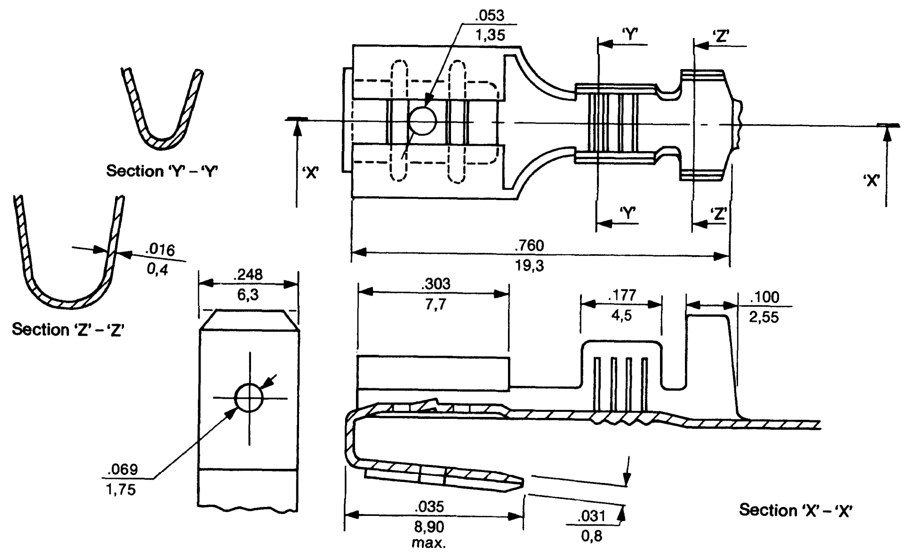
- Wire range from 0.50 through 1.00mm² to 4.00 through 6.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm
- The design of the product provides easy access to tap an additional connection

Quick Connect Piggyback

For 6.30 by 0.80mm (.250 by .032") Tabs



Available Primarily in Europe—Distributed by Molex Incorporated, not Molex-ETC™



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-6240	94030-6241	7.50 (.295)	7.70 (.303)	2.30 (.091)	0.40 (.016)	19.30 (.760)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-6250	94030-6251	7.50 (.295)	7.70 (.303)	2.30 (.091)	0.40 (.016)	19.30 (.760)
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94030-6260	94030-6261	7.50 (.295)	7.70 (.303)	2.30 (.091)	0.40 (.016)	19.30 (.760)

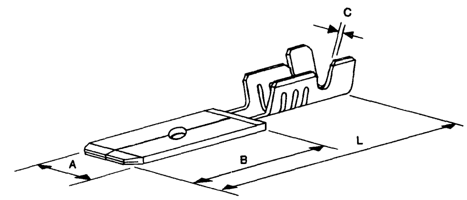
FEATURES AND SPECIFICATIONS

Quick Connect Tab

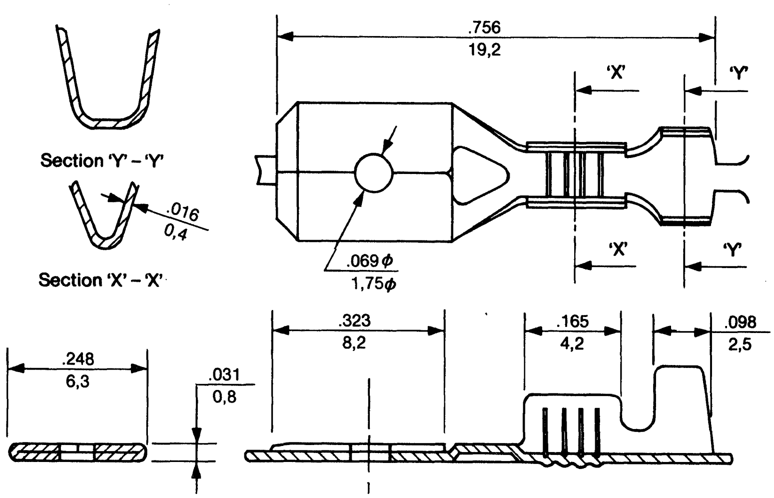
6.30 by 0.80mm (.250 by .032")

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 4.00 through 6.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm
- These are manufactured to a high standard to mate with our standard Qik Konnect Receptacles for optimum fit and performance



Available Primarily in Europe—Distributed by Molex Incorporated, not Molex-ETC™



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension			
		Brass/Plain	Brass/Tin	A	B	C	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-4550	94030-4551	6.30 (.248)	8.20 (.323)	0.40 (.016)	19.20 (.756)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-4560	94030-4561	6.30 (.248)	8.20 (.323)	0.40 (.016)	19.20 (.756)
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94030-4570	94030-4571	6.30 (.248)	8.20 (.323)	0.40 (.016)	19.20 (.756)

* Contact factory to obtain order no. for Phosphor Bronze/Plain and Phosphor Bronze/Tin

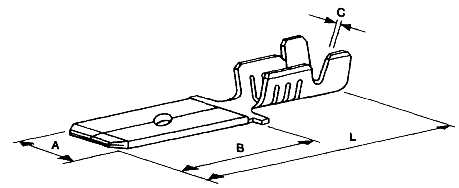
FEATURES AND SPECIFICATIONS

molex **Quick Connect Tab**

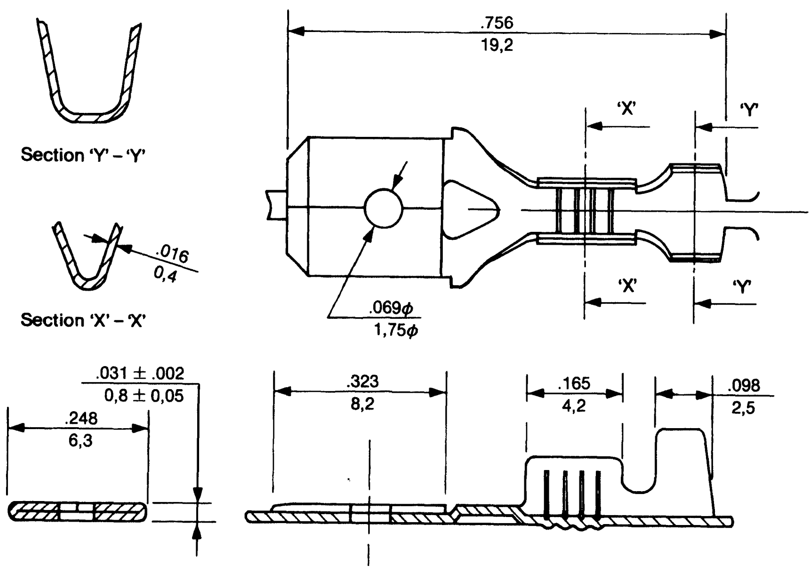
6.30 by 0.80mm (.250 by .032")

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 4.00 through 6.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm



Available Primarily in Europe— Distributed by Molex Incorporated, not Molex-ETC™



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension			
		Brass/Plain	Brass/Tin	A	B	C	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-4100	94030-4101	6.30 (.248)	8.20 (.323)	0.40 (.016)	19.20 (.756)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-4110	94030-4111	6.30 (.248)	8.20 (.323)	0.40 (.016)	19.20 (.756)
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94030-4120	94030-4121	6.30 (.248)	8.20 (.323)	0.40 (.016)	19.20 (.756)

* Contact factory to obtain order no. for Phosphor Bronze/Plain and Phosphor Bronze/Tin

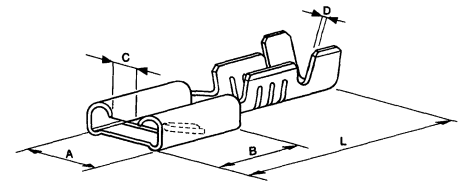
FEATURES AND SPECIFICATIONS

Quick Snap Female Receptacle

For 6.30 by 0.80mm (.250 by .032") Tabs

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 4.00 through 6.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm
- This is the multiway connector version of our standard Qik Konnect receptacle, normally used in harness making; this provides a quick method of multi-connection up to 18 ways



Solderless Terminals

L

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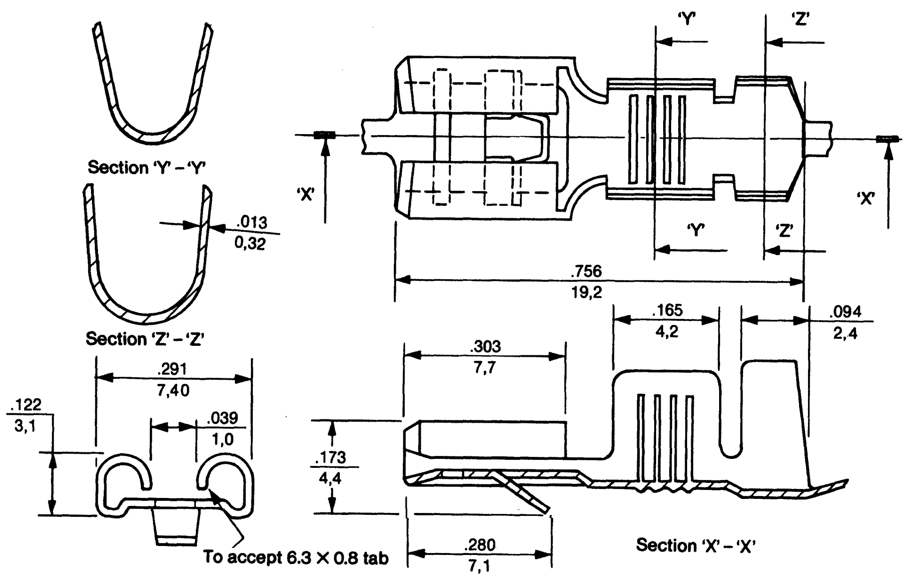


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension				
		Brass/Plain	Brass/Tin	A	B	C	D	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-3890	94030-3891	7.40 (.291)	7.70 (.303)	1.00 (.039)	0.32 (.013)	19.20 (.756)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-3910	94030-3911	7.40 (.291)	7.70 (.303)	1.00 (.039)	0.32 (.013)	19.20 (.756)
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94030-3960	94030-3961	7.40 (.291)	7.70 (.303)	1.00 (.039)	0.32 (.013)	19.20 (.756)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

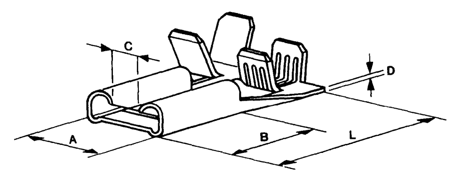
FEATURES AND SPECIFICATIONS

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 2.50 through 4.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm
- This is the multiway connector version of our Qik Konnect Flag receptacle; this provides a quick method of multi-connection up to 18 ways

molex® Quick Snap Flag Receptacle

For 7.70 by 0.80mm (.303 by .032") Tabs



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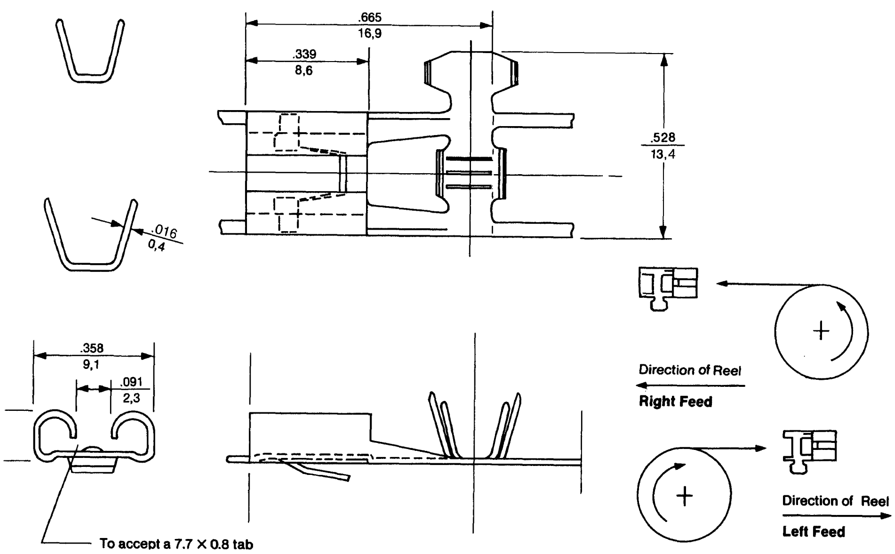


ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Left Feed Order No.*		Right Feed Order No.*		Dimension				
		Brass/Plain	Brass/Tin	Brass Plain	Brass/Tin	A	B	C	D	L
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-5920	94030-5921	94030-5900	94030-5901	9.10 (.358)	8.60 (.339)	2.30 (.091)	0.40 (.016)	16.90 (.665)
11-14 (2.50-4.00)	3.80-5.10 (.150-.201)	94030-6010	94030-6011	94030-6000	94030-6001	9.10 (.358)	8.60 (.339)	2.30 (.091)	0.40 (.016)	16.90 (.665)

* Contact factory to obtain order no. for Phosphor Bronze/Plain, Phosphor Bronze/Tin, Nickel Silver/Plain and Steel/Nickel

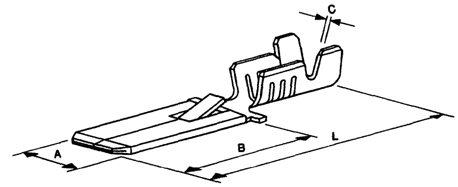
FEATURES AND SPECIFICATIONS

Quick Snap Snap Tab

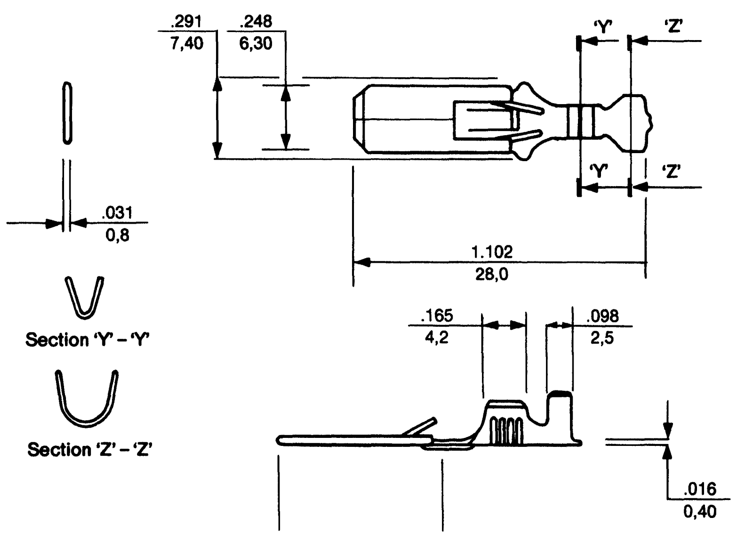
6.30 by 0.80mm (.250 by .032") with Latch For Use in Multicontact Housings

Features and Benefits

- Wire range from 0.50 through 1.00mm² to 4.00 through 6.00mm²
- Insulation range from 2.00 through 3.30∅mm to 3.80 through 5.10∅mm
- This is the multiway connector version of our standard Qik Konnect tab, normally used in harness manufacture; this provides a quick method of multi-connection up to 18 ways



Available Primarily in Europe—Distributed by Molex Incorporated, not Molex-ETC™



ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG (mm²)	Insulation Range	Order No.*		Dimension			
		Brass/Plain	Brass/Tin	A	B	C	L
18-20 (0.50-1.00)	2.00-3.30 (.079-.130)	94030-4070	94030-4071	6.30 (.248)	15.70 (.618)	0.40 (.016)	28.00 (1.102)
14-18 (1.00-2.50)	2.70-4.30 (.106-.169)	94030-4080	94030-4081	6.30 (.248)	15.70 (.618)	0.40 (.016)	28.00 (1.102)
10-11 (4.00-6.00)	3.80-5.10 (.150-.201)	94030-4090	94030-4091	6.30 (.248)	15.70 (.618)	0.40 (.016)	28.00 (1.102)

* Contact factory to obtain order no. for Phosphor Bronze/Plain and Phosphor Bronze/Tin

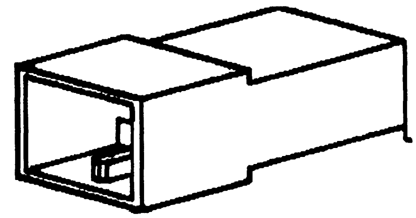
FEATURES AND SPECIFICATIONS

Quick Connect Housings Male/Female

For 6.35mm Tabs/Receptacle

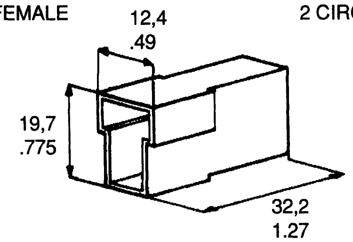
Features and Benefits

- Sizes 2 to 3 circuits
- Standard Material Color: Natural (for other colors please contact Molex)
- Designed for high current
- Female housing fits with tabs series Z630B and Z630C
- Male housing fits with receptacle Z630B and Z630C
- Keyed and polarized
- Material: Nylon (for other material contact Molex)



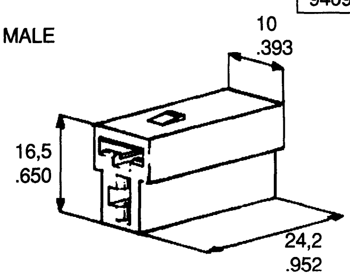
Available Primarily in Europe—Distributed by Molex Incorporated, not Molex-ETC™

FEMALE 2 CIRCUITS



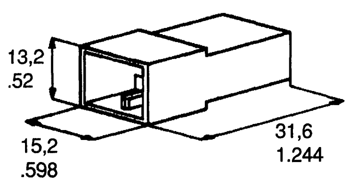
ORDER NO
94090-4090

MALE



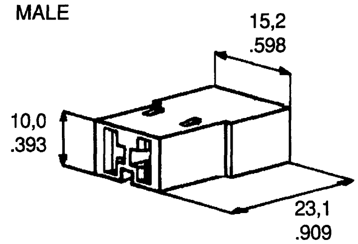
ORDER NO
94090-4080

FEMALE 2 CIRCUITS



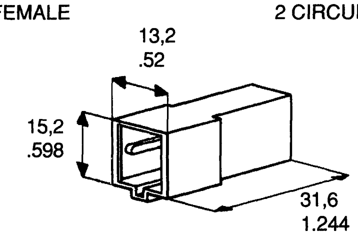
ORDER NO
94502-0200

MALE



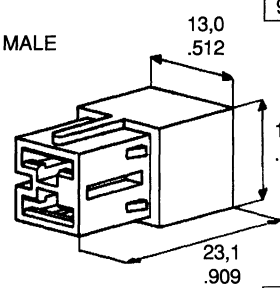
ORDER NO
94503-0200

FEMALE 2 CIRCUITS



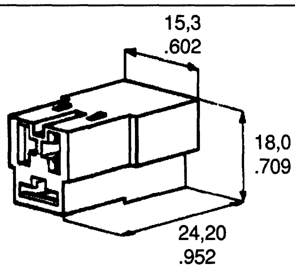
ORDER NO
94502-0210

MALE



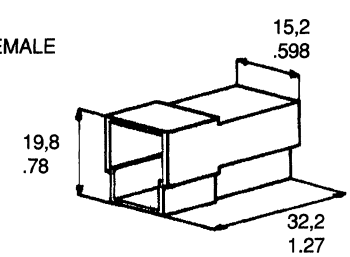
ORDER NO
94503-0210

MALE 3 CIRCUITS



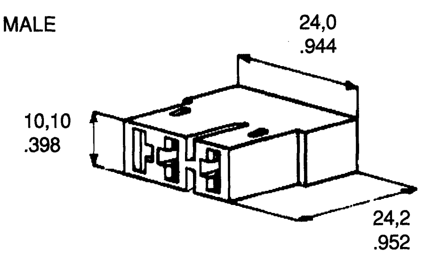
ORDER NO
94090-4120

FEMALE



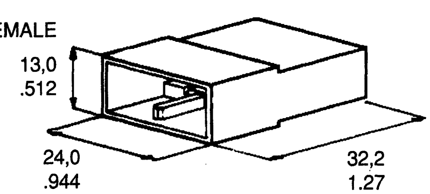
ORDER NO
94090-4130

MALE 3 CIRCUITS



ORDER NO
94090-4100

FEMALE

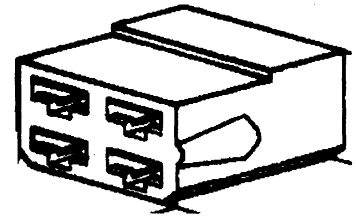


ORDER NO
94090-4110

Quick Connect Housings Male/Female

For 6.35mm Tabs/Receptacle

Features and Benefits
- Sizes 4 and 6 circuits
- Standard Material Color: Natural (for other colors please contact Molex)
- Designed for high current
- Female housing fits with tabs series Z630B and Z630C
- Male housing fits with receptacle Z630B and Z630C
- Keyed and polarized
- Material: Nylon (for other material contact Molex)



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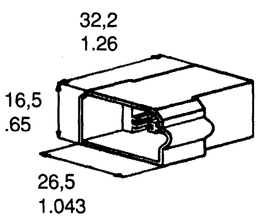
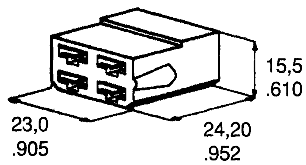
FEMALE 4 CIRCUITS



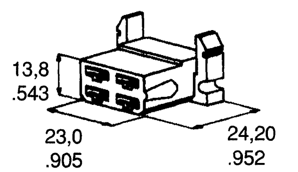
ORDER NO
94090-4160

MALE 4 CIRCUITS



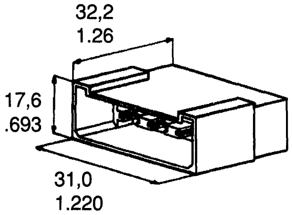
ORDER NO
94090-4140

MALE (Panel mount) 4 CIRCUITS



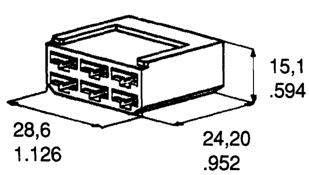
ORDER NO
94090-4150

FEMALE 6 CIRCUITS



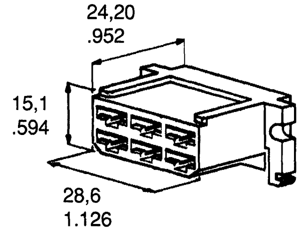
ORDER NO
94090-4190

MALE 6 CIRCUITS



ORDER NO
94090-4170

MALE (Panel mount) 6 CIRCUITS



ORDER NO
94090-4180

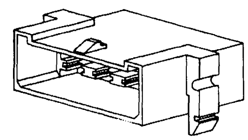
FEATURES AND SPECIFICATIONS

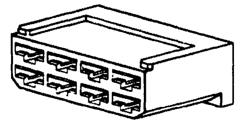
Quick Connect Housings Male/Female

For 6.35mm Tabs/Receptacle

Features and Benefits

- Size 8 circuits
- Standard Material Color: Natural (for other colors please contact Molex)
- Designed for high current
- Female housing fits with tabs series Z630B and Z630C
- Male housing fits with receptacle Z630B and Z630C
- Keyed and polarized
- Material: Nylon (for other material contact Molex)





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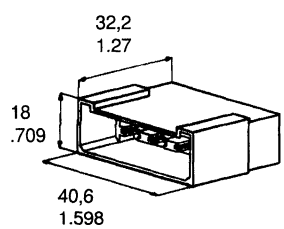
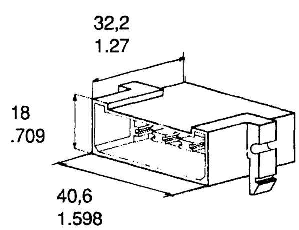
FEMALE 8 CIRCUITS



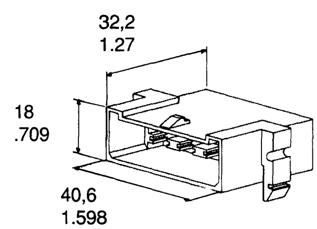
ORDER NO
94090-4210

FEMALE 8 CIRCUITS



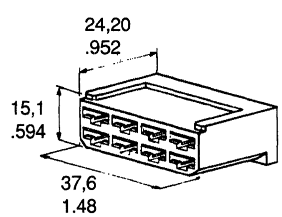
ORDER NO
94090-4220

FEMALE 8 CIRCUITS



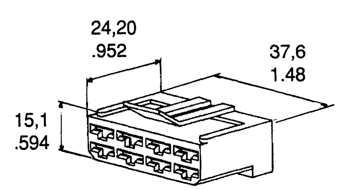
ORDER NO
94502-0800

MALE 8 CIRCUITS



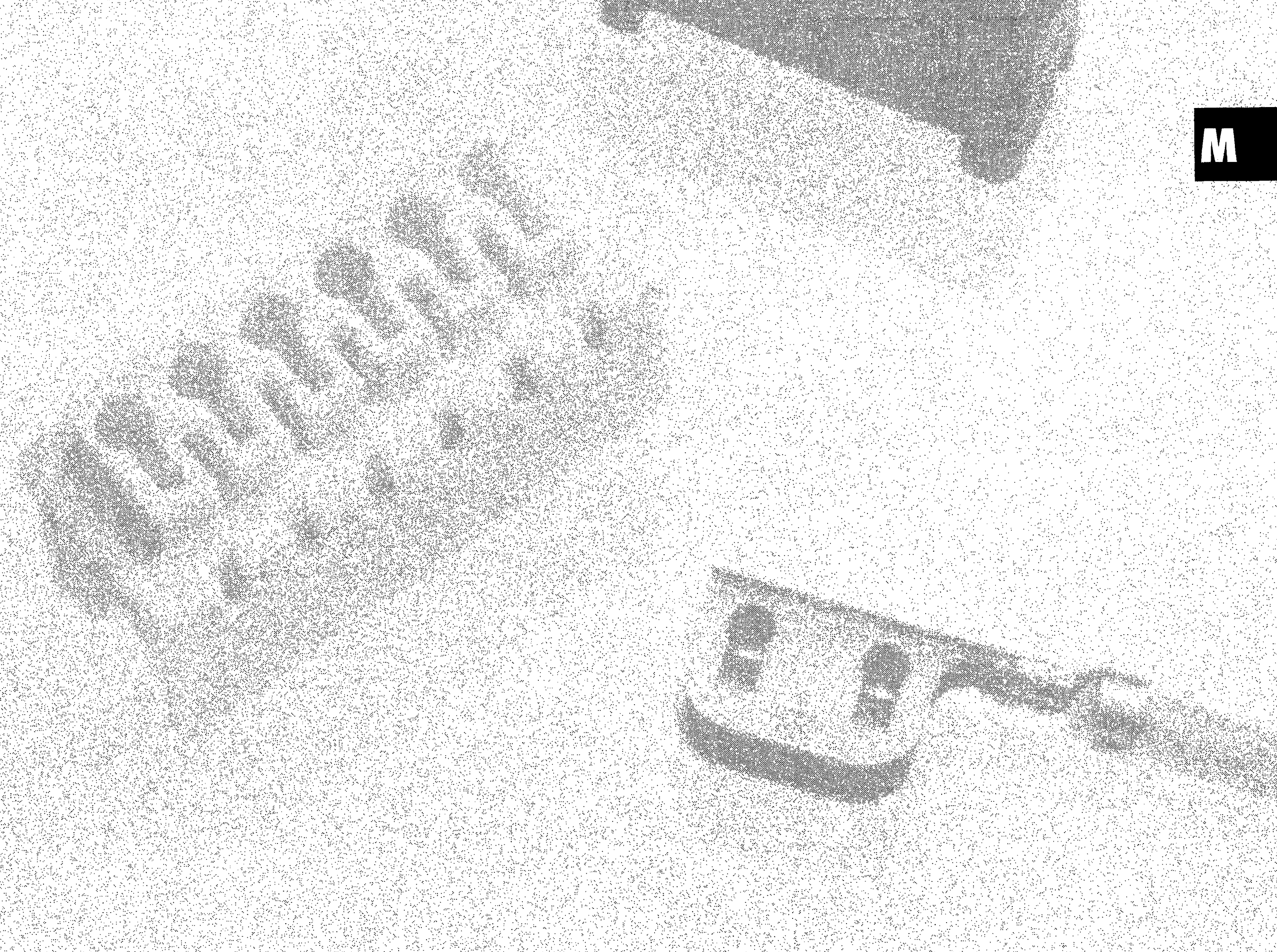
ORDER NO
94090-4200

MALE 8 CIRCUITS



ORDER NO
94503-0800

Specialty Connectors



M

FEATURES AND SPECIFICATIONS

Claspcon™ Wire-to-Board Crimp Terminal Sockets

1881 For Round Pins

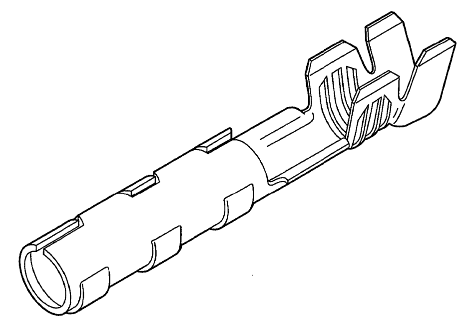
Features and Benefits
- Single-point contact connection to PC board
- Ideal for test set-ups or side connections to PC boards
- No housing required

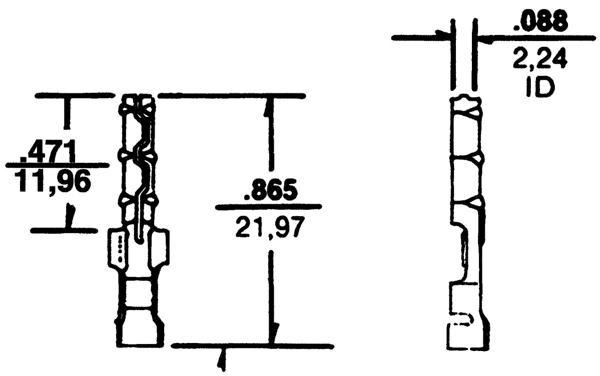
Molex 1881 Claspcon crimp-type terminals are designed for a single contact connection to a .093" dia. pin (16-06-0005) that has been inserted into a PC board. This type of interconnection is especially useful for test set-ups or side connections that must be made on the PC board. Two sizes are available, depending on specified wire size, both in Tin-plated Brass. Order mating .093" PC pin below.

Reference Information
Packaging: Loose or chain
UL File No.: E29179
CSA File No.: LR19980A
Mates With: .093" round pins
Designed In: Inches

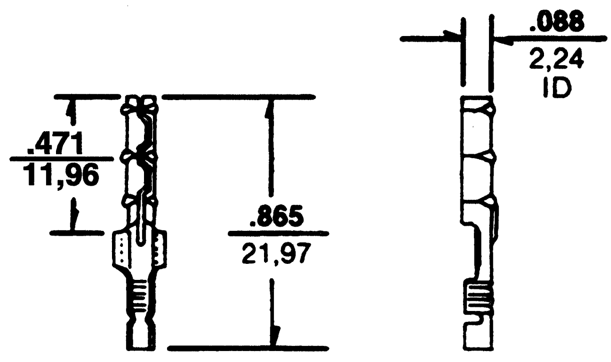
Electrical
Current: 6.0A

Physical
Contact: Brass
Plating: Tin





1881-2



1881-3

ORDERING INFORMATION

Crimp Wire Size AWG	Insulation Diameter	Engineering No.	1881 Order No.		.093" PC Pin Ordering Information		Application Tooling	
			Chain Form	Loose Form	Staking Length	Order No.	Hand Crimp Tool	TM-42 Die
16-24	3.50 (.138) max.	1881-2	02-08-1101	02-08-1102	2.78 (.109)	16-06-0005	• 11-01-0084	11-40-2083
24-30	0.76-1.52 (.030-.060)	1881-3	02-08-1103	02-08-1104			11-01-0006	11-40-2084

• US Standard Product, available through Molex franchised distributors
Recommended wire range assumes stranded wire
See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac and TM-42

FEATURES AND SPECIFICATIONS

Claspcon™ Wire-to-Board Crimp Terminal Sockets

2107

For Round or Square Pins

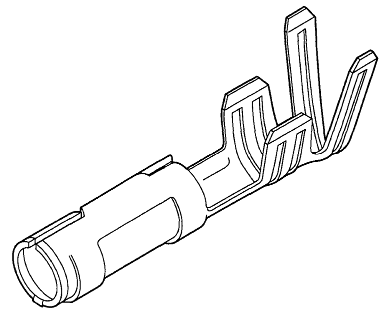
Features and Benefits
- Single-point contact connection to PC board
- Ideal for test set-ups or side connections to PC boards
- No housing required

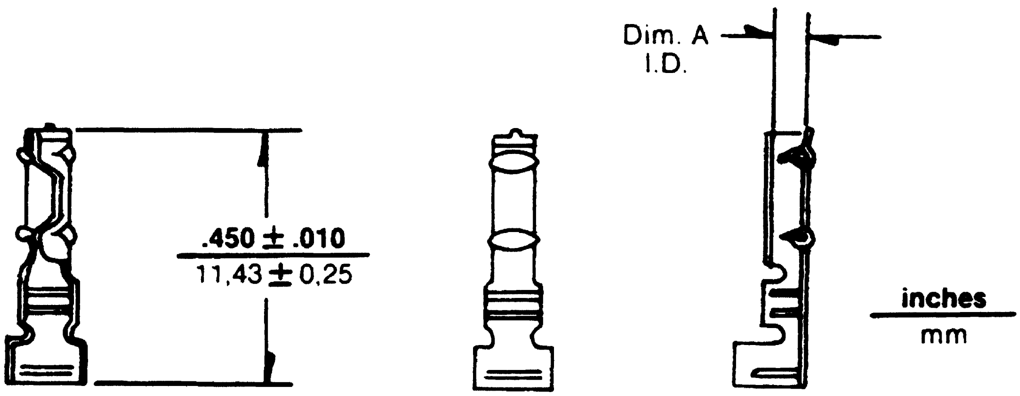
Claspcon crimp-type terminals connect to a single circuit 1.14mm (.045") wire pin. The pin may be positioned anywhere on a PC board, thus eliminating the need to run a circuit to the PC board edge. The terminal may be specified in either chain or loose form for automatic or single crimping.

Reference Information
Packaging: Loose or chain
UL File No.: E29179
Mates With: .045" pins
Designed In: Inches

Electrical
Current: 6.0A

Physical
Contact: See Table
Plating: See Table





ORDERING INFORMATION AND DIMENSIONS

.045" Pin Style	Crimp Wire Size AWG	Insulation Diameter	Order No.				Application Tooling		Dimension A
			Brass		Phosphor Bronze		Hand Crimp Tool	TM-40/42 Die	
			Chain Form	Loose Form	Chain Form	Loose Form			
Round	18-24	1.52-3.05 (.060-.120)	02-05-1104	02-05-1105	02-05-1204	02-05-1205	11-01-0088	11-40-2014	1.12 (.044)
	24-30	0.76-1.52 (.030-.060)	02-05-1116	02-05-1117	02-05-1216	02-05-1217	11-01-0088	11-40-2013	1.12 (.044)
Square	18-24	1.52-3.05 (.060-.120)	02-05-1106	02-05-1107	02-05-1207	02-05-1208	11-01-0088	11-40-2014	1.37 (.054)
	24-30	0.76-1.52 (.030-.060)	02-05-1115	02-05-1119			11-01-0088	11-40-2013	1.37 (.054)

Recommended wire range assumes stranded wire

See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac and TM-42

Specialty Connectors

M

FEATURES AND SPECIFICATIONS

Wire-to-Board Crimp Terminals Strain Relief PC Board Terminals

4706/4811/5190/5298/41817/42001/90198

Features and Benefits

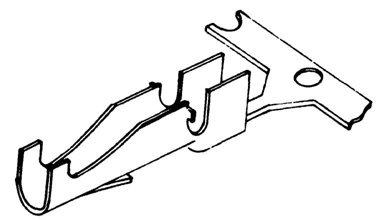
- Snap-lock secure wire to PC board before wave soldering
- No additional contact resistance
- Wire soldering directly to board
- Rapid and economical means of hand-wiring boards
- Eliminates eyelets on PC boards

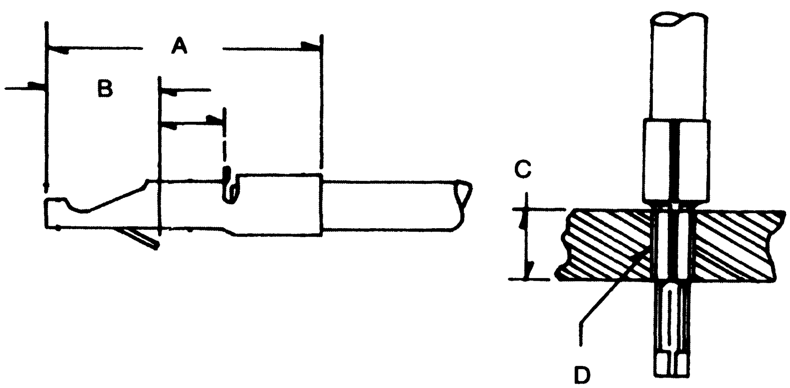
Physical

Contact: Brass
Plating: See Table

Reference Information

Product Specification: PS-4706 and PS-4811
Designed In: Inches





ORDERING INFORMATION AND DIMENSIONS

Wire Size AWG	Maximum Insulation Diameter	Engineering No.	Order No.	Plating	Terminal Progression	Application Tooling TM-42			Dimension			
						Die Only	Press and Die	Spare Tooling Kit	A	B	Board Thickness C	PC Board Hole Size D
16-18	3.05 (.120)	4706	02-09-2105	Tin/Lead	11.20 (.440)	11-40-2042	11-04-0293	11-40-3042	7.70 (.300)	3.10 (.120)	1.57 (.062)	2.49 + 0.08 (.098 ± .003)
18-24	3.05 (.120)	4706-3	02-07-2101	Tin/Lead	11.20 (.440)	11-40-2043	11-04-0295	11-40-3043	7.70 (.300)	3.10 (.120)	1.57 (.062)	1.91 + 0.08 (.075 ± .003)
		5298	08-70-0106	Tin		11-40-2115	11-04-0450	11-40-3113	6.90 (.270)	2.10 (.080)	1.57 (.062)	1.30 + 0.08 (.071 + .003) (.071 - .000)
22-24	2.54 (.100)	4811	16-02-0037	Tin/Lead	9.70 (.380)	11-40-2029	11-04-0277	11-40-3029	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.30 + 0.05 (.051 ± .002)
22-26	1.52 (.060)	4811-1	16-02-0034	Tin/Lead	9.70 (.380)	11-40-2039	11-04-0279	11-40-3029	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.30 + 0.05 (.051 ± .002)
		41817	16-02-0118	Tin/Lead	5.10 (.200)	11-40-2120	11-04-0595	11-40-3118	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.30 + 0.05 (.051 ± .002)
		42001	40-08-0605	Tin/Lead	5.10 (.200)	11-40-2171	11-04-0679	11-40-3173	6.90 (.270)	2.10 (.080)	1.57 (.062)	1.30 + 0.05 (.051 ± .002)
		90198	91098-0001	Tin	9.00 (.236)	11-40-2196	11-04-0687	11-40-3197	6.20 (.240)		1.57 (.062)	22 AWG 1.20 + 0.08 (.048 ± .003) 24/26 AWG 1.27 + 0.03 (.049 ± .002)
	1.70 (.067)	5190	08-70-0060	Tin		11-40-2039	11-04-0279	11-40-3039	8.10 (.320)	3.40 (.140)	1.57 (.062)	1.20 + 0.08 (.048 ± .003)

FEATURES AND SPECIFICATIONS

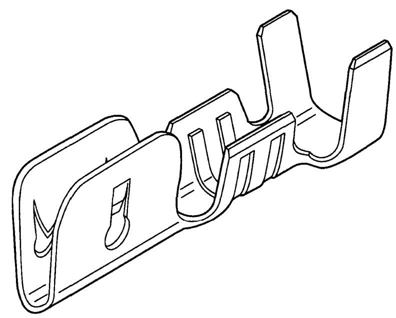
Panel Grounding Clip

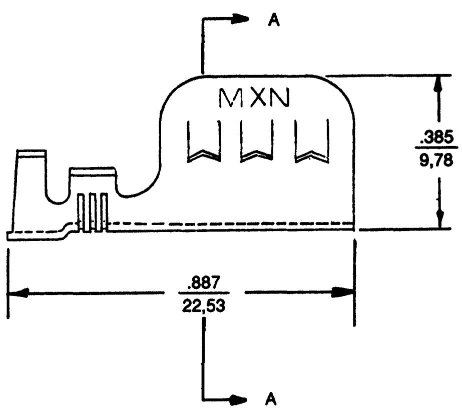
42172

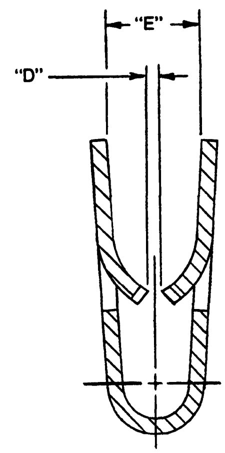
Features and Benefits
- Provides reliable ground to chassis without fasteners
- Simple to install
- Requires no secondary fasteners
- Accepts single and dual crimps
- Secondary grounding applications only
- Rust-resistant Stainless Steel

Physical
Contact: .020" Stainless Steel

Reference Information
UL File No.: E126412
CSA File No.: LR19980A
Designed In: Inches







Section A-A

ORDERING INFORMATION*

Minimum Panel Thickness	Maximum Panel Thickness	Wire Range AWG	Dual Crimp Capabilities	Engineering No.	Order No.	Application Tooling Mini-Mac
0.38 (.015)	0.89 (.035)	14	(2) 16 AWG	42172-AA1	40-06-2014	11-18-2139
0.38 (.015)	0.89 (.035)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-A1	40-06-2003	11-18-2139
0.51 (.020)	0.76 (.030)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-F1	40-06-2017	11-18-2139
0.89 (.035)	1.27 (.050)	14	(2) 16 AWG	42172-BB1	40-06-2015	11-18-2139
0.89 (.035)	1.27 (.050)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-B1	40-06-2005	11-18-2139
1.52 (.060)	1.91 (.075)	14	(2) 16 AWG	42172-CC1	40-06-2016	11-18-2139
1.52 (.060)	1.91 (.075)	16-18	(2) 18 AWG, or (1) 18 and (1) 16 AWG	42172-C1	40-06-2013	11-18-2139

* For use with nonaluminum panels: clip material—.020" Stainless Steel. Contact factory for grounding clips for use with aluminum panels.

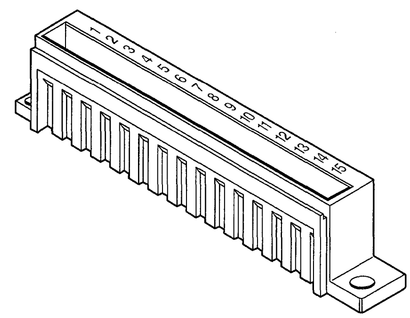
FEATURES AND SPECIFICATIONS

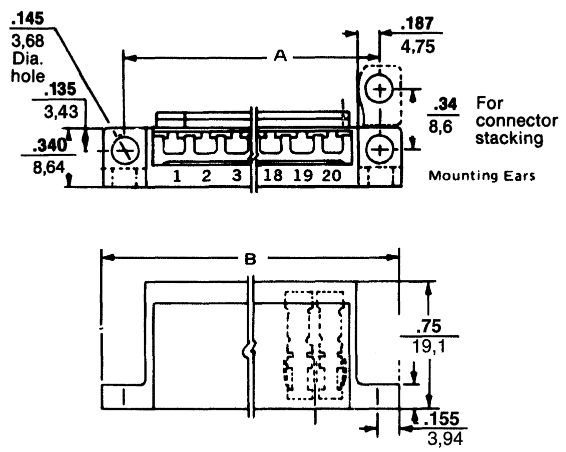
Features and Benefits
- Replaces terminal blocks
- Stackable side-by-side
- Polarizing keys
- Circuit no. identification
- Fewer parts for inventory
- Simplified service

Reference Information
Product Specification: PS-50-36
UL File No.: E29179
CSA File No.: LR19980
Uses: 1457 terminals
Designed In: Inches

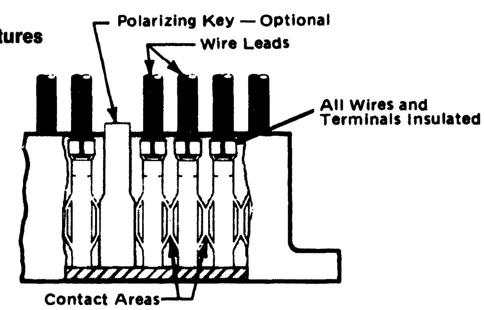
Electrical
Voltage: 250V
Current: 12.0A
Dielectric Withstanding Voltage: 3500V rms

Physical
Housing: Polyester, UL 94V-0





Housing Features



	Engineering No.	Order No.
Polarizing Key	1461-K	15-04-0200

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension	
		A	B
5	• 07-01-7051	34.93 (1.375)	41.02 (16.15)
10	• 07-01-7101	57.15 (2.250)	63.20 (2.490)
15	• 07-01-7151	79.50 (3.130)	85.60 (3.370)
20	• 07-01-7201	101.60 (4.000)	107.70 (4.240)

• US Standard Product, available through Molex franchised distributors

Commoning Connector Terminals

1457

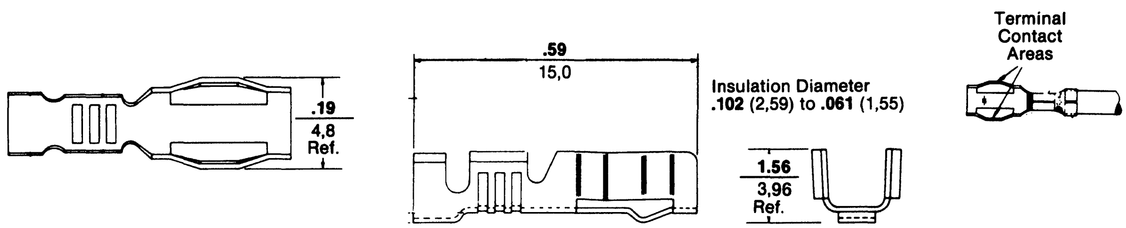
FEATURES AND SPECIFICATIONS

Features and Benefits
- Full range of application tooling
- Accept 14 to 22 AWG

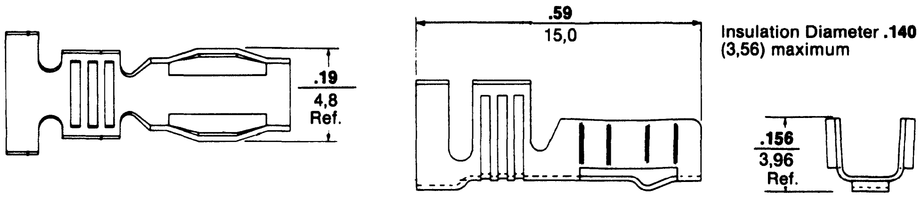
Reference Information
Uses: 1461 housings
Designed In: Inches

Electrical
Current: 12.0A
Contact Resistance: 1mΩ max.

Physical
Contact: Brass
Plating: Tin



1457-1 Series for 18-22 AWG wire



ORDERING INFORMATION

Engineering No.	Wire Size AWG	Maximum Insulation Diameter	Order No.		Hand Tool		TM-40/42						Insertion Tool		Extraction
			Chain Form	Loose Form	Engineering No.	Order No.	Terminator Die Only		TM-40/42 Press and Die		Spare Tooling		Engineering No.	Order No.	
							Engineering No.	Order No.	Engineering No.	Order No.	Engineering No.	Order No.			
1457-1	18-22	2.59 (.102)	• 05-02-0047	• 05-02-0048	HTR-1031E	11-01-0084	T8307A	11-40-2009	TM40D8307A	11-04-0213	K8307A	11-40-3009	HT-1461	11-02-0007	
1457-2	14-16	3.56 (.140)	• 05-02-0049	• 05-02-0050			T8307B	11-40-2010	TM40D8307B	11-04-0215	K8307B	11-40-3010			

• US Standard Product, available through Molex franchised distributors
Recommended wire range assumes stranded wire
For crimp tools, see the Application Tooling section of this catalog

FEATURES AND SPECIFICATIONS

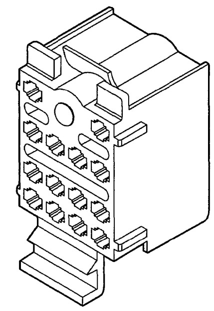
1852/2177/2191/ 2211/42354

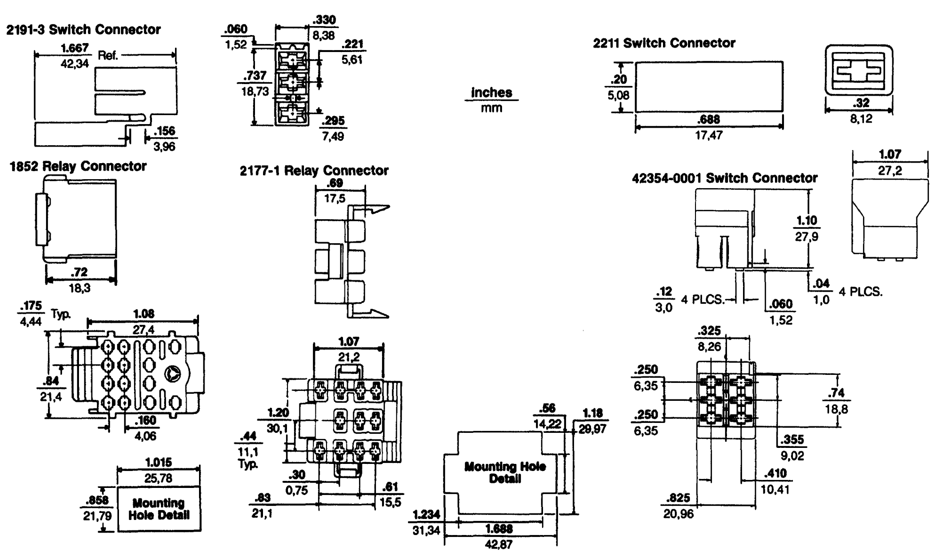
Features and Benefits
- 11 circuit standard relay version (2177)
- 14 circuit miniature relay version (1852)
- 1 and 3 circuit switch connectors (2211 and 2191)
- Accepts 14 through 28 AWG
- Optional detent available for increased holding action

Reference Information
UL File No.: E29179 (except 42354)
CSA File No.: LR19980A (except for 1852, 2177 and 42354)
Uses: Relay and switch terminals
Designed In: Inches

Electrical
Voltage: 125V
Current: 15.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 2500V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Nylon, UL 94V-2
Temperature: 105°C max.





ORDERING INFORMATION

Circuits	Maximum Current Rating	Maximum Voltage Rating	Mounting Ears	Maximum Panel Thickness	Engineering No.	Order No.	Uses Terminal No.
1	10	250	No		2211	06-02-3011	2176, 2328, 2576, 2698, 2799
3	10	250	No		2191	06-02-3031	2176, 2328, 2576, 2698, 2799
6	15	250	No		42354	06-02-1061	41422
11	8	125	Yes	1.27 (.050)	2177-1	06-02-3111	2176, 2328, 2576, 2698, 2799
14	5	250	Yes	1.27 (.050)	1852-R2	06-02-3143	1943
			Yes	2.03 (.080)	1852-R	06-02-3141	1943

FEATURES AND SPECIFICATIONS

![molex]

Relay and Switch Terminals

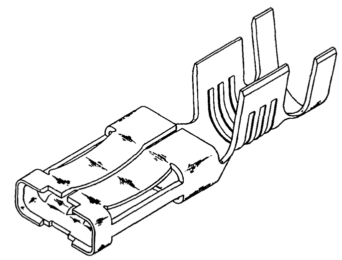
1943/2176/2328/2576/ 2698/2799/41422

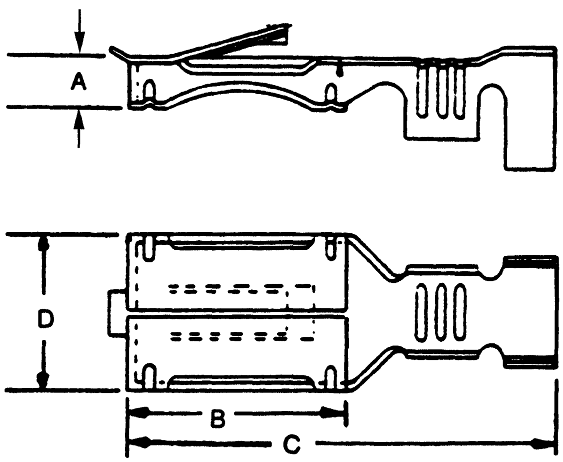
Features and Benefits
- Designed for mass connection
- Mates with standard NEMA male tabs
- Utilizes 4 points of contact
- Accommodates a wide range of wire sizes (10 to 24 AWG)
- Rugged terminal design

Reference Information
Uses: Relay and switch connectors
Designed In: Inches

Electrical
Current: 15.0 to 25.0A
Contact Resistance: 10mΩ max.

Physical
Contact: Brass
Plating: Tin





ORDERING INFORMATION AND DIMENSIONS

Engineering No.	Wire Size AWG	Order No.				Application Tooling		
		With Detent		Without Detent				
		Chain Form	Loose Form	Chain Form	Loose Form	Hand Tool	TM-40/42 Die	Mini-Mac
1943	18-24			05-06-0200	05-05-0201	11-01-0008	11-40-2035	
2176	14-22	05-06-0301	05-06-0302	05-06-0303	05-06-0304	11-01-0101	11-40-2015	11-18-2040
2328	14-22	05-06-0401	05-06-0403	05-06-0402	05-06-0404	11-01-0101	11-40-2015	11-18-2040
2576	14-22			05-06-0305	05-06-0306	11-01-0101	11-40-2015	11-18-2040
2698	14-22			05-06-0405	05-06-0406	11-01-0101	11-40-2006	
2799	14-22			05-06-0307	05-06-0308	11-01-0006	11-40-2154	11-18-2041
41422-3XXX	10-12			40-02-1601			11-40-2192	11-18-2080
	14-18			40-02-1602			11-40-2193	11-18-2081
41422-5001	14-18			40-02-1602			11-40-2193	11-18-2081

Engineering No.	Engagement/ Disengagement Forces (lb)	Wire Size AWG	Maximum Insulation Diameter	Material Thickness	Mating Tab Size (in.)	Dimension			
						A	B	C	D
1943		18-24	2.67 (.110)	0.28 (.011)	.100 by .020	0.90 (.030)	7.50 (.300)	15.20 (.600)	3.30 (.130)
2176		14-22	3.43 (.135)	0.25 (.010)	.187 by .020	1.80 (.070)	7.10 (.280)	15.50 (.610)	6.10 (.240)
2328		14-22	3.18 (.125)	0.25 (.010)	.187 by .020	1.80 (.070)	7.10 (.280)	15.70 (.620)	6.10 (.240)
2576		14-22	3.43 (.135)	0.30 (.012)	.187 by .020	0.90 (.080)	7.10 (.280)	15.50 (.610)	6.10 (.240)
2698		14-22	3.18 (.125)	0.30 (.012)	.187 by .020	0.90 (.080)	7.10 (.280)	15.50 (.610)	6.10 (.240)
2799		14-22	1.52 (.060)	0.30 (.012)	.187 by .020	0.90 (.080)	7.10 (.280)	15.50 (.610)	6.10 (.240)
High Current 41422-3XXX	4	10-12	4.83 (.190)	0.41 (.016)	.250 by .032	0.90 (.080)	11.70 (.460)	23.10 (.910)	7.50 (.300)
		14-18	3.53 (.139)	0.41 (.016)	.250 by .032	0.90 (.080)	11.70 (.460)	23.10 (.910)	7.50 (.300)
Low Force 41422-5001	2	14-18	3.53 (.139)	0.41 (.016)	.250 by .032	0.90 (.080)	11.70 (.460)	23.10 (.910)	7.50 (.300)

FEATURES AND SPECIFICATIONS

molex®

5.08 by 5.59mm (.200 by .220") Grid Specialty Receptacle Timer Receptacle Housing

41644/41645

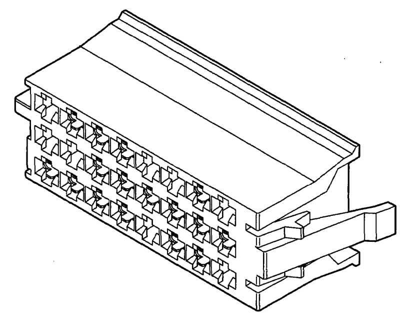
Features and Benefits
- Positive locking latches
- Fully polarized, color-coded right- (41644) and left- (41645) handed configurations
- Flared wire entry ports for double wire crimps
- Accepts standard and low force designs of 1508 Series terminals

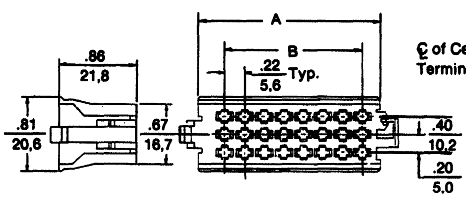
Reference Information
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980A
Mates With: Industry timer housings
Uses: 1508 terminals
Designed In: Inches

Electrical
Voltage: 125V
Current: 11.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

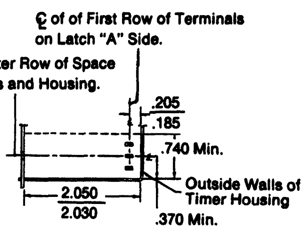
Mechanical
Contact Insertion Force: 1.5 lb max.
Contact Retention to Housing: 20 lb min.
Wire Pull-Out Force: 20 lb min.
Mating Force: 3 lb max. per contact
Unmating Force: 3 lb min. per contact
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-2
Temperature: 105°C max.

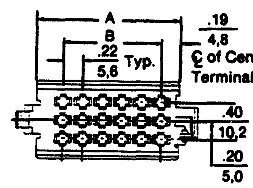




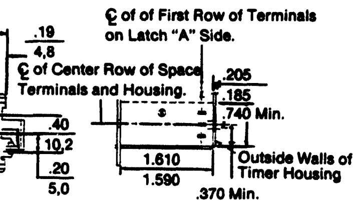
41644 – Right Handed Version



Recommended Panel Mtg.
Min./Max. Dim's for Mtg. of 41644 Receptacle



41645 – Left Handed Version



Recommended Panel Mtg.
Min./Max. Dim's for Mtg. of 41645 Receptacle

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Terminal	Dimension	
	41644 Right Hand	41645 Left Hand		A	B
18	06-02-1186	06-02-1185	05-06-0113	40.40 (1.590)	27.90 (1.100)
24	06-02-1246	06-02-1245		51.60 (2.030)	39.10 (1.540)

FEATURES AND SPECIFICATIONS

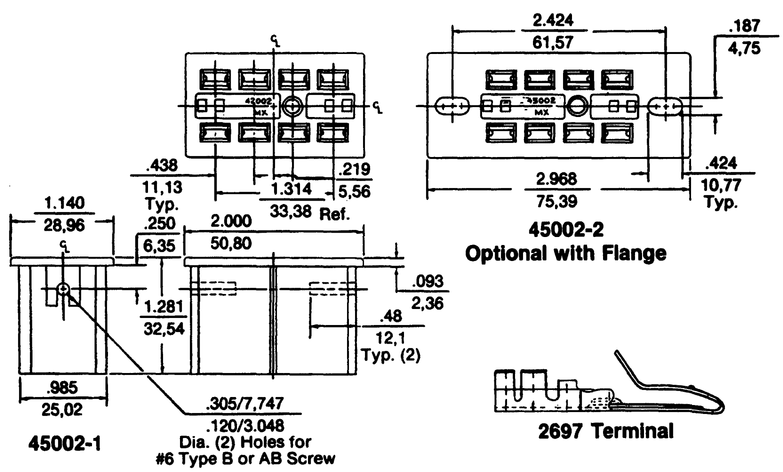
11.13mm (.438") Pitch Specialty Receptacles 8-Position Coin Changer Receptacle for Vending Machines

45002

Features and Benefits
- Vending industry standard for single-price coin changers
- Mates with plug provided on coin changers manufactured by Mars, Coinco and others
- Available in front and side mounting versions
- Crimp terminals eliminate fast-ons

Physical
Housing: Nylon, UL 94V-2

Reference Information
UL File No.: E29179
CSA File No.: LR19980A
Use With: 2697 terminals
Designed In: Inches



inches
mm

ORDERING INFORMATION

45002			
Circuits	**Flange**	**Engineering No.**	**Order No.**
8	No	45002-1	15-04-0451
	Yes	45002-2	15-04-0453

2697 Terminals					
Crimp Wire Size AWG	**Insulation Diameter (in.)**	**Finish**	**Engineering No.**	**Chain Form Order No.**	**Mini-Mac**
12-20	.188	Tin plated	2699	05-02-0075	11-18-2095

FEATURES AND SPECIFICATIONS

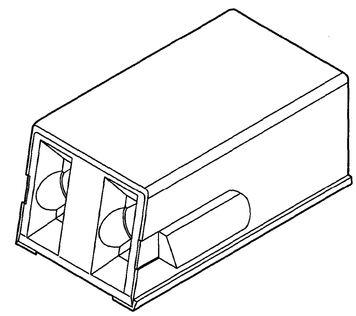
15.88mm (.625") Pitch Ceramic and Phenolic Range Receptacles, Terminals and Mounting Clips

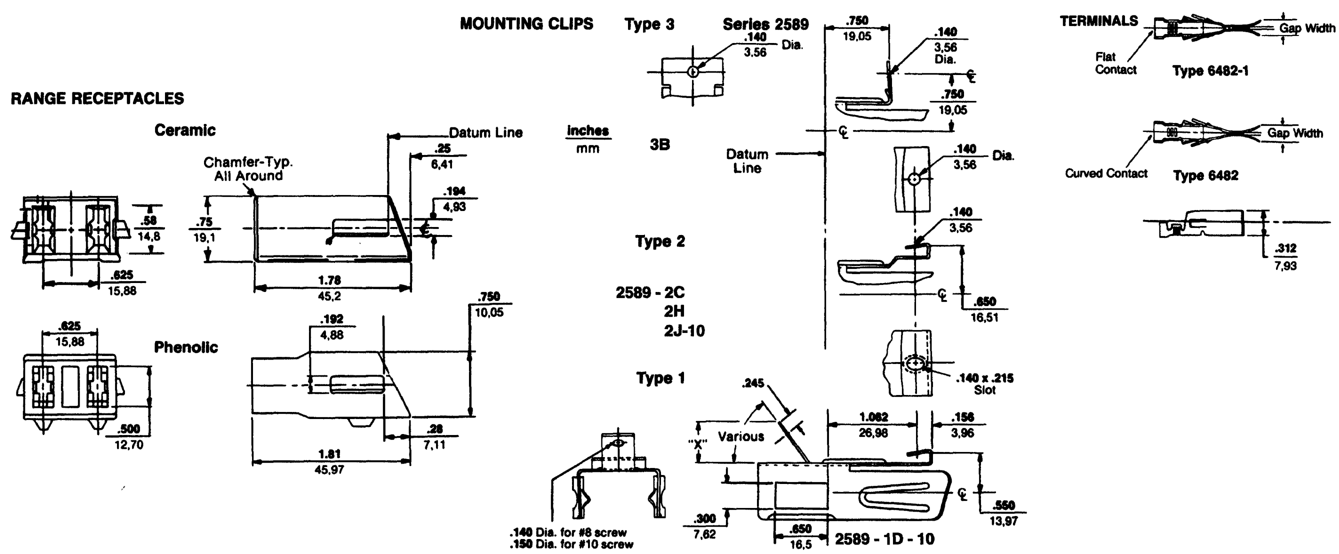
2481/6482

Features and Benefits
- Receptacles provide easy disconnect from heating element on range surface
- Ceramic housings use Beryllium terminals and Phenolic housings use standard terminals
- High density ceramic withstands high impact without shattering
- Choice of mounting bracket configurations
- Long product life
- Trouble-free assembly

Physical
Housing: Ceramic or Phenolic
Contact: Alcoloy or Beryllium Copper
Temperature: Ceramic—200 to 300°C
Phenolic—0 to 150°C

Reference Information
UL File No.: E153512
CSA File No.: LR19980A
Designed In: Inches





ORDERING INFORMATION

Terminals							
Wire Size AWG	Terminal Material	Contact Type	Gap Width	Engineering No.	Order No.	Mini-Mac	TM-40/42
14-18	Beryllium Copper Alloy	Curved	5.30 (.210)	6482-2 (Chain)	05-12-1104	11-18-2036	11-04-0632
		Flat	5.30 (.210)				
	Standard Copper Alloy	Curved	5.30 (.210)	6482- (Chain)	05-12-1100	11-18-2036	11-04-0632
		Flat	5.30 (.210)	6482-1 (Chain)	05-12-1102	11-18-2036	11-04-0632

Automated application equipment can be used to crimp either terminal. Automatic and semi-automatic application tooling available, contact factory.

Heater Element Terminal Thickness Range
2.032-2.413 (.080-.095)*
2.286-2.667 (.090-.105)*

* Heater elements not interchangeable in same terminal

Mounting Clips
Contact factory for technical assistance based on clip type, tab angle, desired "X" dimension and mounting screw size

Range Receptacles			
Description	Temperature Range	Engineering No.	Order No.
Ceramic Receptacle	200-300°C	2481-13	50-16-0283
Phenolic Receptacle	0-150°C	2481	50-16-0281

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Crimp Terminal and Housing

8981-04P

Features and Benefits

- Crimp equivalent of 70156
- Wire range 14 to 20 AWG and 18 to 22 AWG available
- Wire-to-board and wire-to-wire connector system
- Crimp version
- Wire connectors have end grips for easy unmating
- Detents provide firm positive fit

Reference Information

Product Specification: PS-8981-4M/4P
Packaging: Terminal—Reel
Housing—Bag
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 8981 4M/4V/4SM/4R
Designed In: Inches

Electrical

Voltage: 250V
Current:

AWG	14	16	18	22
Amperes	10.0	10.0	8.0	6.0

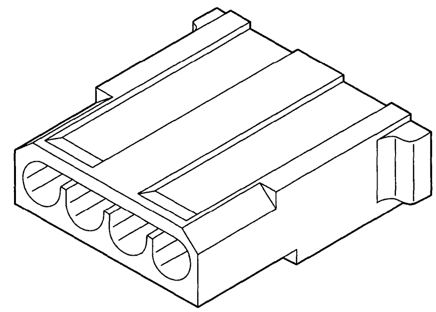
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 250V AC
Insulation Resistance: 1000 MΩ min.

Mechanical

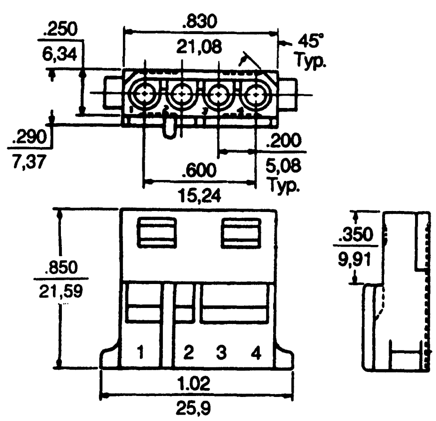
Contact Retention to Housing: 4.5kg min.
Mating Force: 10kg max.
Unmating Force: 2.5kg min.
Durability: 50 cycles

Physical

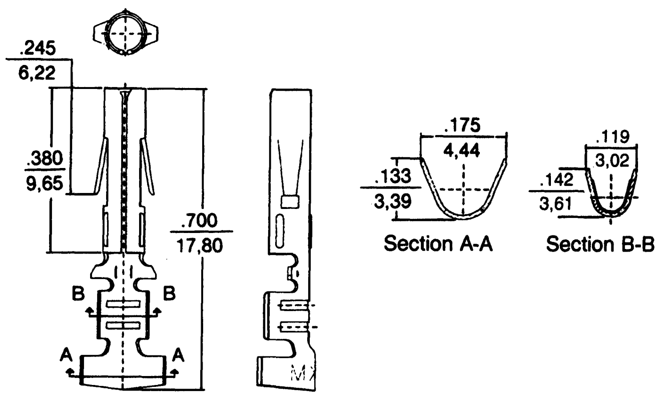
Housing: Neutral nylon, UL 94V-0
Contact: Phosphor Bronze or Brass (see table)
Plating: Tin over Copper
Temperature: -10 to +85°C



Specialty Connectors
M



Terminals for 8981-4P Housing



ORDERING INFORMATION

Housing	
Engineering No.	Order No.
8981-04P	15-24-4048

Terminal					
Engineering No.	Order No.	Form	Contact Material	AWG	Crimp Hand Tool Order No.
8980-3C	02-08-1201	Chain	Phosphor Bronze	14-20	
8980-3L	02-08-1202	Loose	Phosphor Bronze	14-20	11-01-0123
8980-2C	02-08-1215	Chain	Brass	14-20	
8980-2L	02-08-1216	Loose	Brass	14-20	

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Crimp Terminal and Housing

8981-04M

Features and Benefits
- Wire range 14 to 20 AWG and 18 to 22 AWG available
- Wire-to-board and wire-to-wire connector system
- Crimp version
- Wire connectors have end grips for easy unmating
- Detents provide firm positive fit

Reference Information
Product Specification: PS-8981-4M/4P
Packaging: Terminal—Reel
Housing—Bag
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

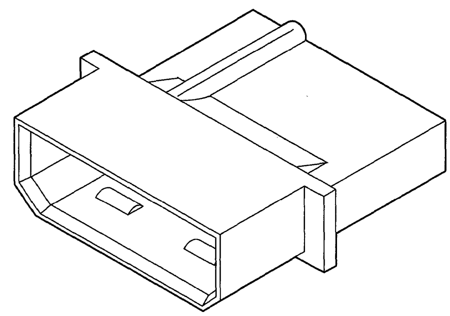
Electrical
Voltage: 250V
Current:

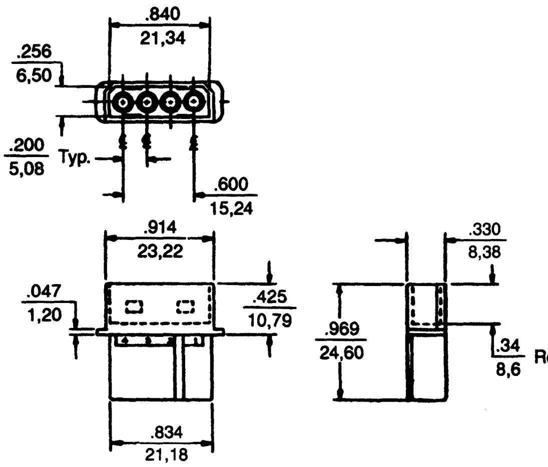
AWG	14	16	18	22
Amperes	10.0	10.0	8.0	6.0

Contact Resistance: 25mΩ max.
Insulation Resistance: 1000 MΩ min.

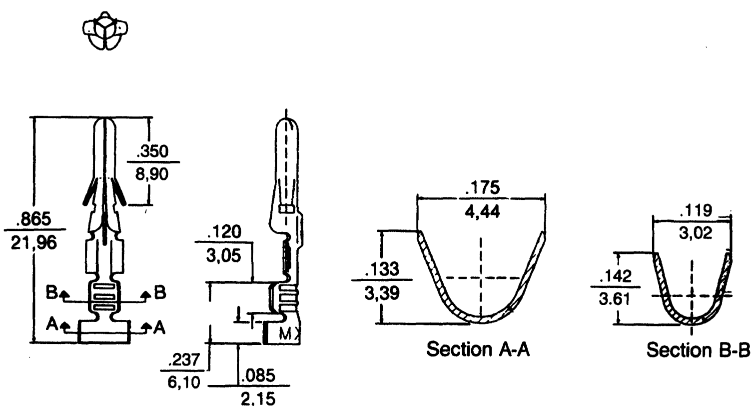
Mechanical
Contact Retention to Housing: 4.5kg min.
Mating Force: 10kg max.
Unmating Force: 2.5kg min.
Durability: 50 cycles

Physical
Housing: Natural nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin/Lead over Nickel
Temperature: -40 to +105°C





Terminals for 8981-4M Housing



ORDERING INFORMATION

Housing	
Engineering No.	**Order No.**
8981-04M	15-24-4047

Terminal				
Engineering No.	**Order No.**	**Form**	**AWG**	**Crimp Hand Tool Order No.**
8980-6C	02-08-1234	Chain	14-20	11-01-0152
8980-6C2	02-08-1236	Chain	18-22	

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Header

A-8981-04V Vertical

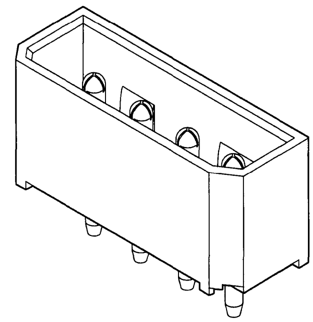
Features and Benefits
- Optional drain hole and polarization pegs available
- Antiwicking PC tails

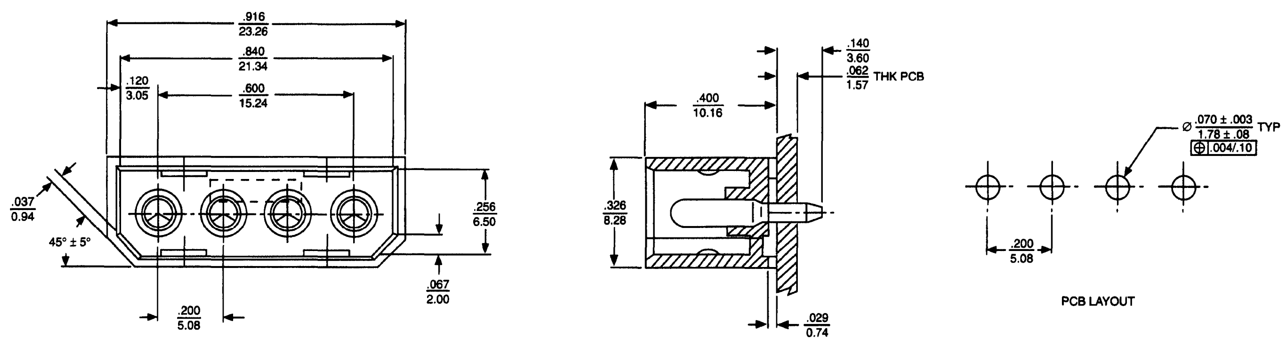
Reference Information
Product Specification: PS-8981-4V/4R
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

Electrical
Voltage: 250V
Current: 10.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.
Durability: 50 cycles

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin/Lead over Nickel
Temperature: -40 to +105°C





Specialty Connectors

M

ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length
A-8981-04V	• 15-24-4049	3.60 (.140)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features and Benefits
- Optional drain hole and polarization pegs available
- Antiwicking PC tails

Reference Information
Product Specification: PS-8981-4V4/4R1P
Packaging: Bag (8981-4V6 in tray)
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

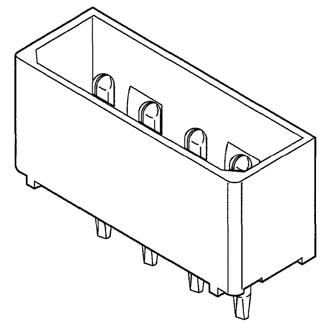
Electrical
Voltage: 250V
Current: 10.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 5000 MΩ min.

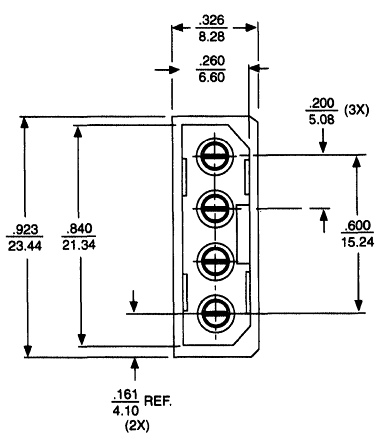
Mechanical
Contact Retention to Housing: 4 lb min.
Mating Force: 12 lb max.
Unmating Force: 12 lb min.
Durability: 25 cycles

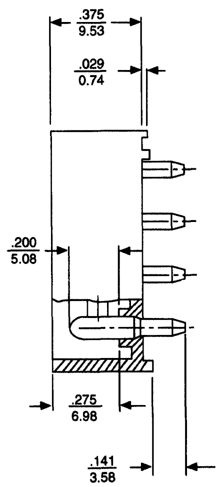
Physical
Housing: High-temperature thermoplastic
Contact: Phosphor Bronze
Plating: Tin/Lead over Nickel
Temperature: -40 to +85°C

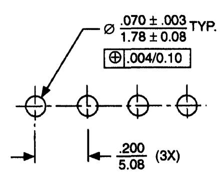
5.08mm (.200") Pitch Disk Drive Power Connection System Header

A-8981-04V4/04V5/04V6 High Temperature Version Vertical









PCB LAYOUT

ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length	Peg
A-8981-04V4	15-24-4157	2.12 (.083)	No
A-8981-04V5	15-24-4345	3.58 (.141)	No
A-8981-04V6	15-24-4342	2.12 (.083)	Yes

Note: 8981-4V5 drawing shown for reference

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Header

A-8981-04R1 Right Angle

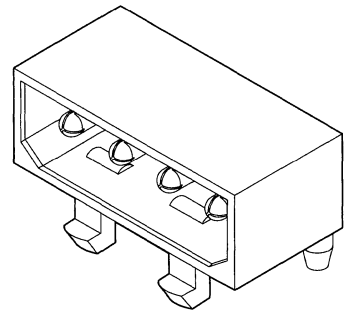
Features and Benefits
- Snap-in retention locks for secure peg retention
- Sturdy locating pegs provide added stability

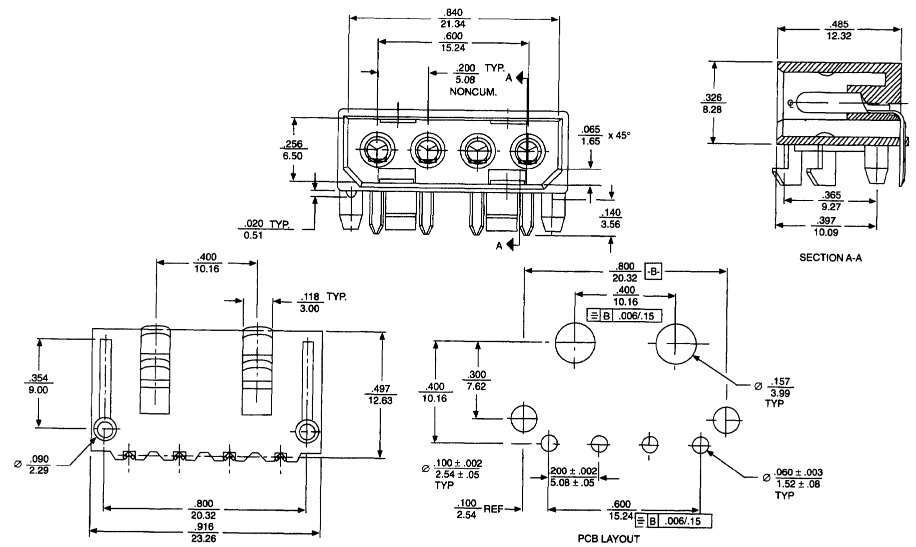
Reference Information
Product Specification: PS-8981-4V/4R
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

Electrical
Voltage: 250V
Current: 6.5A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.
Durability: 50 cycles

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin/Lead over Copper
Temperature: -40 to +105°C





ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length
A-8981-04R1	• 15-24-4041	3.56 (.140)

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Header

A-8981-04SM1 Standard Profile, SMT Right Angle

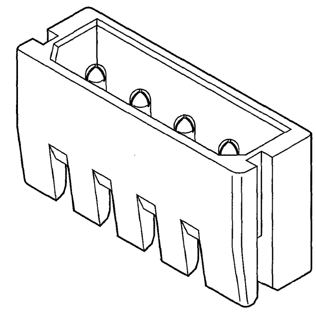
Features and Benefits
- Dual-slot orientation
- Gull-wing solder tails provide stable PCB retention

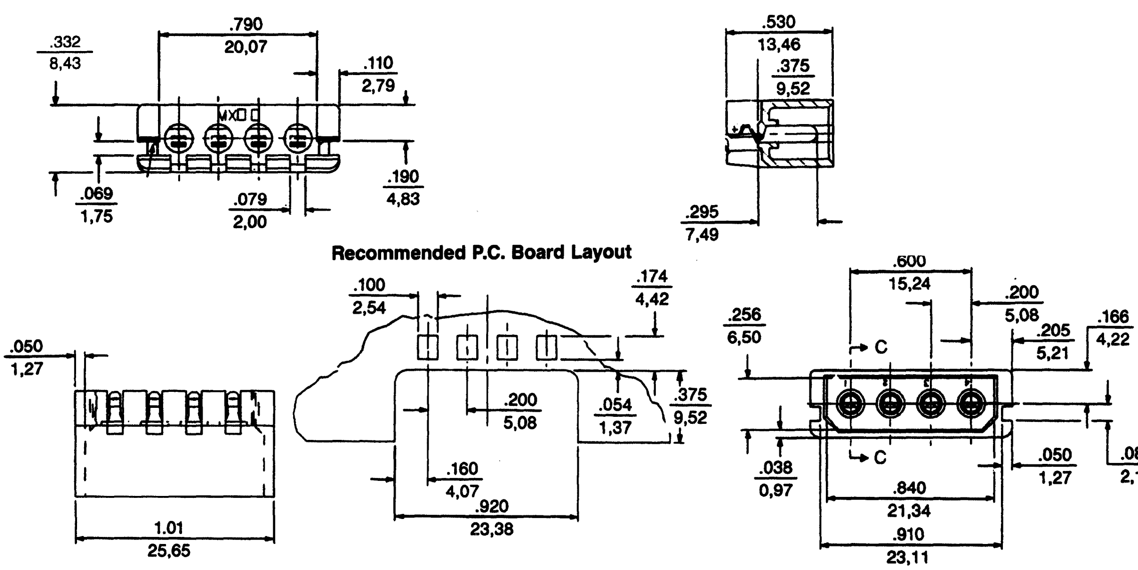
Reference Information
Product Specification: PS-8981-4SM*
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

Electrical
Voltage: 250V
Current: 6.5A
Contact Resistance: 5mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Contact Retention to Housing: 5 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.
Durability: 25 cycles

Physical
Housing: Black glass-filled rynite
Contact: Phosphor Bronze
Plating: Tin/Lead over Nickel
Temperature: -40 to +105°C





ORDERING INFORMATION

Engineering No.	Order No.
A-8981-04SM1	15-24-4055

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Header

A-8981-04SM3 Standard Profile, SMT Right Angle

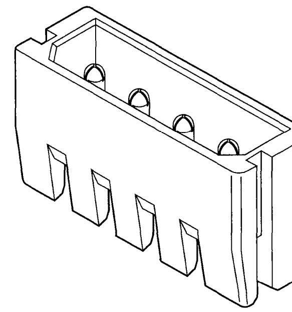
Features and Benefits
- Single-slot orientation
- Gull-wing solder tails provide stable PCB retention

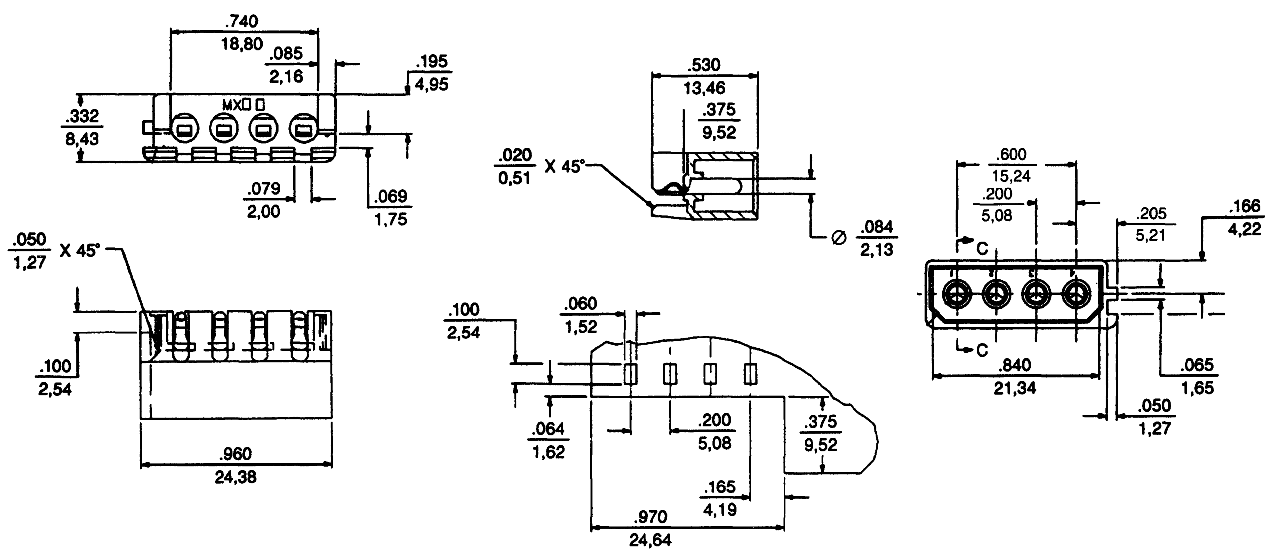
Reference Information
Product Specification: PS-8981-4SM✻
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

Electrical
Voltage: 250V AC
Current: 6.5A
Contact Resistance: 5mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Contact Retention to Housing: 5 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.
Durability: 25 cycles

Physical
Housing: Black glass-filled PET
Contact: Phosphor Bronze
Plating: Tin/Lead over Nickel
Temperature: -40 to +105°C





PCB Layout

ORDERING INFORMATION

Engineering No.	Order No.
A-8981-04SM3	15-24-4059

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Header

A-8981-04SM4C Low Profile, SMT Right Angle

Features and Benefits

- Single-slot orientation
- Gull-wing solder tails provide stable PCB retention

Reference Information

Product Specification: PS-8981-4SM✻
Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980A
Mates With: 70156/8981-4P
Designed In: Inches

Electrical

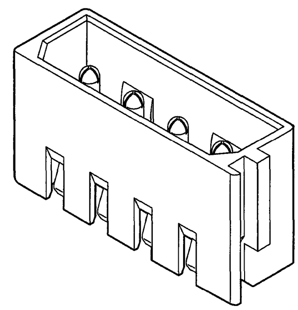
Voltage: 250V
Current: 6.5A
Contact Resistance: 5mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

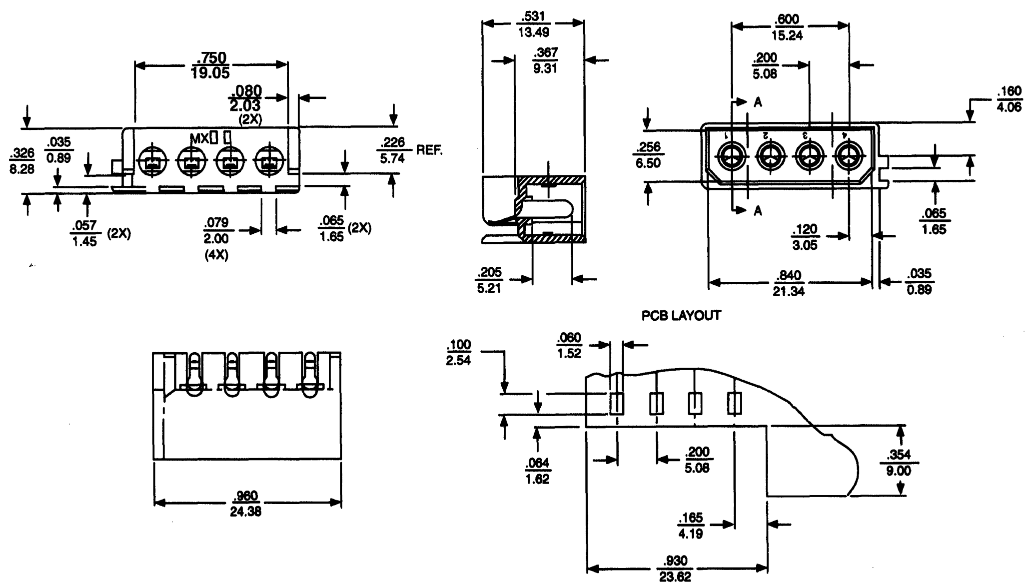
Mechanical

Contact Retention to Housing: 5 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.
Durability: 25 cycles

Physical

Housing: Black high-temperature nylon
Contact: Phosphor Bronze
Plating: Tin/Lead over Nickel
Temperature: -40 to +105°C





ORDERING INFORMATION

Engineering No.	Order No.
A-8981-04SM4C	15-24-4145

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Header

53109

Right Angle with Strap Standard Polarization

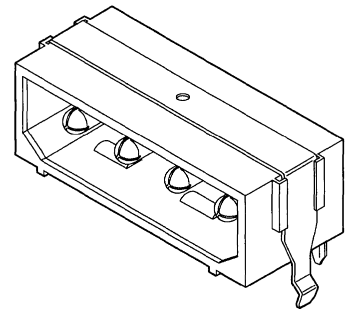
Features and Benefits
- Pre-assembled with metal strap

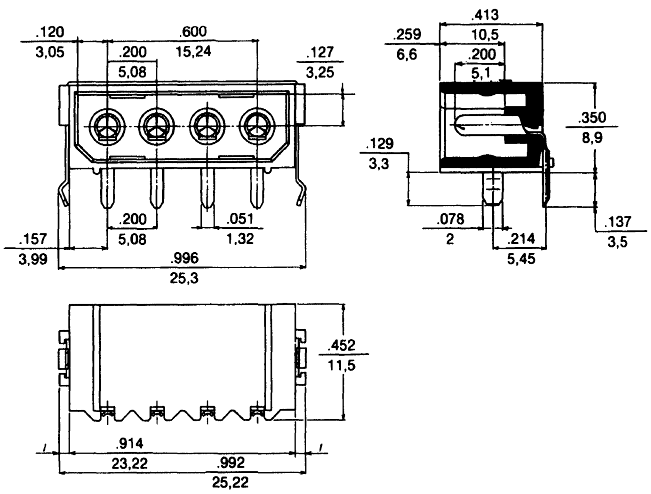
Reference Information
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70156/8981-4P
Designed In: Millimeters

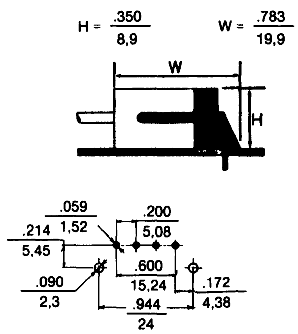
Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin
Band: Brass, pretinned
Temperature: -40 to +80°C





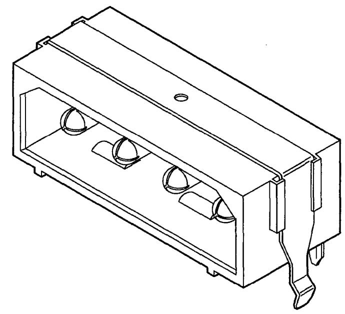


P.C. Board Layout

ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length
53109-0410 Standard Polarization	53109-0410	3.50 (.130)

FEATURES AND SPECIFICATIONS



5.08mm (.200") Pitch Disk Drive Power Connection System Header

53113

Right Angle with Strap Reverse Polarization

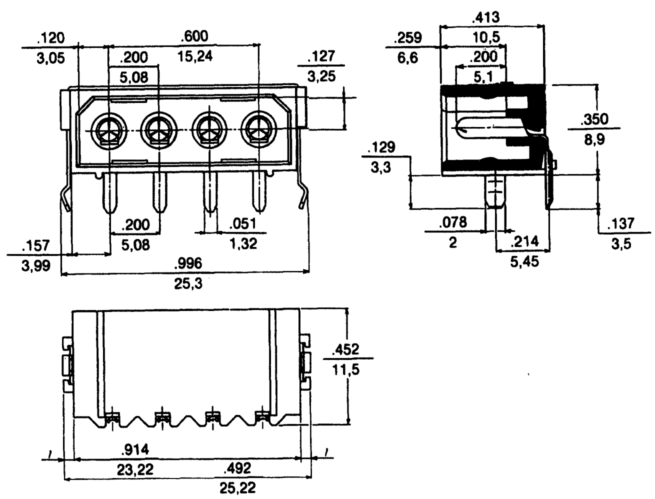
Features and Benefits
- Pre-assembled with metal strap

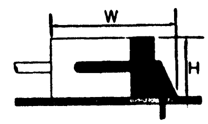
Reference Information
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70156/8981-4P
Designed In: Millimeters

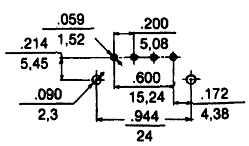
Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.

Physical
Housing: 6/6 nylon, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin
Band: Brass, pretinned
Temperature: -40 to +80°C







P.C. Board Layout

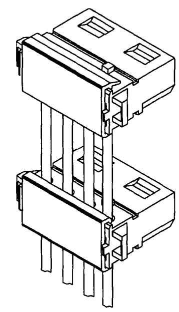
ORDERING INFORMATION

Engineering No.	Order No.	PC Tail Length
53113-0410 Reverse Polarization	53113-0410	3.50 (.130)

FEATURES AND SPECIFICATIONS

5.08mm (.200") Pitch Disk Drive Power Connection System Connector

70156 Female IDT



Features and Benefits
- Wire-to-wire and wire-to-board insulation displacement
- End grips for easy unmating
- Housing detents provide positive retention
- Locking IDT wire strain relief cover
- IDT equivalent to 8981-4P

Reference Information
Product Specification: PS-70156
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8981 and 71156
Designed In: Inches

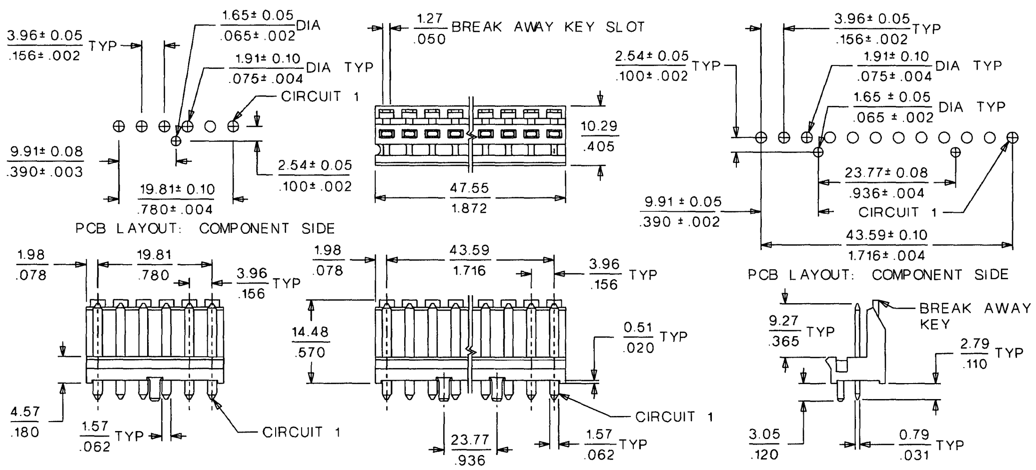
Electrical
Voltage: 250V
Current:

AWG	16	18	20	22
Amperes	8.0	8.0	6.5	6.0

Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.

Physical
Housing: White thermoplastic, UL 94V-0 or natural thermoplastic, UL 94V-2
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C



ORDERING INFORMATION

Connectors Only, 94V-0		
Order No.	**Wire Type**	**Color Code**
• 15-24-3053	16 AWG stranded	Yellow
• 15-24-3050	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3051	20 AWG stranded	Blue
• 15-24-3052	22 AWG solid, fused and stranded	Black

Connectors Only, 94V-2		
Order No.	**Wire Type**	**Color Code**
• 15-24-3000	16 AWG stranded	Yellow
• 15-24-2000	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-2001	20 AWG stranded	Blue
• 15-24-2002	22 AWG solid, fused and stranded	Black

Strain Relief Covers Only (Black)	
Feed-Through	**Feed-To**
• 15-05-7011	• 15-05-7012

• US Standard Product, available through Molex franchised distributors

Note: Covers must be used with connectors to retain wires

Kit with Connector and Wire Strain Relief, 94V-0			
Order No.	**Cover Type**	**Wire Type**	**Color Code**
• 15-24-3030	Feed-Through	16 AWG stranded	Yellow
• 15-24-3031	Feed-To	16 AWG stranded	Yellow
• 15-24-3032	Feed-Through	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3033	Feed-To	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3034	Feed-Through	20 AWG stranded	Blue
• 15-24-3035	Feed-To	20 AWG stranded	Blue
• 15-24-3036	Feed-Through	22 AWG solid, fused and stranded	Black
• 15-24-3037	Feed-To	22 AWG solid, fused and stranded	Black

Kit with Connector and Wire Strain Relief, 94V-2			
Order No.	**Cover Type**	**Wire Type**	**Color Code**
• 15-24-3001	Feed-Through	16 AWG stranded	Yellow
• 15-24-3002	Feed-To	16 AWG stranded	Yellow
• 15-24-2003	Feed-Through	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-2004	Feed-To	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-2005	Feed-Through	20 AWG stranded	Blue
• 15-24-2006	Feed-To	20 AWG stranded	Blue
• 15-24-2007	Feed-Through	22 AWG solid, fused and stranded	Black
• 15-24-2008	Feed-To	22 AWG solid, fused and stranded	Black

FEATURES AND SPECIFICATIONS

molex®

5.08mm (.200") Pitch Disk Drive Power Connection System Connector

71156 Male IDT

Features and Benefits

- Wire-to-wire insulation displacement
- End grips for easy unmating
- Housing detents provide positive retention
- Locking IDT wire strain relief cover
- IDT equivalent to 8981-4M

Reference Information

Product Specification: PS-71156
Packaging: Bulk
UL File No.: E29179
CSA File No.: LR19980
Mates With: 70156 and 898-4P
Designed In: Inches

Electrical

Voltage: 250V
Current:

AWG	16	18	20	22
Amperes	8.0	8.0	6.5	6.0

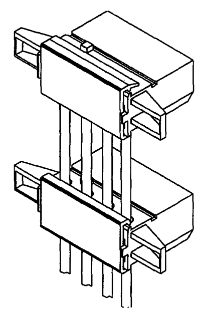
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1500V AC
Insulation Resistance: 500 MΩ min.

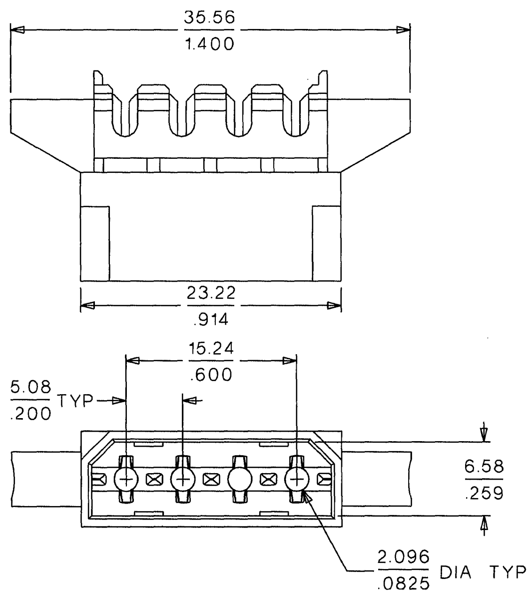
Mechanical

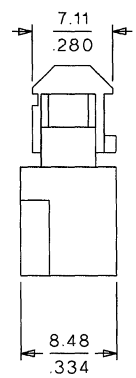
Contact Retention to Housing: 4 lb min.
Mating Force: 4 lb max.
Unmating Force: 1.5 lb min.

Physical

Housing: White thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Temperature: -40 to +105°C







ORDERING INFORMATION

Connectors Only		
Order No.	**Wire Type**	**Color Code**
• 15-24-3303	16 AWG stranded	Yellow
• 15-24-3300	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3301	20 AWG stranded	Blue
• 15-24-3302	22 AWG solid, fused and stranded	Black

Strain Relief Covers Only (Black)	
Feed-Through	**Feed-To**
• 15-05-7011	• 15-05-7012

• US Standard Product, available through Molex franchised distributors
Note: Covers must be used with connectors to retain wires

Kit with Connector and Wire Strain Relief			
Order No.	**Cover Type**	**Wire Type**	**Color Code**
• 15-24-3040	Feed-Through	16 AWG stranded	Yellow
• 15-24-3041	Feed-To	16 AWG stranded	Yellow
• 15-24-3042	Feed-Through	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3043	Feed-To	18 AWG stranded 20 AWG solid and fused	Red
• 15-24-3044	Feed-Through	20 AWG stranded	Blue
• 15-24-3045	Feed-To	20 AWG stranded	Blue
• 15-24-3046	Feed-Through	22 AWG solid, fused and stranded	Black
• 15-24-3047	Feed-To	22 AWG solid, fused and stranded	Black

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Industry Standard Power Supply Header

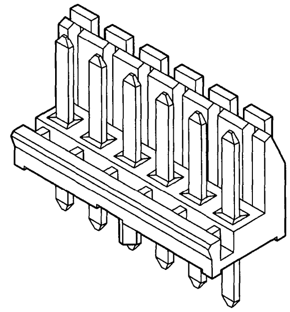
8619

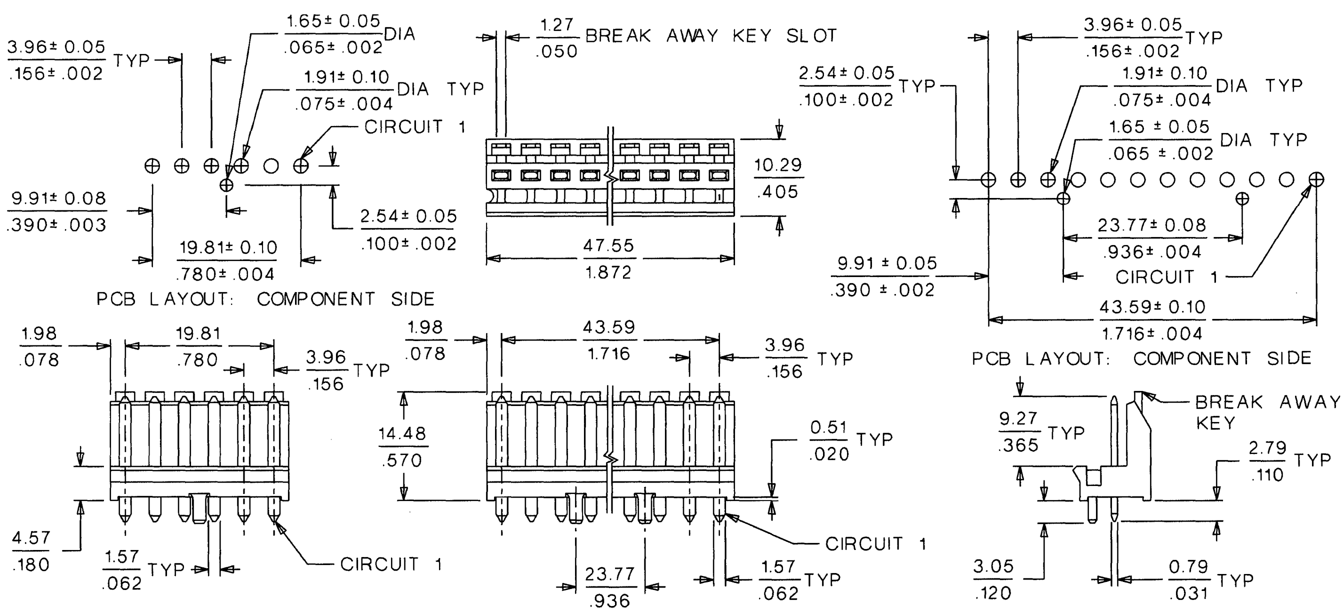
Features and Benefits
- Sizes 6 and 12 circuits
- Break-away polarizing keys
- Rectangular pins 0.79 by 1.57mm (.031 by .062")
- High temperature version also available

Reference Information
Product Specification: PS-90331
Packaging: Tray
Mates With: 90331
Designed In: Inches

Electrical
Voltage: 250V
Current: 5.0A
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Copper Alloy
Plating: Tin
Temperature: -40 to +105°C





ORDERING INFORMATION

Circuits	Order No.	Keys Removed	Mates with Housing
6	15-48-0106	None	90331-0006
6	15-48-0407	Circuit 1	90331-0002
6	15-48-0406	Circuit 2	90331-0007
6	15-48-0409	Circuit 3	90331-0008
6	15-48-0408	Circuit 4	90331-0003
6	15-48-0411	Circuit 5	90331-0009
6	15-48-0412	Circuit 6	90331-0010
12	15-48-0212	None	

FEATURES AND SPECIFICATIONS

3.96mm (.156") Pitch Industry Standard Power Supply Crimp Terminal and Housing

8993/90331

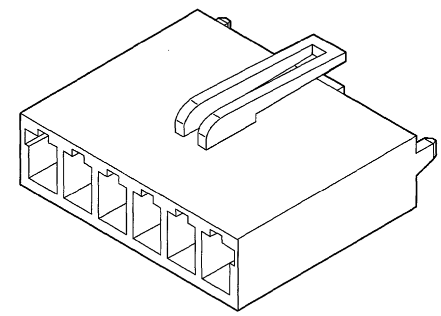
Features and Benefits
- 6 circuit standard
- Molded latches lock on header
- Polarizing ribs
- Keying options
- Friction lock

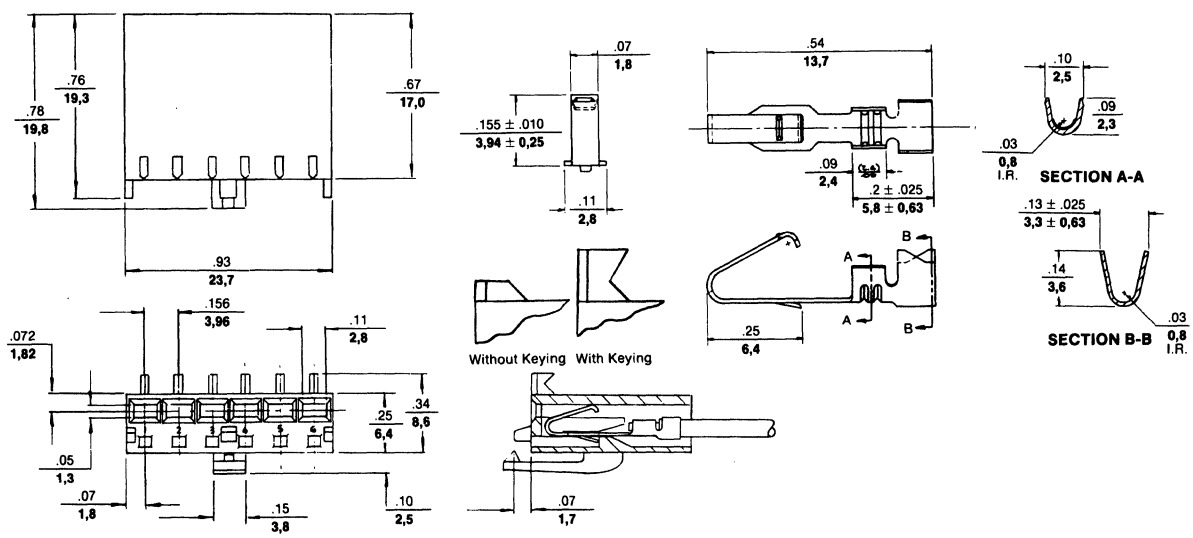
Reference Information
Product Specification: PS-90331
Packaging: Bag
UL File No.: E29179
CSA File No.: LR19980
Mates With: 8619
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 5.0A
Contact Resistance: 20mΩ max.
Insulation Resistance: 500 MΩ min.

Mechanical
Contact Insertion Force: 336g max.
Contact Retention to Housing: 14g min.
Wire Pull-Out Force: 36N min.
Durability: 25 cycles

Physical
Housing: White polyester, UL 94V-0
Contact: Copper Alloy
Plating: Tin
Temperature: -40 to +85°C
Wire Range: 18 to 24 AWG
Insulation Diameter: 2.79mm (.110") max.





ORDERING INFORMATION AND DIMENSIONS

Housing

Circuit No.	Order No.		Dimension		Keying Required at Circuit Positions						Middle Locking Peg
	Natural	Black	A	B	1	2	3	4	5	6	
6	90331-X001	90331-X101	19.81 ± 0.13	23.67 ± 0.13	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	90331-X002	90331-X102	19.81 ± 0.13	23.67 ± 0.13	Yes	No	No	No	No	No	Yes
6	90331-X003	90331-X103	19.81 ± 0.13	23.67 ± 0.13	No	No	No	Yes	No	No	Yes
6	90331-X004	90331-X104	19.81 ± 0.13	23.67 ± 0.13	Yes	No	Yes	Yes	No	No	Yes
6	90331-X006	90331-X106	19.81 ± 0.13	23.67 ± 0.13	No	No	No	No	No	No	No
6	90331-X007	90331-X107	19.81 ± 0.13	23.67 ± 0.13	No	Yes	No	No	No	No	Yes
6	90331-X008	90331-X108	19.81 ± 0.13	23.67 ± 0.13	No	No	Yes	No	No	No	Yes
6	90331-X009	90331-X109	19.81 ± 0.13	23.67 ± 0.13	No	No	No	No	Yes	No	Yes
6	90331-X010	90331-X110	19.81 ± 0.13	23.67 ± 0.13	No	No	No	No	No	Yes	Yes

Terminal	
Chain	08-50-0277
Loose	08-50-0276

Material: Replace X with
0 = Polyester, UL 94V-0
1 = 6/6 nylon, UL 94V-0
4 = 6/6 nylon, UL 94V-2

FEATURES AND SPECIFICATIONS

21-Position Pin Housing
90305
For Harsh Environments

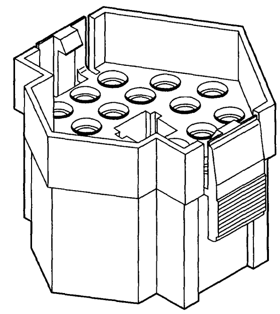
Features and Benefits
- Accepts 20 Molok pin contacts (order separately)
- Also accepts 9.50mm tab contacts

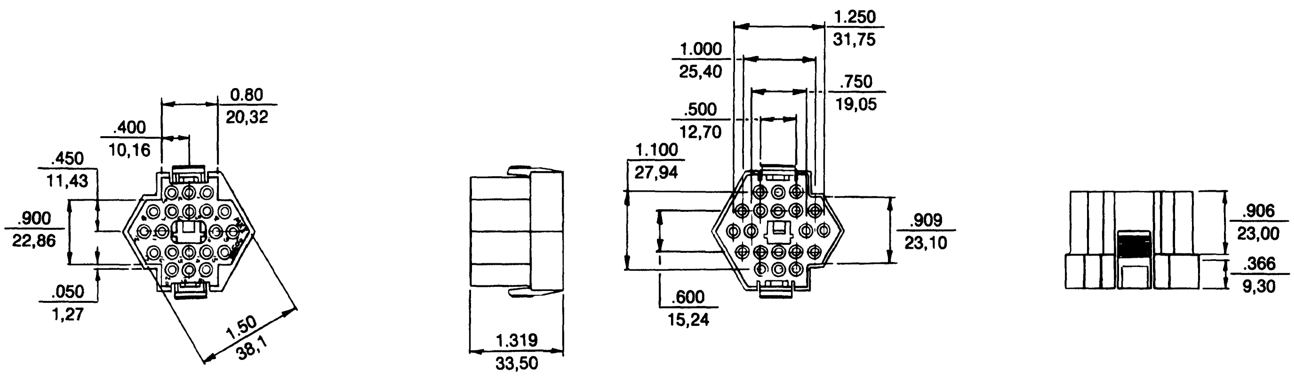
Reference Information
Product Specification: PS-90305
Mates With: 90306
Designed In: Millimeters

Electrical
Voltage: 200V

Mechanical
Contact Insertion Force: 20N max.
Contact Retention to Housing: 100N min.

Physical
Housing: Black nylon, UL 94V-0
Temperature: -40 to +85°C





ORDERING INFORMATION

Order No.
90305-0001

FEATURES AND SPECIFICATIONS

molex® **21-Position Socket Housing**

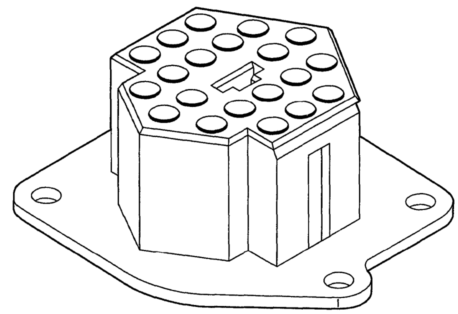
90306

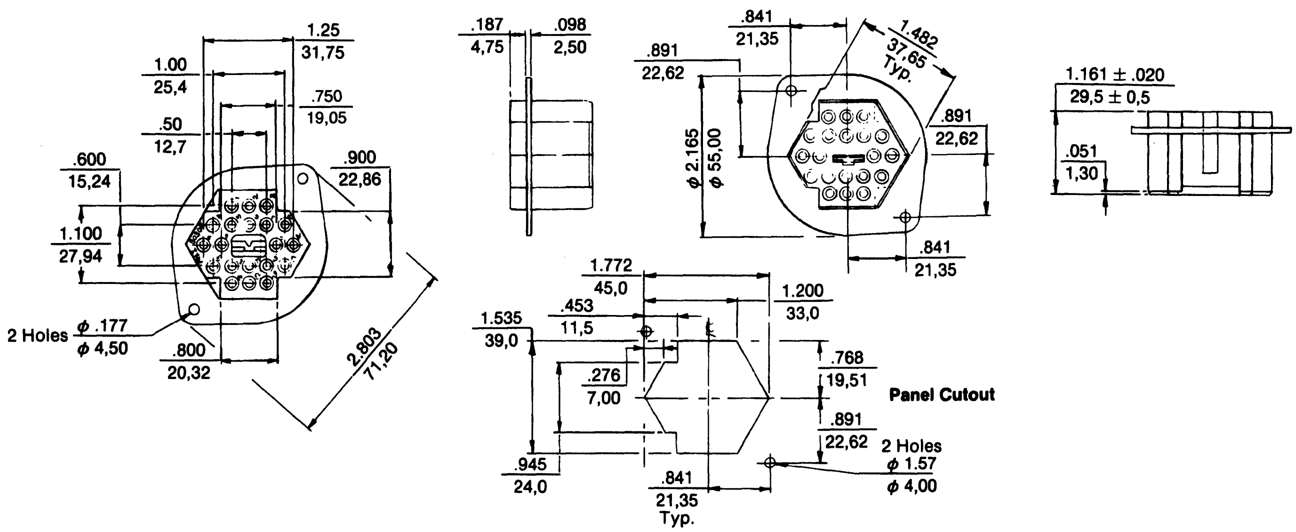
For Harsh Environments

Features and Benefits
- Accepts 20 Molok pin contacts (order separately)
- Also accepts 9.50mm tab contact
- Panel mount

Reference Information
Mates With: 90305
Designed In: Millimeters

Physical
Housing: Black 6/6 nylon, UL 94V-2





ORDERING INFORMATION

Order No.
90306-0001

molex® Terminals for Multicontact Connector Housings Technical Data

Product Description	Fits Tab Size (mm)	Push On Force (per contact) (N)	Pull-Off Force (N)	Contact Retention Force (N)	Current Rating (Amperes)	Cycles	Reel Quantity	Wire Range (mm²)	Pin Diameter (mm)
90020	2.80 by 0.80 2.00 by 0.80	10 max.	4 max.	60 min.	8	50 min.	4000	0.50-1.50 and 1.00-2.50	
90026 90027		20 max.	12 max.	60 min.	25	50 max.	3000	1.00-2.50 and 2.50-4.00	3.55
90021	6.30 by 0.80	Phosphor Bronze—18 max. Brass—8 max.	4 min.	60 min.	16	50	3000	0.50-1.50 and 1.00-2.50	
90028	6.20 by 0.80 with locking hole	25 max.	25 max.	40 min.	25		2000	0.50-1.50, 1.00-2.50 and 2.50-4.00	
90022 90024		6 max.	1 min.	60 min.	13	Tin—200 Gold—500	3000	0.50-1.50 and 1.00-2.50	1.58
90030	2.80-0.80 2.00-0.80	10 max.	4 max.	60 min.	8	50 min.	4000		

Terminals accommodate standard and thin wall cable

Current ratings based on +105°C max. operating temperature

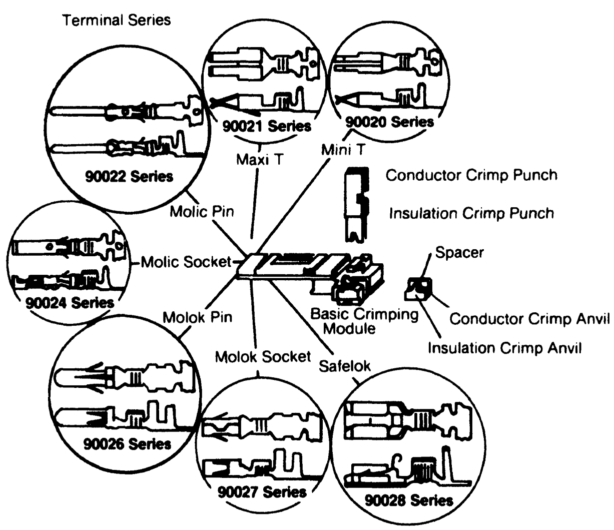
Material and plating specifications shown with ordering information on each product page

Cable tensile from crimp as per DIN 46249, all products

Crimp Tooling Information

- Molex provides a flexible tooling system that can easily be adapted to manufacture double-ended harnesses of different lengths and wire styles with different terminals
- By changing small die parts on the Molex TM-40/42, a range of popular terminals can be accommodated
- TM-40/42s can be mounted in pairs onto the Komax brand fully automated, double-ended harness assembly machines to achieve 15,000 crimps per hour

TM 40/42 Crimp Die System
Front Carrier Chain Type Terminals Only



Terminal Part No.	Terminator with Tool Kit	Spare Tool Kit
90020-01	69001-1000	69001-2001
90020-02	69001-1005	69001-2002
90020-03	69001-1001	69001-2003
90020-04	69001-1006	69001-2004
90021-01	69001-1000	69001-2001
90021-02	69001-1005	69001-2002
90021-03	69001-1001	69001-2003
90021-04		
90022-01	69001-1010	69001-2005
90022-02	69001-1011	69001-2006
90022-03	69001-1012	69001-2007
90022-04	69001-1013	69001-2008
90024-01	69001-1010	69001-2005
90024-02	69001-1011	69001-2006
90024-03	69001-1012	69001-2007
90024-04		
90028-01	69001-1002	69001-2013
90028-02	69001-1007	69001-2014
90028-03	69001-1004	69001-2015
90028-04	69001-1008	69001-2016
90028-05	69001-1003	69001-2017
90028-06	69001-1009	69001-2018

Basic terminator order no. 69001-0000 without tooling

Terminal Part No.	Terminator with Tool Kit	Spare Tool Kit
90026-01	69001-1014	69001-2009
90026-02	69001-1015	69001-2010
90026-03	69001-1016	69001-2011
90026-04	69001-1017	69001-2012
90027-01	69001-1014	69001-2009
90027-02	69001-1015	69001-2010
90027-03	69001-1016	69001-2011
90027-04	69001-1017	69001-2012

FEATURES AND SPECIFICATIONS

Mini-T Terminal

90020

For Use with Multicontact Connector Housings

Features and Benefits
- For input/output "black boxes" in cars and appliances
- 4 independent contact springs
- High resistance to vibration
- Low engagement force
- Can be applied on fully automatic equipment
- High current carrying capacity

Reference Information
Product Specification: PS-90020
Packaging: Reel
Mates With: Flat tabs 2.80 x 0.80"
Designed In: Millimeters

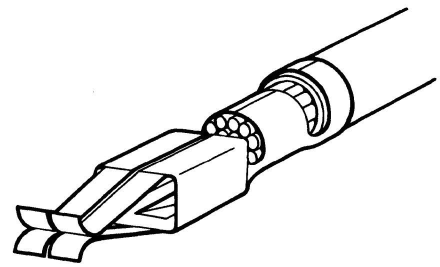
Electrical
Voltage: 200V max.
Current: 11.0A
Contact Resistance: 1.5mΩ max.

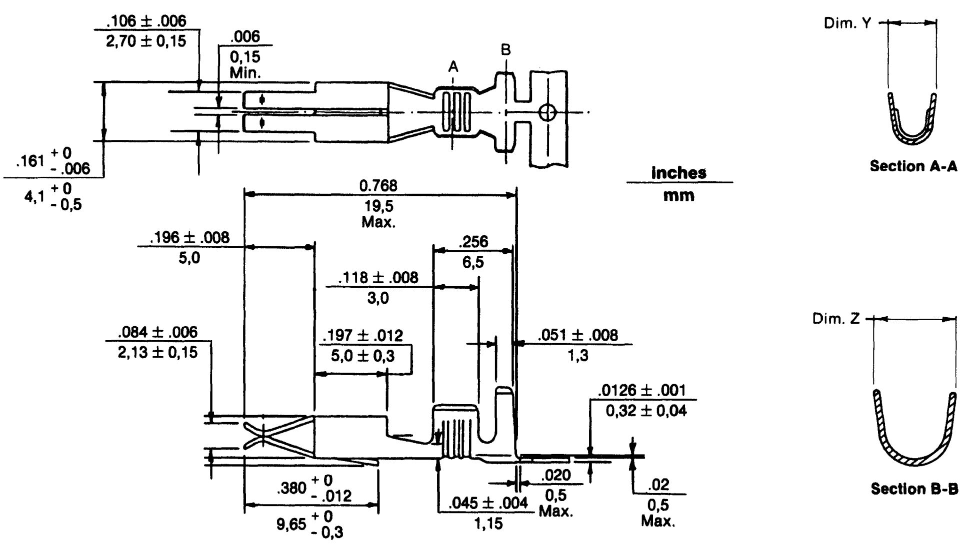
Mechanical
Wire Pull-Out Force:

Cable Size (mm²)	0.50	0.75	1.00	1.50	2.50
Force (N) min.	80	130	160	200	250

Mating Force: 10N max.
Unmating Force: 4N min.
Durability: 25 cycles

Physical
Contact: See Table
Plating: Hot Tin dipped
Temperature: -40 to +100°C





ORDERING INFORMATION AND DIMENSIONS

Wire Range (mm²)	Insulation Range ∅ (mm)	Order No. Material-(Plating) 0.32mm Brass (Hot Tin Dipped*)	Order No. Material-(Plating) 0.32mm Phosphor Bronze (Hot Tin Dipped*)	Dimension Z	Dimension Y
0.50-1.50	2.00-3.30	90020-0101	90020-0102	4.00 (.157)	3.00 (.117)
	1.40-2.30	90020-0201	90020-0202	3.60 (.142)	3.00 (.117)
1.00-2.50	2.70-4.30	90020-0301	90020-0302	4.80 (.189)	3.50 (.137)
	1.80-2.90	90020-0401	90020-0402	4.30 (.169)	3.50 (.137)

* 1.00 to 2.50 microns thick

Specialty Connectors

M

FEATURES AND SPECIFICATIONS

Maxi-T Terminal

90021

Standard Terminal for Harsh Environments

Features and Benefits

- 4 independent contact springs
- High resistance to vibration
- Low engagement force
- Can be applied on fully automatic equipment
- High current carrying capacity

Reference Information

Product Specification: PS-90021
Packaging: Reel
Mates With: Flat tabs 6.30 x 0.80"
Designed In: Millimeters

Electrical

Voltage: 200V
Current: 20.0A
Contact Resistance: 1.5mΩ max.

Mechanical

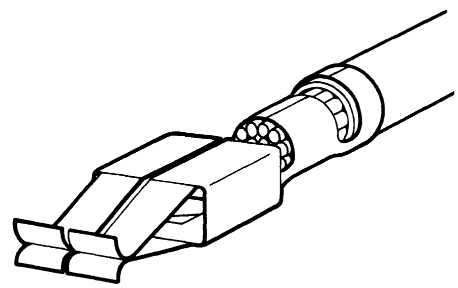
Wire Pull-Out Force:

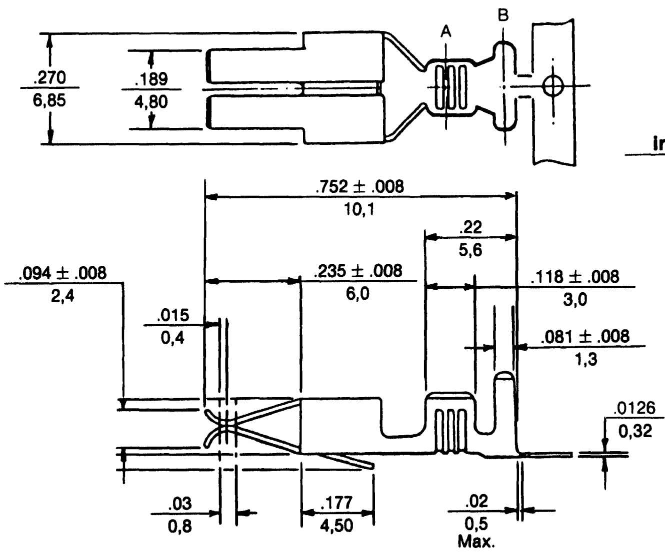
Cable Size (mm^2)	0.50	0.75	1.00	1.50	2.50
Force (N) min.	80	130	160	200	250

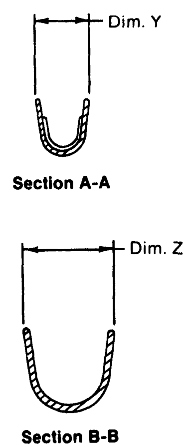
Mating Force: 10N max.
Unmating Force: 2N min.
Durability: 25 cycles

Physical

Contact: See Table
Plating: Hot Tin dipped
Temperature: -40 to +100°C







Specialty Connectors

M

ORDERING INFORMATION AND DIMENSIONS

Wire Range (mm^2)	Insulation Range ∅ (mm)	Order No. Material-(Plating) 0.32mm Brass (Hot Tin Dipped*)	0.32mm Phosphor Bronze (Hot Tin Dipped*)	Copper/Iron	Dimension Z	Y
0.50-1.50	2.00-3.30	90021-0101	90021-0102	90021-0104	4.00 (.157)	3.00 (.117)
	1.40-2.30	90021-0201	90021-0202	90021-0204	3.60 (.142)	3.00 (.117)
1.00-2.50	2.70-4.30	90021-0301	90021-0302	90021-0304	4.80 (.189)	3.50 (.137)
	1.80-2.90	90021-0401	90021-0402	90021-0404	4.30 (.169)	3.50 (.137)
2.50-6.00	1.40-2.30	90021-0501	90021-0502	90021-0504	3.60 (.142)	2.60 (.102)
	1.80-2.90	90021-0601	90021-0602	90021-0604	4.70 (.185)	3.60 (.142)
	3.00-4.50	90021-0701	90021-0702	90021-0704	6.40 (.251)	5.40 (.212)

* 1.00 to 2.50 microns thick

FEATURES AND SPECIFICATIONS

90030
Standard Terminal with Solder Post

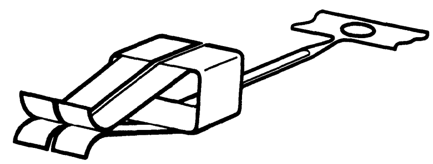
Features and Benefits
- For direct insertion into printed circuit board
- Tulip-shape mouth for easy front entry
- 4 independent contact springs
- High resistance to vibration
- Low engagement force
- High current carrying capacity

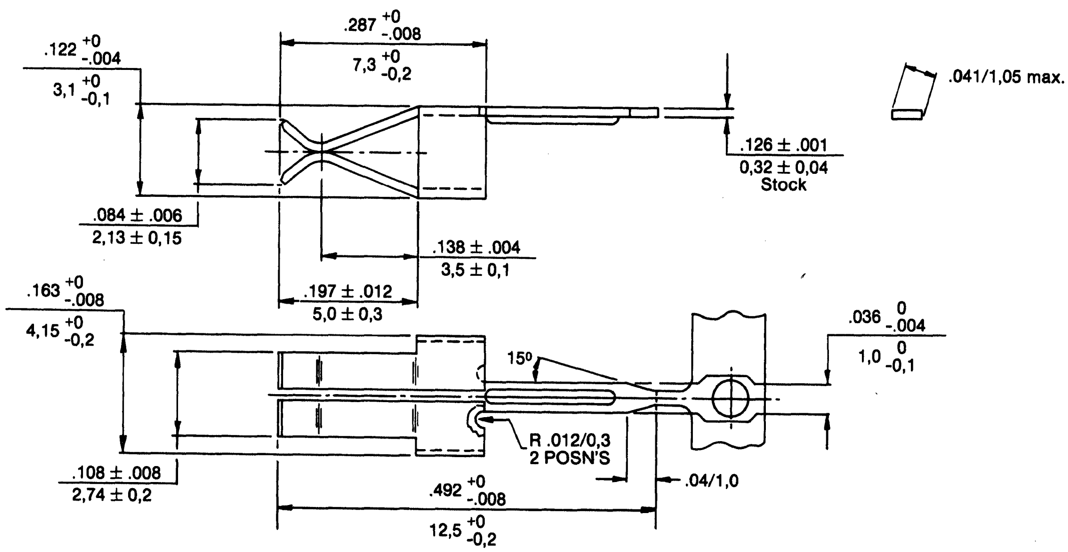
Reference Information
Product Specification: PS-90030
Mates With: Flat tabs 2.80 x 0.80"
Designed In: Millimeters

Electrical
Voltage: 200V
Current: 11.0A
Contact Resistance: 1.5mΩ max.

Mechanical
Mating Force: 10N max.
Unmating Force: 2N min.
Durability: 25 cycles

Physical
Contact: Phosphor Bronze
Plating: Hot Tin dipped
Temperature: -40 to +100°C





ORDERING INFORMATION

Order No.	
Chain Form	**Loose Form**
90030-0001	90030-1001

FEATURES AND SPECIFICATIONS

Molic Pin and Socket

90022/90024

For High Density Multicontact Connector Housings

Reference Information
Product Specification: PS-90022/90024
Packaging: Reel
Designed In: Millimeters

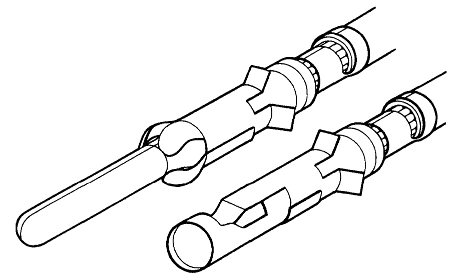
Electrical
Voltage: 200V
Current: 13.0A

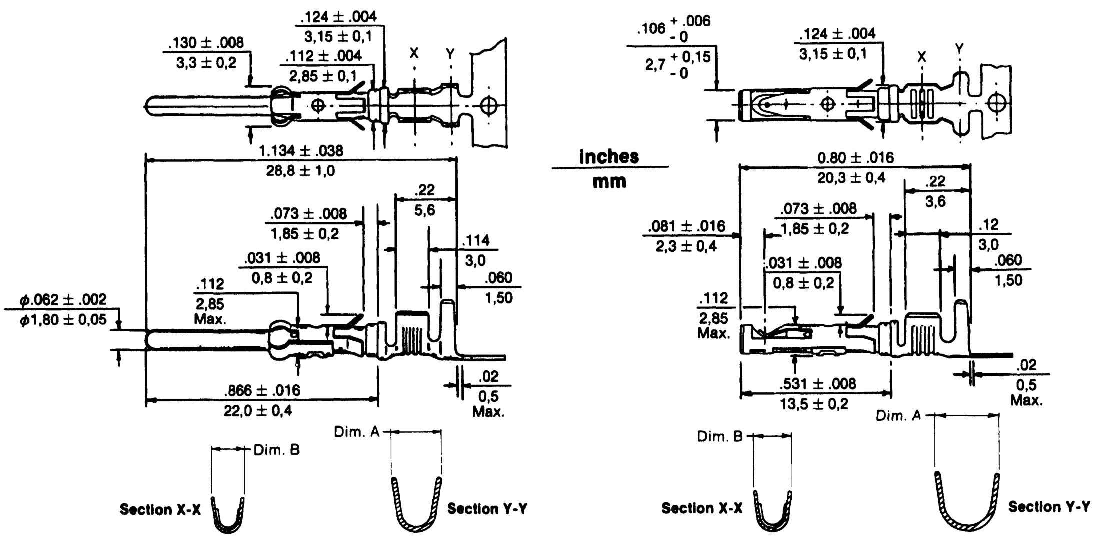
Mechanical
Wire Pull-Out Force:

Cable Size (mm²)	0.50	0.75	1.00	1.50	2.50
Force (N) min.	80	130	160	200	250

Mating Force: 6N max.
Unmating Force: 1N min.
Durability: 25 cycles

Physical
Contact: See Table
Plating: Hot Tin dipped
Temperature: -40 to +100°C





ORDERING INFORMATION AND DIMENSIONS

Wire Range (mm²)	Insulation Range ∅ (mm)	Order No. Material-(Plating)				Dimension	
		90022-Molic Pin		90024-Molic Socket		A	B
		0.32mm Brass (Pretinned*)	0.32mm Phosphor Bronze (Pretinned*)	0.32mm Brass (Pretinned*)	0.32mm Phosphor Bronze (Pretinned*)		
0.50-1.50	2.00-3.00	90022-0101	90022-0102	90024-0101	90024-0102	4.00 (.157)	3.00 (.117)
	1.30-2.30	90022-0201	90022-0202	90024-0201	90024-0202	3.60 (.142)	3.00 (.117)
	2.40-3.70	90022-0501	90022-0502	90024-0501	90024-0502	4.00 (.189)	3.00 (.117)
1.00-2.50	2.40-3.70	90022-0301	90022-0302	90024-0301	90024-0302	4.80 (.189)	3.50 (.137)
	1.70-2.90	90022-0401	90022-0402	90024-0401	90024-0402	4.30 (.169)	3.50 (.137)

* 1.00 to 2.50 microns thick

FEATURES AND SPECIFICATIONS

Molok Pin and Socket

90026/90027

For High Current Applications

Reference Information
Product Specification: PS-90026/90027
Packaging: Reel
Designed In: Millimeters

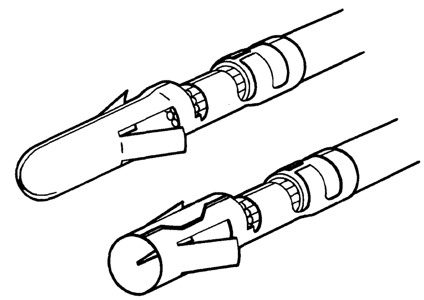
Electrical
Voltage: 200V
Current: 25.0A

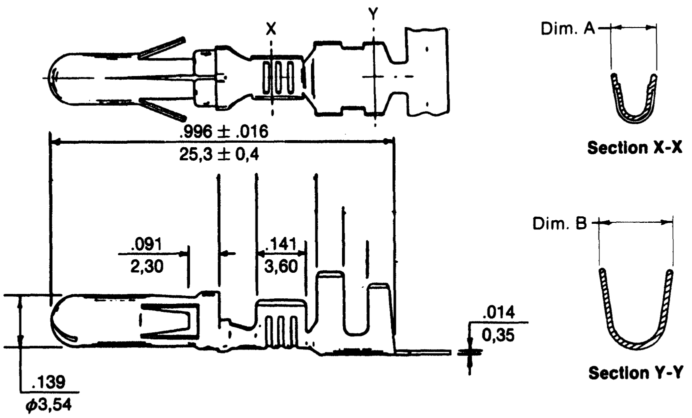
Mechanical
Wire Pull-Out Force:

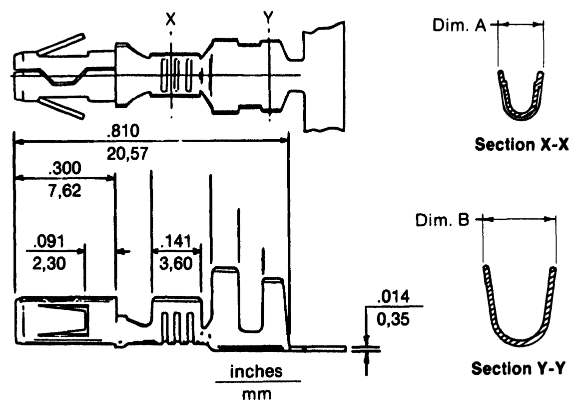
Cable Size (mm^2)	1.00	1.50	2.50	4.00
Force (N) min.	160	200	250	350

Mating Force: 20N max.
Unmating Force: 12N min.
Durability: 20 cycles

Physical
Contact: See Table
Plating: Hot Tin dipped
Temperature: -40 to +100°C







ORDERING INFORMATION AND DIMENSIONS

Wire Range (mm^2)	Insulation Range ∅ (mm)	Order No. Material-(Plating)				Dimension	
		90026-Molok Pin		90027-Molok Socket		A	B
		0.35mm Brass (Hot Tin Dip*)	0.35mm Phosphor Bronze (Hot Tin Dip*)	0.35mm Brass (Hot Tin Dip*)	0.35mm Phosphor Bronze (Hot Tin Dip*)		
1.00-2.50	2.40-3.70	90026-0101	90026-0102	90027-0101	90027-0102	3.55 (.140)	5.00 (.200)
	1.70-2.90	90026-0201	90026-0202	90027-0201	90027-0202	3.55 (.140)	4.40 (.200)
2.50-4.00	3.30-4.50	90026-0301	90026-0302	90027-0301	90027-0302	4.35 (.170)	5.80 (.230)
	2.60-3.60	90026-0401	90026-0402	90027-0401	90027-0402	4.35 (.170)	5.30 (.210)

* 1.00 to 2.50 microns thick

FEATURES AND SPECIFICATIONS

Safelock Terminal

90028

Push-On for High Current Applications

Reference Information
Product Specification: PS-98012
Packaging: Reel
Mates With: 98014
Designed In: Millimeters

Electrical
Voltage: 200V
Current: 25.0A
Contact Resistance: 3mΩ max.
Dieletric Withstanding Voltage: 1000V min.
Insulation Resistance: 1000 MΩ min.

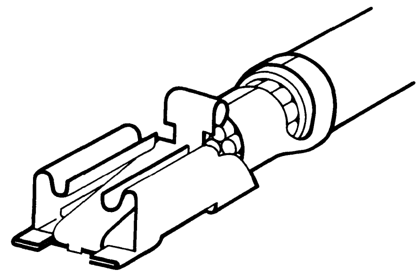
Mechanical
Contact Retention to Housing: 80N min.
Wire Pull-Out Force:

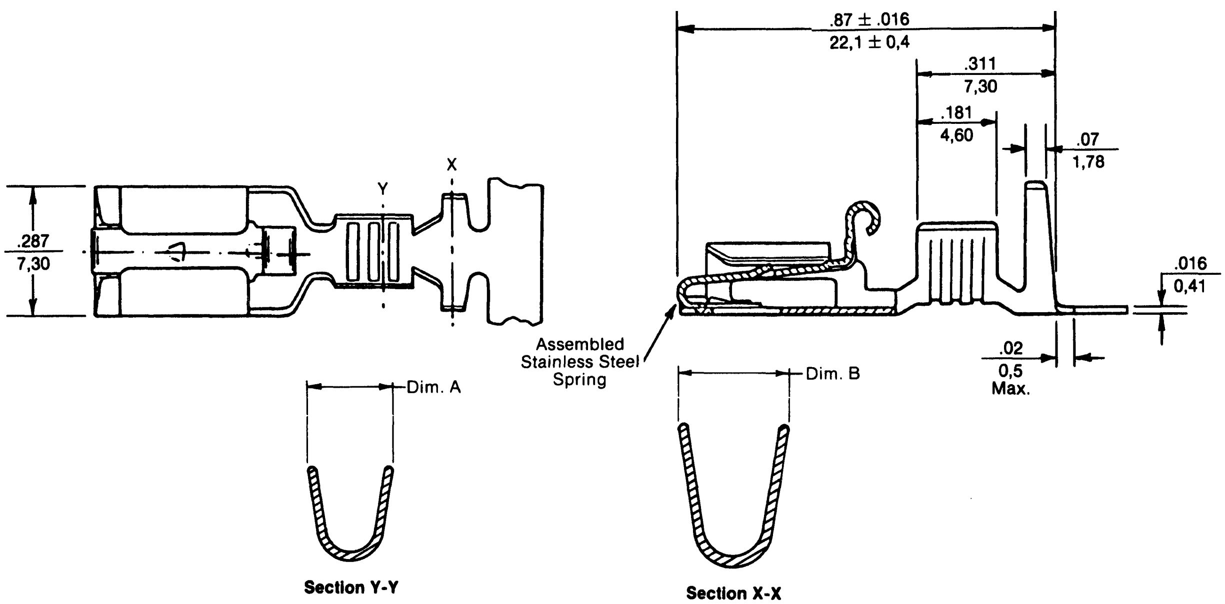
Wire Size (mm^2)	0.50	0.80	1.00	1.50	2.00	2.50	4.00
Force (N) min.	80	115	150	200	225	250	300*

* Limit given by contact body breaking

Mating Force: 10N max.
Unmating Force: 2N min.
Durability: 20 cycles

Physical
Contact: See Table
Plating: Hot Tin dipped
Temperature: -55 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Wire Range (mm^2)	Insulation Range ∅ (mm)	Order No. Mating-(Plating) 0.40mm Brass (Hot Tin Dip†)	0.40mm Phosphor Bronze (Hot Tin Dip†)	0.40mm Brass (Unplated)	0.40mm Phosphor Bronze (Unplated)	Dimension A	Dimension B
0.50-1.50	2.00-3.00	90028-0101	90028-0102	90028-0103	90028-0104	3.00 (.120)	4.40 (.170)
	1.30-2.30	90028-0201	90028-0202	90028-0203	90028-0204	3.00 (.120)	3.70 (.145)
1.00-2.50	2.40-3.70	90028-0301	90028-0302	90028-0303	90028-0304	3.60 (.140)	5.10 (.200)
	1.70-2.90	90028-0401	90028-0402	90028-0403	90028-0404	3.60 (.140)	4.50 (.170)
2.50-4.00	3.30-4.50	90028-0501	90028-0502	90028-0503	90028-0504	4.40 (.170)	6.00 (.230)
	2.60-3.60	90028-0601	90028-0602	90028-0603	90028-0604	4.40 (.170)	5.40 (.210)

† 1.00 to 2.50 microns thick

Specialty Connectors

M

FEATURES AND SPECIFICATIONS

Safelock Housing

98004

Features and Benefits
- 1 circuit

Reference Information
Packaging: Loose piece
UL File No.: E29179
CSA File No.: LR19980
Mates With: 90028
Designed In: Millimeters

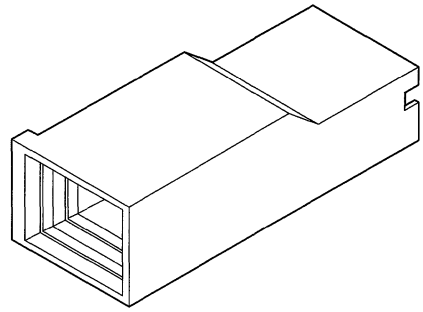
Electrical
Voltage: 200V
Current: 25.0A

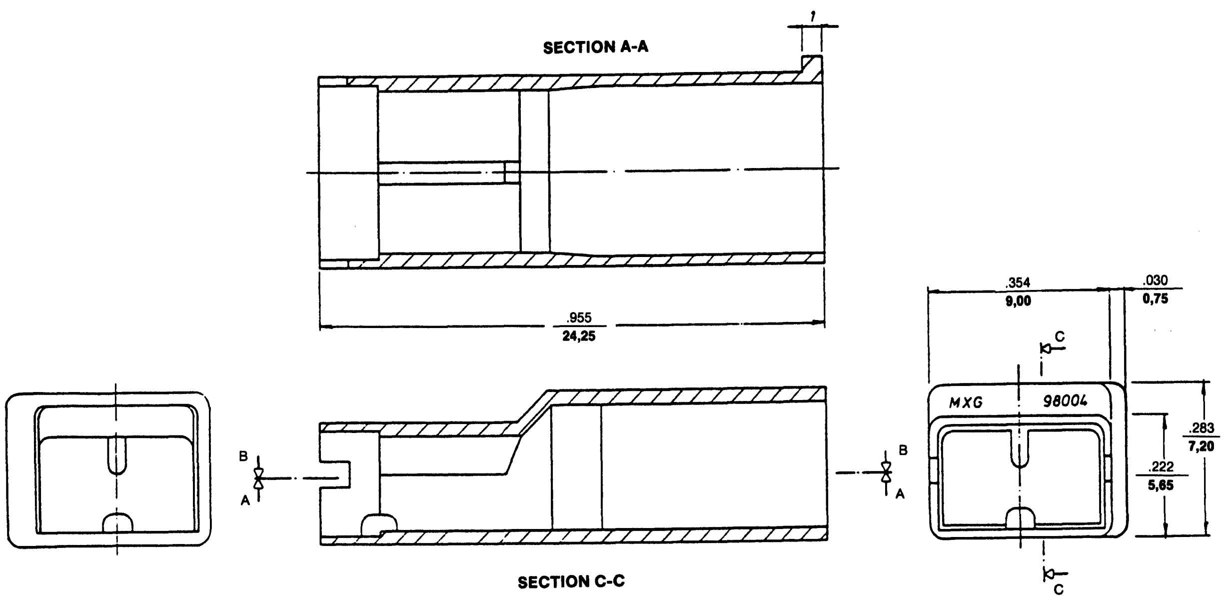
Mechanical
Contact Retention to FAB: 100N min.
Wire Pull-Out Force:

Cable Size (mm^2)	1.00	1.50	2.50	4.00
Force (N) min.	160	200	250	350

Mating Force: 20N max.
Unmating Force: 12N min.
Durability: 25 cycles

Physical
Housing: Nylon, UL 94V-2
Contact: Brass
Plating: Hot Tin dipped
Temperature: -40 to +85°C





ORDERING INFORMATION

Order No.	Color
98004-0101*	Black*
98004-0102	Natural

* Molex European Standard Product, usually available within shorter lead times

US Crimp Tooling

Presses	
Description	**Order No.**
TM-44 Press without Mini-Mac (220V)	11-09-2074
TM-42 Press without Dies (110V)	69002-5001
TM-144 Press and Stripper without Mini-Mac (220V)	11-09-2073
TM-7 Press without Mini-Mac (110V)	11-05-0043
TM-7 Press without Mini-Mac (220V)	11-05-0046

Terminal Series No.	Order No.									Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Terminator Die*	Terminator Die* Spare Tooling	Mini-Mac	Mini-Mac Spare Tooling	TM-144†	TM-80		
1457-1	• 11-01-0084		11-02-0007	11-40-2009	11-40-3009	11-18-2056	11-18-3052			18-22 (0.80-0.35)	2.60 (.102) max.
1457-2	• 11-01-0084		11-02-0007	11-40-2010	11-40-3010	11-18-2057	11-18-3053			14-16 (2.00-1.30)	3.56 (.140) max.
1508	• 11-01-0101	• 11-03-0016		11-40-2117	11-40-3115	11-18-2200	11-18-3193	11-09-2098		14-18 (2.00-0.80)	3.56 (.140) max.
1508		• 11-03-0016		11-40-2118	11-40-3116	11-18-2202	11-18-3195	11-09-2096		18 Double (0.80)	2.80 (.110) max.
1881-2	• 11-01-0084			11-40-2083	11-40-3083	11-18-2010	11-18-3010			16-24 (1.30-0.20)	3.50 (.138) max.
1881-3	• 11-01-0006			11-40-2084	11-40-3084	11-18-2091	11-18-3086			24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
1943	• 11-01-0008	• 11-03-0010		11-40-2035	11-40-3035	11-18-2175	11-18-3166			18-24 (0.80-0.20)	2.80 (.110) max.
2107	11-01-0088			11-40-2014	11-40-3014	11-18-2097	11-18-3092			18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
2107	11-01-0088			11-40-2013	11-40-3013	11-18-2098	11-18-3093			24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
2176	11-01-0101	• 11-03-0016		11-40-2015	11-40-3015	11-18-2040	11-18-3040			14-22 (2.00-0.35)	3.43 (.135) max.
2328	11-01-0101	• 11-03-0016		11-40-2015	11-40-3015	11-18-2040	11-18-3040			14-22 (2.00-0.35)	3.18 (.125) max.
2576	11-01-0101	• 11-03-0016		11-40-2015	11-40-3015	11-18-2040	11-18-3040			14-22 (2.00-0.35)	3.43 (.135) max.
2697-1	11-01-0011	11-03-0001				11-18-2095	11-18-3091			12-20 (3.30-0.50)	4.78 (.188) max.
2697-2	• 11-01-1026					11-18-2096	11-18-3090			12-20 (3.30-0.50)	5.84 (.230) max.
2698	11-01-0101	• 11-03-0016		11-40-2015	11-40-3015	11-18-2024	11-18-3024			14-22 (2.00-0.35)	3.18 (.125) max.
2699	11-01-0011	11-03-0001								12-20 (3.30-0.50)	4.78 (.188) max.
2799	• 11-01-0006	• 11-03-0016		11-40-2215	11-40-3154	11-18-2041	11-18-3041			14-22 (2.00-0.35)	1.52 (.060) max.
4706-P,1	11-01-0065			11-40-2042	11-40-3042	11-18-2042	11-18-3042			16-18 (1.30-0.80)	3.00 (.118) max.
4706-P,1				11-40-2044	11-40-3044					16-18 (1.30-0.80)	1.78 (.070) max.
4706-3	11-01-0068			11-40-2043	11-40-3043	11-18-2043	11-18-3043			18-24 (0.80-0.20)	3.00 (.118) max.
4706-3				11-40-2045	11-40-3045					18-24 (0.80-0.20)	1.78 (.070) max.
4811	11-01-0086			11-40-2029	11-40-3029	11-18-2048	11-18-3048			22 (0.35)	2.50 (.100) max.
4811	11-01-0086			11-40-2240	11-40-3243	11-18-2048	11-18-3048			24 (0.20)	2.50 (.100) max.
4811-1	11-01-0085			11-40-2039	11-40-3039	11-18-2049	11-18-3049			22 (0.35)	1.52 (.060) max.
4811-1	11-01-0085			11-40-2241	11-40-3244	11-18-2049	11-18-3049			24-26 (0.20-0.12)	1.52 (.060) max.
5190	11-01-0085			11-40-2039	11-40-3039	11-18-2049	11-18-3049			22 (0.35)	1.52 (.060) max.
5190	11-01-0085			11-40-2241	11-40-3244	11-18-2049	11-18-3049			24-26 (0.20-0.12)	1.52 (.060) max.
5298				11-40-2246	11-40-3249	11-18-2203	11-18-3196			18-24 (0.80-0.20)	3.05 (.120) max.
6482-,1,2				11-40-2151	11-40-3144	11-18-2036	11-18-3036			14-18 (2.00-0.80)	3.56 (.140) max.
8980 1-3C	11-01-0206	11-03-0037		11-40-2282	11-40-3283	11-18-2186	11-18-3179			14-20 (2.00-0.50)	3.56 (.140) max.
8980 1-3C1	11-01-0206	11-03-0037		11-40-2273	11-40-3275	11-18-2188	11-18-3181		11-09-2056	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)
8980 4C	11-01-0206	11-03-0037		11-40-2274	11-40-3276					14-20 (2.00-0.50)	3.56 (.140) max.
8980 4C1	11-01-0206	11-03-0037		11-40-2275	11-40-3277				11-09-2057	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)
8993	11-01-0026	• 11-03-0016		11-40-2096	11-40-3096	11-18-2210	11-18-3203			18-24 (0.80-0.20)	2.80 (.110) max.
41422	11-01-0181			11-40-2193	11-40-3194	11-18-2081	11-18-3076			14-18 (2.00-0.80)	3.53 (.139) max.
41422	11-01-0180			11-40-2192	11-40-3193	11-18-2080	11-18-3075			10-12 (5.00-3.30)	4.83 (.190) max.
41817	11-01-0085			11-40-2120	11-40-3118	11-18-2106	11-18-3100			22-26 (0.35-0.12)	1.52 (.060) max.
42001				11-40-2171	11-40-3173	11-18-2108	11-18-3102			22-26 (0.35-0.12)	1.52 (.060) max.
42172						11-18-2139	11-18-3130			14-18 (2.00-0.80)	
90020/21-01				69001-1000	69001-2001					16-20 (1.50-0.50)	2.00-3.30 (.080-.130)
90020/21-02				69001-1005	69001-2002					16-20 (1.50-0.50)	1.00-2.30 (.055-.090)
90020/21-03				69001-1001	69001-2003					14-18 (2.50-1.00)	2.00-4.30 (.102-.142)
90020/21-04				69001-1006	69001-2004	69037-1054	69037-2054			14-18 (2.50-1.00)	1.00-2.90 (.040-.115)
90022/24-01				69001-1010	69001-2005					16-20 (1.50-0.50)	2.00-3.30 (.080-.130)
90022/24-02				69001-1011	69001-2006					16-20 (1.50-0.50)	1.30-2.30 (.052-.090)
90022/24-03				69001-1012	69001-2007					14-18 (2.50-1.00)	2.00-3.70 (.095-.145)
90022/24-04				69001-1013	69001-2008					14-18 (2.50-1.00)	1.00-2.90 (.067-.115)
90022/24-05										16-20 (1.50-0.50)	2.00-3.70 (.095-.145)
90026/27-01				69001-1014	69001-2009					14-18 (2.50-1.00)	2.00-3.70 (.095-.145)
90026/27-02				69001-1015	69001-2010					14-18 (2.50-1.00)	1.00-2.90 (.067-.115)
90026/27-03				69001-1016	69001-2011					12-14 (4.00-2.50)	3.00-4.50 (.130-.180)
90026/27-04				69001-1017	69001-2012					12-14 (4.00-2.50)	2.00-4.30 (.102-.142)
90028-010X				69001-1002	69001-2013					16-20 (1.50-0.50)	2.00-3.30 (.080-.130)
90028-020X				69001-1007	69001-2014					16-20 (1.50-0.50)	1.30-2.30 (.052-.090)
90028-030X				69001-1004	69001-2015					14-18 (2.50-1.00)	2.00-3.70 (.095-.145)
90028-040X				69001-1008	69001-2016					14-18 (2.50-1.00)	1.00-2.90 (.067-.115)
90028-050X				69001-1003	69001-2017					12-14 (4.00-2.50)	3.00-4.50 (.130-.180)
90028-060X				69001-1009	69001-2018					12-14 (4.00-2.50)	2.00-4.30 (.102-.142)
90198				11-40-2196	11-40-3197					22-26 (0.80-0.12)	1.00 (.067) max.

• US Standard Product, available through Molex franchised distributors

* For use with TM-40/42 or Base Unit

† Includes Mini-Mac

Application Tooling

Crimp Tooling Molex Europe

Presses	
Description	Order No.
TM-42 Press without Die (220V)	69002-5000

Preferred Version in Europe— Not Available in the US

Terminal Series No.	Order No.									Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Terminator Die*	Terminator Die* Spare Tooling	Mini-Mac	Mini-Mac Spare Tooling	TM-114†	TM-80		
1457-1						69037-1106	69037-2106			18-22 (0.80-0.35)	2.60 (.102) max.
1457-2						69037-1107	69037-2107			14-16 (2.00-1.30)	3.56 (.140) max.
1508-9						69037-1066	69037-2066			14-18 (2.00-0.80)	3.56 (.140) max.
1943						69037-1007	69037-2107			18-24 (0.80-0.20)	2.80 (.110) max.
2107						69037-1116	69037-2116			18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
2107						69037-1116	69037-2116			24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
4706-P,1						69037-1124	69037-2124			16-18 (1.30-0.80)	3.00 (.118) max.
4706-3						69037-1087	69037-2087			18-24 (0.80-0.20)	3.00 (.118) max.
8980 1-3C						69037-1079	69037-2079			14-20 (2.00-0.50)	3.56 (.140) max.
8993						69037-1008	69037-2008			18-24 (0.80-0.20)	2.80 (.110) max.
90020/21-01				69001-1000	69001-2001					16-20 (1.50-0.50)	2.00-3.30 (.080-.130)
90020/21-02				69001-1005	69001-2002					16-20 (1.50-0.50)	1.00-2.30 (.055-.090)
90020/21-03				69001-1001	69001-2003					14-18 (2.50-1.00)	2.00-4.30 (.102-.142)
90020/21-04				69001-1006	69001-2004	69037-1054	69037-2054			14-18 (2.50-1.00)	1.00-2.90 (.040-.115)
90022/24-01				69001-1010	69001-2005					16-20 (1.50-0.50)	2.00-3.30 (.080-.130)
90022/24-02				69001-1011	69001-2006					16-20 (1.50-0.50)	1.30-2.30 (.052-.090)
90022/24-03				69001-1012	69001-2007					14-18 (2.50-1.00)	2.00-3.70 (.095-.145)
90022/24-04				69001-1013	69001-2008					14-18 (2.50-1.00)	1.00-2.90 (.067-.115)
90026/27-01				69001-1014	69001-2009					14-18 (2.50-1.00)	2.00-3.70 (.095-.145)
90026/27-02				69001-1015	69001-2010					14-18 (2.50-1.00)	1.00-2.90 (.067-.115)
90026/27-03				69001-1016	69001-2011					12-14 (4.00-2.50)	3.00-4.50 (.130-.180)
90026/27-04				69001-1017	69001-2012					12-14 (4.00-2.50)	2.00-4.30 (.102-.142)
90028-010X				69001-1002	69001-2013					16-20 (1.50-0.50)	2.00-3.30 (.080-.130)
90028-020X				69001-1007	69001-2014					16-20 (1.50-0.50)	1.30-2.30 (.052-.090)
90028-030X				69001-1004	69001-2015					14-18 (2.50-1.00)	2.00-3.70 (.095-.145)
90028-040X				69001-1008	69001-2016					14-18 (2.50-1.00)	1.00-2.90 (.067-.115)
90028-050X				69001-1003	69001-2017					12-14 (4.00-2.50)	3.00-4.50 (.130-.180)
90028-060X				69001-1009	69001-2018					12-14 (4.00-2.50)	2.00-4.30 (.102-.142)
90198-0001				69001-1024	69001-2025	69037-1004	69037-2004			22-26 (0.35-0.12)	1.00 (.067) max.

* For use with TM-40/42 or Base Unit

† Includes Mini-Mac

ORDERING INFORMATION

Preferred Version for Molex Japan— Not Available in the US

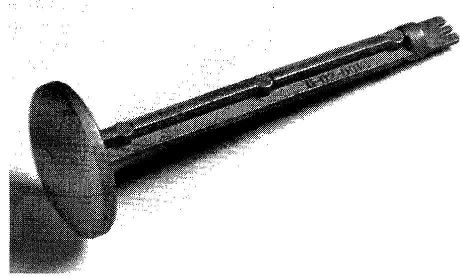
Crimp Tooling Molex Japan

Presses	
Description	Order No.
Press for Crimp Die	M15
Press for Modular Crimp Die	M15A
Mini-Press for Modular Crimp Die	57177-4000

Terminal Series No.	Order No.					Wire Gauge AWG (mm²)	Insulation Diameter
	Hand Crimper	Extraction Tool	Insertion Tool	Modular Crimp Die	Crimp Die		
1881-2	HTR1031E	J5800-003		JM5866A	CDJ1487	16-24 (1.30-0.20)	3.50 (.138) max.
1881-3	JHTR2262	J5800-003		JM5866A	CDJ1487	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
1943	JHTR1719C	HT2215			CDJ2061	18-24 (0.80-0.20)	2.80 (.110) max.
2107-1B5N	HTR4059A				CDJ2061	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)
2107-1B6N	HTR4059A				CDJ2061	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)
2576	JHTR2450				CDI2250	14-22 (2.00-0.35)	3.43 (.135) max.
2799	JHTR2262				CDI2250H	14-22 (2.00-0.35)	1.52 (.060) max.
4706-3	HTR4971C				CDJ4997	18-24 (0.80-0.20)	3.00 (.118) max.
5190				JM5865A		24-26 (0.20-0.12)	1.52 (.060) max.
5298				JM5998A	CDJ4997	18-24 (0.80-0.20)	3.05 (.120) max.
8980 1-3C				57102-3000		14-20 (2.00-0.50)	3.56 (.140) max.
8980 1-3C1				57102-3000		18-22 (0.80-0.35)	1.52-2.30 (.060-.090)
8980 4C				JM5866A		14-20 (2.00-0.50)	3.56 (.140) max.
8980 4C1				JM5866A		18-22 (0.80-0.35)	1.52-2.30 (.060-.090)
8993	JHTR2445A	J5800-004		JM5868A		18-24 (0.80-0.20)	2.80 (.110) max.

Application Tooling Insulation Displacement Tooling for 70156/71156

"T" Handle Discrete Wire Hand Tool



FEATURES

- For repair or prototype assembly

ORDERING INFORMATION

Description	Order No.	Connector
"T" Handle Hand Tool	11-02-0015	70156, 71156

Terminator Hand Tool and Snap-On Module

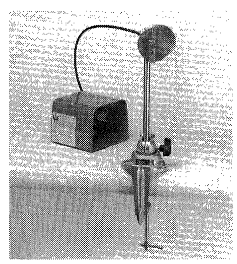
FEATURES

- For low volume, prototyping and repair
- Terminates up to 4 wires simultaneously

ORDERING INFORMATION

Description	Order No.	Connector
Pistol	11-21-5194	
Module	11-21-9756	70156
Module	11-32-6027	71156

Pneumatic Adapter for Module



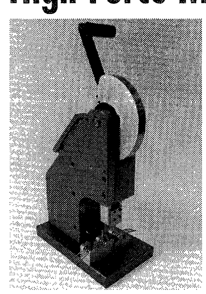
FEATURES

- For low to medium volume
- Terminates up to 4 wires simultaneously

ORDERING INFORMATION

Description	Order No.	Connector
Pneumatic Adapter	11-31-1570	70156, 71156

High Force Manual Press



FEATURES

- For medium volume
- Terminates 4 wires simultaneously
- Feed-to and feed-through

ORDERING INFORMATION

Description	Order No.	Connector
Manual Press with Tooling	11-20-1317	70156
Manual Press with Tooling	11-20-1286	71156
Tooling Only	11-39-0119	70156
Tooling Only	11-39-0034	71156

molex Memory Card

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Introduction

Molex's memory card connector family offers industry standard compatibility and unique performance features for memory cards used in PC, consumer, telecom and other electronic industries.

Our growing lineup includes 68-circuit receptacles and headers that are compatible with PCMCIA and JEIDA standards for Type I, II and III card applications. Our 88-circuit headers and receptacles are also developed to meet the JEIDA DRAM Card standard for memory expansion applications.

KEY FEATURES

PCMCIA 68-Circuit Receptacles

- High temperature insulator
- Single-side SMT or straddle mount
- Dual beam contacts
- 10,000 mating cycles
- Gold over Palladium Nickel plating
- Various offset tails

PCMCIA 68-Circuit Headers

- Vertical or right angle mount
- Standard profile or raised version
- Top or bottom board mount options
- Through hole or SMT with in-line tails
- Accepts Type I, II and III cards
- Various eject mechanisms
- Phosphor Bronze pins
- Gold over Palladium Nickel plating
- 10,000 mating cycles
- Stacked header/ejector assemblies

Complete Card Kits

- Type I frame and covers (with or without adhesive tapes)
- Type II frame and covers (with or without adhesive tapes)
- 14, 15 circuit SMT I/Os (with or without latches) for Type II cards
- Covers with silk screening options
- Covers with recess for labeling options
- 88-circuit DRAM frame and covers (with or without adhesive tapes)
- Adapter cases for DAA applications
- Custom cable assemblies for land line and cellular line

JEIDA 88-Circuit Receptacles

- JEIDA DRAM compatible
- High temperature insulator
- Dual beam contacts
- 30μ" Gold over Nickel plating
- Straddle mount

JEIDA 88-Circuit Headers

- Right angle, surface mount
- Single in-line tails for surface mount
- High temperature insulator
- Phosphor Bronze pins
- 30μ" Gold over Nickel plating
- Top or bottom board mount options
- Fitting nail options for SMT headers

68-Circuit PCMCIA Headers/Ejectors

Order No.	Ports	Profile	Connector Style	Board Mount	Solder Tails	Mated Ejector	Page No.
94208-0011	Single	Flush	Vertical	Top	Through Hole	N/A	N-4
71078-1X00			Right Angle				N-5
53380-6810					SMT	53381-0011	N-9
89147-0110							N-11
71078-2X00				Bottom	Through Hole	N/A	N-6
53484-6810					SMT	53381-0011	N-10
89147-0111							N-12
71089-300X			Right Angle Long Header	Top	Through Hole	87510-001X	N-21
71089-30XX		Raised					N-21
71089-350X		Flush		Bottom			N-22
71089-35XX		Raised					N-22
71089-100X/110X		Flush	Right Angle Eject Header	Top		87510-10XX	N-21
71089-10XX/11XX		Raised					N-21
71089-150X/160X		Flush		Bottom			N-22
71089-15XX/16XX		Raised					N-22
89030-0100		Flush	Edge Mount	Top	SMT	N/A	N-13
89030-0101				Bottom			N-14
71078-1X00		Raised	Right Angle	Top	Through Hole		N-5
53409-6810					SMT	53410-0011	N-15
71078-2XX0				Bottom	Through Hole	N/A	N-6
53556-6810					SMT	53410-0011	N-16
71078-3X00	Dual	Flush		Top	Through Hole	N/A	N-7
71078-4X00				Bottom			N-8
71708-3XX0		Raised		Top			N-7
71078-4XX0				Bottom			N-8
53524-1364		Flush		Top	SMT	Pre-assembled	N-25
53514-1364				Bottom			N-26
71089-400X			Right Angle Long Header	Top	Through Hole	87510-001X	N-24
71089-40XX		Raised					N-24
71089-450X		Flush		Bottom			N-23
71089-45XX		Raised					N-23
71089-200X/210X/220X/230X		Flush	Right Angle Eject Header	Top		87510-10XX	N-24
71089-20XX/21XX/22XX/23XX		Raised					N-24
71089-250X/260X/270X/280X		Flush		Bottom			N-23
71089-25XX/26XX/27XX/28XX		Raised					N-23

PCMCIA Card Kit (with Straddle Mount Receptacle)

Order No.	Card Type	Kit Item	Page No.
52731-6811	Type I	Receptacle	N-27
89074-68X1			N-28
89094-0002		Frame	N-30
89094-0000			N-30
89195-0000		Top Cover	N-30
89195-1000			N-30
89195-0000		Bottom Cover	N-30
89195-0000			N-30

Order No.	Card Type	Kit Item	Page No.
89074-68X1	Type II	Receptacle	N-28
89207-000X		I/O	N-34
89075-000X			N-34
89198-000X			N-34
89201-000X		Frame	N-31
89500-0005		Cover	N-32
89132-XXXX			N-32
89188-XXXX			N-32

PCMCIA Card Kit (with SMT Receptacle)

Order No.	Card Type	Kit Item	Page No.
71075-000X	Type II	Receptacle	N-29
89207-000X		I/O	N-34
89075-000X			N-34
89198-000X			N-34
71073-1X00		Frame	N-32
89500-0005		Cover	N-32
89132-XXXX			N-32
89188-XXXX			N-32

PCMCIA Card Kit (Snapper™)

Order No.	Card Type	Kit Item	Page No.
71075-000X	Type II	Receptacle	N-29
89207-000X		I/O	N-34
89075-000X			N-34
89198-000X			N-34
71141-0002		Frame	N-33
71139-0002		Cover	N-33

Right Angle 88-Circuit JEIDA Headers

Order No.	Solder Tail	Board Mount	Page No.
53427-8817	SMT	Top	N-37
53495-8817			N-39
53429-8817		Bottom	N-38
53496-8817			N-40

DRAM Card and Receptacle Kit

Order No.	Card Type	Kit Item	Page No.
52716-8811	88-Circuit DRAM	Receptacle	N-41
89094-0001		Frame	N-42
89195-0000		Cover	N-42
89195-1000			N-42
89195-2000			N-42

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

94208

Single Port, Flush Profile Vertical, Top Mount Through Hole

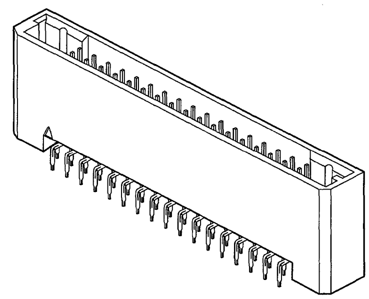
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- Screw holes inside the shrouded housing (no mounting ears)
- Accepts any PCMCIA Type I, II or III cards

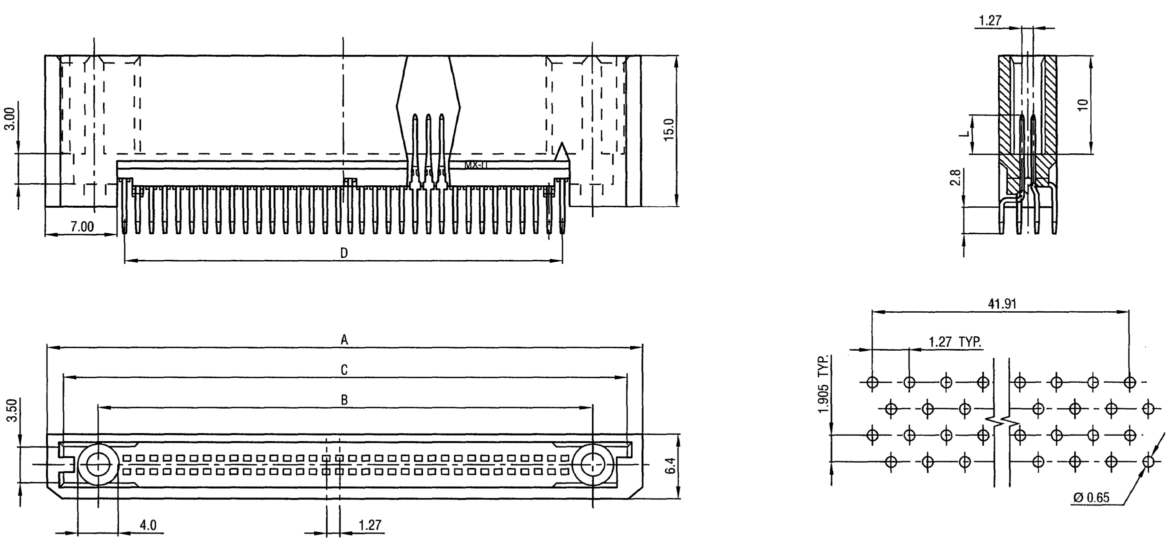
Reference Information
Product Specification: PS-94208
Packaging: Tube
Mates With: 52731, 89074 and 71075
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black nylon 6/6, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, 150µ" min. Tin/Lead on solder tails, 20µ" min. Nickel underplate overall
Temperature: -25 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension			
			A	B	C	D
68	94208-0011	Vertical	57.4	39.0	54.2	41.9

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

71078

Single Port Right Angle, Top Mount

Features and Benefits

- Accepts Type I, II and III PC cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- SMT process compatible
- 0, 2, 5 and 8mm standoffs available
- Available with M2 threaded insert

Reference Information

Product Specification: PS-71078-0001
Packaging: Tray
Designed In: Millimeters

Electrical

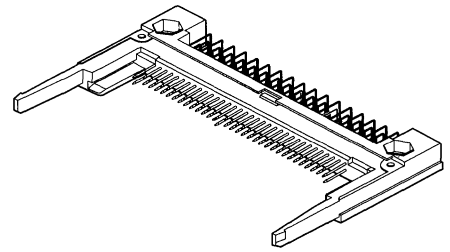
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

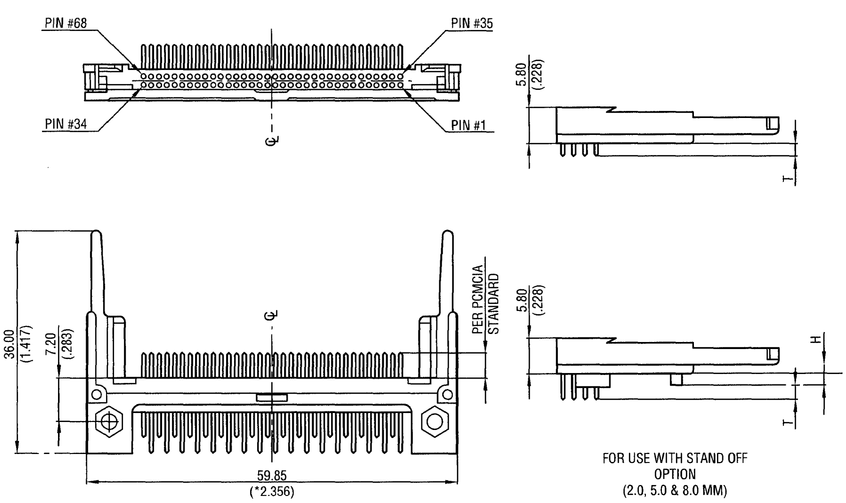
Mechanical

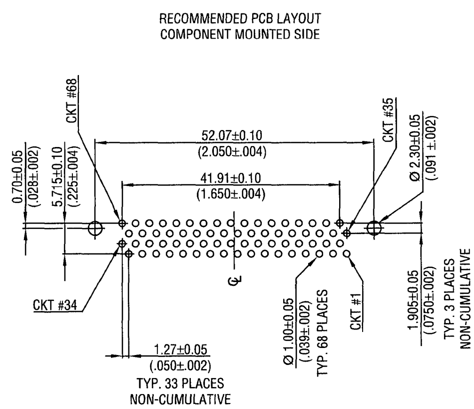
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical

Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C







Memory Card
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ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension T Tail Length	Dimension H Standoff Height	Threaded Insert
71078-1000	1.95 (.077)	0.00 (.000)	No
71078-1020	1.95 (.077)	2.00 (.079)	No
71078-1050	1.95 (.077)	5.00 (.197)	No
71078-1080	1.95 (.077)	8.00 (.315)	No
71078-1100	1.95 (.077)	0.00 (.000)	Yes
71078-1120	1.95 (.077)	2.00 (.079)	Yes
71078-1150	1.95 (.077)	5.00 (.197)	Yes
71078-1180	1.95 (.077)	8.00 (.315)	Yes

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

71078

Single Port Right Angle, Bottom Mount

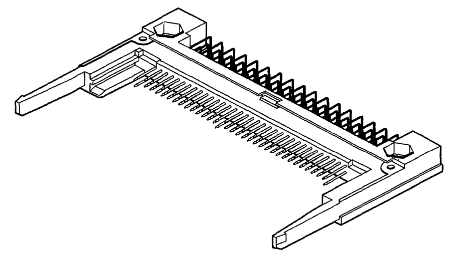
Features and Benefits
- Accepts Type I, II and III PC cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- SMT process compatible
- 0, 2, 5 and 8mm standoffs available
- Available with M2 threaded insert

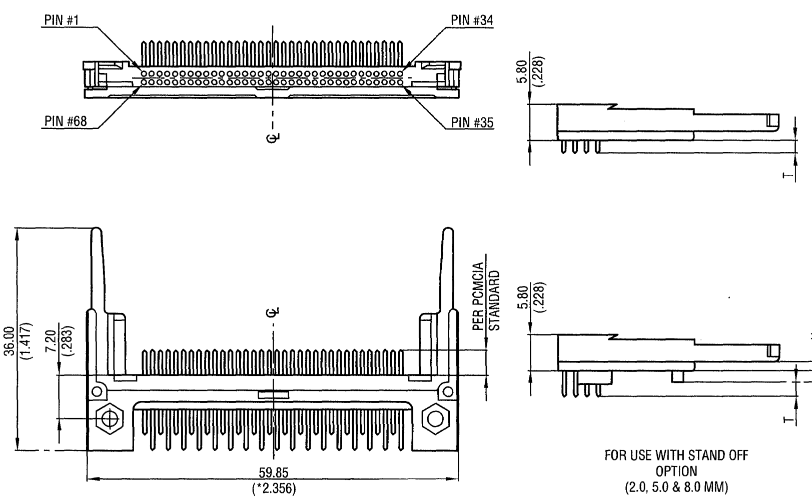
Reference Information
Product Specification: PS-71078-0001
Packaging: Tray
Designed In: Millimeters

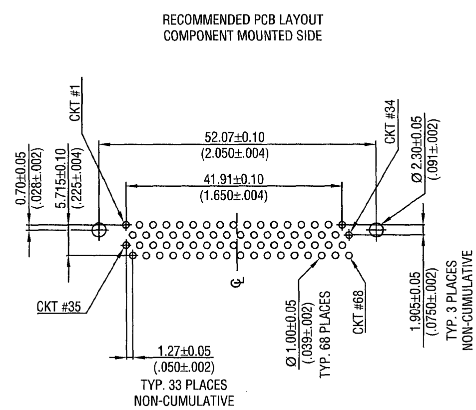
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C







ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension T Tail Length	Dimension H Standoff Height	Threaded Insert
71078-2000	1.95 (.077)	0.00 (.000)	No
71078-2020	1.95 (.077)	2.00 (.079)	No
71078-2050	1.95 (.077)	5.00 (.197)	No
71078-2080	1.95 (.077)	8.00 (.315)	No
71078-2100	1.95 (.077)	0.00 (.000)	Yes
71078-2120	1.95 (.077)	2.00 (.079)	Yes
71078-2150	1.95 (.077)	5.00 (.197)	Yes
71078-2180	1.95 (.077)	8.00 (.315)	Yes

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

71078

Dual Port Right Angle, Top Mount

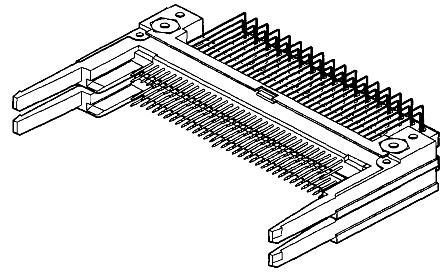
Features and Benefits
- Accepts Type I, II and III PC Cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- SMT process compatible
- 0, 2 and 5mm standoffs available
- With M2 threaded insert

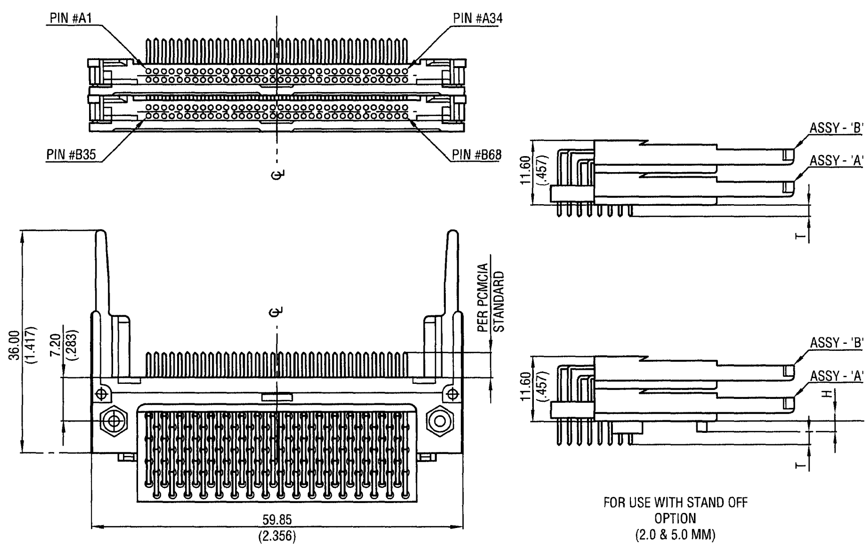
Reference Information
Product Specification: PS-71078-0001
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C





ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension	
	T	H
	Tail Length	Standoff Height
71078-3100	1.95 (.077)	0.00 (.000)
71078-3120	1.95 (.077)	2.00 (.079)
71078-3150	1.95 (.077)	5.00 (.197)

Memory Card

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FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

71078

Dual Port Right Angle, Bottom Mount

Features and Benefits

- Accepts Type I, II and III PC Cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- SMT process compatible
- 0, 2 and 5mm standoffs available
- With M2 threaded insert

Reference Information

Product Specification: PS-71078-0001
Packaging: Tray
Designed In: Millimeters

Electrical

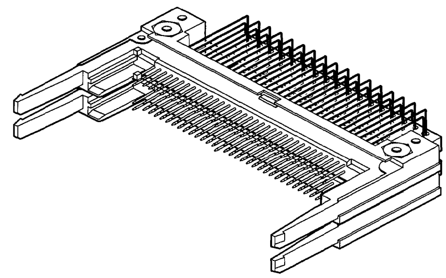
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

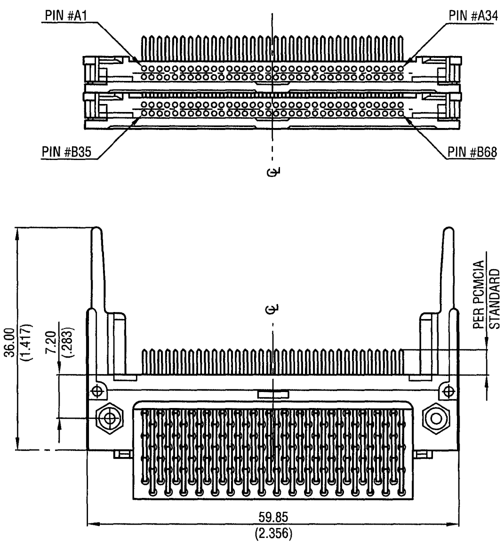
Mechanical

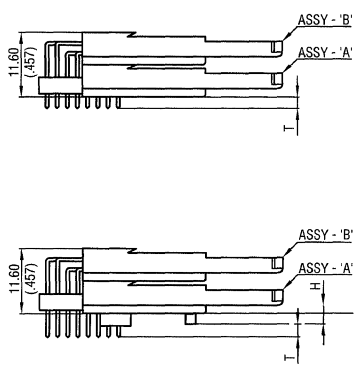
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical

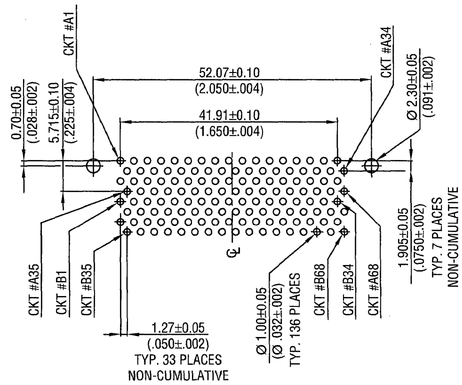
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C







FOR USE WITH STAND OFF OPTION
(2.0 & 5.0 MM)



ORDERING INFORMATION AND DIMENSIONS

Order No.	Dimension	
	T	H
	Tail Length	Standoff Height
71078-4100	1.95 (.077)	0.00 (.000)
71078-4120	1.95 (.077)	2.00 (.079)
71078-4150	1.95 (.077)	5.00 (.197)

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

53380

Single Port, Flush Profile Right Angle, Top Mount SMT

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- Low profile (5.2mm height)
- High temperature housing for I.R. process
- Single in-line surface mount tails (0.635mm)
- Accepts any PCMCIA Type I and II cards

Reference Information

Packaging: Tray
Mates With: 53381 ejector
Designed In: Millimeters

Electrical

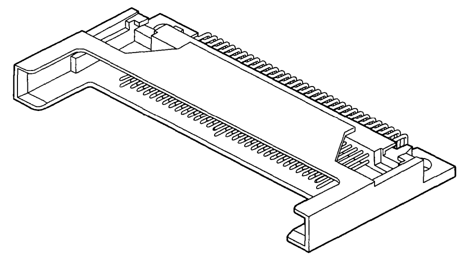
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ MAX.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

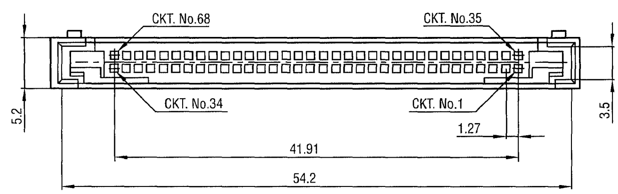
Mechanical

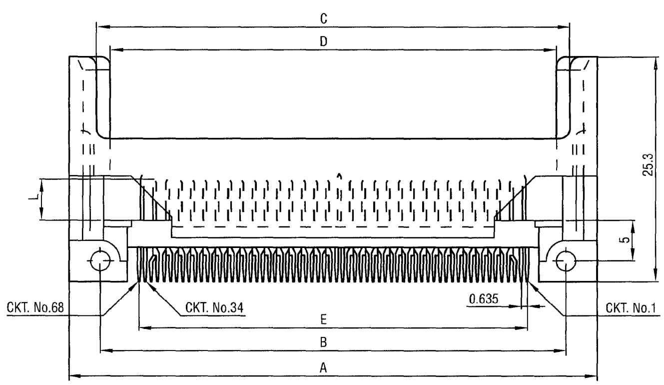
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

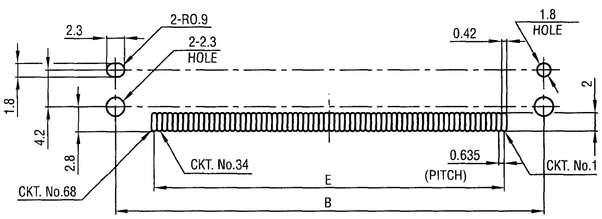
Physical

Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C









RECOMMENDED P.C.B. LAYOUT

Memory Card

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ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension				
			A	B	C	D	E
68	53380-6810	Top	57.4	52.0	51.6	49.2	42.545

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

53484

Single Port, Flush Profile Right Angle, Bottom Mount SMT

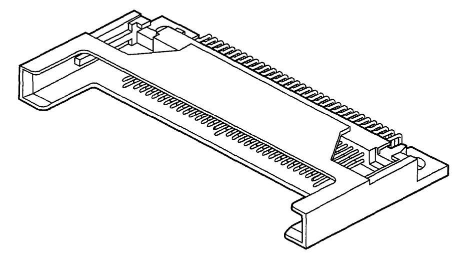
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- Low profile (5.2mm height)
- High temperature housing for I.R. process
- Single in-line surface mount tails (0.635mm)
- Accepts any PCMCIA Type I and II cards

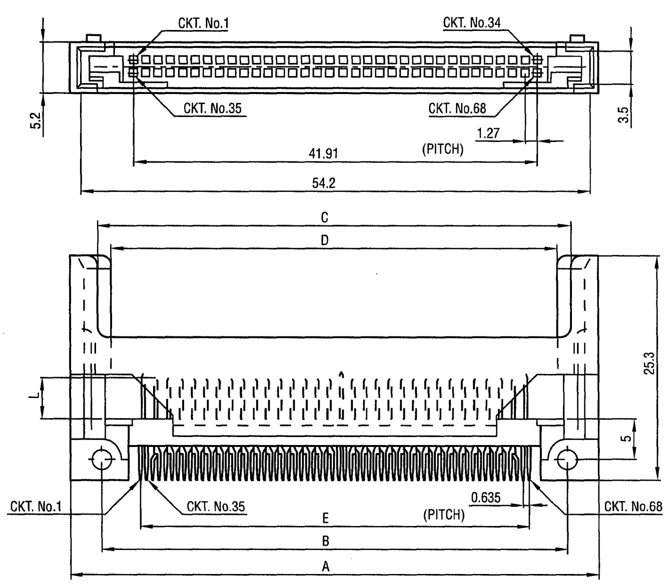
Reference Information
Packaging: Tray
Mates With: 53381 ejector
Designed In: Millimeters

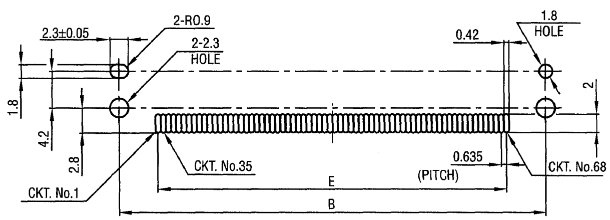
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C







RECOMMENDED P.C.B. LAYOUT

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
68	53484-6810	Bottom	57.4	52.0	51.6	49.2	42.545

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

89147

Single Port, Flush Profile Right Angle, Top Mount SMT

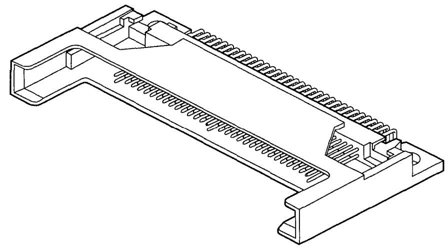
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- Low profile (5.2mm height)
- High temperature housing for I.R. process
- Single in-line surface mount tails (0.635mm)
- Accepts any PCMCIA Type I, II and III cards

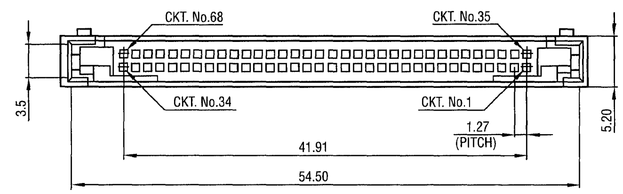
Reference Information
Packaging: Tray
Mates With: 53381 ejector
Designed In: Millimeters

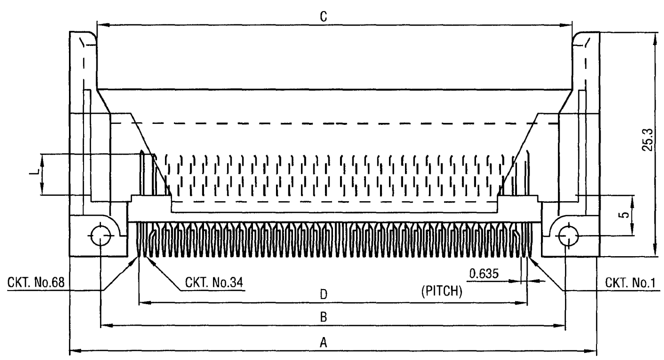
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ min.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

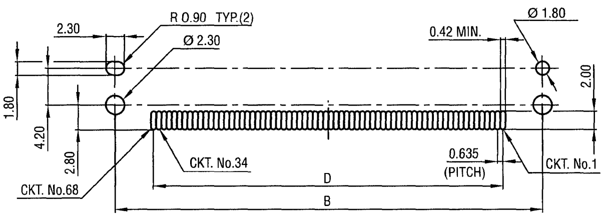
Mechanical
Contact Retention to Housing: 9.8N max.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C









RECOMMENDED P.C.B. LAYOUT

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension			
			A	B	C	D
68	89147-0110	Top	57.40	52.00	51.60	42.545

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

Memory Card

N

1.27mm Pitch PCMCIA Header

89147

Single Port, Flush Profile Right Angle, Bottom Mount SMT

FEATURES AND SPECIFICATIONS

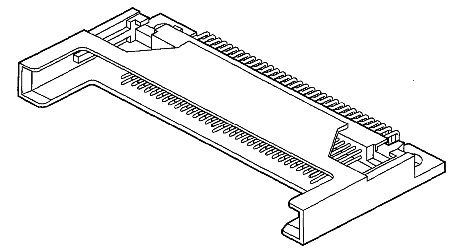
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- Low profile (5.2mm height)
- High temperature housing for I.R. process
- Single in-line surface mount tails (0.635mm)
- Accepts any PCMCIA Type I, II and III cards

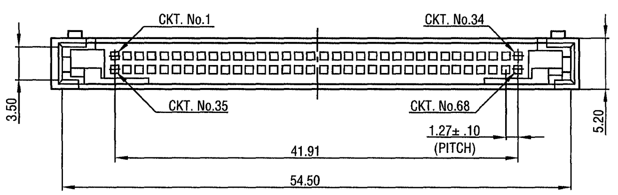
Reference Information
Packaging: Tray
Mates With: 53381 ejector
Designed In: Millimeters

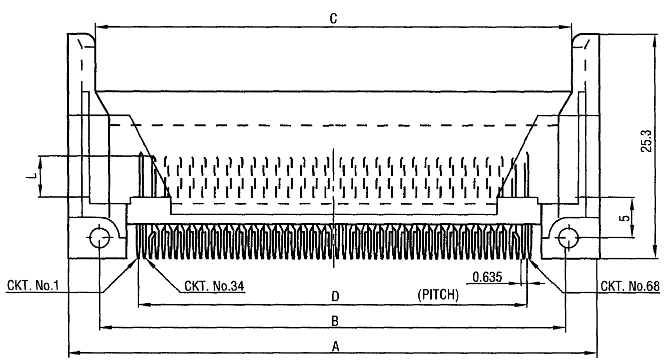
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

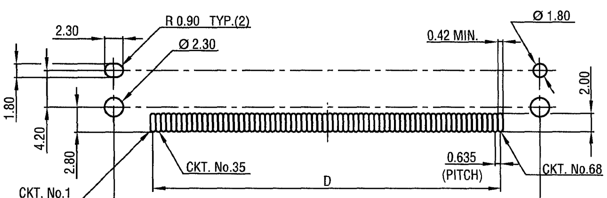
Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C









RECOMMENDED P.C.B. LAYOUT (BACK SIDE)

N Memory Card

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	Dimension B	Dimension C	Dimension D
68	89147-0111	Bottom	57.40	52.00	51.60	42.545

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

89030

Single Port, Flush Profile Edge Mount, Top Position SMT

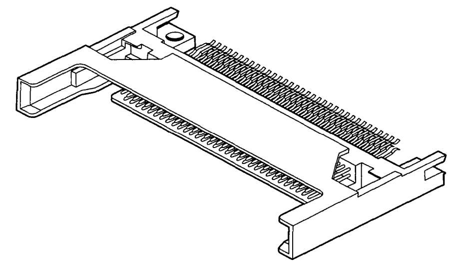
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- High temperature housing for I.R. process
- Screw holes for board lock
- Accepts any PCMCIA Type I, II and III cards

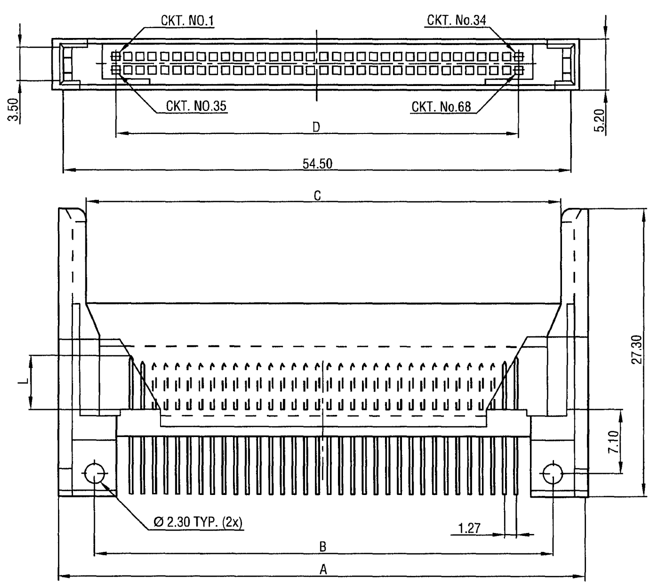
Reference Information
Packaging: Tray
Designed In: Millimeters

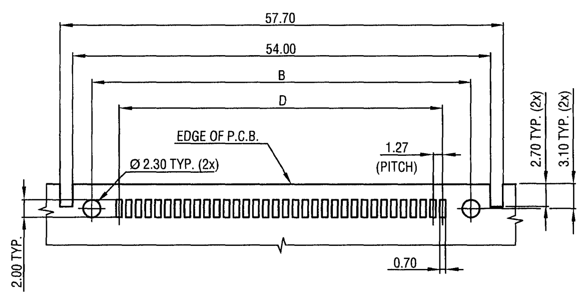
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N max.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C
PC Board Thickness: 1.2mm ± 0.10







RECOMMENDED P.C.B. LAYOUT (BOTH SIDES)

Memory Card

N

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	Dimension B	Dimension C	Dimension D
68	89030-0100	Top	57.4	49.3	51.6	41.91

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

89030

Single Port, Flush Profile Edge Mount, Bottom Position SMT

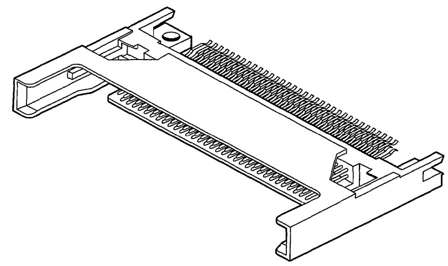
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- High temperature housing for I.R. process
- Screw holes for board lock
- Accepts any PCMCIA Type I, II and III cards

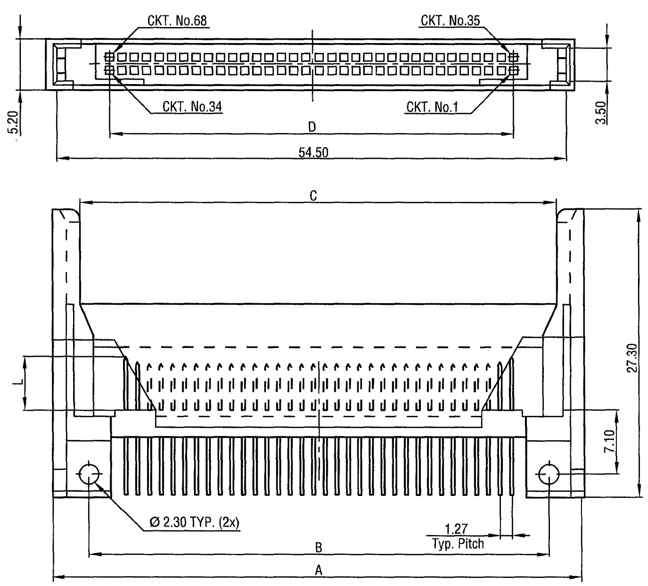
Reference Information
Packaging: Tray
Designed In: Millimeters

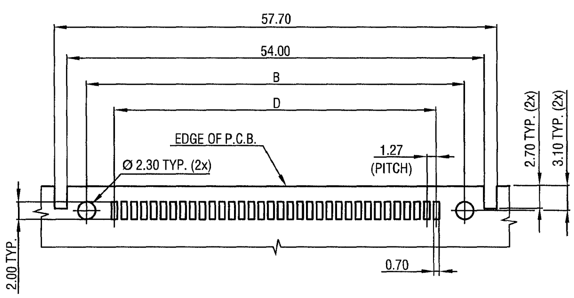
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectrical Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C
PC Board Thickness: 1.2mm ± 0.10







RECOMMENDED P.C.B. LAYOUT (BOTH SIDES)

Memory Card

N

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	Dimension B	Dimension C	Dimension D
68	89030-0101	Bottom	57.4	49.3	51.6	41.91

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

53409

Single Port, Raised Profile Right Angle, Top Mount SMT

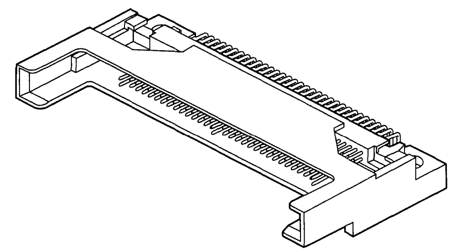
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- High temperature housing for I.R. process
- Raised 2.1mm for components mounted under the cards
- Single in-line surface mount tails (0.635mm)
- Accepts any PCMCIA Type I, II and III cards

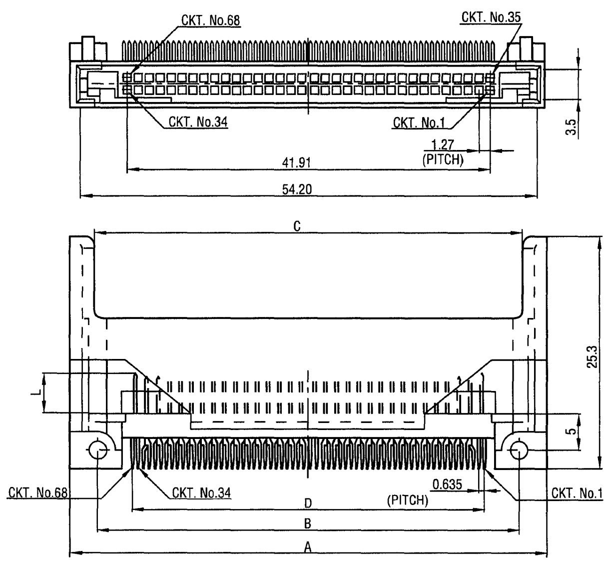
Reference Information
Packaging: Tray
Mates With: 53410 ejector
Designed In: Millimeters

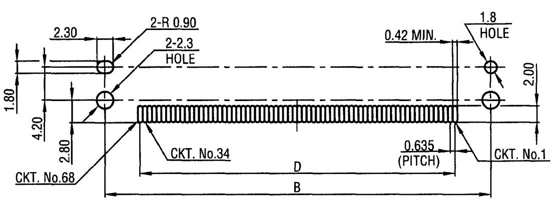
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

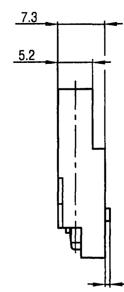
Physical
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C







RECOMMENDED P.C.B. LAYOUT



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension			
			A	B	C	D
68	53409-6810	Top	57.4	52.0	51.4	42.545

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

Memory Card

N

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header

53556

Single Port, Raised Profile Right Angle, Bottom Mount SMT

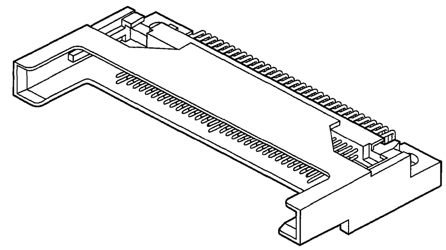
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- High temperature housing for I.R. process
- Raised 2.1mm for components mounted under the cards
- Single in-line surface mount tails (0.635mm)
- Accepts any PCMCIA Type I, II and III cards

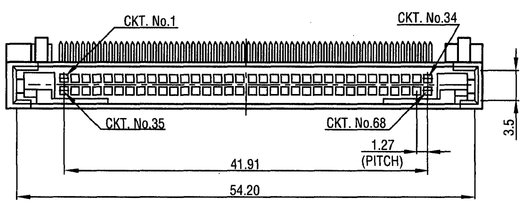
Reference Information
Packaging: Tray
Mates With: 53410 ejector
Designed In: Millimeters

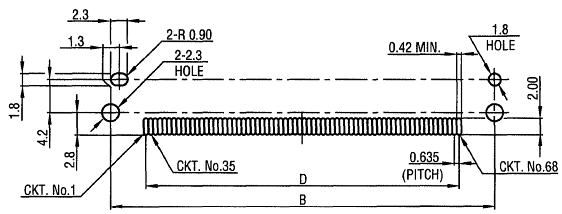
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

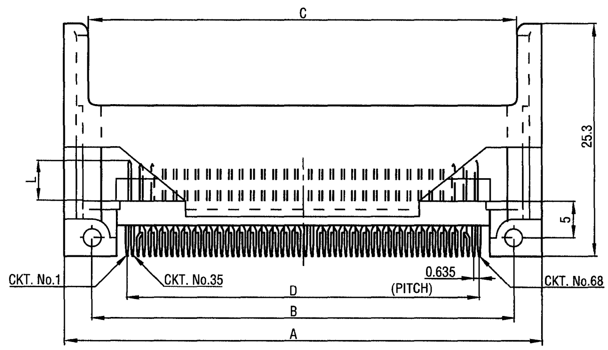
Physical
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to 90°C

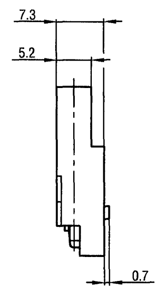






RECOMMENDED P.C.B. LAYOUT





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	Dimension B	Dimension C	Dimension D
68	53556-6810	Bottom	57.4	52.0	51.4	42.545

Pin No.	Dimension L
36 and 37	3.5
All other pins	4.25
1, 17, 34, 35, 51 and 68	5.0

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Guide Rails

87510

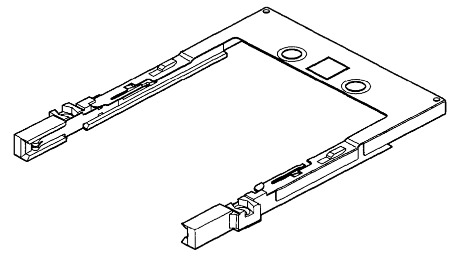
Features and Benefits
- Accepts Type I, II and III PC Cards
- PCMCIA compatible
- 0, 2, 5 and 8mm standoffs available

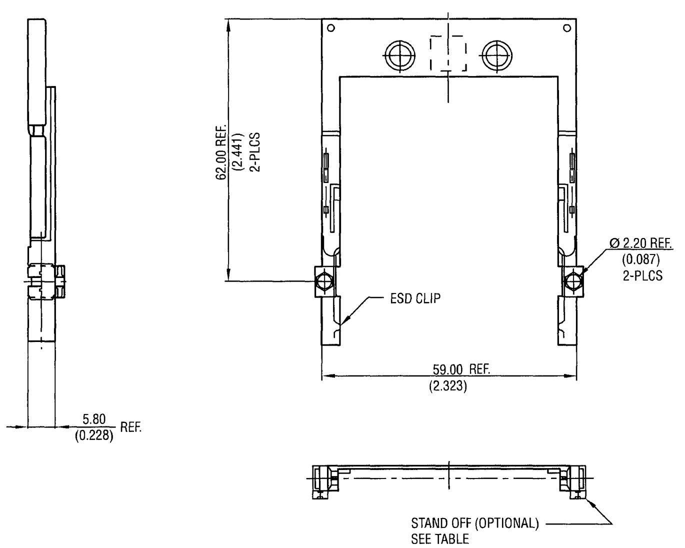
Reference Information
Mates With: 71078-XXXX
Designed In: Millimeters

Electrical
Contact Resistance: 40mΩ, initial

Mechanical
Durability: 10,000 cycles (per PCMCIA)

Physical
Housing: PBT
Contact: Phosphor Bronze
Plating: Gold





Memory Card

N

ORDERING INFORMATION AND DIMENSIONS

Order No.	Standoff Height (mm)
87510-0010	0
87510-0012	2
87510-0015	5
87510-0018	8

1.27mm Pitch PCMCIA Ejector

87510

FEATURES AND SPECIFICATIONS

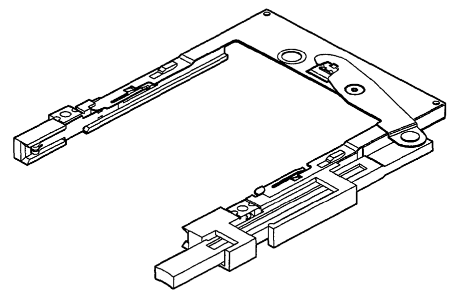
Features and Benefits
- Accepts Type I, II and III PC Cards
- PCMCIA compatible
- 0, 2, 5 and 8mm standoffs available
- 8mm button travel, 4mm card travel

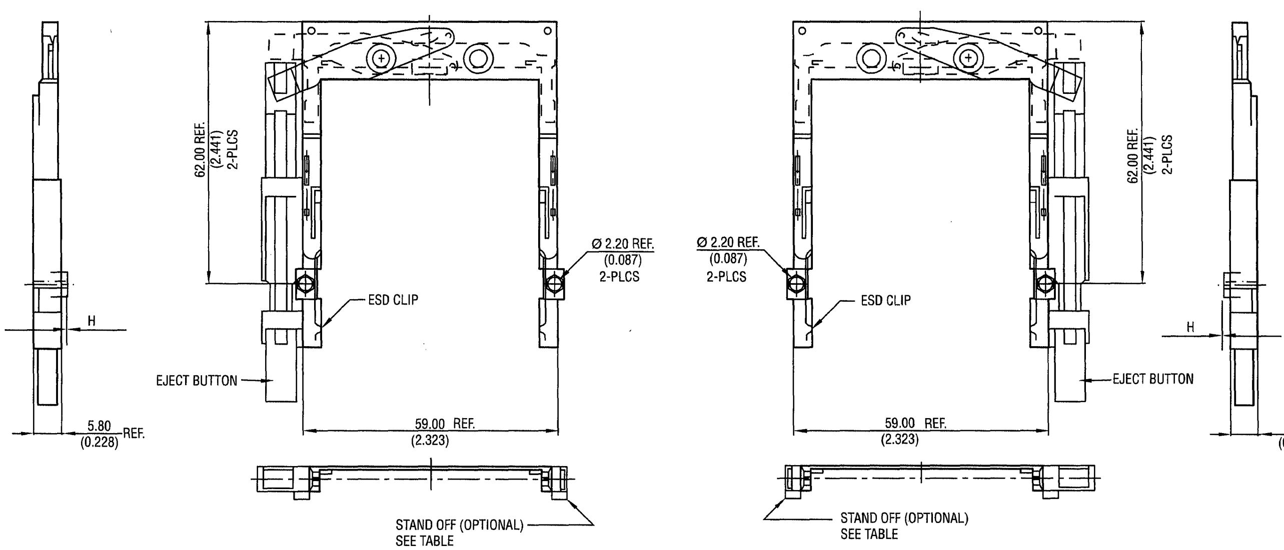
Reference Information
Mates With: 71078-XXXX
Designed In: Millimeters

Electrical
Contact Resistance: 40mΩ, initial

Mechanical
Durability: 10,000 cycles (per PCMCIA)

Physical
Housing: PBT
Contact: Phosphor Bronze
Plating: Gold





ORDERING INFORMATION AND DIMENSIONS

Right Pushbutton	Left Pushbutton	Standoff Height (mm)
87510-1020	87510-1010	0
87510-1022	87510-1012	2
87510-1025	87510-1015	5
87510-1028	87510-1018	8

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Ejector

53381

Features and Benefits

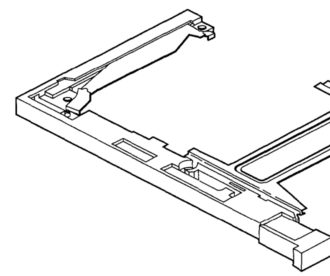
- Low profile 5.2mm (button 10.3 x 6mm)
- Pushbutton side stroke (left-hand side)
- Top or bottom mounting options
- Ground terminal with guide rails and ESD features
- Accepts Type I or II cards

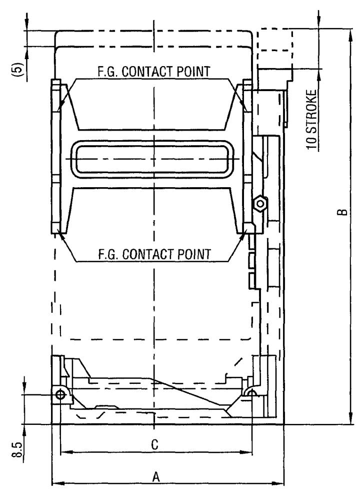
Physical

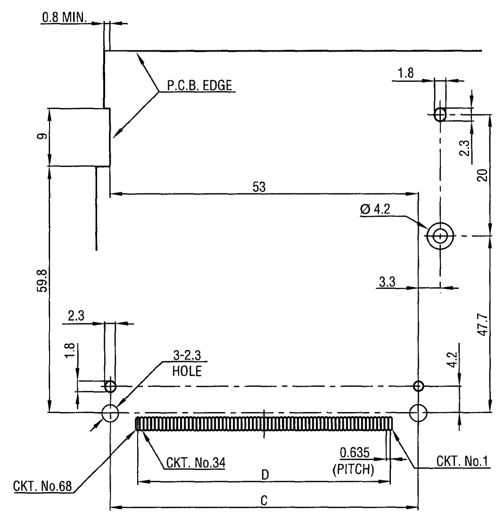
Frame: Black glass-filled PPS, UL 94V-0
Button: Blue glass-filled PBT, UL 94V-0
Eject lever: Stainless Steel
Ground Terminal: Phosphor Bronze
Plating: Nickel

Reference Information

Packaging: Tray
Mates With: 53380, 53484 and 89147 SMT headers
Designed In: Millimeters







RECOMMENDED P.C.B. LAYOUT

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension			
		A	B	C	D
68	53381-0011	64.8	102.1	52.0	42.545

FEATURES AND SPECIFICATIONS

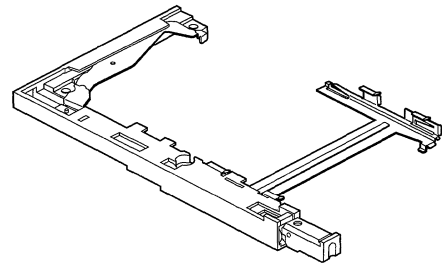
1.27mm Pitch PCMCIA Ejector

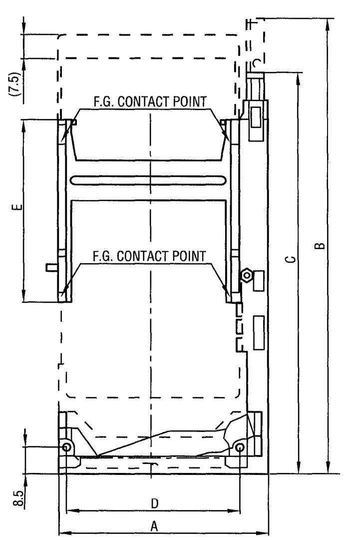
53410 With Flip Button

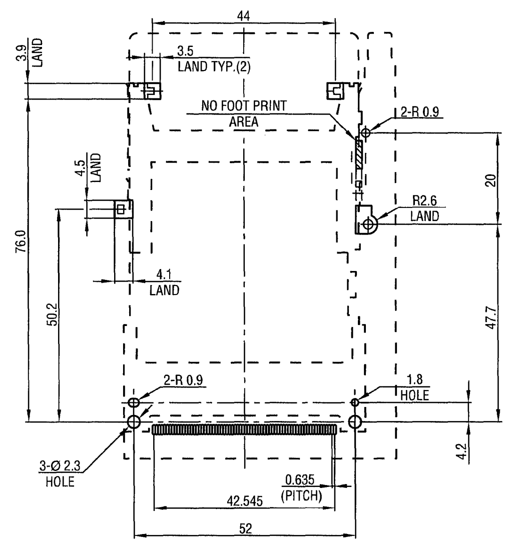
Features and Benefits
- Raised 2.1mm off the board
- Pushbutton can be flipped 90° down
- Push rod is spring loaded
- U-shape grounding terminal for Type I, II and III cards

Reference Information
Packaging: Tray
Mates With: 53409 and 53556 SMT headers
Designed In: Millimeters

Physical
Frame: Black glass-filled PPS, UL 94V-0
Button: Black glass-filled PBT, UL 94V-0
Eject lever: Stainless Steel
Ground Terminal: Phosphor Bronze
Plating: Nickel







RECOMMENDED P.C.B. LAYOUT

ORDERING INFORMATION AND DIMENSIONS

Circuit	Order No.	Dimension				
		A	B	C	D	E
68	53410-0011	64.5	107.65	99.1	52.0	39.3

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header and Ejector Assembly

71089

Single Port, Top Mount

Features and Benefits

- Accepts Type I, II and III PC cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- 0, 2, 5 and 8mm standoffs available
- Ejector grounding clip
- Header available with M2 threaded insert

Reference Information

Product Specification: PS-71089-0001
Packaging: Tray
Designed In: Millimeters

Electrical

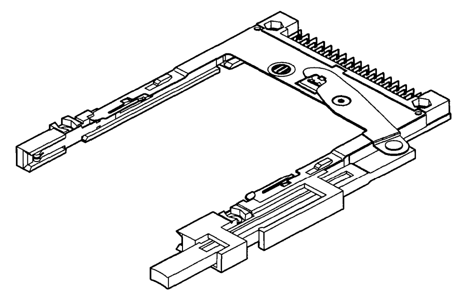
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

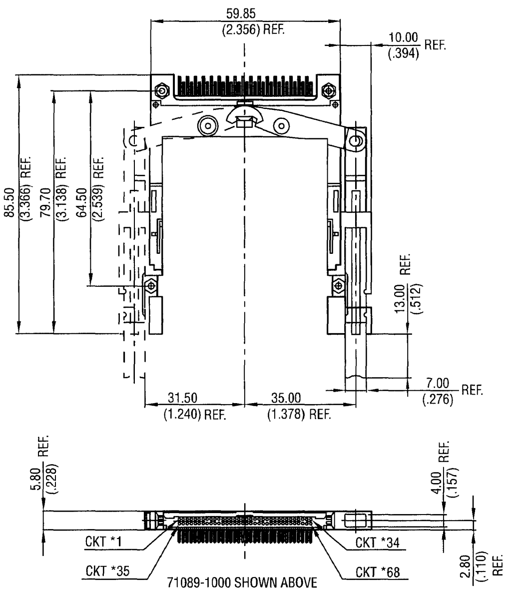
Mechanical

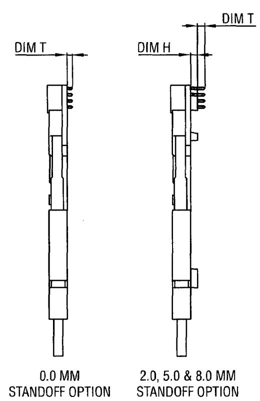
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

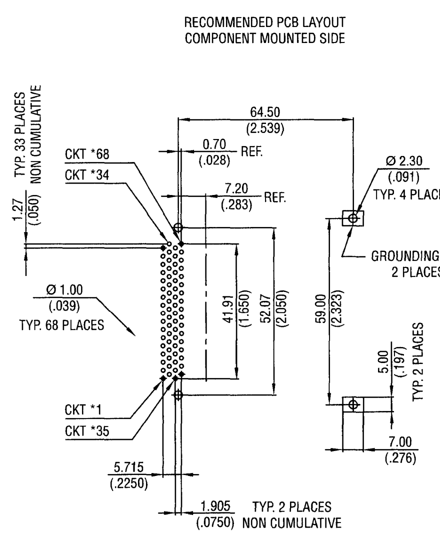
Physical

Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C









ORDERING INFORMATION AND DIMENSIONS

Order No.			Dimension		Threaded Insert
Eject Button		Rails Only	T	H	
Right	Left		Tail Length	Standoff Height	
71089-1000	71089-1100	71089-3000	1.95 (.077)	0.00 (.000)	None
71089-1020	71089-1120	71089-3020	1.95 (.077)	2.00 (.079)	None
71089-1050	71089-1150	71089-3050	1.95 (.077)	5.00 (.197)	None
71089-1080	71089-1180	71089-3080	1.95 (.077)	8.00 (.315)	None
71089-1005	71089-1105	71089-3005	1.95 (.077)	0.00 (.000)	In Header
71089-1025	71089-1125	71089-3025	1.95 (.077)	2.00 (.079)	In Header
71089-1055	71089-1155	71089-3055	1.95 (.077)	5.00 (.197)	In Header
71089-1085	71089-1185	71089-3085	1.95 (.077)	8.00 (.315)	In Header

FEATURES AND SPECIFICATIONS

PCMCIA Header and Ejector Assembly

71089

Single Port, Bottom Mount

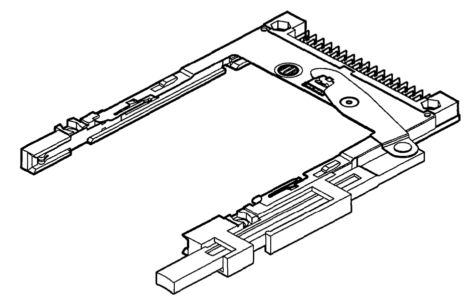
Features and Benefits
- Accepts Type I, II and III PC cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- 0, 2, 5 and 8mm standoffs available
- Ejector grounding clip
- Header available with M2 threaded insert

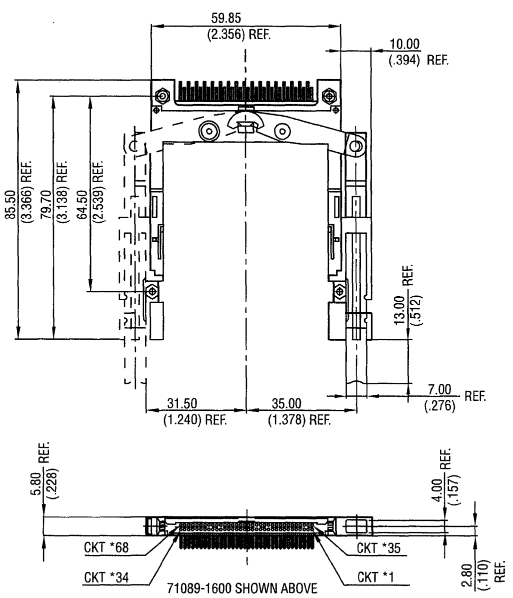
Reference Information
Product Specification: PS-71089-0001
Packaging: Tray
Mates With: 71081
Designed In: Millimeters

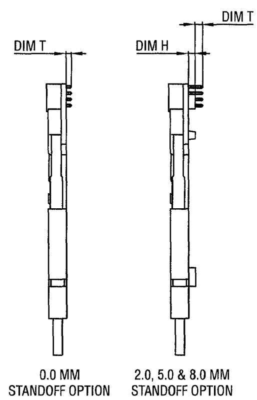
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

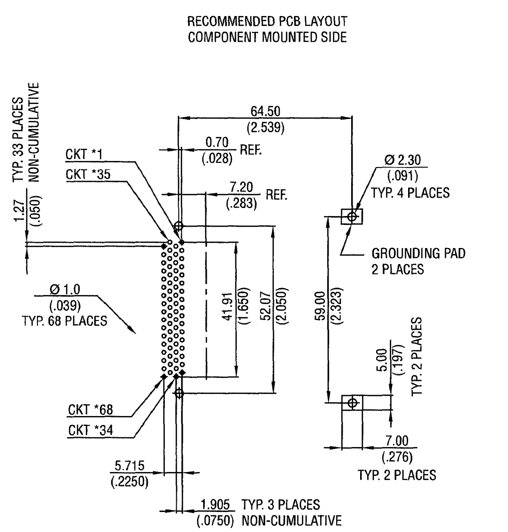
Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C









ORDERING INFORMATION AND DIMENSIONS

Order No.			Dimension		Threaded Insert
Eject Button		Rails Only	H	T	
Right	Left		Standoff Height	Tail Length	
71089-1500	71089-1600	71089-3500	0.00 (.000)	1.95 (.077)	None
71089-1520	71089-1620	71089-3520	2.00 (.079)	1.95 (.077)	None
71089-1550	71089-1650	71089-3550	5.00 (.197)	1.95 (.077)	None
71089-1580	71089-1680	71089-3580	8.00 (.315)	1.95 (.077)	None
71089-1505	71089-1605	71089-3505	0.00 (.000)	1.95 (.077)	In Header
71089-1525	71089-1625	71089-3525	2.00 (.079)	1.95 (.077)	In Header
71089-1555	71089-1655	71089-3555	5.00 (.197)	1.95 (.077)	In Header
71089-1585	71089-1685	71089-3585	8.00 (.315)	1.95 (.077)	In Header

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header and Ejector Assembly

71089
Dual Port, Top Mount

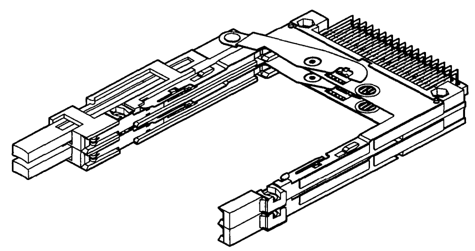
Features and Benefits
- Accepts Type I, II and III PC cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- 0, 2 and 5mm standoffs available
- Ejector grounding clip
- Header available with M2 threaded insert

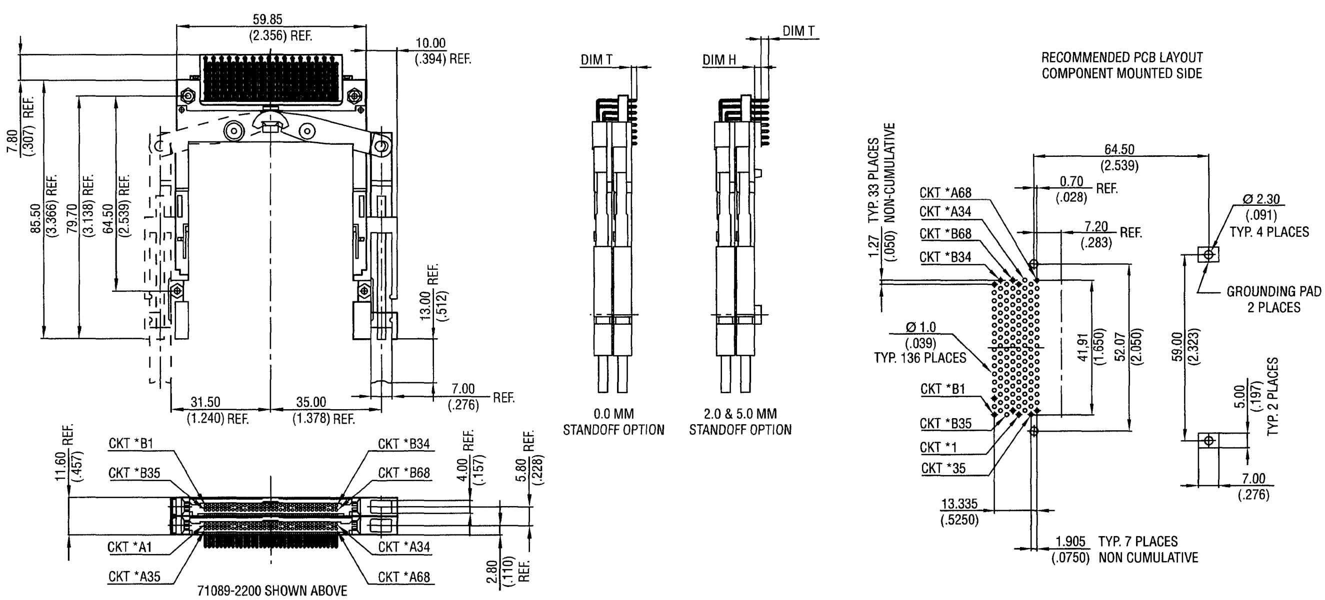
Reference Information
Product Specification: PS-71089-0001
Packaging: Tray
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C





ORDERING INFORMATION AND DIMENSIONS

Order No.					Dimension		Threaded Insert
Eject Button				Rails Only	T	H	
Right/Left	Left/Right	Right/Right	Left/Left		Tail Length	Standoff Height	
71089-2000	71089-2100	71089-2200	71089-2300	71089-4000	1.95 (.077)	0.00 (.000)	None
71089-2020	71089-2120	71089-2220	71089-2320	71089-4020	1.95 (.077)	2.00 (.079)	None
71089-2050	71089-2150	71089-2250	71089-2350	71089-4050	1.95 (.077)	5.00 (.197)	None
71089-2005	71089-2105	71089-2205	71089-2305	71089-4005	1.95 (.077)	0.00 (.000)	In Header
71089-2025	71089-2125	71089-2225	71089-2325	71089-4025	1.95 (.077)	2.00 (.079)	In Header
71089-2055	71089-2155	71089-2255	71089-2355	71089-4055	1.95 (.077)	5.00 (.197)	In Header

Memory Card N

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Header and Ejector Assembly

71089

Dual Port, Bottom Mount

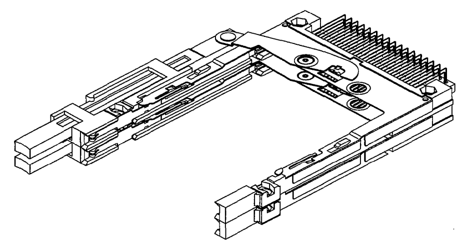
Features and Benefits
- Accepts Type I, II and III PC cards
- Positive polarization prevents PC card mis-insertion
- PCMCIA compatible
- 0, 2 and 5mm standoffs available
- Ejector grounding clip
- Header available with M2 threaded insert

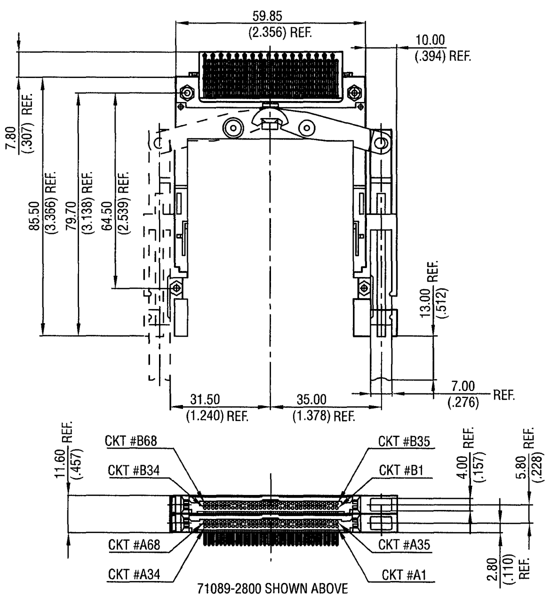
Reference Information
Product Specification: PS-71089-0001
Packaging: Tray
Mates With: 71081
Designed In: Millimeters

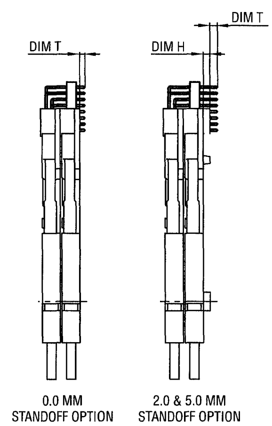
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

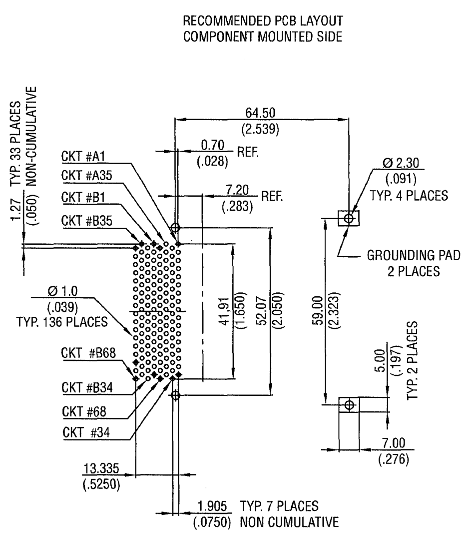
Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Palladium Nickel with Gold flash
Temperature: -20 to +60°C









ORDERING INFORMATION AND DIMENSIONS

Order No.					Dimension		Threaded Insert
Eject Button				Rails Only	T	H	
Right/Left	Left/Right	Right/Right	Left/Left		Tail Length	Standoff	
71089-2500	71089-2600	71089-2700	71089-2800	71089-4500	1.95 (.077)	0.00 (.000)	None
71089-2520	71089-2620	71089-2720	71089-2820	71089-4520	1.95 (.077)	2.00 (.079)	None
71089-2550	71089-2650	71089-2750	71089-2850	71089-4550	1.95 (.077)	5.00 (.197)	None
71089-2505	71089-2605	71089-2705	71089-2805	71089-4505	1.95 (.077)	0.00 (.000)	In Header
71089-2525	71089-2625	71089-2725	71089-2825	71089-4525	1.95 (.077)	2.00 (.079)	In Header
71089-2555	71089-2655	71089-2755	71089-2855	71089-4555	1.95 (.077)	5.00 (.197)	In Header

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- A complete module for ease of assembly to main board
- 0.635mm 140 circuit board-to-board connector as mating receptacle
- Raised 1.5mm off the board
- Top mount with left-hand side ejectors
- Filter circuitry on daughter board (assembly module)
- Accepts 2 Type I or 2 Type II cards, or 1 Type III card

Reference Information

Packaging: Tray
Mates With: 53481 plug (board-to-board)
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical

Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

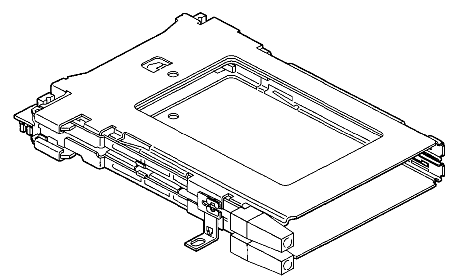
Physical

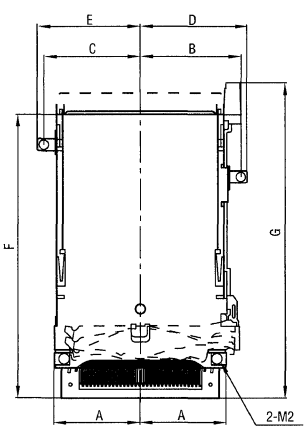
Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C

1.27mm Pitch PCMCIA Header Assembly

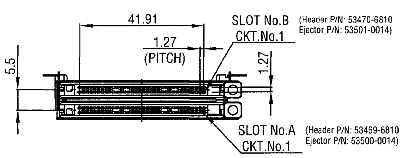
53524

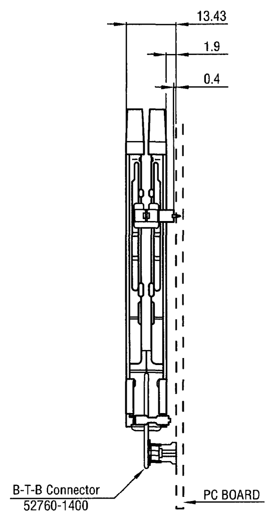
Dual Port, Raised Profile Right Angle, Top Mount SMT



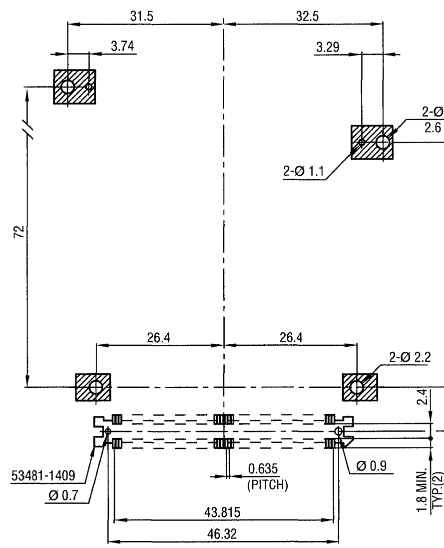


TOP VIEW





SIDE VIEW



RECOMMENDED P.C.B. PATTERN LAYOUT

Memory Card

N

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	B	C	D	E	F	G
136	53524-1364	Top	29.05	32.5	31.5	35.0	33.54	95.7	106.3

1.27mm Pitch PCMCIA Header Assembly

53514

Dual Port, Raised Profile Right Angle, Bottom Mount SMT

FEATURES AND SPECIFICATIONS

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- A complete module for ease of assembly to main board
- 0.635mm 140 circuit board-to-board connector as mating receptacle
- Raised 1.90mm off the board
- Bottom mount with right-hand side ejectors
- Push button can be flipped 90° to the side
- Filter circuitry on daughter board
- Accepts 2 Type I or 2 Type II cards, or 1 Type III card

Reference Information

Packaging: Tray
Mates With: 53481 plug (board-to-board)
Designed In: Millimeters

Electrical

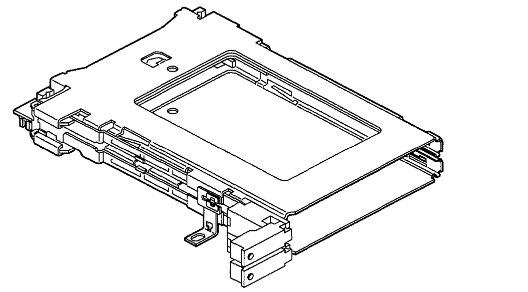
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

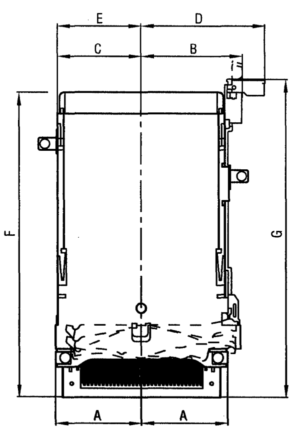
Mechanical

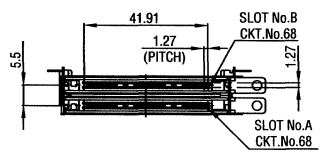
Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

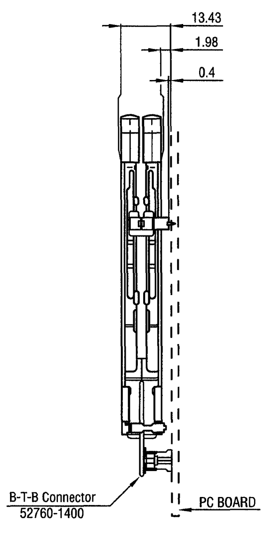
Physical

Housing: White glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C

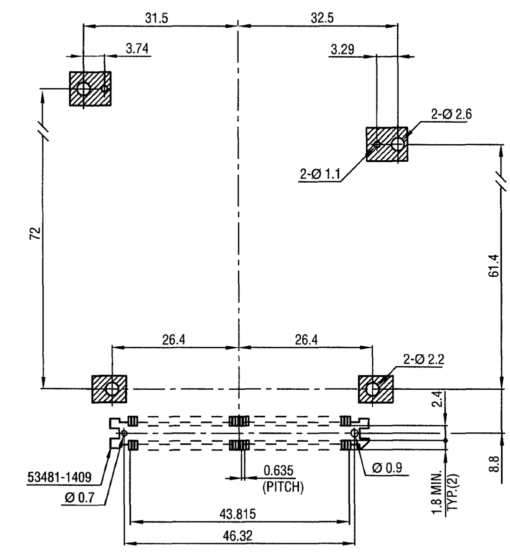








SIDE VIEW



RECOMMENDED P.C.B. PATTERN LAYOUT

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension						
			A	B	C	D	E	F	G
136	53514-1364	Bottom	29.05	33.6	27.96	41.15	41.15	95.7	106.4

Memory Card
N

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Receptacle

52731 Straddle Mount

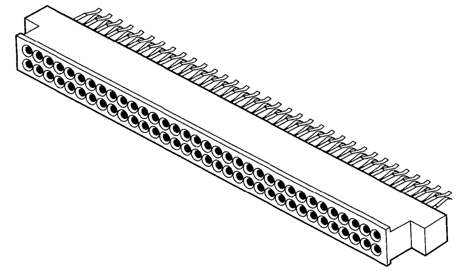
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- Dual beam contact design
- Short body (6mm)

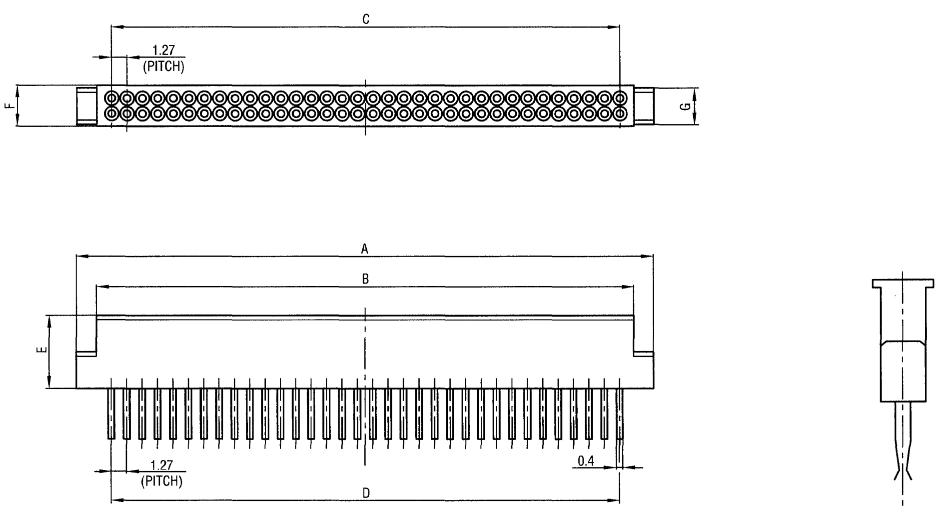
Reference Information
Packaging: Tray
Mates With: PCMCIA headers
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 4.9N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Titanium Copper Alloy
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension						
		A	B	C	D	E	F	G
68	52731-6811	47.46	44.46	41.91	41.91	6.0	3.3	2.8

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA Receptacle

89074

Straddle Mount, Standard and Offset Tail Versions

Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- Dual beam contact design
- Various offset tails

Reference Information

Packaging: Tray/Tube
Mates With: PCMCIA headers
Designed In: Millimeters

Electrical

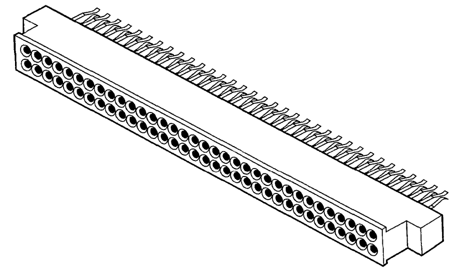
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

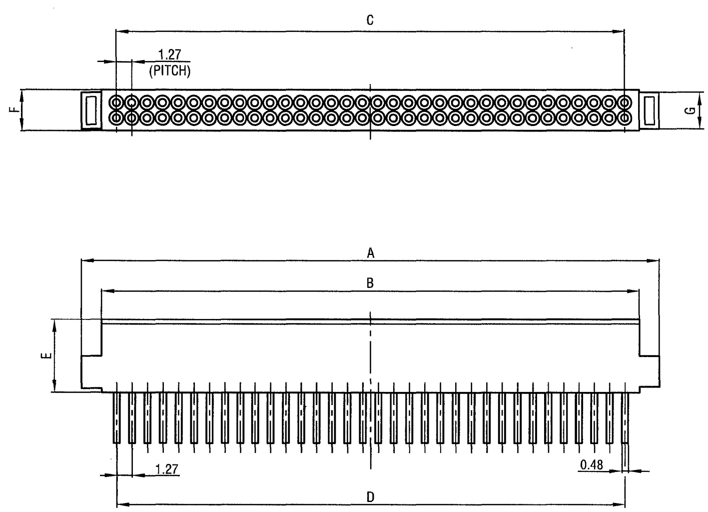
Mechanical

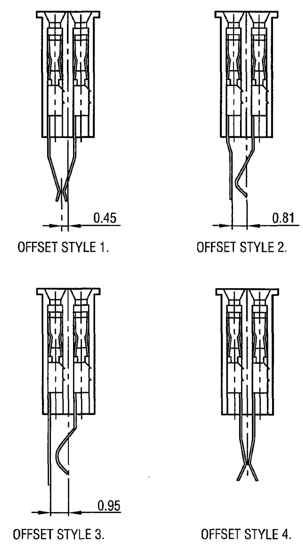
Contact Retention to Housing: 4.9N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical

Housing: Black glass-filled PPS, UL 94V-0
Contact: Beryllium Copper Alloy
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C







Memory Card

N

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Offset Style	Dimension A	B	C	D	E	F	G
68	89074-6801	1	47.46	44.46	41.91	41.91	6.6	3.3	2.7
	89074-6821	2	47.46	44.46	41.91	41.91	6.6	3.3	2.7
	89074-6831	3	47.46	44.46	41.91	41.91	6.6	3.3	2.7
	89074-6841	4	47.46	44.46	41.91	41.91	6.6	3.3	2.7

1.27mm Pitch PCMCIA Receptacle

71075

SMT, Standard and Offset Tail Versions

FEATURES AND SPECIFICATIONS

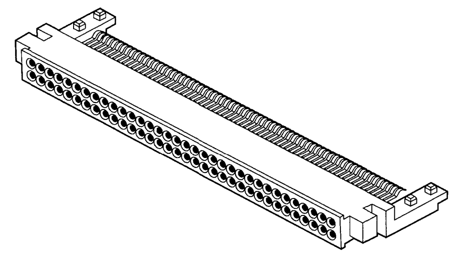
Features and Benefits
- Compatible with PCMCIA and JEIDA standards
- Various offset tails
- Single in-line solder tails (0.635mm pitch)
- Unique retention peg design
- High temperature housing for I.R. process
- Top to bottom assembly direction for robotic placement

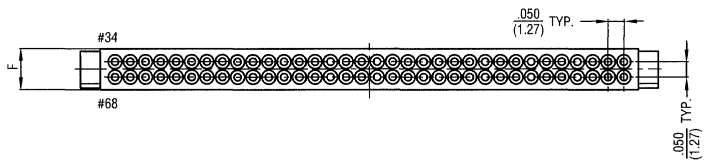
Reference Information
Packaging: See ordering information
Designed In: Millimeters

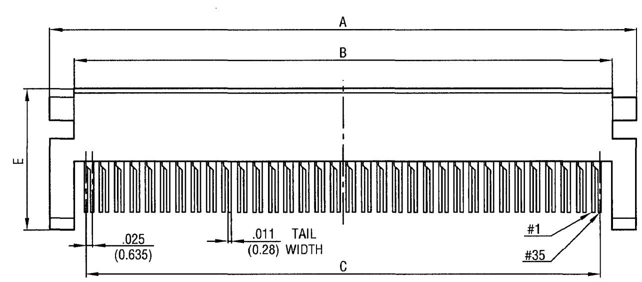
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

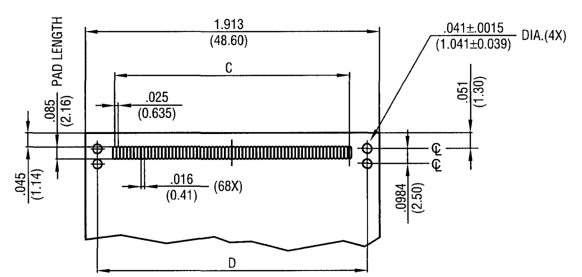
Mechanical
Contact Retention to Housing: 4.9N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Titanium Copper Alloy
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +80°C







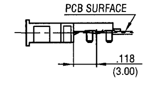


RECOMMENDED P.C.B. LAYOUT
CONNECTOR SIDE

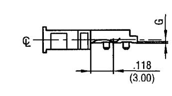
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Offset Style	Packaging Type	Dimension A	B	C	D	E	F	G
68	71075-0001	1	Tube	48.26	44.45	42.545	46.126	11.84	3.3	0.00
	71075-0041		Tape and Reel	48.26	44.45	42.545	46.126	11.84	3.3	0.00
	71075-0002	2	Tube	48.26	44.45	42.545	46.126	11.84	3.3	0.25
	71075-0042		Tape and Reel	48.26	44.45	42.545	46.126	11.84	3.3	0.25
	71075-0003	3	Tube	48.26	44.45	42.545	46.126	11.84	3.3	0.41
	71075-0043		Tape and Reel	48.26	44.45	42.545	46.126	11.84	3.3	0.41
	71075-0004	4	Tube	48.26	44.45	42.545	46.126	11.84	3.3	0.00
	71075-0044		Tape and Reel	48.26	44.45	42.545	46.126	11.84	3.3	0.00

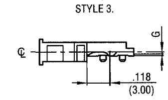
0.00 mm OFFSET
STYLE 1.



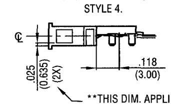
0.25 mm OFFSET
STYLE 2.



0.41 mm OFFSET
STYLE 3.



0.00 mm OFFSET WITH
CUSTOM FRAME TABS**
STYLE 4.



**THIS DIM. APPLIES FOR THE -0004 VERSION ONLY

Memory Card

N

PCMCIA Card Kit

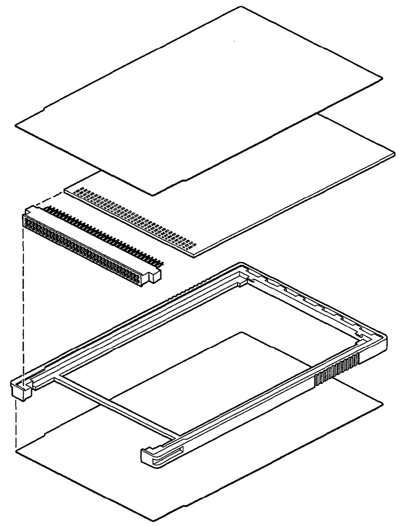
Type I
Straddle Mount

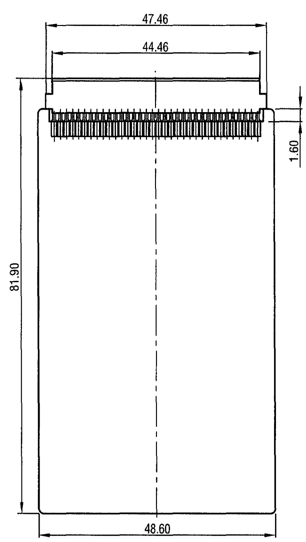
FEATURES AND SPECIFICATIONS

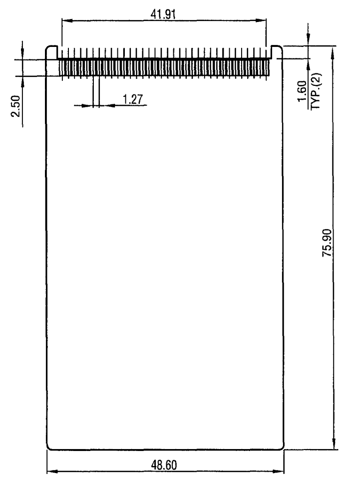
Features and Benefits
- Offers complete component kit for assembly
- Frame with or without write protection switch window
- Cover with or without adhesive tapes pre-assembled
- Cover may be custom silk screened with customer's artwork

Reference Information
Packaging (Cover/Frame): Tray
Use With: 52731 and 89074 receptacle
Designed In: Millimeters

Physical
Frame: Black PBT, UL 94V-0
Covers: Stainless Steel SUS 304
Adhesive Tape: Scotch* 468MP double-coated adhesive







RECOMMENDED P.C.B. PATTERN

ORDERING INFORMATION

Order No.	Item	Options	
		Center Cross Bar	WPS Window
89094-0002	Type I Frame	With	Yes
89094-0000		Without	No

Order No.	Item	Options		
		THK	Style	Adhesive
89195-0000	Type I Cover	0.15mm	Top	No
89195-1000				Yes
89195-0000			Bottom	No
89195-2000				Yes

* Scotch is a registered trademark of 3M Corporation

Note: Each Type I card kit consists of 1 68-circuit receptacle, 1 frame and 2 covers

FEATURES AND SPECIFICATIONS

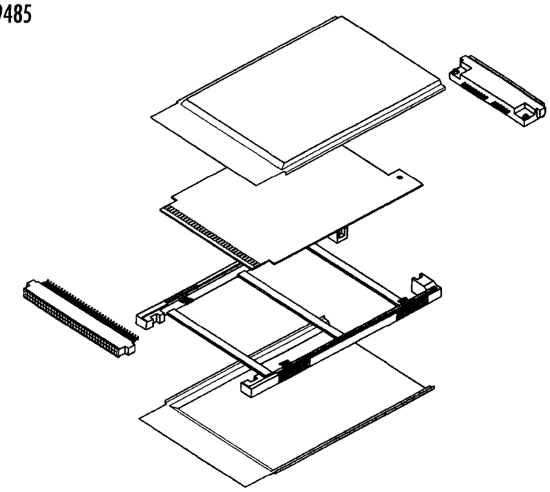
PCMCIA Card Kit

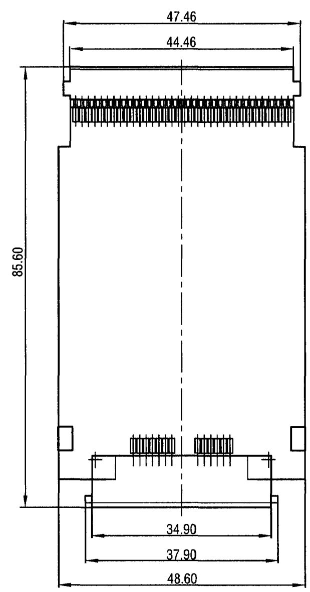
Type II Straddle Mount

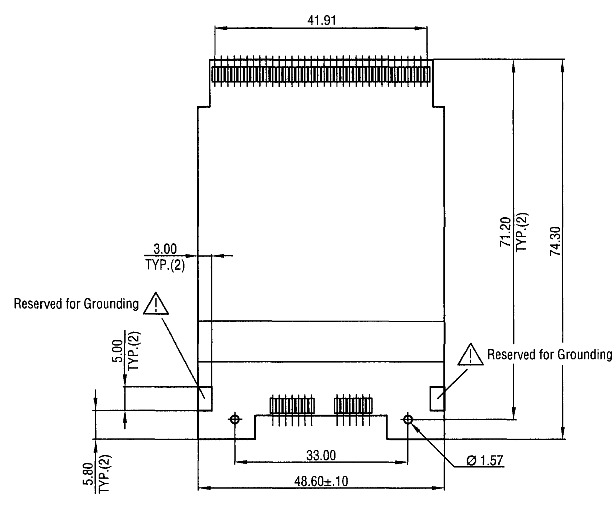
Features and Benefits
- Offers complete component kit for assembly
- Frame with 2 or 4 grounding clips
- Cover with or without recess for labeling
- Cover with or without adhesive tapes pre-assembled
- Cover may be custom silk screened with customer's artwork

Physical
Frame: Black PBT, UL 94V-0
Grounding Clips: Phosphor Bronze
Plating: Gold over Nickel
Covers: Stainless Steel SUS 304
Adhesive Tape: Scotch* 467/468MP or 3M9445/9485 double-coated adhesive

Reference Information
Packaging (Cover/Frame): Tray
Use With: 52731 and 89074 receptacle, and 89075, 89198 and 89207 male I/O
Designed In: Millimeters







RECOMMENDED P.C.B. PATTERN

ORDERING INFORMATION

Order No.	Item	No. of Clips	Options: Center Cross Bar	Options: I/O Port Slot
89201-0001	Type II Frame	2	Without	Yes
89201-0006†				Yes
89201-0005				No
89201-0002		4		Yes
89201-0003			With	Yes

* Scotch is a registered trademark of 3M Corporation
† 89201-0006 frame has open slots to accept covers P/N 89204-X000 that have 4 tabs on the edge of the cover
Note: Each Type II card kit consists of 1 68-circuit receptacle, 1 male I/O (optional), 1 frame and 2 covers

Order No.	Item	Options: THK	Options: Surface	Options: Adhesive
89500-0005	Type II Covers	0.15mm	Flash	No
89204-0000†			Brushed	No
89204-1000†				Yes
89132-0040				No
89132-1040				Yes
89132-0050			Brushed with recess for labeling	No
89132-1050				Yes
89188-0000		0.20mm	Brushed	No
89188-1000				Yes
89188-0001			Brushed with recess for labeling	No
89188-1001				Yes

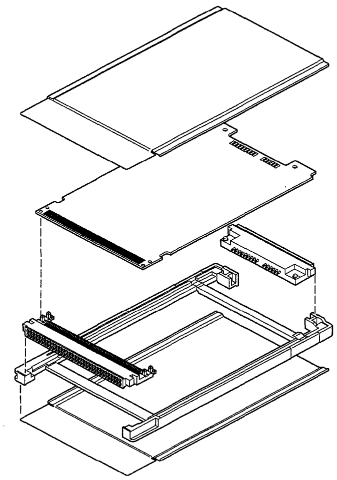
FEATURES AND SPECIFICATIONS

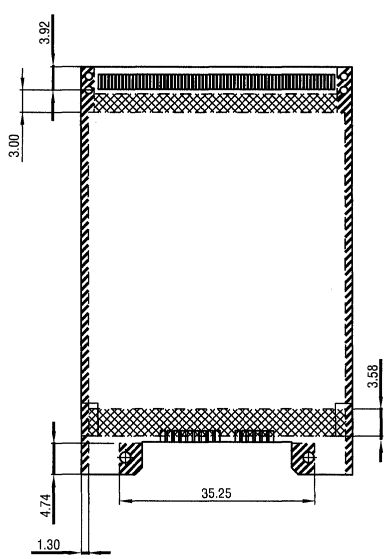
PCMCIA Card Kit
71081
Type II, SMT

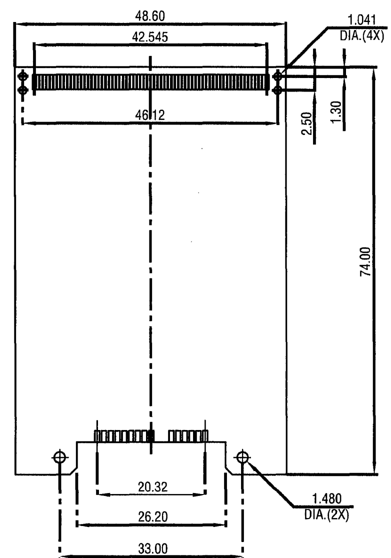
Features and Benefits
- Offers complete component kit for assembly
- Frame with 2 or 4 grounding clips
- Cover with or without recess for labeling
- Cover with or without adhesive tapes pre-assembled
- Cover may be custom silk screened with customer's artwork

Reference Information
Packaging (Cover/Frame): Tray
Designed In: Millimeters

Physical
Frame: Black PBT, UL 94V-0
Grounding Clips: Phosphor Bronze
Plating: Gold over Nickel
Covers: Stainless Steel SUS 304
Adhesive Tape: Scotch* 467/468MP or 3M9445/9485 double-coated adhesive







ORDERING INFORMATION

Order No.	Item	Options		
		No. of Clips	Center Cross Bar	I/O Port Slot
71073-1200	Type II Frame	2	Without	Yes
71073-1400	Type II Frame	4	Without	Yes

* Scotch is a registered trademark of 3M Corporation
Note: Each Type II card kit consists of 1 68-circuit receptacle (SMT), 1 male I/O, 1 frame (for SMT receptacle) and 2 covers

Order No.	Item	Options		
		THK	Surface	Adhesive
89500-0005	Type II Covers	0.15mm	Flash	No
89132-0040	Type II Covers	0.15mm	Brushed	No
89132-1040	Type II Covers	0.15mm	Brushed	Yes
89132-0050	Type II Covers	0.15mm	Brushed with recess for labeling	No
89132-1050	Type II Covers	0.15mm	Brushed with recess for labeling	Yes
89188-0000	Type II Covers	0.20mm	Brushed	No
89188-1000	Type II Covers	0.20mm	Brushed	Yes
89188-0001	Type II Covers	0.20mm	Brushed with recess for labeling	No
89188-1001	Type II Covers	0.20mm	Brushed with recess for labeling	Yes

FEATURES AND SPECIFICATIONS

PCMCIA Card Kit SNAPPER™

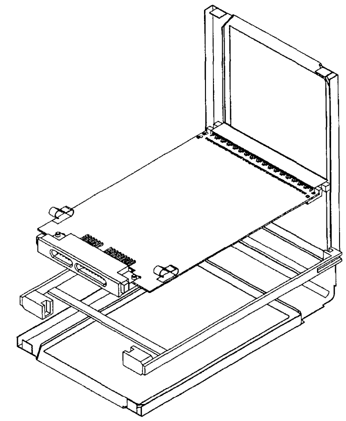
71140

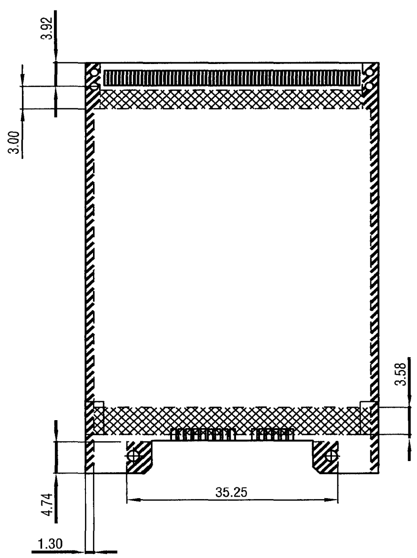
Type II Snap-Together

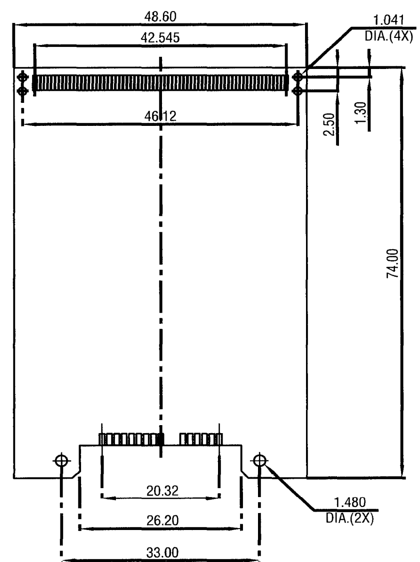
Features and Benefits
- Offers complete component kit for assembly
- 1 piece snapper cover reduces assembly time
- Cover snaps together without using adhesive tapes
- Cover with recess for labeling

Reference Information
Mates With: 71075 and 89074 receptacles and 89075, 89198 and 89207 male I/O
Designed In: Millimeters

Physical
Frame: Black 30% PBT, UL 94V-0
Cover: Stainless Steel







ORDERING INFORMATION

Order No.	Item	Options	
		Center Cross Bar	I/O Port Slot
71141-0002	Frame (SMT Receptacle)	Without	Yes
89202-0005	Frame (Straddle Receptacle)	Without	Yes

Order No.	Item	Options	
		THK	Surface
71139-0002	Cover	0.20mm	Brushed

Note: Each Type II SNAPPER card kit consists of 1 68-circuit receptacle (SMT), 1 male I/O, 1 frame and 1 cover

FEATURES AND SPECIFICATIONS

1.27mm Pitch PCMCIA I/O Header

89075/89198/89207 SMT

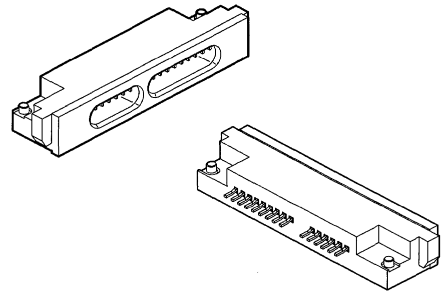
Features and Benefits
- High temperature housing for SMT I.R. process
- With or without latch options
- Various offset tails
- Board retention pegs
- 2 sizes of bays prevent inverse insertion

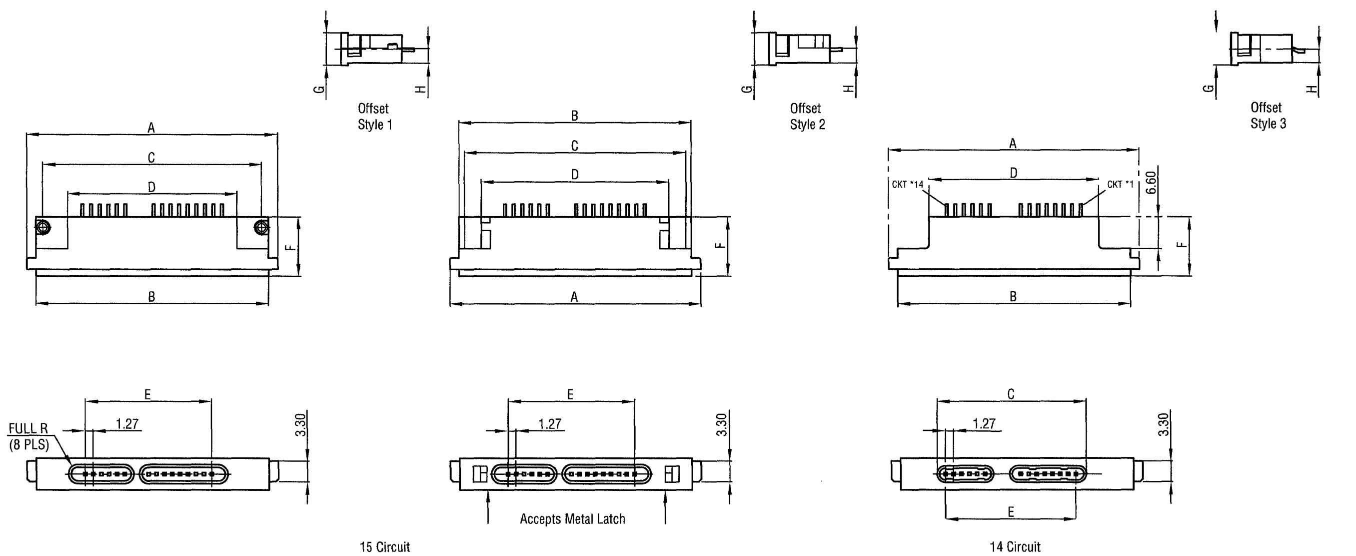
Reference Information
Packaging: Tray
Mates With: 71073, 71141, 89201 and 89202 Type II Frames
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 9.8N min.
Mating Force: 19.6N max.
Unmating Force: 3.43N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C





Memory Card

N

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Latch Option	Offset Style	Dimension A	B	C	D	E	F	G	H
14	89207-0000	No	1	37.90	34.95	21.01	25.10	19.015	11.00	5.00	2.45
	89207-0001		2	37.90	34.95	21.01	25.10	19.015	11.00	5.00	2.20
	89207-0003		3	37.90	34.95	21.01	25.10	19.015	11.00	5.00	2.61
15	89075-0000	No	1	37.90	34.95	33.00	25.10	20.32	9.40	5.00	2.45
	89075-0001		2	37.90	34.95	33.00	25.10	20.32	9.40	5.00	2.20
	89075-0002		3	37.90	34.95	33.00	25.10	20.32	9.40	5.00	2.61
	89075-0004		4	37.90	34.95	33.00	25.10	20.32	9.40	5.00	2.75
15	89198-0000	Yes	1	37.90	34.95	33.35	28.20	20.32	9.40	5.00	2.45
	89198-0001		2	37.90	34.95	33.35	28.20	20.32	9.40	5.00	2.20
	89198-0002		3	37.90	34.95	33.35	28.20	20.32	9.40	5.00	2.61

molex® 1.27mm Pitch PCMCIA I/O Card Cable Assembly

FEATURES AND SPECIFICATIONS

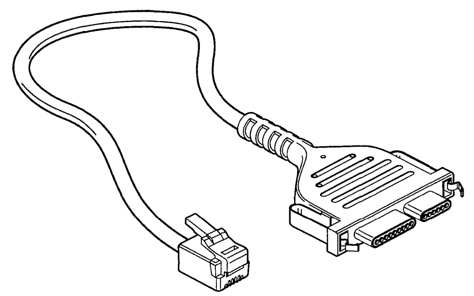
Features and Benefits
- High temperature housing for I.R. process
- With or without latch options
- Overmolded cable assemblies
- Custom design for complete cable assemblies

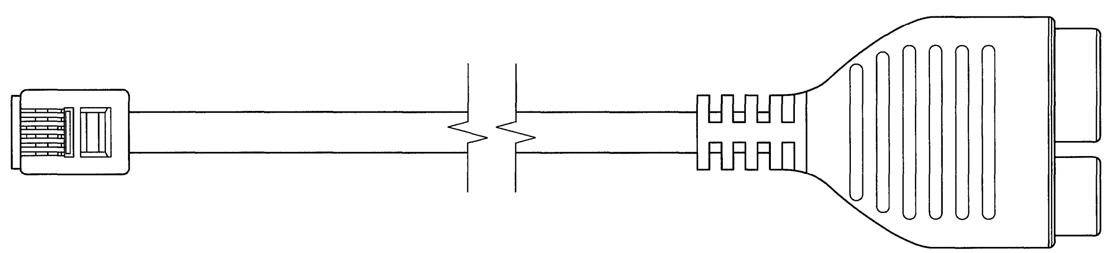
Reference Information
Packaging: Bulk
Designed In: Millimeters

Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Retention to Housing: 4.9N min.
Mating Force: 19.6N max.
Unmating Force: 3.43N min.
Durability: 10,000 cycles

Physical
Housing: Black glass-filled LCP, UL 94V-0
Contact: Titanium Copper Alloy
Plating: Gold over Palladium Nickel on contact area, Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C





Memory Card

N

ORDERING INFORMATION

Circuits	Latch Option	Remarks
14	No	Part No. will be assigned based on customer's cable specifications
15	No	
15	Yes	

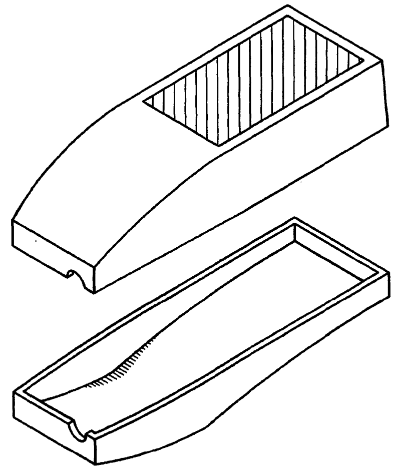
Adapter Case
89500
For External DAA

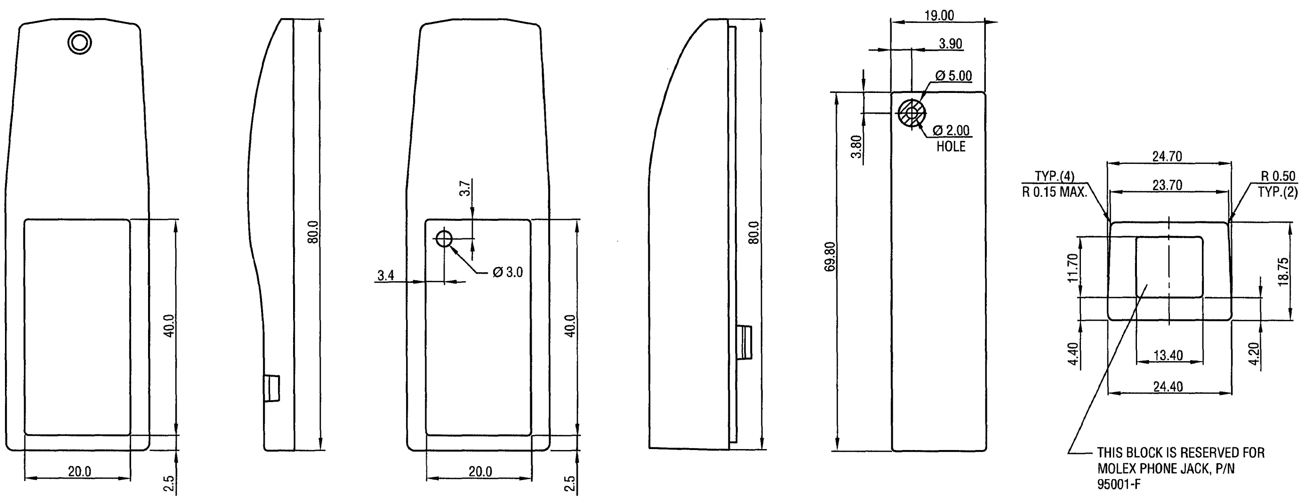
FEATURES AND SPECIFICATIONS

Features and Benefits
- Snap design for top and bottom case
- Ideal for fax modem DAA or LAN MAU
- Opening front end for phone jack or coax connector
- Round hole on top case for LED indicator
- Beige or black color options

Reference Information
Packaging: Bulk
Designed In: Millimeters

Physical
Housing: ABS, UL 94-HB





BOTTOM CASE

TOP CASE

RECOMMENDED
PCB SIZE

THICKNESS: 0.55±.05
RECOMMENDED BACK PANEL LAYOUT

ORDERING INFORMATION

Order No.	Item	Color	Style
89500-0020	Adapter Cases	Beige	Top
89500-0019			Bottom
89500-0023		Black	Top
89500-0022			Bottom

Note: Back panel not included as part of case

FEATURES AND SPECIFICATIONS

1.00mm Pitch JEIDA Header

53427

Right Angle, Top Mount SMT

Features and Benefits

- Compatible with JEIDA DRAM standards
- Low profile (4.50mm)
- 2 pin lengths for first mate-last break
- Single in-line tails (0.50mm pitch)
- High temperature housing for I.R. process
- Accepts all standard JEIDA DRAM cards

Reference Information

Packaging: Tray
Mates With: 52716 receptacle and all JEIDA DRAM cards
Designed In: Millimeters

Electrical

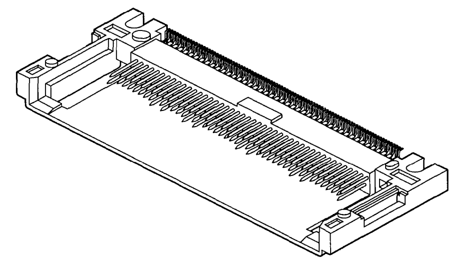
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

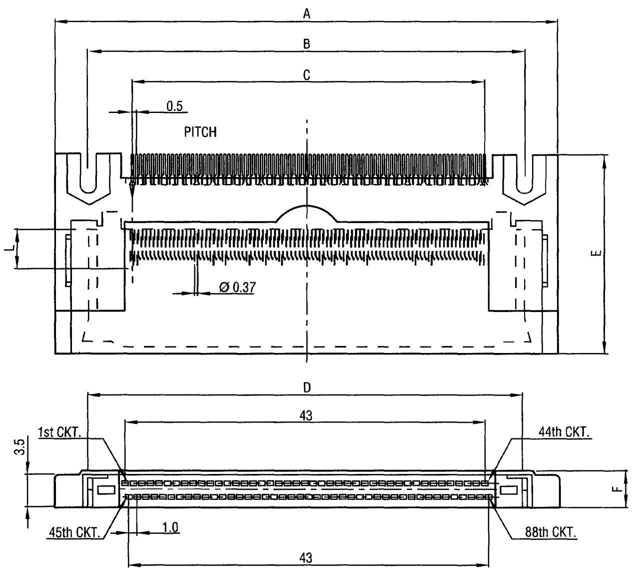
Mechanical

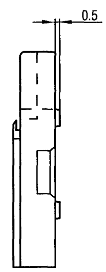
Contact Retention to Housing: 14.7N min.
Mating Force: 39.2N max.
Unmating Force: 8.63N min.
Durability: 200 cycles

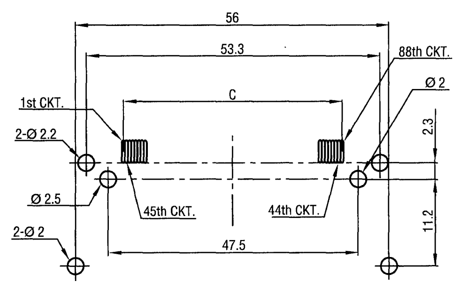
Physical

Housing: Brown glass-filled PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold on contact area, 200μ" Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C









RECOMMENDED P.C.B. LAYOUT
(MOUNTING SIDE)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	B	C	D	E	F
88	53427-8817	Top	60.0	53.3	43.5	54.2	20.5	4.5

Pin No.	Dimension L
1, 9, 11, 15, 17, 25, 27, 35, 37, 44, 45, 56, 63, 67, 73 and 88	4.6
All Other Pins	3.8

FEATURES AND SPECIFICATIONS

1.00mm Pitch JEIDA Header

53429

Right Angle, Bottom Mount SMT

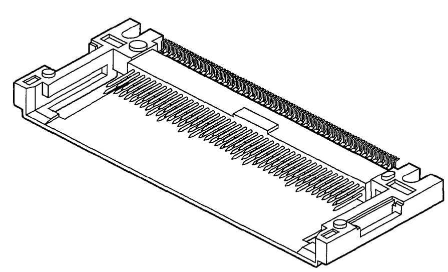
Features and Benefits
- Compatible with JEIDA DRAM standards
- Low profile (4.50mm)
- 2 pin lengths for first mate-last break
- Single in-line tails (0.50mm pitch)
- High temperature housing for I.R. process

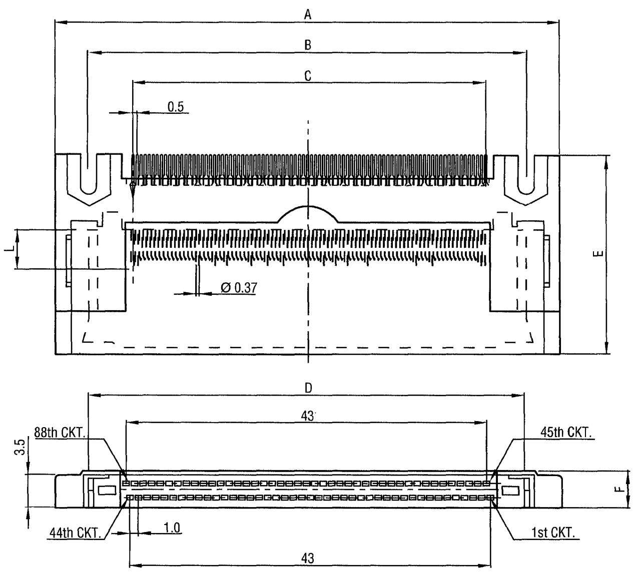
Reference Information
Packaging: Tray
Mates With: 52716 receptacle and all JEIDA DRAM cards
Designed In: Millimeters

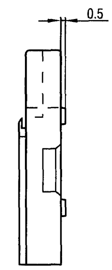
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

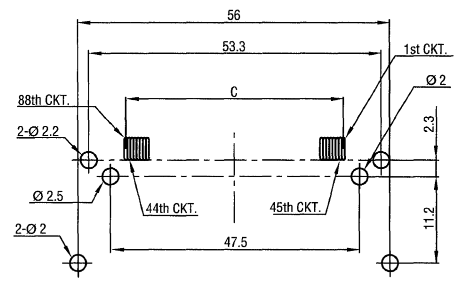
Mechanical
Contact Retention to Housing: 14.7N min.
Mating Force: 39.2N max.
Unmating Force: 8.63N min.
Durability: 200 cycles

Physical
Housing: Brown glass-filled PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold on contact area, 200μ" Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C









RECOMMENDED P.C.B. LAYOUT
(MOUNTING SIDE)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	B	C	D	E	F
88	53429-8817	Bottom	60.0	53.3	43.5	54.2	20.5	4.5

Pin No.	Dimension L
1, 9, 11, 15, 17, 25, 27, 35, 37, 44, 45, 56, 63, 67, 73 and 88	4.6
All other pins	3.8

FEATURES AND SPECIFICATIONS

1.00mm Pitch JEIDA Header

53495

Right Angle, Top Mount SMT, With Fitting Nails

Features and Benefits

- Compatible with JEIDA DRAM standards
- Low profile (4.50mm)
- 2 pin lengths for first mate-last break
- Single in-line tails (0.50mm pitch)
- High temperature housing for I.R. process
- SMT fitting nails for board retention

Reference Information

Packaging: Tray
Mates With: 52716 receptacle and all JEIDA DRAM cards
Designed In: Millimeters

Electrical

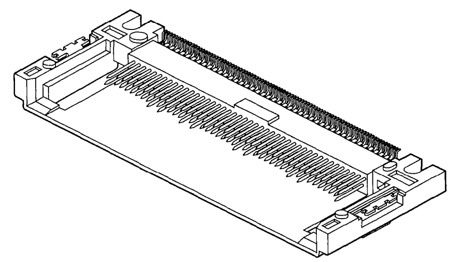
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

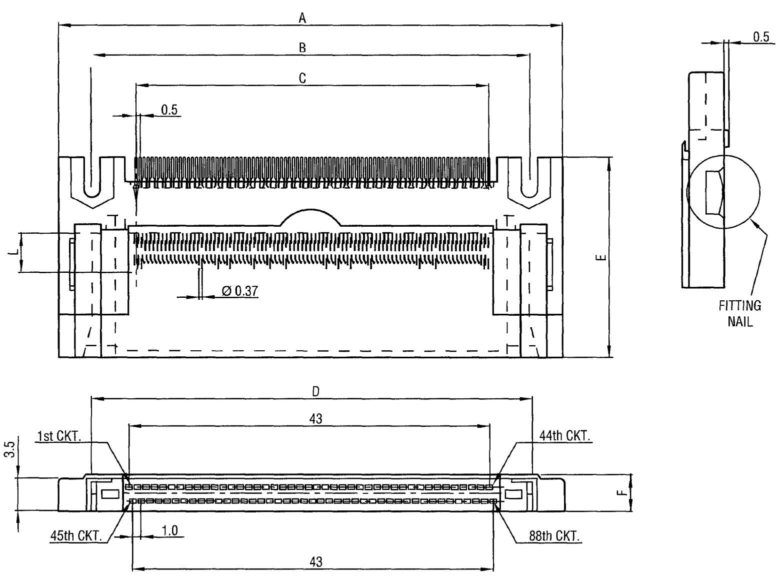
Mechanical

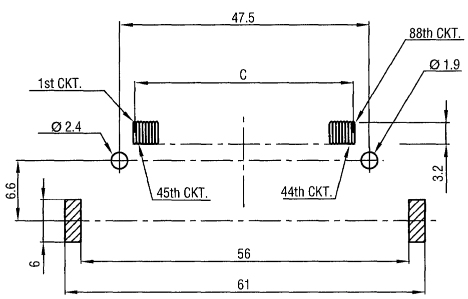
Contact Retention to Housing: 14.7N min.
Mating Force: 39.2N max.
Unmating Force: 8.63N min.
Durability: 200 cycles

Physical

Housing: Brown glass-filled PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold on contact area, 200μ" Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C







RECOMMENDED P.C.B. LAYOUT
(MOUNTING SIDE)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension					
			A	B	C	D	E	F
88	53495-8817	Top	60.0	53.3	43.5	54.2	20.5	4.5

Pin No.	Dimension L
1, 9, 11, 15, 17, 25, 27, 35, 37, 44, 45, 56, 63, 67, 73 and 88	4.6
All other pins	3.8

FEATURES AND SPECIFICATIONS

1.00mm Pitch JEIDA Header

53496

Right Angle, Bottom Mount SMT, With Fitting Nails

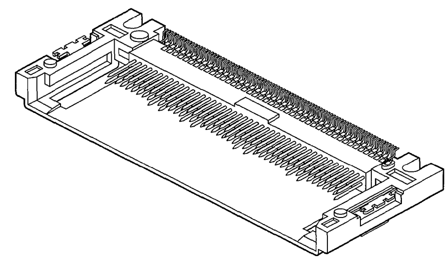
Features and Benefits
- Compatible with JEIDA DRAM standards
- Low profile (4.50mm)
- 2 pin lengths for first mate-last break
- Single in-line tails (0.50mm pitch)
- High temperature housing for I.R. process
- SMT fitting nails for board retention

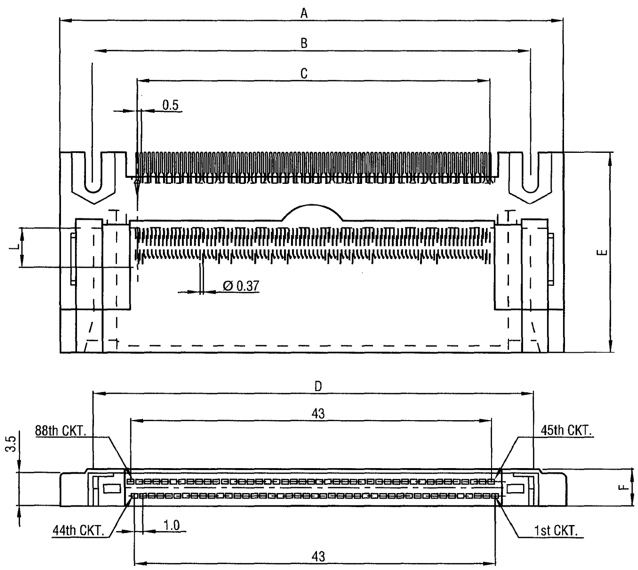
Reference Information
Packaging: Tray
Mates With: 52716 receptacle and all JEIDA DRAM cards
Designed In: Millimeters

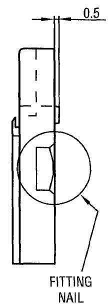
Electrical
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

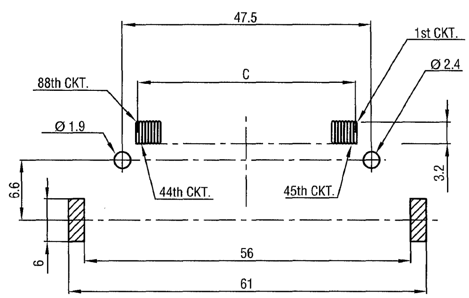
Mechanical
Contact Retention to Housing: 14.7N min.
Mating Force: 39.2N max.
Unmating Force: 8.63N min.
Durability: 200 cycles

Physical
Housing: Brown glass-filled PPS, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold on contact area, 200μ" Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C









RECOMMENDED P.C.B. LAYOUT
(MOUNTING SIDE)

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Board Mount	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F
88	53496-8817	Bottom	60.0	53.3	43.5	54.2	20.5	4.5

Pin No.	Dimension L
1, 9, 11, 15, 17, 25, 27, 35, 37, 44, 45, 56, 63, 67, 73 and 88	4.6
All other pins	3.8

FEATURES AND SPECIFICATIONS

1.00mm Pitch JEIDA Receptacle

52716 Straddle Mount

Features and Benefits
- Compatible with JEIDA DRAM standards
- Dual beam contact design
- High temperature housing for I.R. process
- 1.00mm pitch staggered mating interface

Reference Information

Packaging: Tray
Mates With: JEIDA DRAM 88-circuit headers 53427, 53429, 53495 and 53496
Designed In: Millimeters

Electrical

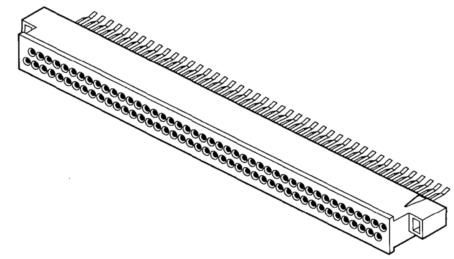
Voltage: 100V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

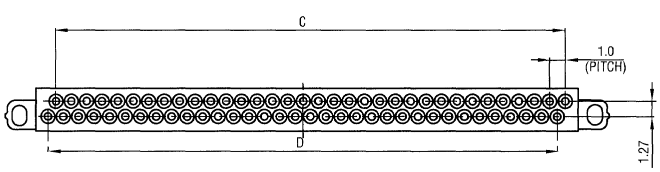
Mechanical

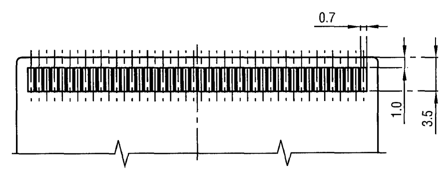
Contact Retention to Housing: 4.9N min.
Mating Force: 39.2N max.
Unmating Force: 8.63N min.
Durability: 200 cycles

Physical

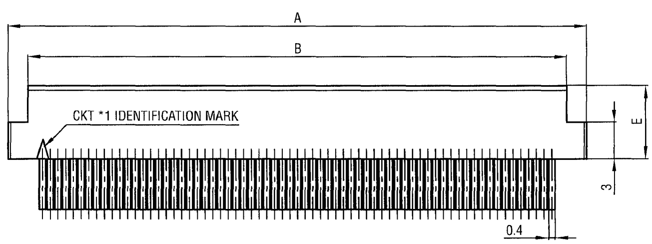
Housing: Black LCP, UL 94V-0
Contact: Titanium Copper Alloy
Plating: 30μ" Gold on contact area, 200μ" Tin/Lead on solder tails, Nickel underplate overall
Temperature: -20 to +90°C

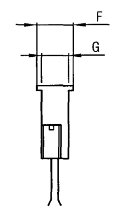






PCB DIMENSION (REFERENCE)





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension						
		A	B	C	D	E	F	G
88	52716-8811	49.55	45.5	43.0	43.0	5.5	3.3	2.75

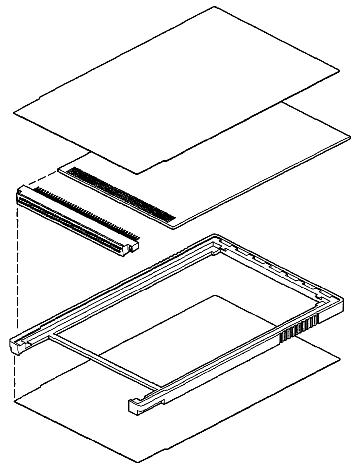
For Straddle Mount Receptacles

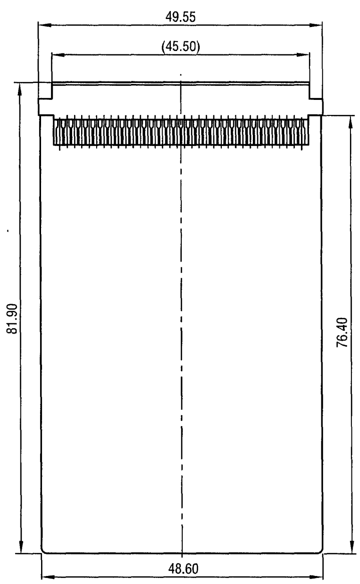
FEATURES AND SPECIFICATIONS

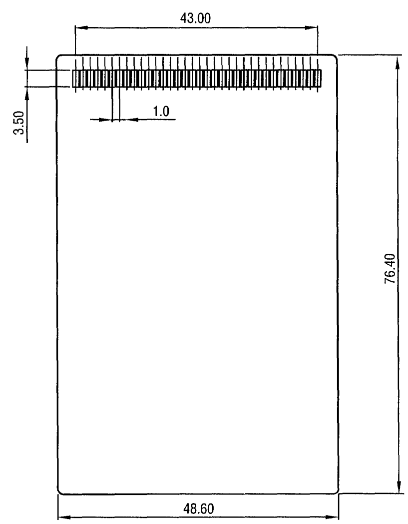
Features and Benefits
- Offer complete component kit for assembly
- Cover with or without adhesive tapes pre-assembled
- Cover may be custom silk screened with customer's artwork

Physical
Frame: Black PBT, UL 94V-0
Covers: Stainless Steel SUS 304
Adhesive Tape: Scotch* 468MP double-coated adhesive

Reference Information
Packaging (Cover/Frame): Tray
Use With: 52716 receptacle
Designed In: Millimeters







RECOMMENDED P.C.B. PATTERN

ORDERING INFORMATION AND DIMENSIONS

Order No.	Item
89094-0001	DRAM Frame

Order No.	Item	Options		
		THK	Style	Adhesive
89195-0000	DRAM Cover	0.15mm	Top	No
89195-1000				Yes
89195-0000			Bottom	No
89195-2000				Yes

* Scotch is a registered trademark of 3M Corporation

Note: Each 88-circuit DRAM card and kit consists of 1 88-circuit receptacle, 1 frame and 2 covers

Memory Card Manual Press For Cover 71139-0001

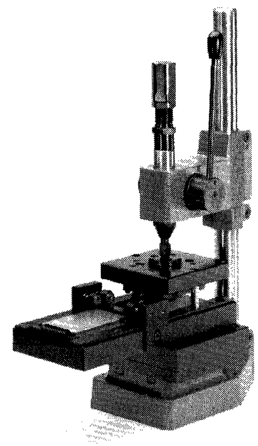
FEATURES AND SPECIFICATIONS

Features

- Closes cover and crimps in 1 operation
- Adjustable closing force
- Audible "click" indicates cycle completion
- Card cover crimping nest slides out of press for easy loading

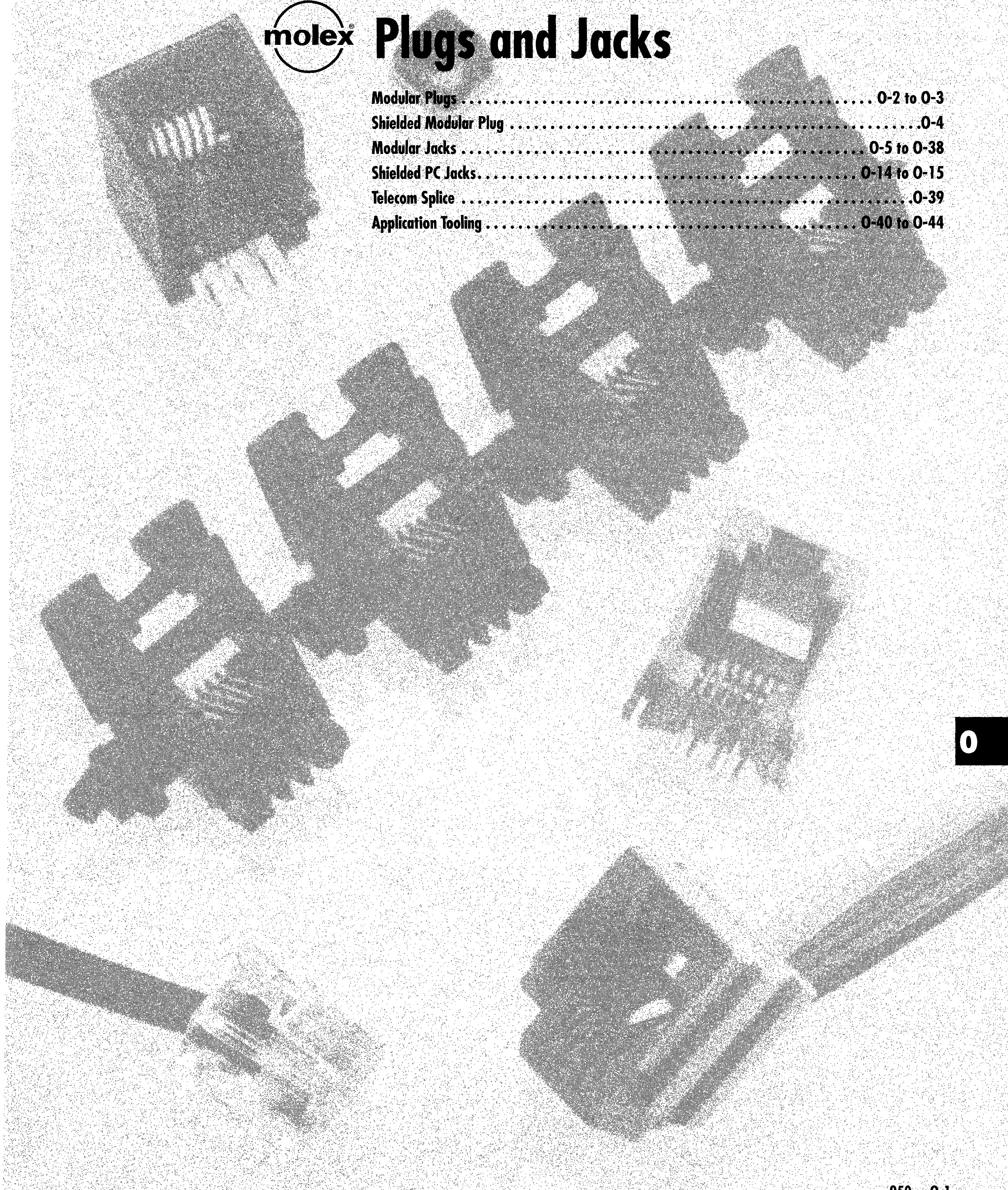
Specifications

Size: Width—150mm (6")
Depth—330mm (13")
Height—450mm (18")
Weight: 15kg (33 lb)
Rate: Up to 100 assemblies per hour, dependent on operator speed and application



ORDERING INFORMATION

Description	Order No.	Product
Manual Press for Memory Card Cover	62200-1400	71139



Plugs and Jacks

O

FEATURES AND SPECIFICATIONS

FCC 68 Modular Plug

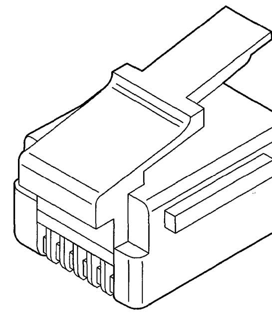
87031

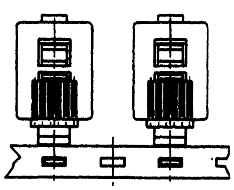
Features and Benefits
- Double strain relief construction
- Available in strip mounted and loose piece
- To terminate flat oval telephone cord to REA Bulletin 345-80, PE 75

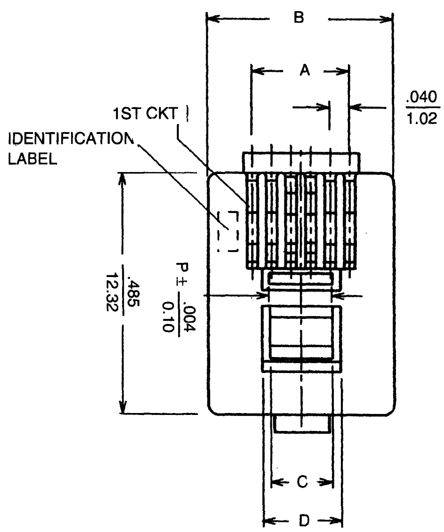
Reference Information
Product Specification: PS-87031
Packaging: Strip mounted and loose piece
Tooling Information: See pages 0-40 to 0-44
UL File No.: E107635(N)
Mates With: FCC 68 jacks
Designed In: Inches

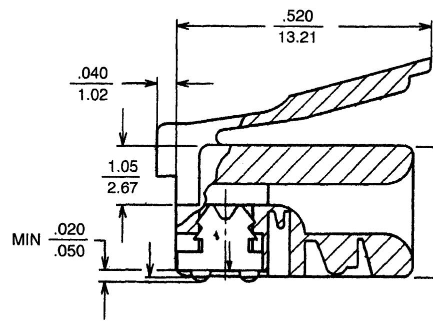
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.

Physical
Housing: Natural polycarbonate, UL 94V-2
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +60°C









inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.						Dimension			
		Strip Mounted			Loose Piece			A	B	C	D
		Plating No. 1	Plating No. 2	Plating No. 3	Plating No. 1	Plating No. 2	Plating No. 3				
4	4	87031-0412	87031-0422	87031-0432	87031-0413	87031-0423	87031-0433	3.05 (.120)	7.62 (.300)	4.60 (.181)	5.21 (.205)
6	2	87031-0614	87031-0624	87031-0634	87031-0615	87031-0625	87031-0635	5.08 (.200)	9.65 (.380)	4.60 (.181)	5.21 (.205)
6	4	87031-0616	87031-0626	87031-0636	87031-0617	87031-0627	87031-0637	5.08 (.200)	9.65 (.380)	4.60 (.181)	5.21 (.205)
6	6	87031-0618	87031-0628	87031-0638	87031-0619	87031-0629	87031-0639	5.08 (.200)	9.65 (.380)	4.60 (.181)	6.98 (.275)

Plating No. 1: 0.76μm (30μ") min. Gold in contact area, 1.27μm (50μ") min. Tin/Lead in pierce area both over 1.27μm (50μ") min. Nickel

Plating No. 2: 1.27μm (50μ") min. Gold in contact area, 1.27μm (50μ") min. Tin/Lead in pierce area both over 1.27μm (50μ") min. Nickel

Plating No. 3: 0.38μm (15μ") min. Gold in contact area, 1.27μm (50μ") min. Tin/Lead in pierce area both over 1.27μm (50μ") min. Nickel

FCC 68 Modular Plug

90075

FEATURES AND SPECIFICATIONS

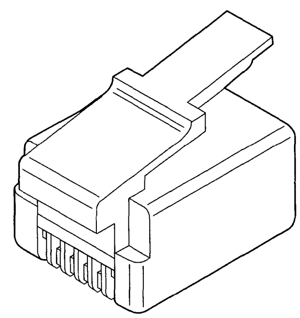
Features and Benefits
- Pre-assembled contacts
- Selective Gold platings
- To terminate flat oval telephone cord to REA Bulletin 345-80, PE 75
- Strip mounting—cost efficient, time saving
- 4-, 6- and 8-way loaded or partially loaded

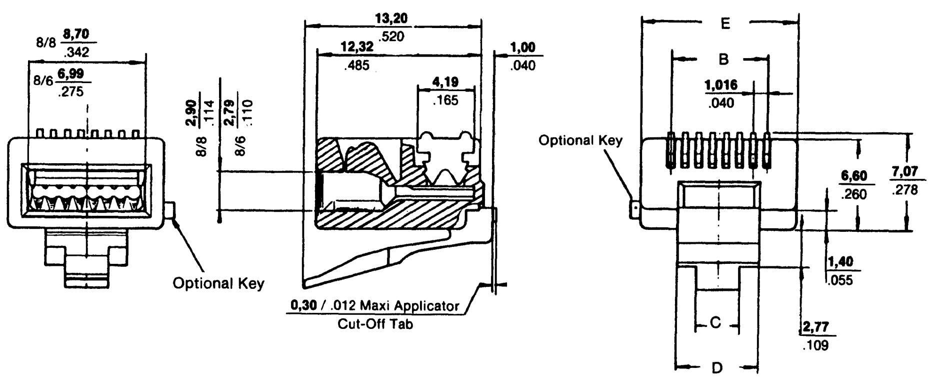
Reference Information
Product Specification: PSX90075-E
Packaging: Strip mounted or loose piece
Tooling Information: See pages 0-40 to 0-44
UL File No.: 86046
Mates With: WE Co. and FCC 68 jacks
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 500 MΩ min.

Mechanical
Cable to Plug Tensile Strength: 7.71kg (17 lb) min.

Physical
Housing: Natural polycarbonate, UL 94V-2
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +60 °C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Key	Order No.				Dimension			
			Strip Mounted		Loose Piece		B	C	D	E
			Plating No. 1	Plating No. 2	Plating No. 1	Plating No. 2				
8	8	No	90075-0130	90075-0139	90075-0132	90075-0141	7.11 (.280)	3.25 (.128)	6.10 (.240)	11.68 (.460)

Plating No. 1: 0.76μm (30μ") min. Gold in contact area, 1.27μm (50μ") min. Tin/Lead in pierce area both over 1.27μm (50μ") min. Nickel

Plating No. 2: 1.27μm (50μ") min. Gold in contact area, 1.27μm (50μ") min. Tin/Lead in pierce area, 1.27μm (50μ") Nickel overall

Note: 0.38μm (15μ") and 0.76μm (30μ") Gold plating also available, contact factory

FEATURES AND SPECIFICATIONS

Shielded Modular Plug

95043

For Round Cable

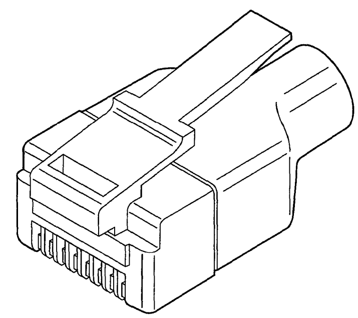
Features and Benefits
- 8-way RJ45 fully shielded plug
- 1-piece dual-function shield for optimal strain relief (hex crimp) and 360° shielding
- Selectively Gold-plated contact
- Terminates with 5.40 or 6.00mm LAN, STP or ISDN recommended round cables
- Rubber boot for ideal grip, color coded for line tracing and different network types
- Meets CAT 5 to EIA/TIA 568 B requirements (100 Mbits/s)

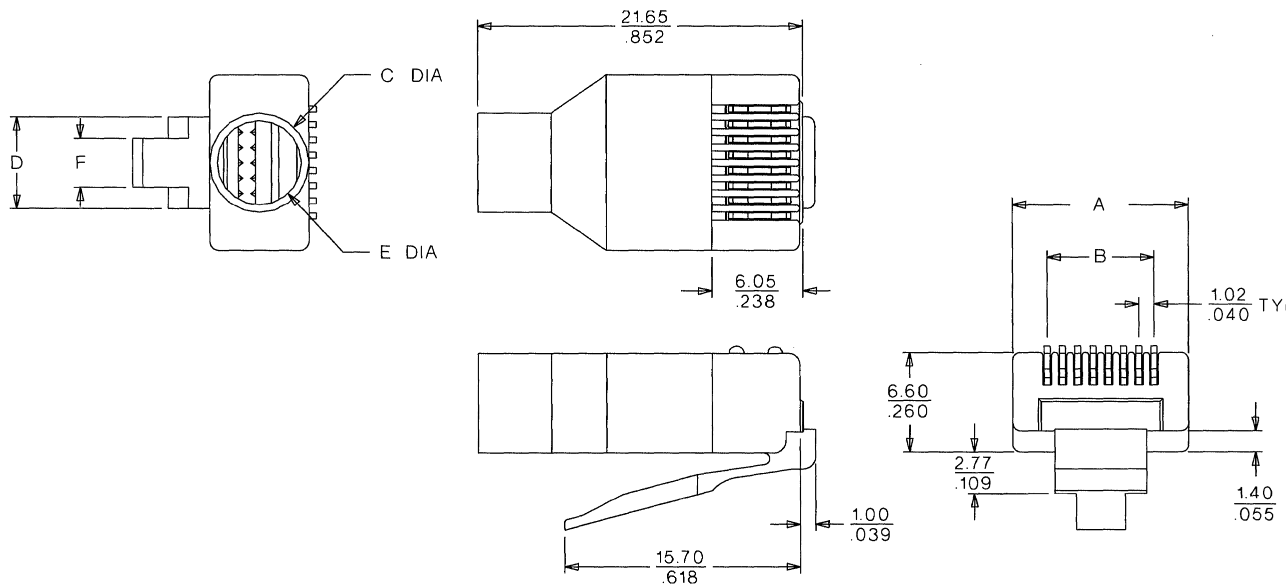
Reference Information
Product Specification: PS-95043-F
Packaging: Loose piece
Tooling Information: See page 0-40
Mates With: WE Co. and FCC 68 jacks

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V rms
Insulation Resistance: 500 MΩ min.

Mechanical
Cable to Plug Tensile Strength: 10kg (21 lb) min.

Physical
Housing: Natural polycarbonate, UL 94V-2
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +60°C





ORDERING INFORMATION

Circuits	Loaded Contacts	Boot Color	Order No.	
			For 5.40mm Cable	For 6.00mm Cable
8	8	Black	95043-2891	95043-5891
8	8	Beige/Gray	95043-2892	95043-5892
8	8	Green	95043-2893	95043-5893
8	8	Red	95043-2894	95043-5894
8	8	Yellow	95043-2895	95043-5895
8	8	Blue	95043-2896	95043-5896
8	8	Without boot	95043-2881	95043-5881

Plating: 1.27μm (50μ") Gold in contact area and Tin/Lead in pierce area, both over 1.27μm (50μ") Nickel

FEATURES AND SPECIFICATIONS

molex® Modular Jack

41314

Right Angle Flange Mount

Features and Benefits

- 50µ" Gold meets FCC 68 requirements
- Keying options available
- Top-covered leads meet British Telecom 4000V test
- Contacts are duplex plated after stamping, eliminating bare edges in the mating area
- Every jack must pass on-line functional tests, including hi-pot and continuity
- Optional PC clip mount for added mechanical strength

Reference Information

Product Specification: PS-41314
Packaging: Film pack or tray
UL File No.: E107635
CSA File No.: LR19980
Mates With: WE Co. and FCC 68 plugs
Designed In: Inches

Electrical

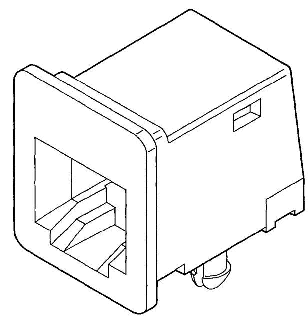
Voltage: 125V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 500 MΩ min.

Mechanical

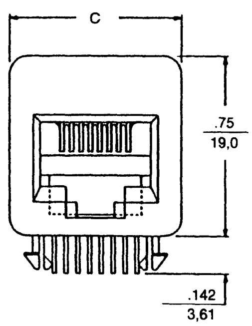
Durability: 500 cycles min.

Physical

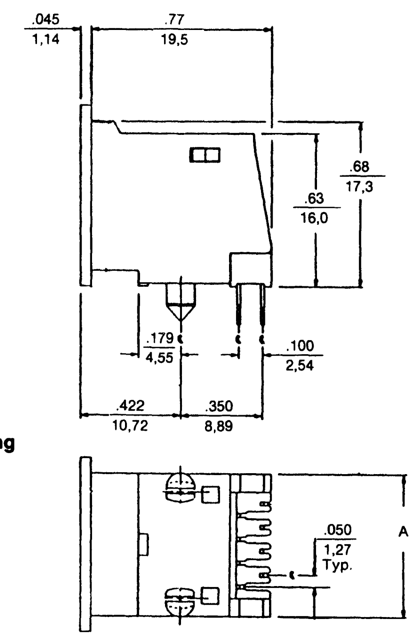
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C

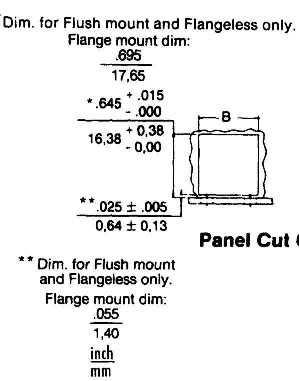


Preferred Version in the Americas



Flange Mount Housing
(8 Position Shown)





Panel Cut Out

Please see page 0-8 for PC board layout

Plugs and Jacks

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ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.		Universal Service Order Code	Keyed	Dimension		
		Film Pack	Tray Pack			A	B	C
4	2	15-43-6042	• 15-43-6542		No	11.20 (.440)	11.56 (.455)	14.50 (.570)
4	4	15-43-6044	• 15-43-6544		No	11.20 (.440)	11.56 (.455)	14.50 (.570)
6	2	15-43-6063	• 15-43-6563	RJ11W/RJ11C	No	13.20 (.520)	13.59 (.535)	16.50 (.650)
6	4	15-43-6064	• 15-43-6564	RJ16	No	13.20 (.520)	13.59 (.535)	16.50 (.650)
6	6	15-43-6066	• 15-43-6566	RJ12/RJ18/RJ25	No	13.20 (.520)	13.59 (.535)	16.50 (.650)
8	2	15-43-6090	• 15-43-6590		No	15.20 (.600)	15.62 (.615)	18.50 (.730)
8 Keyed	2	15-43-6248	15-43-6251		Yes/RJ45	15.20 (.600)	15.62 (.615)	18.50 (.730)
8	4	15-43-6084	• 15-43-6584		No	15.20 (.600)	15.62 (.615)	18.50 (.730)
8 Keyed	4	15-43-6242	15-43-6245		Yes/RJ45	15.20 (.600)	15.62 (.615)	18.50 (.730)
8	6	15-43-6086	• 15-43-6586		No	15.20 (.600)	15.62 (.615)	18.50 (.730)
8 Keyed	6	15-43-6236	15-43-6239		Yes/RJ45	15.20 (.600)	15.62 (.615)	18.50 (.730)
8	8	15-43-6088	• 15-43-6588	RJ48	No	15.20 (.600)	15.62 (.615)	18.50 (.730)
8 Keyed	8	15-43-6230	15-43-6233	RJ14/RJ45	Yes/RJ45	15.20 (.600)	15.62 (.615)	18.50 (.730)

• US Standard Product, available through Molex franchised distributors

Plating: 1.27µm (50µ") min. Nickel overall, 1.27µm (50µ)" min. Gold in contact area and 1.27µm (50µ") min. Tin/Lead on solder tails

FEATURES AND SPECIFICATIONS

Modular Jack

41369

Right Angle Flush Mount

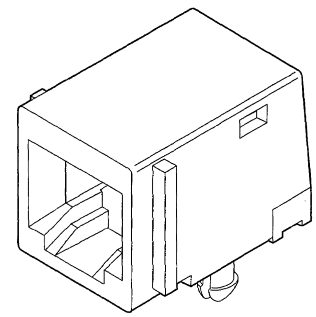
Features and Benefits
- 50μ" Gold meets FCC 68 requirements
- Keying options available
- Top-covered leads meet British Telecom 4000V test
- Contacts are duplex plated after stamping, eliminating bare edges in the mating area
- Every jack must pass on-line functional tests, including hi-pot and continuity
- Optional PC clip mount for added mechanical strength

Reference Information
Product Specification: PS-41314
Packaging: Film pack or tray
UL File No.: E107635
CSA File No.: LR19980
Mates With: WE Co. and FCC 68 plugs
Designed In: Inches

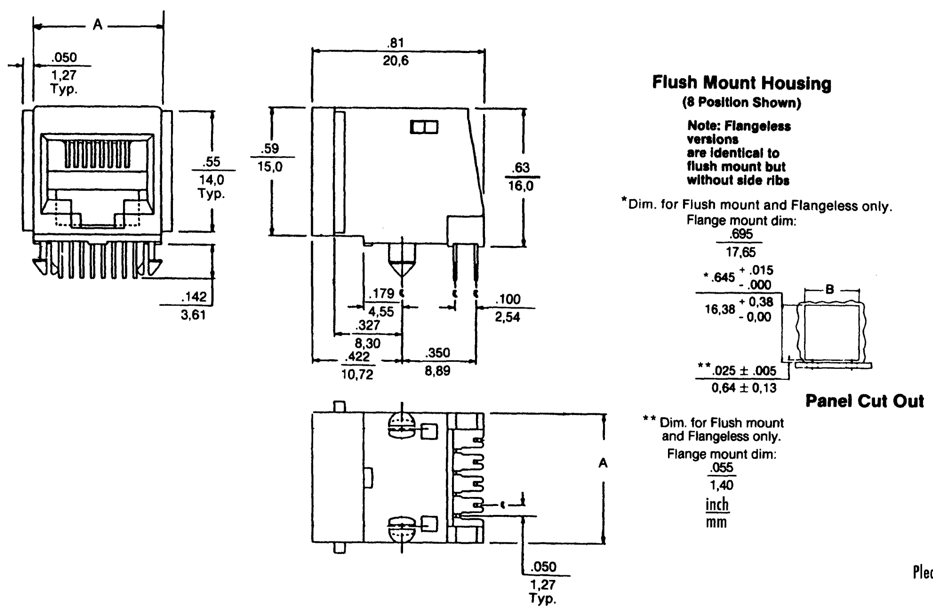
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 500 cycles min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C



Preferred Version in the Americas



Please see page 0-8 for PC board layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.		Universal Service Order Code	Keyed	Dimension	
		Film Pack	Tray Pack			A	B
4	2	15-43-7040	• 15-43-7540		No	11.20 (.440)	11.56 (.455)
4	4	15-43-7044	• 15-43-7544		No	11.20 (.440)	11.56 (.455)
6	2	15-43-7063	• 15-43-7563	RJ11W/RJ11C	No	13.20 (.520)	13.59 (.535)
6	4	15-43-7064	• 15-43-7564	RJ16	No	13.20 (.520)	13.59 (.535)
6	6	15-43-7066	• 15-43-7566	RJ12/RJ18/RJ25	No	13.20 (.520)	13.59 (.535)
6 Offset Latch	6	15-43-6111	15-43-6110		Offset latch DECconnect	13.20 (.520)	13.59 (.535)
8	2	15-43-7080	• 15-43-7580		No	15.20 (.600)	15.62 (.615)
8 Keyed	2	15-43-9010	• 15-43-9510		Yes/RJ45	15.20 (.600)	15.62 (.615)
8	4	15-43-7084	• 15-43-7584		No	15.20 (.600)	15.62 (.615)
8 Keyed	4	15-43-9007	• 15-43-9507		Yes/RJ45	15.20 (.600)	15.62 (.615)
8	6	15-43-7086	• 15-43-7586		No	15.20 (.600)	15.62 (.615)
8 Keyed	6	15-43-9004	• 15-43-9504		Yes/RJ45	15.20 (.600)	15.62 (.615)
8	8	15-43-7088	• 15-43-7588	RJ48	No	15.20 (.600)	15.62 (.615)
8 Keyed	8	15-43-9001	• 15-43-9501	RJ14/RJ45	Yes/RJ45	15.20 (.600)	15.62 (.615)
8/6 Universal	6		15-43-5166		No	13.20 (.520)	15.62 (.615)
8 Notch Front	8	15-43-7098			No	15.20 (.600)	15.62 (.615) 12.19 (.480)

• US Standard Product, available through Molex franchised distributors

Plating: 1.27μm (50μ") min. Nickel overall, 1.27μm (50μ)" min. Gold in contact area and 1.27μm (50μ") min. Tin/Lead on solder tails

Plugs and Jacks

0

FEATURES AND SPECIFICATIONS

molex® Modular Jack

41687
Right Angle Flangeless

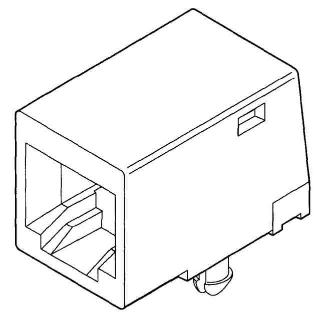
Features and Benefits
- 50μ" Gold meets FCC 68 requirements
- Keying options available
- Top-covered leads meet British Telecom 4000V test
- Contacts are duplex plated after stamping, eliminating bare edges in the mating area
- Every jack must pass on-line functional tests, including hi-pot and continuity
- Optional PC clip mount for added mechanical strength

Reference Information
Product Specification: PS-41314
Packaging: Film pack or tray
UL File No.: E107635
CSA File No.: LR19980
Mates With: WE Co. and FCC 68 plugs
Designed In: Inches

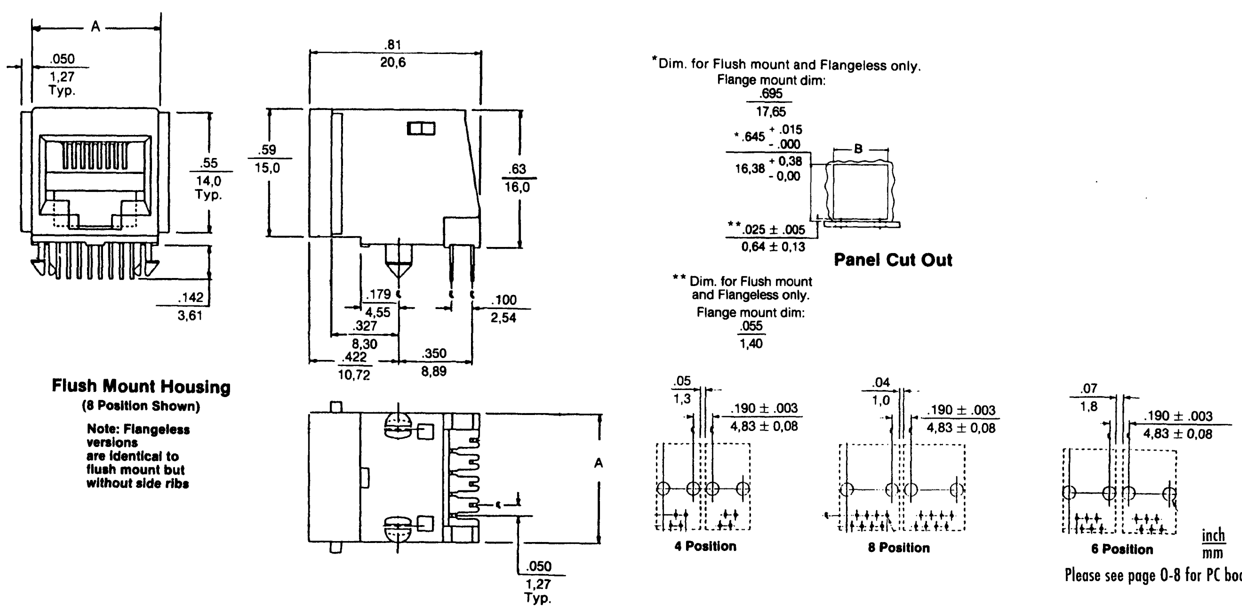
Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 500 cycles min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C



Preferred Version in the Americas



Please see page O-8 for PC board layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.		Universal Service Order Code	Keyed	Dimension	
		Film Pack	Tray Pack			A	B
4	2	15-43-8041	• 15-43-8541		No	11.20 (.440)	11.56 (.455)
4	4	15-43-8044	• 15-43-8544		No	11.20 (.440)	11.56 (.455)
6	2	15-43-8061	• 15-43-8561	RJ11W/RJ11C	No	13.20 (.520)	13.59 (.535)
6	4	15-43-8064	• 15-43-8564	RJ16	No	13.20 (.520)	13.59 (.535)
6	6	15-43-8066	• 15-43-8566	RJ12/RJ18/RJ25	No	13.20 (.520)	13.59 (.535)
8	2	15-43-8090	• 15-43-8590		No	15.20 (.600)	15.62 (.615)
8 Keyed	2	15-43-8010	• 15-43-8510		Yes/RJ45	15.20 (.600)	15.62 (.615)
8	4	15-43-8084	• 15-43-8584		No	15.20 (.600)	15.62 (.615)
8 Keyed	4	15-43-8007	• 15-43-8507		Yes/RJ45	15.20 (.600)	15.62 (.615)
8	6	15-43-8086	• 15-43-8586		No	15.20 (.600)	15.62 (.615)
8 Keyed	6	15-43-8004	• 15-43-8504		Yes/RJ45	15.20 (.600)	15.62 (.615)
8	8	15-43-8088	• 15-43-8588	RJ48	No	15.20 (.600)	15.62 (.615)
8 Keyed	8	15-43-8001	• 15-43-8501	RJ14/RJ45	Yes/RJ45	15.20 (.600)	15.62 (.615)

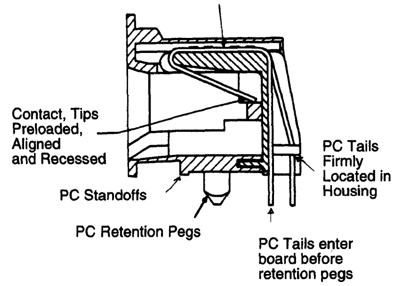
• US Standard Product, available through Molex franchised distributors

Plating: 1.27μm (50μ") min. Nickel overall, 1.27μm (50μ)" min. Gold in contact area and 1.27μm (50μ") min. Tin/Lead on solder tails

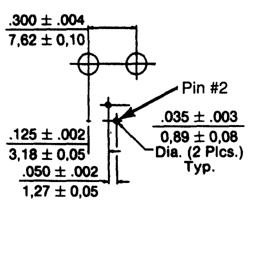
Plugs and Jacks
O

41314/41369/41687
PC Board Layouts

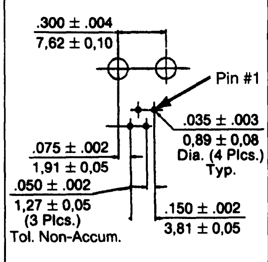
Typical Cross Section



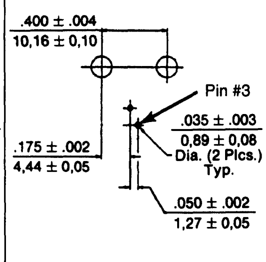
Recommended P.C. Board Layout Dimensions



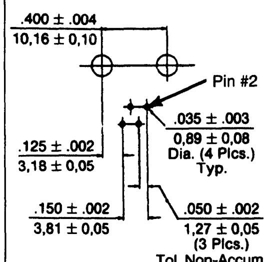
4 Pos. 2 Ckts.



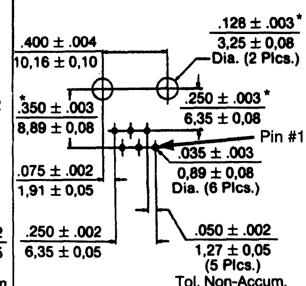
4 Pos. 4 Ckts.



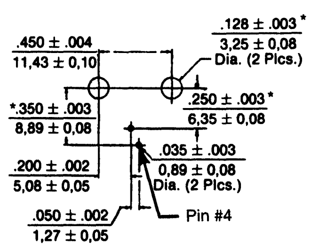
6 Pos. 2 Ckts.



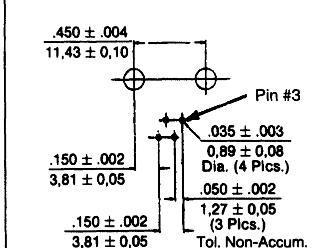
6 Pos. 4 Ckts.



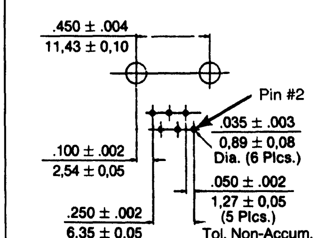
6 Pos. 6 Ckts.



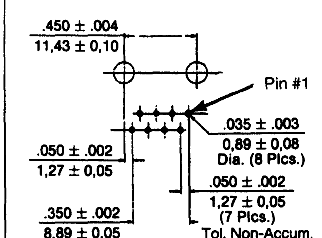
8 Pos. 2 Ckts.



8 Pos. 4 Ckts.



8 Pos. 6 Ckts.



8 Pos. 8 Ckts.

Note: Dimensions marked with asterisk (*) are typical for each layout shown above.

inch / mm

Plugs and Jacks

0

FEATURES AND SPECIFICATIONS

Modular Jack

95009

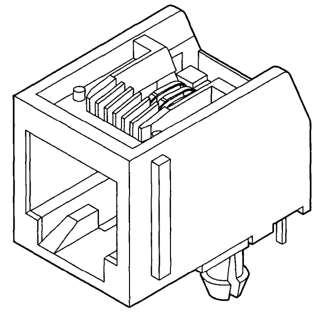
Right Angle Standard Profile

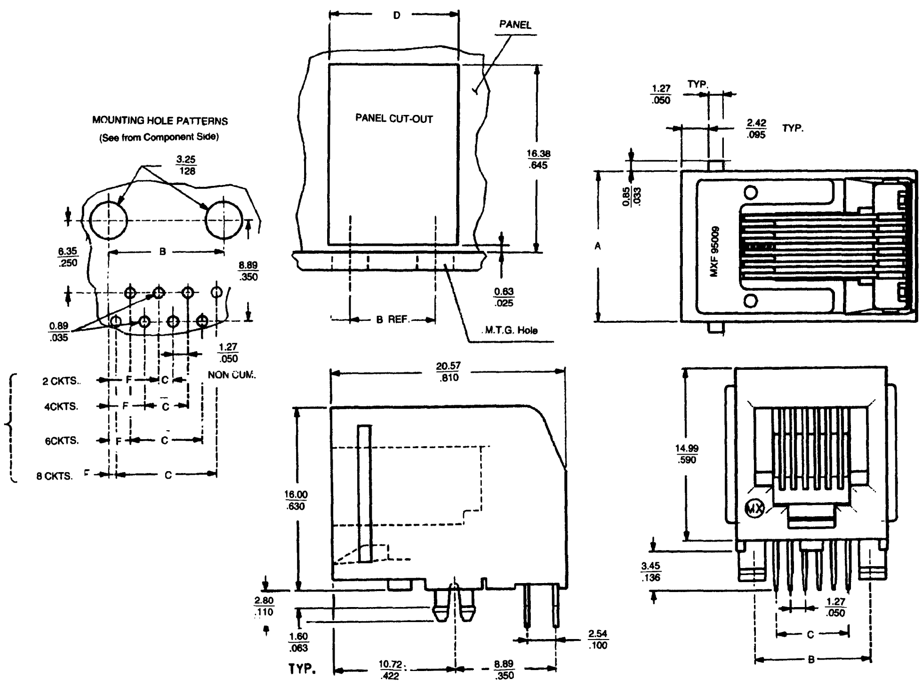
Features and Benefits
- Industry compatible footprints
- Flush mount
- Split snap-fit retention pegs
- High reliability, square contacts

Reference Information
Product Specification: PS-95009-E
Packaging: Tray
UL File No.: E107635
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Mounting Rib	Dimension				
				A	B	C	D	F
4	4	• 95009-2441	Yes	11.18 (.440)	7.62 (.390)	3.81 (.150)	11.56 (.455)	1.27 (.050)
		95009-2447	No					
6	4	• 95009-2641	Yes	13.21 (.520)	10.16 (.400)	3.81 (.150)	13.59 (.535)	3.17 (.125)
		• 95009-2647	No					
6	6	95009-2661	Yes	15.24 (.600)	10.16 (.400)	6.35 (.250)	13.59 (.535)	1.90 (.075)
		95009-2667	No					
8	8	95009-2881	Yes	15.24 (.600)	11.43 (.450)	8.89 (.350)	15.62 (.615)	1.27 (.050)
		95009-2887	No					

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

Note: 0.38μm (15μ") and 0.76μm (30μ") Gold plating also available, contact factory

FEATURES AND SPECIFICATIONS

Modular Jack
90077
Right Angle

Features and Benefits

- Industry compatible
- Flush mounted
- Selective plating—Gold on contact area, Tin on solder posts
- Non-keyed version
- Bubble-lock pegs provide improved PCB retention
- UL 1863 approved

Reference Information

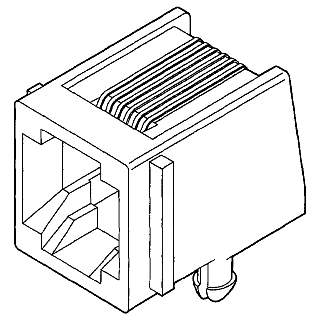
Product Specification: PS-90077
UL File No.: E107635(N)
CSA File No.: 19980
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical

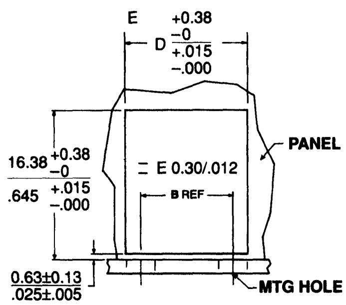
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

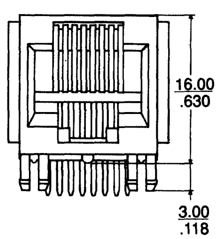
Physical

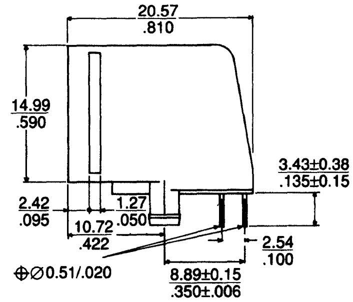
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C

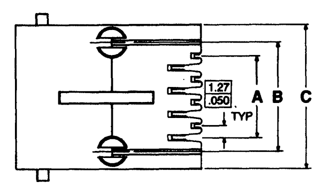


Preferred Version in the Far East

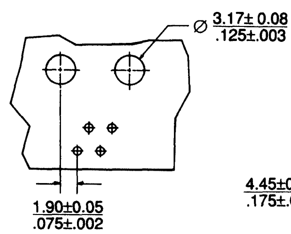




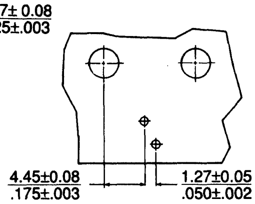




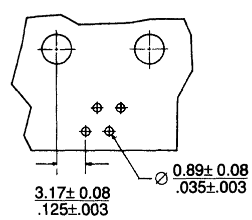
Below: P.C.B. Hole Layout
Seen from Component Side



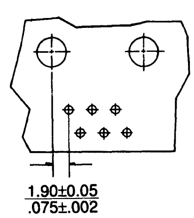
4 Pos. 4 Ckts.



6 Pos. 2 Ckts.



6 Pos. 4 Ckts.



6 Pos. 6 Ckts.

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.		Dimension			
		Plating No. 1	Plating No. 2	A	B	C	D
6	2	90077-1095	90077-1075	1.27 (.050)	10.16 (.400)	13.21 (.520)	13.59 (.535)
6	4	90077-1076	90077-1073	3.81 (.150)	10.16 (.400)	13.21 (.520)	13.59 (.535)
6	6	90077-1081	90077-1082	6.35 (.250)	10.16 (.400)	13.21 (.520)	13.59 (.535)
4	2	90077-1079	90077-1080	1.27 (.050)	7.62 (.300)	11.18 (.440)	11.56 (.455)
4	4	90077-1077	90077-1078	3.81 (.150)	7.62 (.300)	11.18 (.440)	11.56 (.455)

Plating No. 1: Post plate 0.76µm (30µ") Gold in contact area, 1.27µm (50µ") (60/40) Tin/Lead in tail area both over 1.27µm (50µ") Nickel overall

Plating No. 2: Post plate 1.27µm (50µ") Gold in contact area, 1.27µm (50µ") (60/40) Tin/Lead in tail area both over 1.27µm (50µ") Nickel overall

Plugs and Jacks
0

FEATURES AND SPECIFICATIONS

molex **Modular Jack**

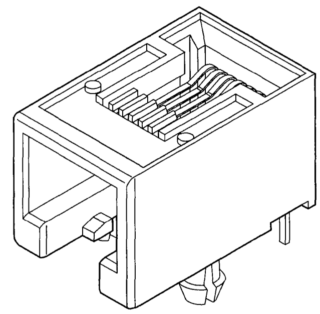
95001 Right Angle Low Profile

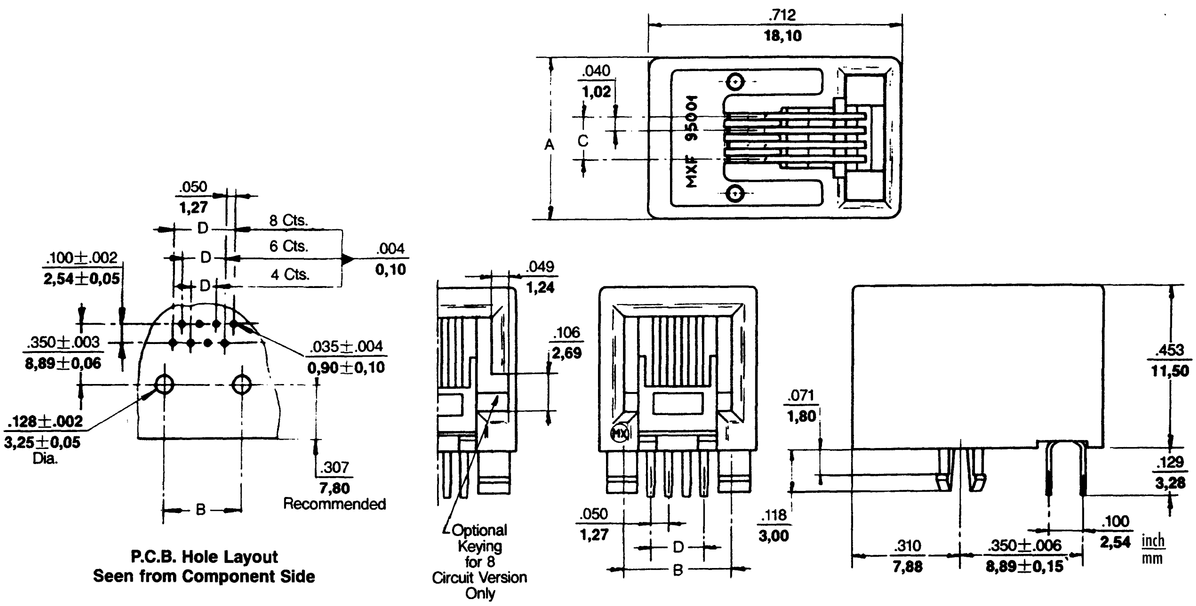
Features and Benefits
- Very low profile — about 3/4 that of industry standard
- Automatic placement possible
- Foot pattern identical to industry standard
- High reliability, square contact

Reference Information
Product Specification: PS-95001-E
Packaging: Tray
UL File No.: 89082
CSA File No.: 89083
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





P.C.B. Hole Layout
Seen from Component Side

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Key	Dimension A	Dimension B	Dimension C	Dimension D
4	4	• 95001-2441	No	11.18 (.440)	7.62 (.300)	3.05 (.120)	3.81 (.150)
6	4	• 95001-2641	No	13.21 (.520)	10.16 (.400)	3.05 (.120)	3.81 (.150)
6	6	• 95001-2661	No	13.21 (.520)	10.16 (.400)	5.08 (.200)	6.35 (.250)
8	8	• 95001-2881	No	15.24 (.600)	11.43 (.450)	7.11 (.280)	8.89 (.350)
8	8	• 95001-2882	Yes	15.24 (.600)	11.43 (.450)	7.11 (.280)	8.89 (.350)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

Note: 0.38μm (15μ") and 0.76μm (30μ") Gold plating also available, contact factory

FEATURES AND SPECIFICATIONS

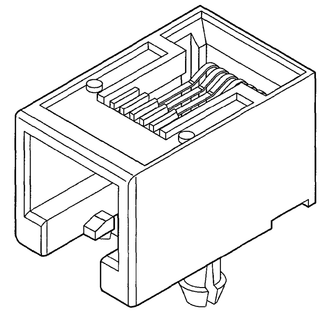
95001
Surface Mount Version
Low Profile

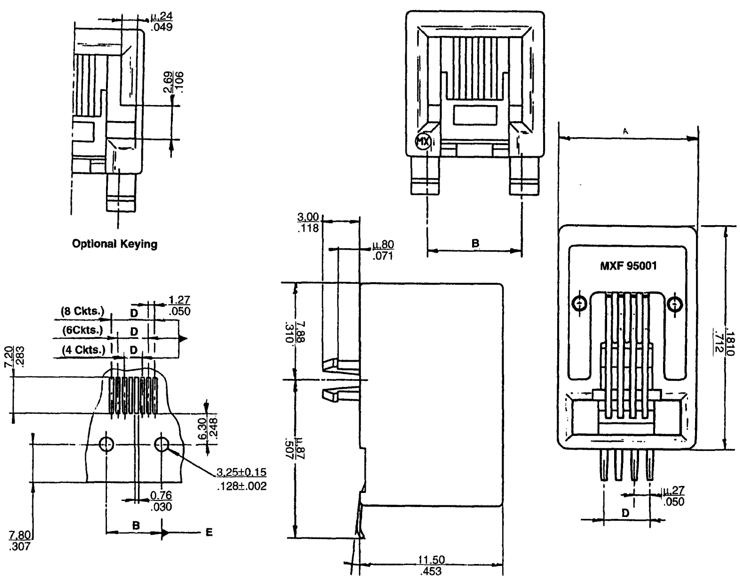
Features and Benefits
- Very low profile — about 3/4 that of industry standard
- Automatic placement possible
- Foot pattern identical to industry standard
- High reliability, square contact

Reference Information
Product Specification: PS-95001
Packaging: Tube
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Gray polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Key	Dimension A	Dimension B	Dimension D
4	4	• 95001-6441	No	11.18 (.440)	7.62 (.300)	3.81 (.150)
6	4	• 95001-6641	No	13.21 (.520)	10.16 (.400)	3.81 (.150)
6	6	• 95001-6661	No	13.21 (.520)	10.16 (.400)	6.35 (.250)
8	8	• 95001-6881	No	15.24 (.600)	11.43 (.450)	8.89 (.350)
8	8	• 95001-6882	Yes	15.24 (.600)	11.43 (.450)	8.89 (.350)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over 1.27µm (50µ") min. Nickel overall

Note: 0.38µm (15µ") and 0.76µm (30µ") Gold plating also available, contact factory

Modular Jack

95034

Right Angle, Low Profile Shunt Version

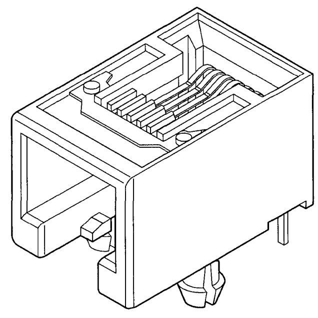
FEATURES AND SPECIFICATIONS

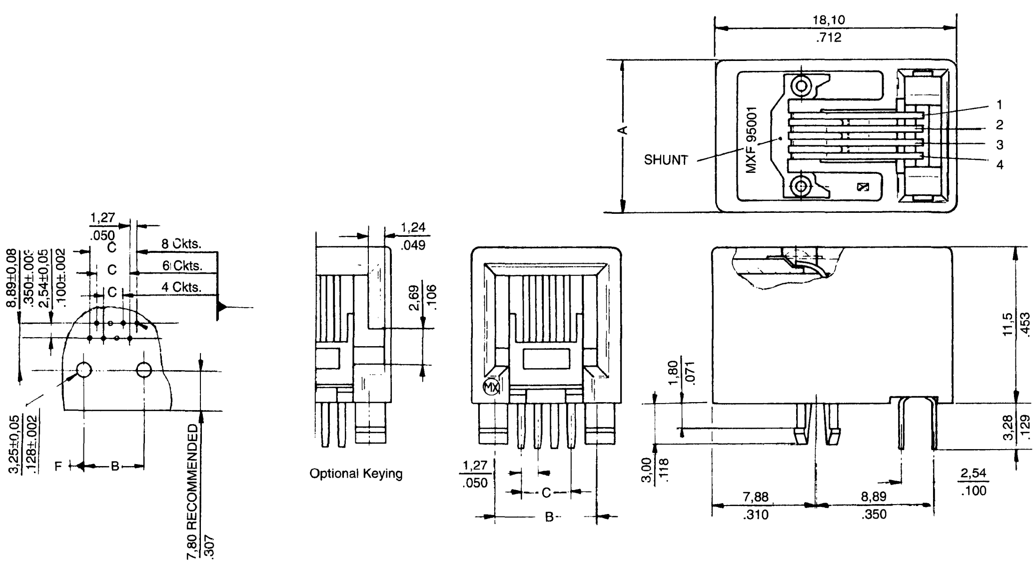
Features and Benefits
- High reliability, square contact
- Industry standard footprint
- Shunt allows signal control and line check

Reference Information
Product Specification: PS-95001
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





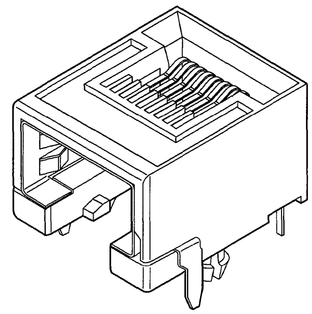
ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

Shielded PC Jack

95040
Right Angle Low Profile

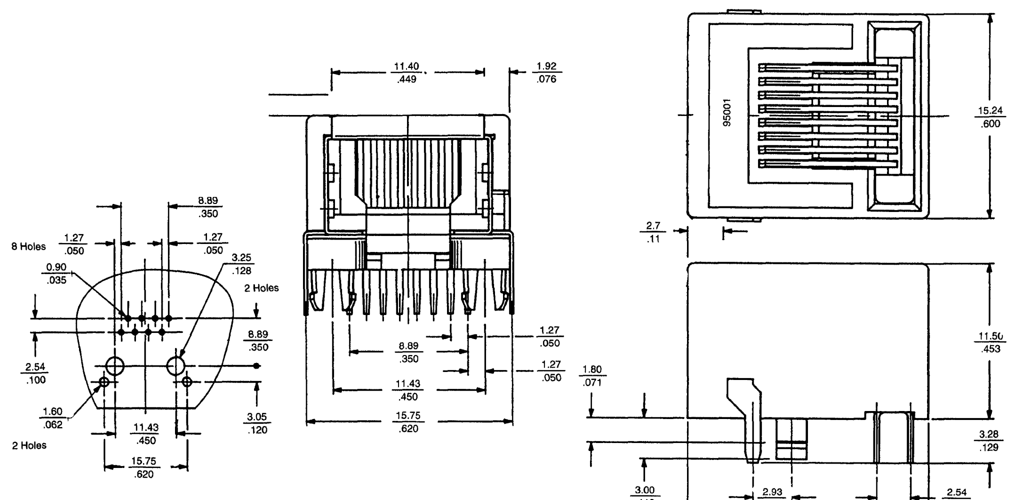


Features and Benefits
- High reliability, square contact
- EMI/RFI protection
- ISDN standard

Reference Information
Product Specification: PS-95040
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 20 dB min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C



P.C.B. Mounting Patterns

ORDERING INFORMATION

Circuits	Loaded Contacts	Order No.	Key
8	8	• 95040-2881	No

• US Standard Product, available through Molex franchised distributors

Plating: 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

FEATURES AND SPECIFICATIONS

Shielded PC Jack with Key

95060

Right Angle Low Profile

Features and Benefits

- High reliability, square contact
- EMI/RFI protection
- ISDN standard
- Keyed version of 95040

Reference Information

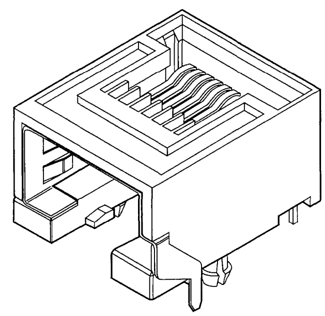
Product Specification: PS-95040
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

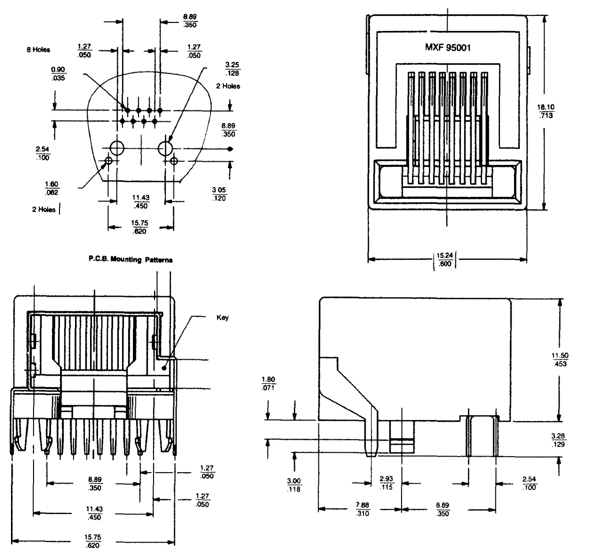
Electrical

Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 20 dB min.

Physical

Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION

Circuits	Loaded Contacts	Order No.	Key
8	8	• 95060-2882	Yes

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over 1.27µm (50µ") min. Nickel overall

FEATURES AND SPECIFICATIONS

molex® **Shielded Modular Jack**

95122

Right Angle Standard Profile

Features and Benefits

- Fully shielded connector
- Advanced EMI/RFI protection
- ISDN standard
- Industry standard footprint and height

Reference Information

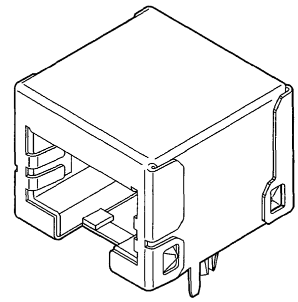
Product Specification: PS-95122
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

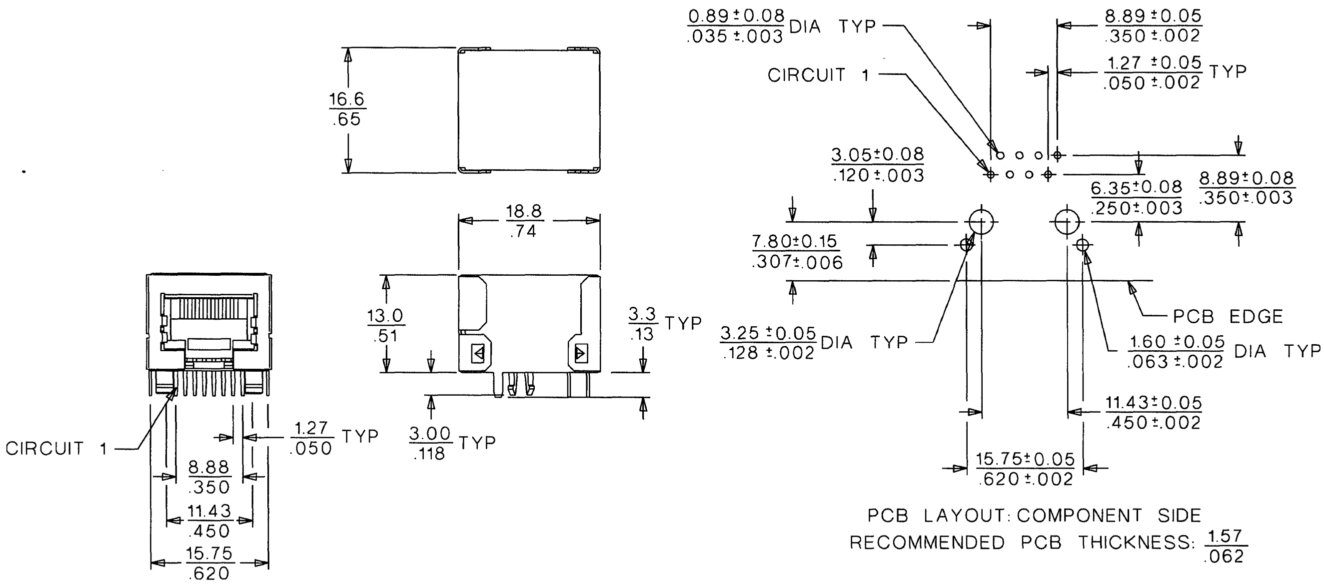
Electrical

Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 20 dB min.

Physical

Housing: Black polyester
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 1.57 / .062

ORDERING INFORMATION

Circuits	Loaded Contacts	Order No.	Key
8	8	95122-2881	No

Plating: Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over 1.27µm (50µ") min. Nickel overall

52018
Right Angle

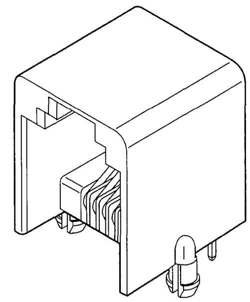
FEATURES AND SPECIFICATIONS

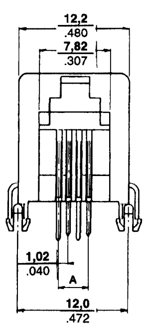
Features and Benefits
- Industry compatible
- Stamped contact

Reference Information
Packaging: Tray
Designed In: Millimeters

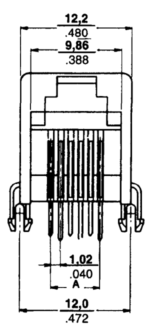
Electrical
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C

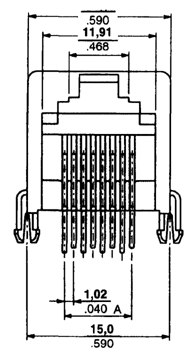




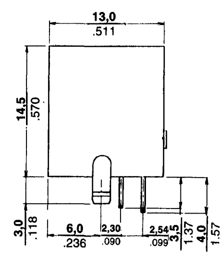
52018-4 Position



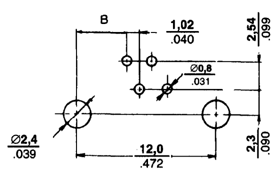
52018-6 Position



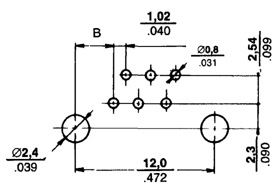
52018-8 Position



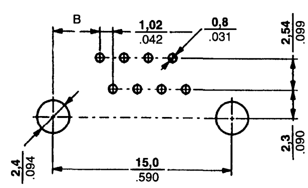
Common for circuits 4, 6, and 8



52018-4 Position
P.C.B. Hole Layout
Seen from Component Side



52018-6 Position
P. C. B. Hole Layout
Seen from Component Side



52018-8 Position
P.C.B. Hole Layout

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Plating No.	Dimension A	Dimension B
4	2	52018-4245	4	1.02 (.040)	5.49 (.216)
4	4	52018-4445	4	3.05 (.120)	4.48 (.176)
6	2	52018-6245	4	1.02 (.040)	5.49 (.216)
6	4	52018-6445	4	3.05 (.120)	4.48 (.176)
6	6	52018-6645	4	5.08 (.200)	3.46 (.136)
8	2	52018-8245	4	1.02 (.040)	6.99 (.275)
8	4	52018-8445	4	3.05 (.120)	5.98 (.235)
8	6	52018-8645	4	5.08 (.200)	4.96 (.195)
8	8	52018-8845	4	7.11 (.280)	3.94 (.155)

Plating: 1.27μm (50μ") min. Gold over Nickel 1.00μm (40μ") min.

FEATURES AND SPECIFICATIONS

molex® **Modular Jack**

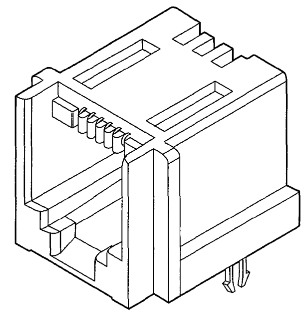
52065
Right Angle with Metal Pegs

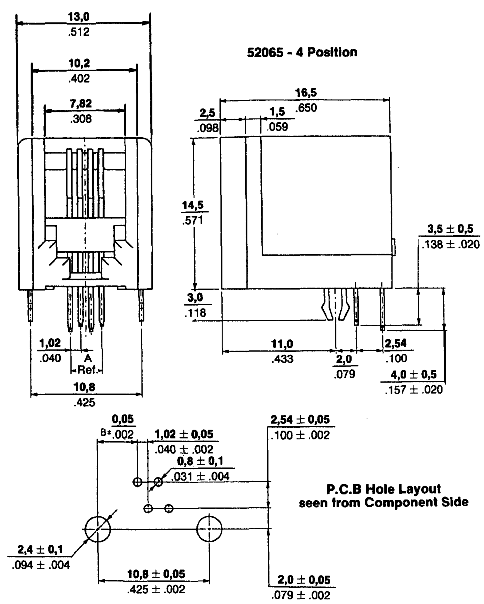
Features and Benefits
- Metal hold-down pegs
- Insert molded
- Industry compatible

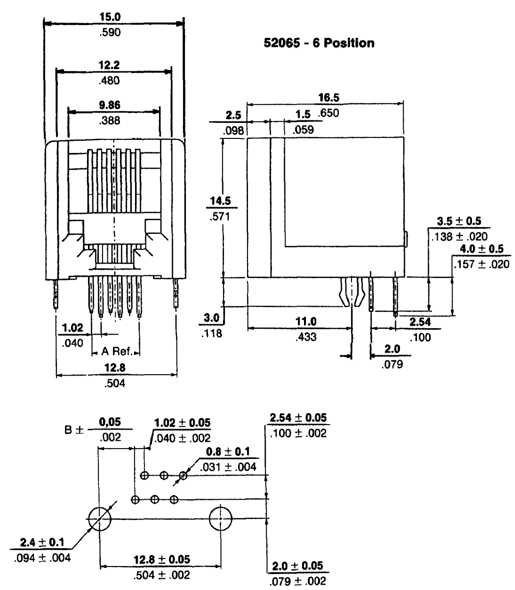
Reference Information
Packaging: Tray
Designed In: Millimeters

Electrical
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Plating No.	Dimension A	Dimension B
4	2	52065-4245	4	1.02 (.040)	4.89 (.192)
4	4	52065-4445	4	3.05 (.120)	3.87 (.152)
6	2	52065-6245	4	1.02 (.040)	5.89 (.232)
6	4	52065-6445	4	3.05 (.120)	4.87 (.192)
6	6	52065-6645	4	5.08 (.200)	3.85 (.152)

Plating: 1.27μm (50μ") min. Gold over Nickel 1.00μm (40μ") min.

FEATURES AND SPECIFICATIONS

Modular Jack

95002

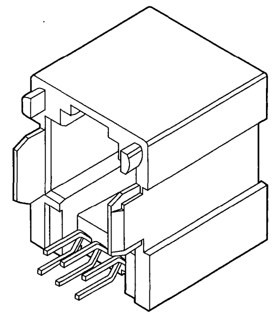
Bottom Entry Low Profile

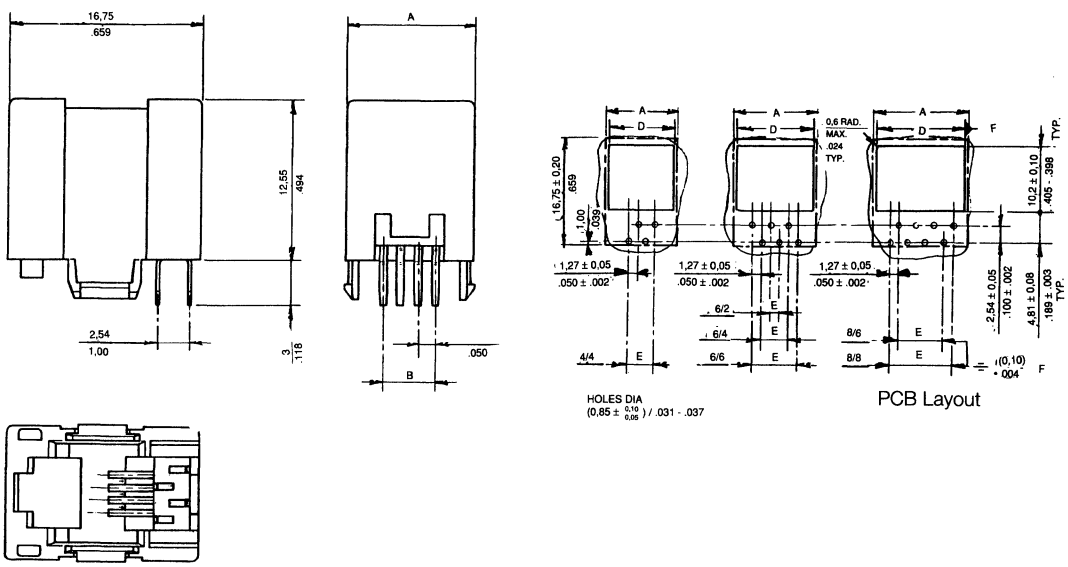
Features and Benefits
- Mates with FCC 68 plug
- Very low profile
- Bottom entry allows space saving in PCB-design

Reference Information
Product Specification: PS-95002-E
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Dimension			
			A	B	D	E
4	4	95002-2441	11.40 (.449)	3.81 (.150)	10.20 (.402)	3.81 (.150)
6	4	95002-2641	13.43 (.529)	3.81 (.150)	12.20 (.480)	3.81 (.150)
6	6	95002-2661	13.43 (.529)	6.35 (.250)	12.20 (.480)	6.35 (.250)
8	8	95002-2881	15.46 (.609)	8.89 (.350)	14.20 (.559)	8.89 (.350)

Plating: Post plate 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

Note: 0.38μm (15μ") and 0.76μm (30μ") Gold plating also available, contact factory

FEATURES AND SPECIFICATIONS

42410
Vertical for .062 PCB

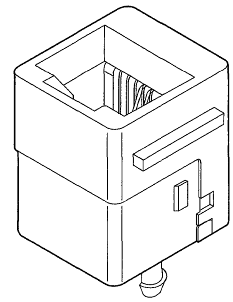
Features and Benefits
- Meets UL 1086 Section 8 Electrical Probe and UL 1863 Section 20 Childs Finger Test
- No exposed leads to meet British Telecom 4000V test
- Contact tips guided within FCC-specified target zone— Positive alignment prevents shorting
- Every jack must pass on-line functional tests, including hi-pot and continuity
- All packaging antistatic treated
- Optional PC clip mount for added mechanical strength

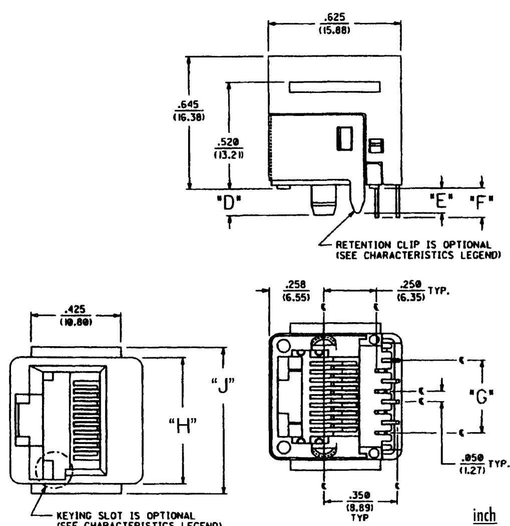
Reference Information
Product Specification: PS-42410
Packaging: Tray
UL File No.: E107635
CSA File No.: LR19980
Mates With: WE Co. and FCC 68 plugs
Designed In: Inches

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 500 cycles min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





42410 SERIES

Please see page 0-22 for PC board layout:

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No. Flush Mount without PC Clip	Flush Mount with PC Clip	Flangeless Mount without PC Clip	Flangeless Mount with PC Clip	Universal Service Order Code	Key Type	Dimension D	E	F	G	H	J
4	2	42410-4312	42410-4324	42410-4314	42410-4326		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	11.43 (.450)	13.97 (.550)
4	4	• 42410-4168	42410-4180	42410-4170	42410-4182		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	11.43 (.450)	13.97 (.550)
6	2	42410-6456	42410-6468	42410-6458	42410-6470		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	13.46 (.530)	16.00 (.630)
6	4	• 42410-6312	42410-6324	• 42410-6314	42410-6326	RJ11/RJ13/RJ14	None	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	13.46 (.530)	16.00 (.630)
6	6	• 42410-6168	42410-6180	• 42410-6170	42410-6182		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	6.25 (.250)	13.46 (.530)	16.00 (.630)
8	2	42410-9176	42410-9188	42410-9178	42410-9190		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	15.49 (.610)	18.03 (.710)
8 Keyed	2	42410-9224	42410-9236	42410-9226	42410-9238		RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	15.49 (.610)	18.03 (.710)
8	4	42410-8888	42410-8900	42410-8890	42410-8902		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	15.49 (.610)	18.03 (.710)
8 Keyed	4	42410-8936	42410-8948	42410-8938	42410-8952		RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	15.49 (.610)	18.03 (.710)
8	6	• 42410-8600	42410-8612	42410-8602	42410-8614		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	6.35 (.250)	15.49 (.610)	18.03 (.710)
8 Keyed	6	• 42410-8648	42410-8660	42410-8650	42410-8662		RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	6.35 (.250)	15.49 (.610)	18.03 (.710)
8	8	• 42410-8312	42410-8324	42410-8314	42410-8326	RJ48	None	3.25 (.128)	3.05 (.120)	3.05 (.120)	8.89 (.350)	15.49 (.610)	18.03 (.710)
8 Keyed	8	• 42410-8360	42410-8372	42410-8362	42410-8374	RJ45	RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	8.89 (.350)	15.49 (.610)	18.03 (.710)

• US Standard Product, available through Molex franchised distributors

Plating: 1.27μm (50μ") min. Nickel overall, 1.27μm (50μ") min. Gold in contact area and 1.27μm (50μ") Tin/Lead on solder tails

Note: Contact factory for .125 PCB jacks

FEATURES AND SPECIFICATIONS

Modular Jack

42878
Low Profile for .062 PCB

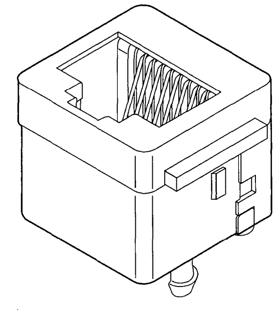
Features and Benefits
- Meets UL 1086 Section 8 Electrical Probe and UL 1863 Section 20 Childs Finger Test
- No exposed leads to meet British Telecom 4000V test
- Contact tips guided within FCC-specified target zone—Positive alignment prevents shorting
- Every jack must pass on-line functional tests, including hi-pot and continuity
- All packaging antistatic treated
- Optional PC clip mount for added mechanical strength

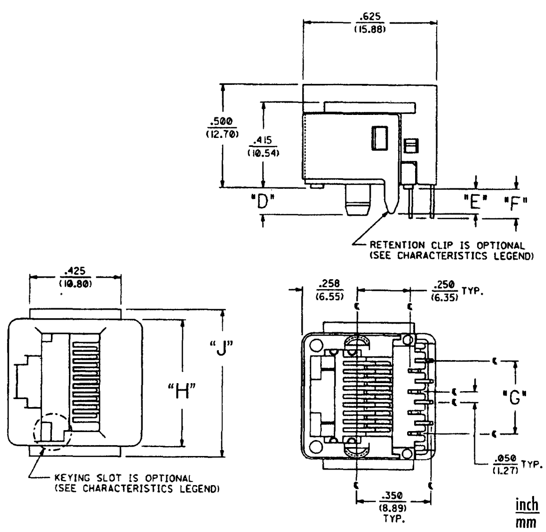
Reference Information
Product Specification: PS-42410
Packaging: Tray
UL File No.: E107635
CSA File No.: LR19980
Mates With: WE Co. and FCC 68 plugs
Designed In: Inches

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 500 cycles min.

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





Please see page 0-22 for PC board layouts

Plugs and Jacks

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ORDERING INFORMATION AND DIMENSIONS

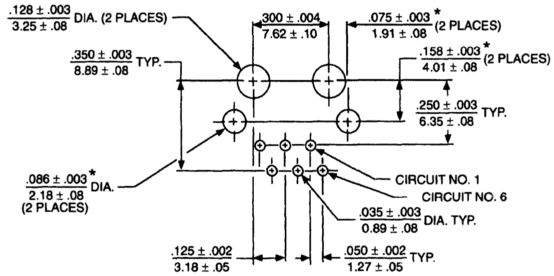
Circuits	Loaded Contacts	Order No.				Universal Service Order Code	Key Type	Dimension					
		Flush Mount without PC Clip	Flush Mount with PC Clip	Flangeless Mount without PC Clip	Flangeless Mount with PC Clip			D	E	F	G	H	J
4	2	42878-4360	42878-4372	42878-4362	42878-4374		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	11.43 (.450)	13.97 (.550)
4	4	• 42878-4216	42878-4228	42878-4218	42878-4230		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	11.43 (.450)	13.97 (.550)
6	2	42878-6504	42878-6516	42878-6506	42878-6518		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	13.46 (.530)	16.00 (.630)
6	4	• 42878-6360	42878-6372	• 42878-6362	42878-6374	RJ11/RJ13/RJ14	None	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	13.46 (.530)	16.00 (.630)
6	6	• 42878-6216	42878-6228	• 42878-6218	42878-6230		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	6.25 (.250)	13.46 (.530)	16.00 (.630)
8	2	42878-9272	42878-9284	42878-9274	42878-9286		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	15.49 (.610)	18.03 (.710)
8 Keyed	2	42878-9320	42878-9332	42878-9322	42878-9334		RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	1.27 (.050)	15.49 (.610)	18.03 (.710)
8	4	42878-8984	42878-8996	42878-8986	42878-8998		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	15.49 (.610)	18.03 (.710)
8 Keyed	4	42878-9032	42878-9044	42878-9034	42878-9046		RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	3.81 (.150)	15.49 (.610)	18.03 (.710)
8	6	• 42878-8696	42878-8708	42878-8698	42878-8710		None	3.25 (.128)	3.05 (.120)	3.05 (.120)	6.25 (.250)	15.49 (.610)	18.03 (.710)
8 Keyed	6	• 42878-8744	42878-8756	42878-8746	42878-8758		RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	6.25 (.250)	15.49 (.610)	18.03 (.710)
8	8	• 42878-8408	42878-8420	42878-8410	42878-8422	RJ48	None	3.25 (.128)	3.05 (.120)	3.05 (.120)	8.89 (.350)	15.49 (.610)	18.03 (.710)
8 Keyed	8	• 42878-8456	42878-8468	42878-8458	42878-8470	RJ45	RJ45	3.25 (.128)	3.05 (.120)	3.05 (.120)	8.89 (.350)	15.49 (.610)	18.03 (.710)

• US Standard Product, available through Molex franchised distributors

Plating: 1.27μm (50μ") min. Nickel overall, 1.27μm (50μ") min. Gold in contact area and 1.27μm (50μ") Tin/Lead on solder tails

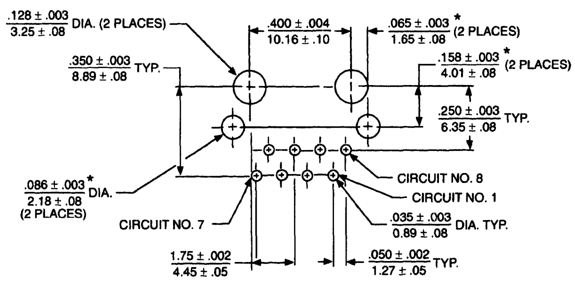
Note: Contact factory for .125 PCB jacks

42410/42878
PC Board Layouts

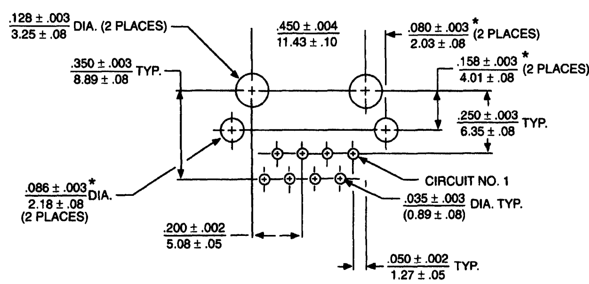


PCB Layout
Size 4

*** For Jacks with P.C. Clip Only**



PCB Layout
Size 6



PCB Layout
Size 8

inch / mm

Plugs and Jacks

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FEATURES AND SPECIFICATIONS

Modular Jack

95022

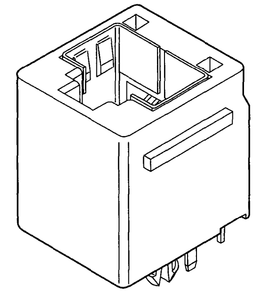
Top Entry Standard Profile

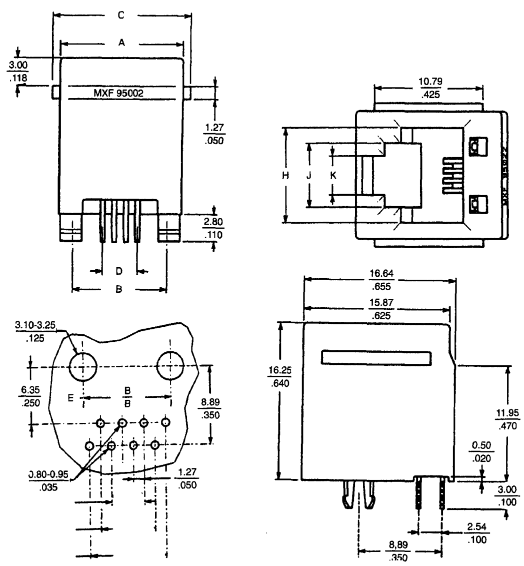
Features and Benefits
- High reliability, square contact
- Industry standard footprint and height

Reference Information
Product Specification: PS-95003-E
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





Plugs and Jacks

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ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Dimension			
			A	B	C	D
4	4	95022-2447	11.18 (.440)	7.62 (.300)	13.60 (.535)	3.81 (.150)
6	4	95022-2647	13.21 (.520)	10.16 (.400)	14.90 (.587)	3.81 (.150)
6	6	95022-2667	13.21 (.520)	10.16 (.400)	14.90 (.587)	6.35 (.250)
8	8	95022-2887	15.24 (.600)	11.43 (.450)	16.90 (.665)	8.89 (.350)

Plating: Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over 1.27µm (50µ") min. Nickel overall

Note: 0.38µm (15µ") and 0.76µm (30µ") Gold plating available, contact factory

FEATURES AND SPECIFICATIONS

molex® Modular Jack

95051

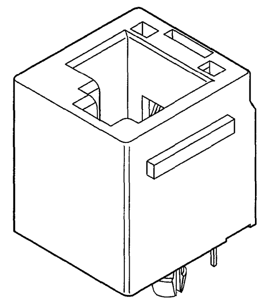
Top Entry with Off-Centered Latch Entry

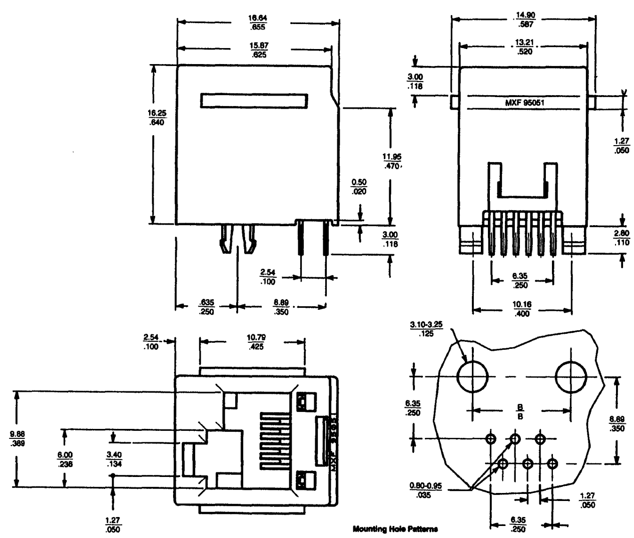
Features and Benefits
- High reliability, square contact
- Industry standard footprint

Reference Information
Product Specification: DEC PS-12-23433-01
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Light gray polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION

Circuits	Loaded Contacts	Order No.
6	6	• 95051-2667

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area, 1.90µ (75µ") min. (90/10) Tin/Lead in tail area both over 1.27µm (50µ") min. Nickel overall

FEATURES AND SPECIFICATIONS

Shielded Modular Jack

95052

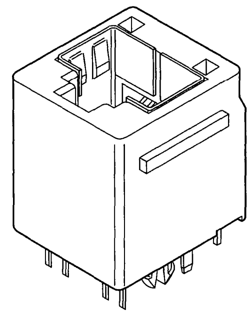
Top Entry Standard Profile

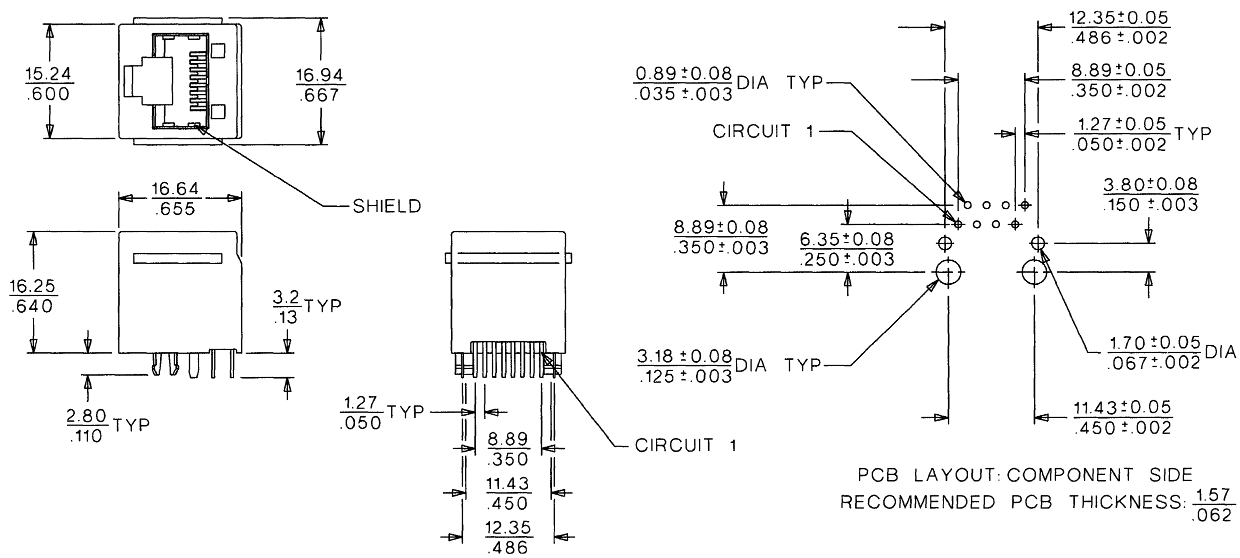
Features and Benefits
- High reliability, square contact
- EMI/RFI protection
- ISDN standard
- Industry standard footprint and height
- Shunt allows signal control and line check

Reference Information
Product Specification: PS-95040
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





Plugs and Jacks

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ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Dimension A	Dimension B	Dimension C	Dimension D	Shunt
8	8	95052-2887	15.24 (.600)	11.43 (.450)	16.94 (.665)	8.89 (.350)	No
8	8	95052-2886	15.24 (.600)	11.43 (.450)	16.94 (.665)	8.89 (.350)	Yes

Plating: Post plate 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

FEATURES AND SPECIFICATIONS

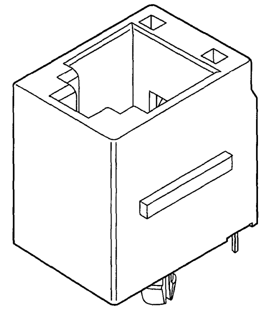
Modular Jack
95063
Top Entry
Bottom-Rib Version

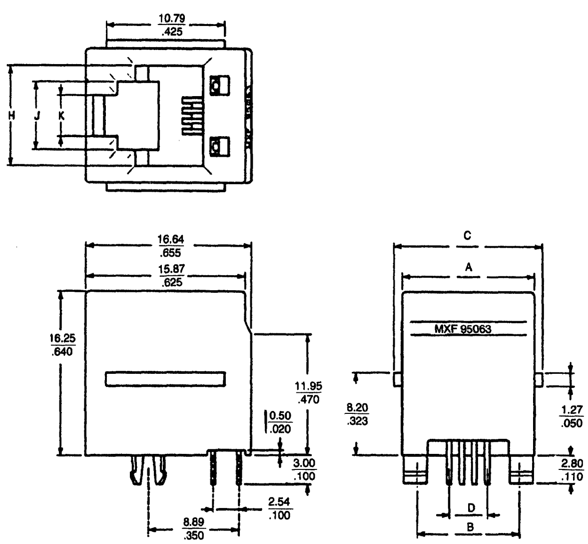
Features and Benefits
- High reliability, square contact
- Industry standard footprint

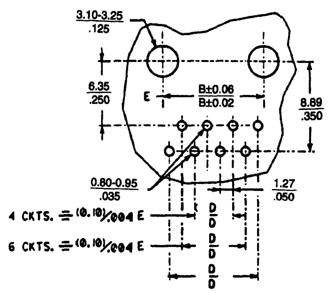
Reference Information
Product Specification: PS-95003-E
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C







Mounting Hole Patterns

ORDERING INFORMATION AND DIMENSIONS

Contact Factory

FEATURES AND SPECIFICATIONS

molex Shielded Modular Jack

95123

Top Entry Standard Profile

Features and Benefits

- Fully shielded connector
- Advanced EMI/RFI protection
- ISDN standard
- Industry standard footprint and height

Reference Information

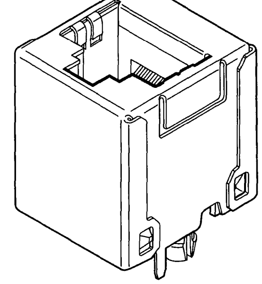
Product Specification: PS-95122
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

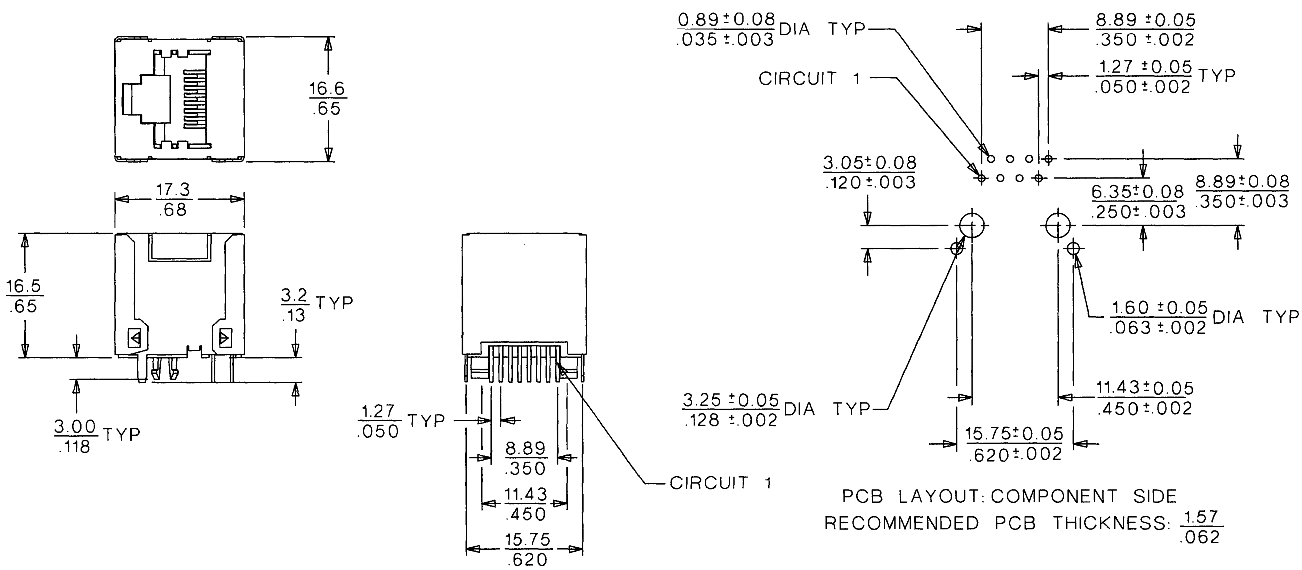
Electrical

Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 20 dB min.

Physical

Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION

Circuits	Loaded Contacts	Order No.	Key	PCB Thickness
8	8	95123-2881	No	1.52 (.059)
8	8	95123-2883	No	1.20 (.047)

Plating: Post plate 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

95003
Top Entry
Small Panel Cutout

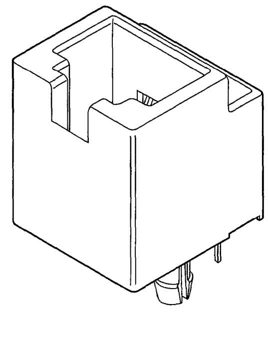
FEATURES AND SPECIFICATIONS

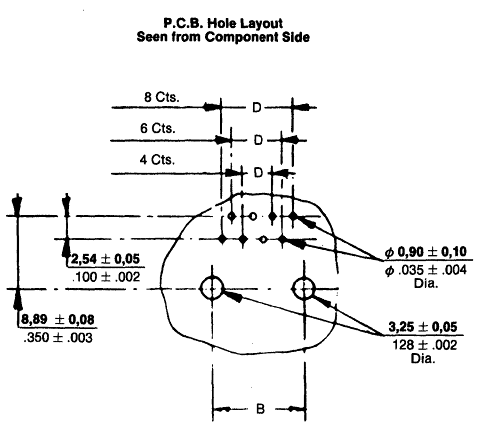
Features and Benefits
- Industry compatible
- Automatic placement on PC boards possible
- Foot patterns identical to industry standard jacks
- High reliability, square contact

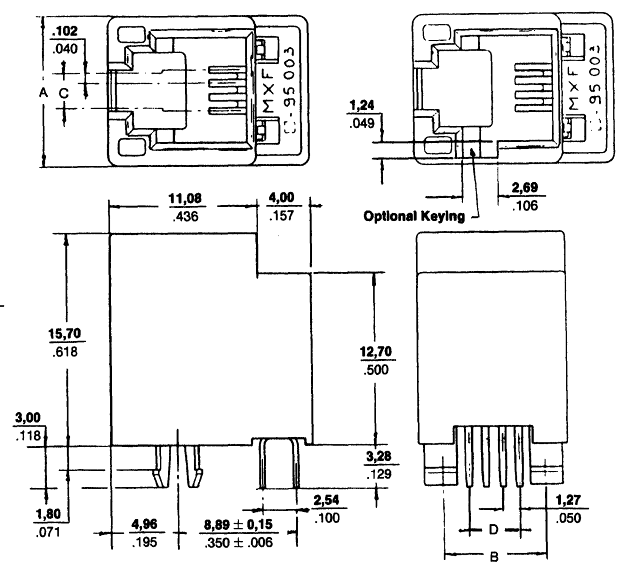
Reference Information
Product Specification: PS-95003-E
Packaging: Tray
UL File No.: 89082
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Key	Dimension A	Dimension B	Dimension C	Dimension D
4	4	• 95003-2441	No	11.18 (.440)	7.62 (.300)	3.05 (.120)	3.81 (.150)
6	4	• 95003-2641	No	13.21 (.520)	10.16 (.400)	3.05 (.120)	3.81 (.150)
6	6	• 95003-2661	No	13.21 (.520)	10.16 (.400)	5.08 (.200)	6.35 (.250)
8	8	• 95003-2881	No	15.24 (.600)	11.43 (.450)	7.11 (.280)	8.89 (.350)
8	8	• 95003-2882	Yes	15.24 (.600)	11.43 (.450)	7.11 (.280)	8.89 (.350)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52μm (50 to 60μ") Gold in contact area, 1.90μm (75μ") min. (90/10) Tin/Lead in tail area both over 1.27μm (50μ") min. Nickel overall

Note: 0.38μm (15μ") and 0.76μm (30μ") Gold plating also available, contact factory

FEATURES AND SPECIFICATIONS

Modular Jack

95003

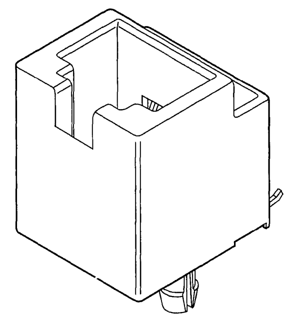
Surface Mount Version Small Panel Cutout

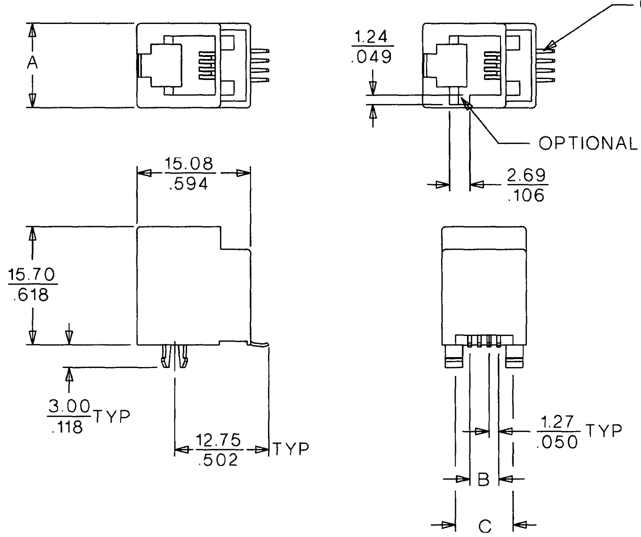
Features and Benefits
- Industry compatible
- Automatic placement on PC boards possible
- Foot patterns identical to industry standard jacks
- High reliability, square contact

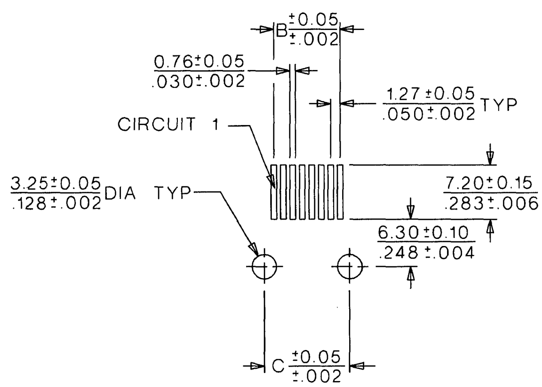
Reference Information
Product Specification: PS-95003-E
Packaging: Tube
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Gray polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C







PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 1.57 / .062

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.	Key	Dimension			
				A	B	C	D
4	4	• 95003-6441	No	11.18 (.440)	7.62 (.300)	3.05 (.120)	3.81 (.150)
6	4	• 95003-6641	No	13.21 (.520)	10.16 (.400)	3.05 (.120)	3.81 (.150)
6	6	• 95003-6661	No	13.21 (.520)	10.16 (.400)	5.08 (.200)	6.35 (.250)
8	8	• 95003-6881	No	15.24 (.600)	11.43 (.450)	7.11 (.280)	8.89 (.350)

• US Standard Product, available through Molex franchised distributors

Plating: Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over 1.27µm (50µ") min. Nickel overall

Note: 0.38µm (15µ") and 0.76µm (30µ") Gold plating also available, contact factory

Plugs and Jacks

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95033
Top Entry
Shunt Version

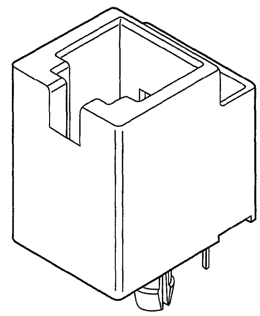
FEATURES AND SPECIFICATIONS

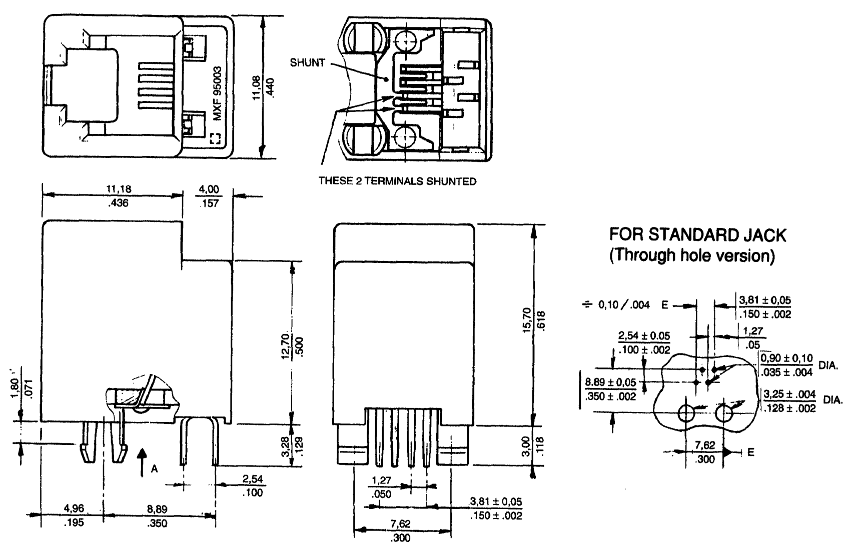
Features and Benefits
- Industry compatible
- Automatic placement on PC boards possible
- Foot patterns identical to industry standard jacks
- High reliability, square contact
- Shunt allows signal control and line check

Reference Information
Product Specification: PS-95003-E
Packaging: Tray
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





ORDERING INFORMATION

Contact Factory

Plugs and Jacks
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90133
Low Profile
IDT

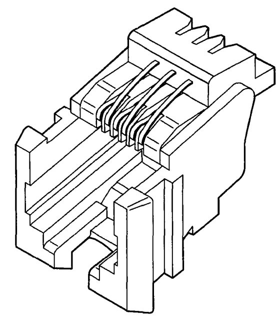
FEATURES AND SPECIFICATIONS

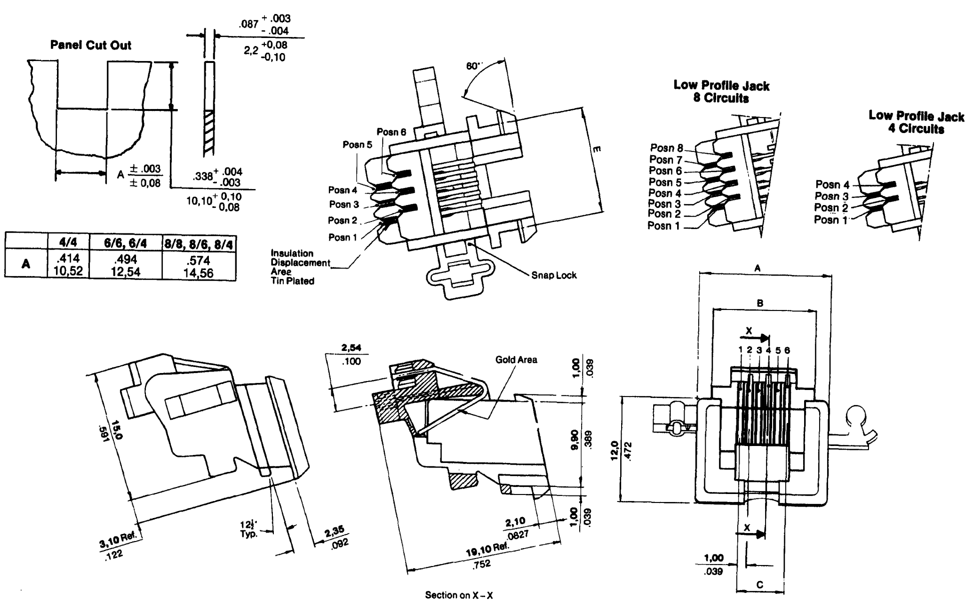
Features and Benefits
- 1-piece construction
- Low profile—recommended for applications in handsets
- Front part may be adapted to customer specifications
- Active part of contact Gold-plated Tin in IDT area
- Available in loose or strip form for high-volume applications
- Uses insulation displacement technology for mass termination

Reference Information
Product Specification: PSX90133-E
Packaging: Strip mounted or loose piece
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.5A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Black polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -55 to +105°C
Wire: Intended to terminate 26 AWG stranded topcoated wire and solid wire or 24 AWG stranded wire





ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.		Dimension			
		Strip Mounted	Loose Piece	A	B	C	E
4	4	90133-0001	90133-7001	13.15 (.518)	10.20 (.402)	3.05 (.120)	10.35 (.407)
6	6	90133-0002	90133-7002	15.20 (.600)	12.20 (.480)	5.08 (.200)	12.35 (.486)
6	4	90133-0003	90133-7003	15.20 (.600)	12.20 (.480)	5.08 (.200)	12.35 (.486)
6	2	90133-0004	90133-7004	15.20 (.600)	12.20 (.480)	5.08 (.200)	12.35 (.486)
8	8	90133-0006	90133-7006	17.22 (.678)	14.22 (.560)	7.11 (.280)	14.38 (.566)

Plating: ID area plated with 1.27μm (50μ") min. electro Tin over 1.27μm (50μ") min. Nickel overall. Area of contact with retainer 1.27μm (50μ") min. Gold in contact area over 1.27μm (50μ") min. Nickel overall.

Plugs and Jacks
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FEATURES AND SPECIFICATIONS

Modular Jack

90319

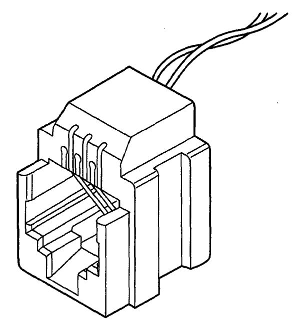
623K Type

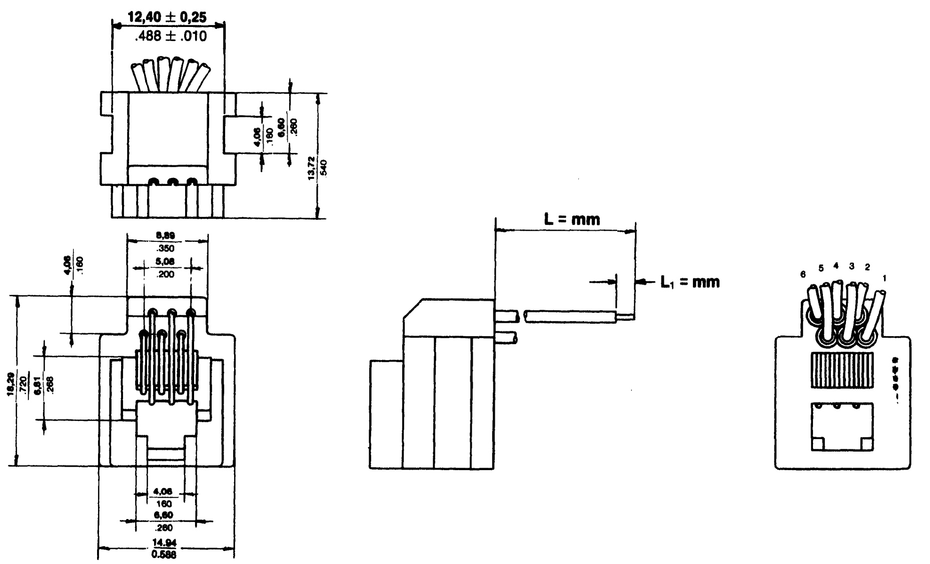
Features and Benefits
- Conforms to 623K industry standard
- Available with 2, 4 or 6 positions loaded
- Delivered with wires pre-assembled to housing
- UL 1863 approved

Reference Information
Product Specification: PS-90319
Packaging: Bag
UL File No.: E107635(N)
CSA File No.: 19880
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V DC rms
Insulation Resistance: 500 MΩ min.

Physical
Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C
Wire: 26 AWG OS-1





Plugs and Jacks

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ORDERING INFORMATION AND DIMENSIONS

Order No.	Plating No.	Length L=mm	Strip Length L_1=mm	Color of Circuits 1 to 6	Color of Jack
90319-0001	1	80 (3.15)	10 (.394)	(4) Void, Yellow, Green, Red, Black, Void	Gray
90319-0033	2	80 (3.15)	10 (.394)	(6) Blue, Black, Red, Green, Yellow, White	Gray
90319-0022	3	80 (3.15)	10 (.394)	(2) Void, Void, Green, Red, Void, Void	Gray

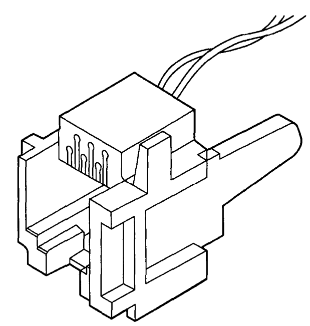
Plating No. 1: 1.27µm (50µ") Gold over 1.27µ (50µ") Nickel
Plating No. 2: 0.76µm (30µ") Gold over 1.27µ (50µ") Nickel
Plating No. 3: 0.27µm (5µ") min. Gold over 1.27µm (50µ") Nickel
Other versions are available, contact factory

FEATURES AND SPECIFICATIONS

Modular Jack

96701

623T Type

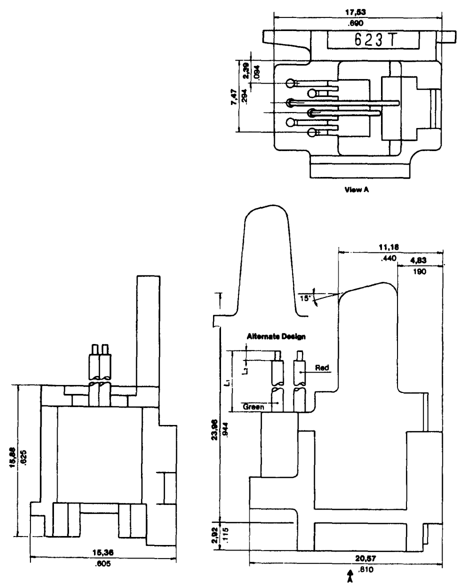


Features and Benefits
- Conforms to 623T industry standard
- Available with 2, 4 or 6 positions loaded
- Delivered with wires pre-assembled to housing
- Customer-specified wire lengths and colors available
- UL 1863 approved

Reference Information
Product Specification: PS-90319
Packaging: Bag
UL File No.: E107635(N)
CSA File No.: 19880
Mates With: FCC 68 plugs
Designed In: Inches

Electrical
Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V DC rms
Insulation Resistance: 500 MΩ min.

Physical
Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C
Wire: 26 AWG OS-1



ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Color	L_1=mm	L_2=mm
96701-0001	Red	186.00 (7.323)	5.50 (.216)
	Green	186.00 (7.323)	5.50 (.216)

Plating: 1.27µm (50µ") Gold over 2.54µm (100µ") Nickel; other platings available, contact factory
Other versions available, contact factory

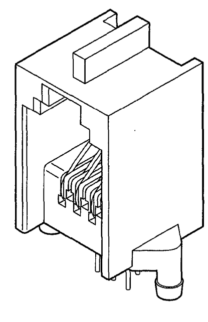
Modular Jack
90332
PC Solder Tail
616/623 Type

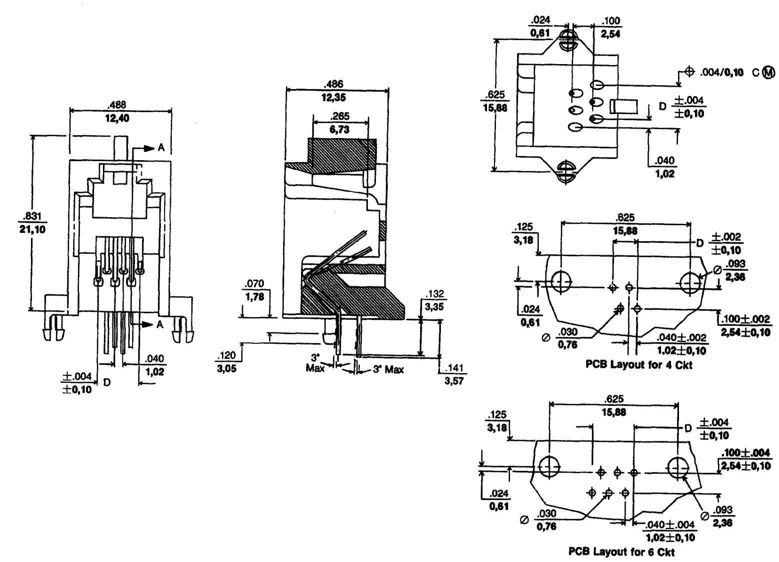
Features and Benefits
- Industry compatible
- Improved locking peg provides more stable PCB retention and easier mounting

Reference Information
Product Specification: PS-90332
Packaging: Tray
CSA File No.: 19980
Mates With: FCC 68 plugs
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 500 MΩ min.

Physical
Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C





inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.		Dimension D
		Plating 1	Plating 2	
4	4	90332-1040	90332-1041	3.05 (.120)
6	4	90332-1046	90332-1047	5.10 (.201)
6	6	90332-1052	90332-1053	5.10 (.201)

Plating No. 1: 0.38μm (15μ") Gold in contact area
Plating No. 2: 0.76μm (30μ)" Gold in contact area
Note: All have underplating of 1.90μm (75μ") min. Tin/Lead over 2.54μm (100μ") min. Nickel overall

FEATURES AND SPECIFICATIONS

molex® Modular Jack

96702

616L Type

Features and Benefits

- Conforms to 616L industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- UL 1863 approved

Reference Information

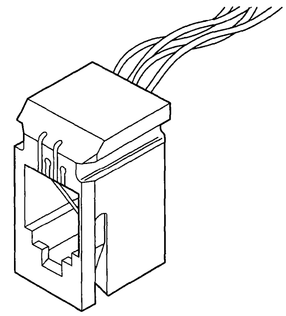
Product Specification: PS-90319
Packaging: Bag
UL File No.: E107635(N)
CSA File No.: 19880
Mates With: FCC 68 plugs
Designed In: Inches

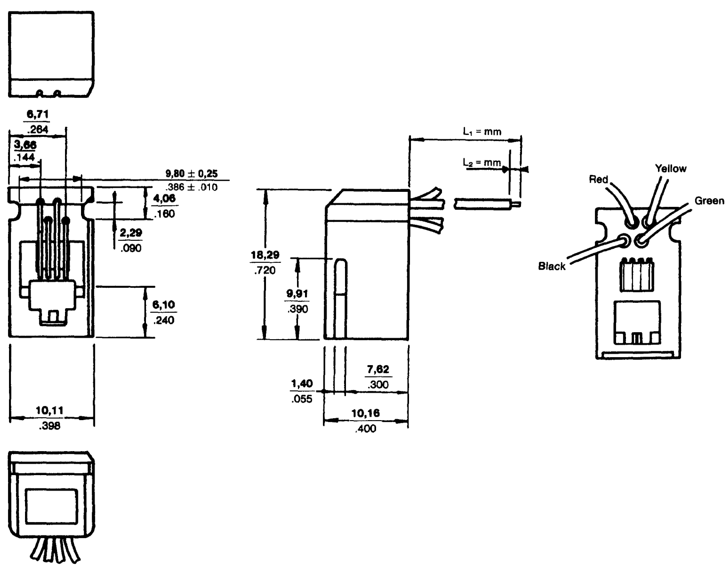
Electrical

Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V DC rms
Insulation Resistance: 500 MΩ min.

Physical

Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C
Wire: 26 AWG OS-1





ORDERING INFORMATION AND DIMENSIONS

Order No.	Wire Color	L_1=mm	L_2=mm
96702-0001	Yellow	178.00 (7.008)	3.18 (.125)
	Green	288.00 (11.339)	5.00 (.197)
	Red	186.00 (7.323)	5.00 (.197)
	Black	178.00 (7.008)	3.18 (.125)

Plating: 1.27μm (50μ") Gold over 2.54μm (100μ") Nickel; other platings available, contact factory
Other versions are available, contact factory

FEATURES AND SPECIFICATIONS

Modular Jack

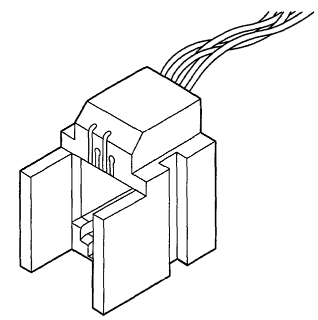
96703
616M Type

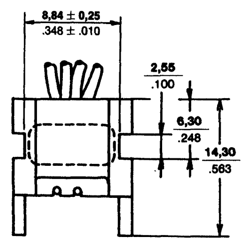
Features and Benefits
- Conforms to 616M industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- UL 1863 approved

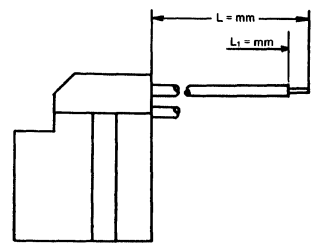
Reference Information
Product Specification: PS-90319
Packaging: Bag
UL File No.: E107635(N)
CSA File No.: 19880
Mates With: FCC 68 plugs
Designed In: Millimeters

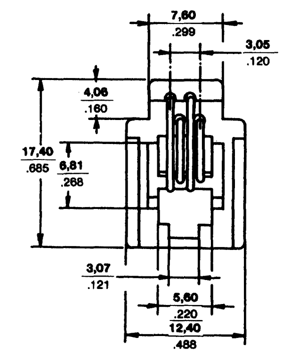
Electrical
Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V DC rms
Insulation Resistance: 500 MΩ min.

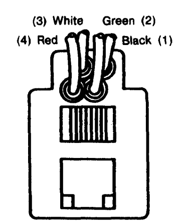
Physical
Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C
Wire: 26 AWG OS-1











ORDERING INFORMATION AND DIMENSIONS

Order No.	No. of Wires	Wire Color	L=mm	L_1=mm
96703-0001	4	(1) Black (2) Green (3) White (4) Red	75.00 (2.952)	10.00 (.394)
96703-0002	2	(1) Void (2) Green (3) White (4) Void	75.00 (2.952)	10.00 (.394)
96703-0003	4	(1) Black (2) Green (3) White (4) Red	100.00 (3.940)	5.00 (.197)
96703-0004	2	(1) Void (2) Green (3) Red (4) Void	80.00 (3.150)	2.50 (.098)
96703-0005	2	(1) Void (2) Green (3) Red (4) Void	305.00 (12.000)	2.50 (.098)

Plating: 1.27μm (50μ") Gold over 1.27μm (50μ") Nickel; other platings available, contact factory
Other versions are available, contact factory

FEATURES AND SPECIFICATIONS

Modular Jack

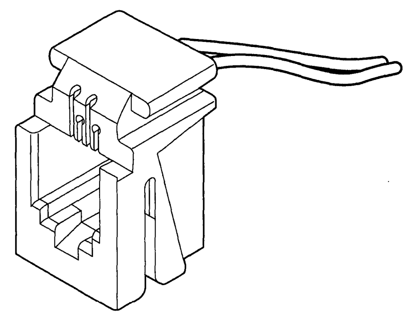
87032
616P Type

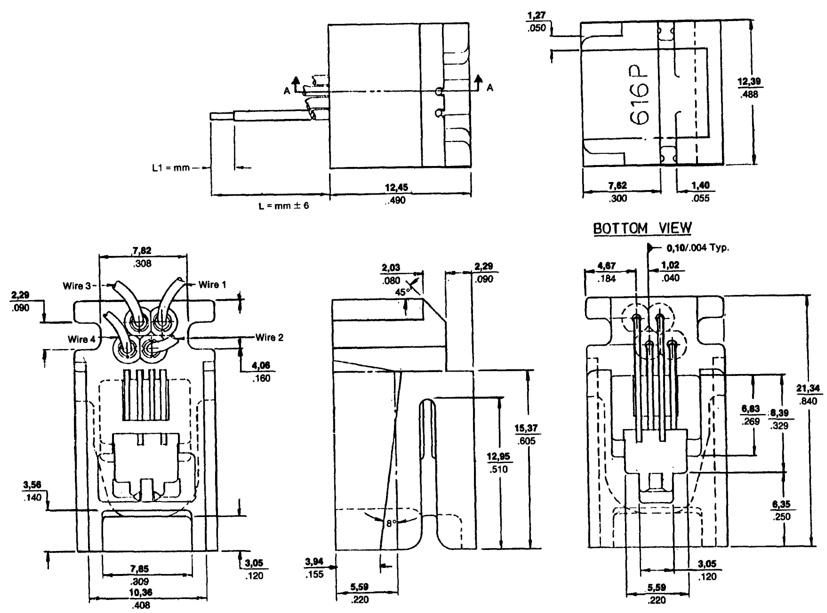
Features and Benefits
- Conforms to 616P-industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- UL 1863 approved

Reference Information
Product Specification: PS-90319
Packaging: Bag
UL File No.: E107635(N)
CSA File No.: 19880
Mates With: FCC 68 plugs
Designed In: Inches

Electrical
Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V DC rms
Insulation Resistance: 500 MΩ min.

Physical
Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Temperature: -40 to +80°C
Wire: 26 AWG OS-1





ORDERING INFORMATION AND DIMENSIONS

Order No.	No. of Wires	Wire 1	Wire 2	Wire 3	Wire 4	Wire Length		Color of Jack
						L=mm	L_1=mm	
87032-0001	4	Black			Red	245.00 (9.646)	5.00 (.196)	Gray
			Green	White		92.00 (3.622)	5.00 (.196)	

Plating: Post plate 1.27μm (50μ") min. Gold in contact area, 1.27μm (50μ") min. Tin/Lead in tail area over 1.27μm (50μ") min. Nickel overall

Other versions are available, contact factory

molex® Modular Jack

87033

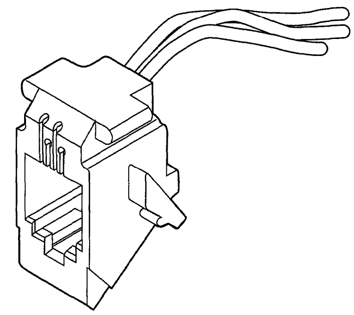
616W Type

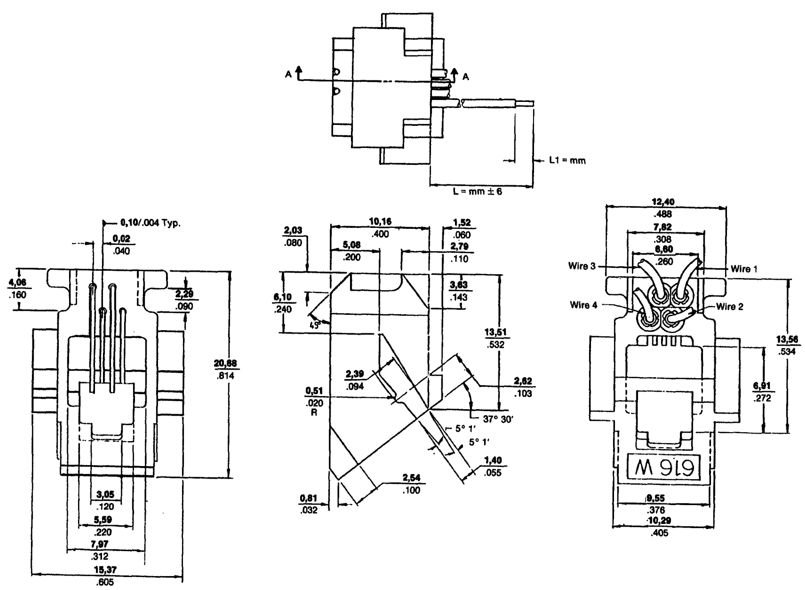
Features and Benefits
- Conforms to 616W industry standard
- Available with 2 or 4 postions loaded
- Delivered with wires pre-assembled to housing
- UL 1863 approved

Reference Information
Product Specification: PS-90319
Packaging: Bag
UL File No.: E107635(N)
CSA File No.: 19880
Mates With: FCC 68 plugs
Designed In: Inches

Electrical
Voltage: 125V
Current: 1.2A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V DC rms
Insulation Resistance: 500 MΩ

Physical
Housing: Gray ABS, UL 94V-0
Contact: Phosphor Bronze
Plating: See Table
Wire: 26 AWG OS-1





ORDERING INFORMATION AND DIMENSIONS

Order No.	No. of Wires	Wire 1	Wire 2	Wire 3	Wire 4	Wire Length		Color of Jack
						L=mm	L_1=mm	
87033-0001	4	Red	White	Green	Black	205.00 (8.071)	3.20 (.126)	Gray

Plating: Post plate 1.27µm (50µ") min. Gold in contact area, 1.27µm (50µ") min. Tin/Lead in tail area over 1.27µm (50µ") min. Nickel overall

Other versions are available, contact factory

FEATURES AND SPECIFICATIONS

Telecom Splice
Splice Connector

36065
QSS — Quick Seal Splice

Features and Benefits

- 2 IDT connections per wire
- "U"-shaped IDT prevents overdistortion of large conductors while ensuring sufficient deformation of small conductors
- Silicone sealant prevents moisture from entering ports and damaging connection
- Natural 6/6 nylon permits visual examination before and after closing
- Accepts all solid conductors from 0.40 to 0.63mm dia. (22 to 26 AWG). Accepts a maximum insulation OD of 1.30mm (.051").
- Greaseless version recommended for low-humidity applications only

Reference Information

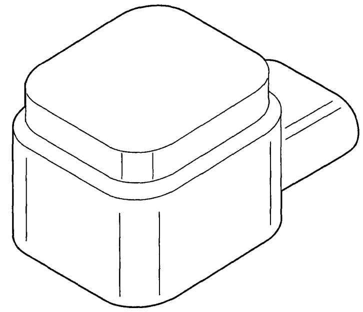
Product Specification: PS-36065
UL File No.: E134962
Designed In: Millimeters

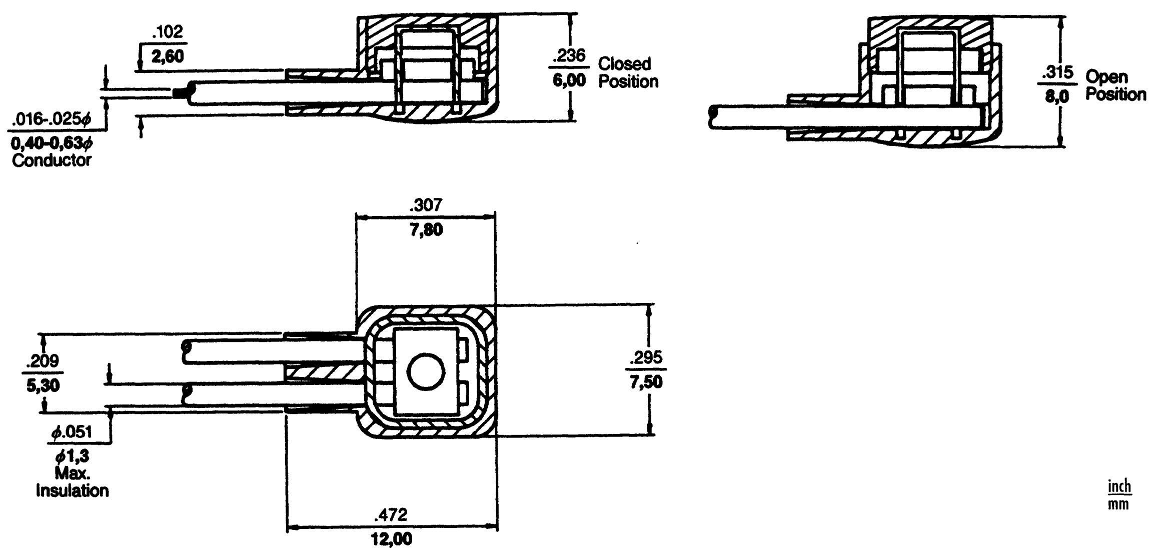
Electrical

Voltage: 250V
Current: 2.0A
Contact Resistance: 5mΩ max.
Dielectric Withstanding Voltage: 2000V
Insulation Resistance: 100 GΩ min.

Physical

Insulator: 6/6 nylon, UL 94V-2
Contact: 70 Copper/30 Zinc cartridge Brass
Plating: Tin over Copper
Sealing Compound: Polymeric grease, drop point 75°C
Temperature: -30 to +75°C





Plugs and Jacks

O

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	AWG	Description
2	36065-2000	22-26	With Grease
2	36065-3000	22-26	Without Grease

FEATURES

- For low volume, prototype and repairs
- Ratchet will not open until crimp action is completed
- Die sets can be changed to accommodate different circuit sizes

90075 Plug Hand Tool

ORDERING INFORMATION

Description	Order No.	Plug	Plug Size and No. of Contacts
W.E. Plug, N.K.	69008-1120	90075-0003	4/4
W.E. Plug, N.K.	69008-1120	90075-0027	4/4
W.E. Plug, N.K.	69008-1121	90075-0011	6/4
W.E. Plug, Key	69008-1121	90075-0035	6/4
W.E. Plug, Key	69008-1121	90075-0012	6/4
W.E. Plug, Key	69008-1121	90075-0036	6/4
W.E. Plug, N.K.	69008-1122	90075-0007	6/6
W.E. Plug, N.K.	69008-1122	90075-0031	6/6
W.E. Plug, Key	69008-1122	90075-0008	6/6
W.E. Plug, Key	69008-1122	90075-0032	6/6
W.E. Plug, N.K.	69008-1123	90075-0136/0145	8/6
W.E. Plug, N.K.	69008-1124	90075-0132/0141	8/8

This range of hand tools is for the application of loose part plugs only

FEATURES

- For low volume, prototype and repairs
- Ratchet will not open until crimp action is completed
- Die sets can be changed to accommodate different circuit sizes

95043 Shielded Plug Hand Tool

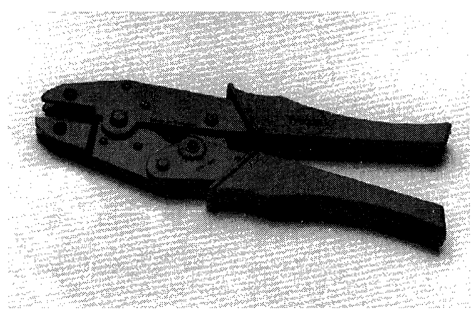
ORDERING INFORMATION

Description	Order No.	Plug
Shielded 5.40mm Cable	69008-1100	95043-2881
Shielded 6.00mm Cable	69008-1104	95043-5881

FEATURES

- For low volume, prototype and repairs
- Ratchet will not open until crimp action is completed
- Die sets can be changed to accommodate different circuit sizes

87031 Plug Hand Tool



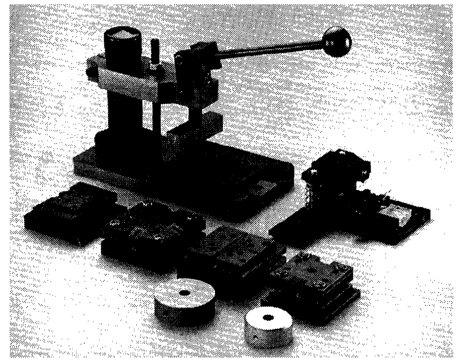
ORDERING INFORMATION

Circuits	Order No.		Plug
	Tool and Dies	Dies Only	
4/4	11-32-4790	11-32-4767	87031-0412
6/2	11-32-4795	11-32-4768	87031-0614
6/4	11-32-4795	11-32-4768	87031-0616
6/6	11-32-4791	11-32-4796	87031-0618

Preferred Version in Europe—Not Available in the US

Circuits	Order No.	Plug
4/4	69008-1110	87031
6/4	69008-1113	87031
6/6	69008-1114	87031

90075 and 90133 Manual Press and Fixtures MB-10 Series



ORDERING INFORMATION

Available only in Europe

Description	Order No.
Manual Press Only	69020-0660

Description	Order No.			Plug	Plug Size and No. of Contacts
	Fixture with Tooling	Fixture Only	Tool Kit		
W.E. Plug, N.K.*	69020-0500			90075-0003	4/4
W.E. Plug, N.K.*	69020-0500			90075-0027	4/4
W.E. Plug, N.K.*	69020-0500			90075-0011	6/4
W.E. Plug, Key*	69020-0500			90075-0035	6/4
W.E. Plug, Key*	69020-0500			90075-0012	6/4
W.E. Plug, Key*	69020-0500			90075-0036	6/4
W.E. Plug, N.K.*	69020-0500			90075-0007	6/6
W.E. Plug, N.K.*	69020-0500			90075-0031	6/6
W.E. Plug, Key*	69020-0500			90075-0008	6/6
W.E. Plug, Key*	69020-0500			90075-0032	6/6
W.E. Plug, N.K.*	69020-0140			90075-0128	8/6 S. Body
W.E. Plug, N.K.*	69020-0140			90075-0136	8/6 S. Body
W.E. Plug, N.K.*	69020-0140			90075-0145	8/6 S. Body
W.E. Plug, N.K.*	69020-0140			90075-0124	8/8 S. Body
W.E. Plug, N.K.*	69020-0140			90075-0132	8/8 S. Body
W.E. Plug, N.K.*	69020-0140			90075-0141	8/8 S. Body
Low Profile Jack	69020-0083	69020-0250	69020-0081	90133-0001	4/4
Low Profile Jack	69020-0084	69020-0250	69020-0082	90133-0002	6/6
Low Profile Jack	69020-0098	69020-0250	69020-0097	90133-0003	6/4
Low Profile Jack	69020-0105	69020-0250	69020-0102	90133-0006	8/6
Low Profile Jack	69020-0104	69020-0250	69020-0099	90133-0007	8/8

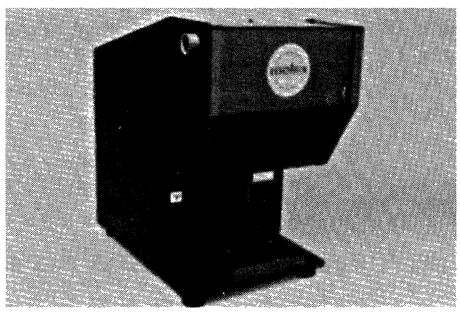
* These are terminated as loose parts only

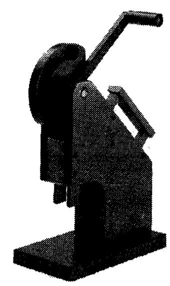
Available Primarily in the US

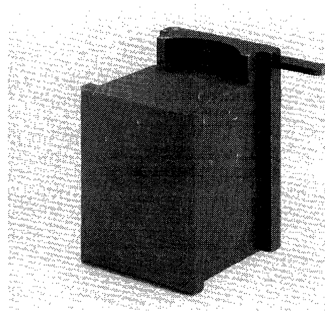
90075 Manual and Electric Presses

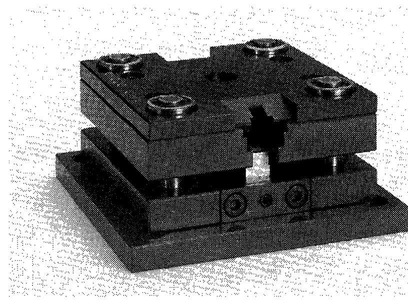
FEATURES

- Modular
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle









ORDERING INFORMATION

Description	Order No.
Manual Press	11-31-6356
Electric Press	11-31-9639

Description	Order No.			Plug	Plug Size and No. of Contacts
	Press Assembly†	Fixture Only	Die Only		
W.E. Plug, N.K.*	11-20-1273	11-21-9933	11-28-0225	90075-0003	4/4
W.E. Plug, N.K.*	11-20-1273	11-21-9933	11-28-0225	90075-0027	4/4
W.E. Plug, N.K.*	11-20-1273	11-21-9933	11-28-0225	90075-0011	6/4
W.E. Plug, N.K.*	11-20-1273	11-21-9933	11-28-0225	90075-0035	6/4
W.E. Plug, Key*	11-20-1273	11-21-9933	11-28-0225	90075-0012	6/4
W.E. Plug, Key*	11-20-1273	11-21-9933	11-28-0225	90075-0036	6/4
W.E. Plug, N.K.*	11-20-1273	11-21-9933	11-28-0225	90075-0007	6/6
W.E. Plug, N.K.*	11-20-1273	11-21-9933	11-28-0225	90075-0031	6/6
W.E. Plug, Key*	11-20-1273	11-21-9933	11-28-0225	90075-0008	6/6
W.E. Plug, Key*	11-20-1273	11-21-9933	11-28-0225	90075-0032	6/6
W.E. Plug, N.K.*	11-20-1274	11-21-9933	69020-0140	90075-0136	8/6 S. Body
W.E. Plug, N.K.*	11-20-1274	11-21-9933	69020-0140	90075-0145	8/6 S. Body
W.E. Plug, N.K.*	11-20-1274	11-21-9933	69020-0140	90075-0132	8/8 S. Body
W.E. Plug, N.K.*	11-20-1274	11-21-9933	69020-0140	90075-0141	8/8 S. Body

* These are terminated as loose parts only
† The press assembly includes an arbor press, fixture and die
Note: For more information reference section "W"

87031 Manual Press

FEATURES

Available Primarily in the US

- Modular
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle

ORDERING INFORMATION

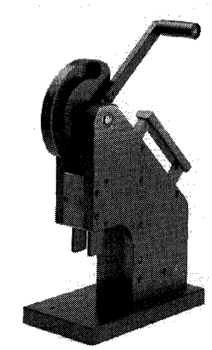
Description	Order No.
Manual Press	11-31-6356
Electric Press	11-31-9639

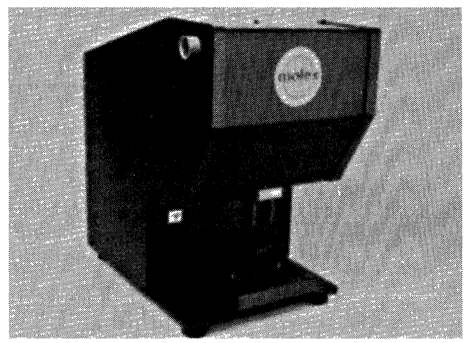
Order No.			Plug	Plug Size and No. of Contacts
Press Assembly†	Fixture Only	Die Only		
11-20-1270	11-31-7559	11-32-4767	87031-0413	4/4*
11-20-1270	11-31-7559	11-32-4767	87031-0423	4/4*
11-20-1270	11-31-7559	11-32-4767	87031-0433	4/4*
11-20-1272	11-31-7559	11-32-4796	87031-0615	6/2*
11-20-1272	11-31-7559	11-32-4796	87031-0625	6/2*
11-20-1272	11-31-7559	11-32-4796	87031-0635	6/2*
11-20-1272	11-31-7559	11-32-4796	87031-0617	6/4*
11-20-1272	11-31-7559	11-32-4796	87031-0627	6/4*
11-20-1272	11-31-7559	11-32-4796	87031-0637	6/4*
11-20-1271	11-31-7559	11-32-4768	87031-0619	6/6*
11-20-1271	11-31-7559	11-32-4768	87031-0629	6/6*
11-20-1271	11-31-7559	11-32-4768	87031-0639	6/6*

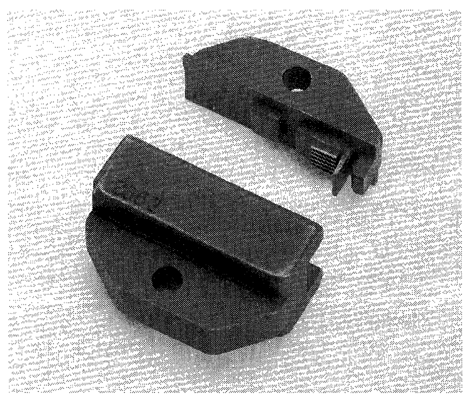
* These are terminated as loose parts only

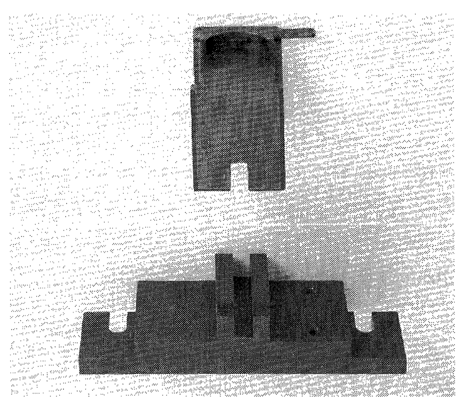
† The press assembly includes an arbor press, fixture and die

Note: For more information reference section "W"









Terminator Dies and Assemblies for 90075 Plugs

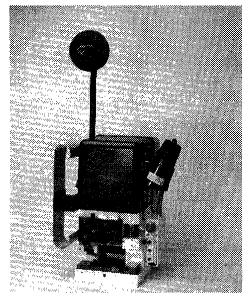
ORDERING INFORMATION

Available only in Europe

Description	Order No.
European TM-42 Press	69002-5000

Description	Order No.			Plug	Plug Size and No. of Contacts
	Fixture with Tooling	Fixture Only	Tool Kit		
W.E. Plug, N.K.*	69017-0087	69020-0010	69020-0088	90075-0001	4/4
W.E. Plug, N.K.*	69017-0087	69020-0010	69020-0088	90075-0025	4/4
W.E. Plug, N.K.*	69017-0087	69020-0010	69020-0088	90075-0049	4/3
W.E. Plug, N.K.*	69017-0087	69020-0010	69020-0088	90075-0053	4/3
W.E. Plug, N.K.*	69020-0069	69020-0010	69020-0067	90075-0057	6/2
W.E. Plug, Key*	69020-0065	69020-0010	69020-0059	90075-0058	6/2
W.E. Plug, N.K.*	69020-0069	69020-0010	69020-0067	90075-0061	6/3
W.E. Plug, Key*	69020-0065	69020-0010	69020-0059	90075-0062	6/3
W.E. Plug, N.K.*	69020-0069	69020-0010	69020-0067	90075-0009	6/4
W.E. Plug, N.K.*	69020-0065	69020-0010	69020-0059	90075-0033	6/4
W.E. Plug, Key*	69020-0065	69020-0010	69020-0059	90075-0010	6/4
W.E. Plug, Key*	69020-0065	69020-0010	69020-0059	90075-0034	6/4
W.E. Plug, N.K.*	69020-0068	69020-0010	69020-0066	90075-0005	6/6
W.E. Plug, N.K.*	69020-0068	69020-0010	69020-0066	90075-0029	6/6
W.E. Plug, Key*	69020-0060	69020-0010	69020-0058	90075-0006	6/6
W.E. Plug, Key*	69020-0060	69020-0010	69020-0058	90075-0030	6/6
W.E. Plug, N.K.*	69020-0096	69020-0010	69020-0044	90075-0126	8/6 S. Body
W.E. Plug, N.K.*	69020-0096	69020-0010	69020-0044	90075-0134	8/6 S. Body
W.E. Plug, N.K.*	69020-0096	69020-0010	69020-0044	90075-0143	8/6 S. Body
W.E. Plug, N.K.*	69020-0095	69020-0010	69020-0050	90075-0122	8/8 S. Body
W.E. Plug, N.K.*	69020-0095	69020-0010	69020-0050	90075-0130	8/8 S. Body
W.E. Plug, N.K.*	69020-0095	69020-0010	69020-0050	90075-0139	8/8 S. Body

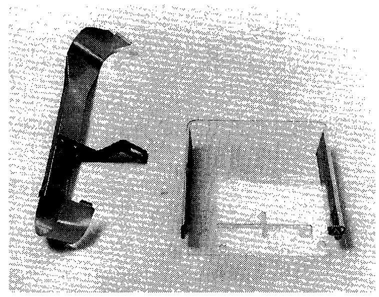
* The above die units apply to chain feed products only



FEATURES

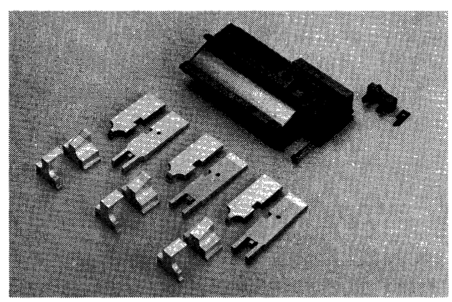
Preferred Version in the US

- For medium to high volume needs
- Plugs are loaded from a reel and require no handling
- Quick changeover from one terminator to another



ORDERING INFORMATION

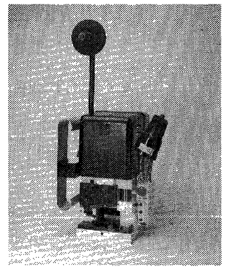
Description	Order No.
US TM-42 Press	69002-5001

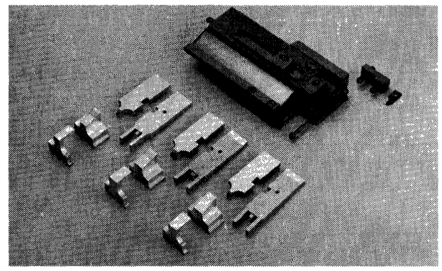


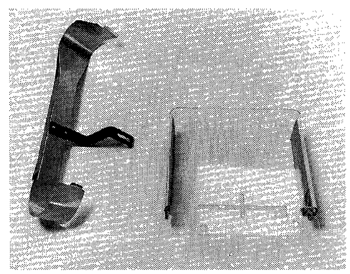
Description	Order No.			Plug	Plug Size and No. of Contacts
	Press Assembly‡	Die Only	Accessory Kit Only		
W.E. Plug, N.K.*	†	†	11-21-9964	90075-0001	4/4
W.E. Plug, N.K.*	†	†	11-21-9964	90075-0025	4/4
W.E. Plug, N.K.*	†	†	11-21-9964	90075-0009	6/4
W.E. Plug, N.K.*	†	†	11-21-9964	90075-0033	6/4
W.E. Plug, Key*	†	†	11-21-9964	90075-0010	6/4
W.E. Plug, Key*	†	†	11-21-9964	90075-0034	6/4
W.E. Plug, N.K.*	†	†	11-21-9964	90075-0005	6/6
W.E. Plug, N.K.*	†	†	11-21-9964	90075-0029	6/6
W.E. Plug, Key*	†	†	11-21-9964	90075-0006	6/6
W.E. Plug, Key*	†	†	11-21-9964	90075-0030	6/6
W.E. Plug, N.K.*	11-04-0720	11-20-1259	11-21-9964	90075-0134	8/6 S. Body
W.E. Plug, N.K.*	11-04-0720	11-20-1259	11-21-9964	90075-0143	8/6 S. Body
W.E. Plug, N.K.*	11-04-0720	11-20-1259	11-21-9964	90075-0130	8/8 S. Body
W.E. Plug, N.K.*	11-04-0720	11-20-1259	11-21-9964	90075-0139	8/8 S. Body

* The above die units apply to chain feed products only
† Contact factory when ordering terminators for 90075 4- and 6-circuit plugs. For use in US TM-40/42 presses.
‡ Press assembly consists of press, die and accessories (terminal guide and press guard)
Note: For more information reference section "W"

Terminator Dies and Assemblies for TM-40/42 Presses







ORDERING INFORMATION — *Available only in Europe*

Description	Order No.
European TM-42 Press	69002-5000

Order No.			Plug	Plug Size and No. of Contacts
Fixture with Tooling	**Die Only**	**Tool Kit Only**		
69017-0139		69017-0145	87031	4/2*
69017-0138		69017-0146	87031	4/4*
69017-0137		69017-0147	87031	6/2*
69017-0136		69017-0148	87031	6/3*
69017-0136		69017-0148	87031	6/4*
69017-0135		69017-0149	87031	6/6*

* The above die units apply to chain feed products only

FEATURES — *Preferred Version in the US*

- For medium to high volume needs
- Plugs are loaded from a reel and require no handling
- Quick changeover from one terminator to another

ORDERING INFORMATION

Description	Order No.
US TM-42 Press	69002-5001

Order No.			Plug	Plug Size and No. of Contacts
Press Assembly†	**Die Only**	**Accessory Kit Only**		
11-04-0727	11-20-1266	11-21-9964	87031-0412	4/4*
11-04-0727	11-20-1266	11-21-9964	87031-0422	4/4*
11-04-0727	11-20-1266	11-21-9964	87031-0432	4/4*
11-04-0724	11-20-1263	11-21-9964	87031-0614	6/2*
11-04-0724	11-20-1263	11-21-9964	87031-0624	6/2*
11-04-0724	11-20-1263	11-21-9964	87031-0634	6/2*
11-04-0724	11-20-1263	11-21-9964	87031-0616	6/4*
11-04-0724	11-20-1263	11-21-9964	87031-0626	6/4*
11-04-0724	11-20-1263	11-21-9964	87031-0636	6/4*
11-04-0724	11-20-1263	11-21-9964	87031-0618	6/6*
11-04-0724	11-20-1263	11-21-9964	87031-0628	6/6*
11-04-0724	11-20-1263	11-21-9964	87031-0638	6/6*

* The above die units apply to chain feed products only
† Press assembly consists of press, die and accessories (terminal guide and press guard)

AM40 Fully Automatic Harness Assembly Machine

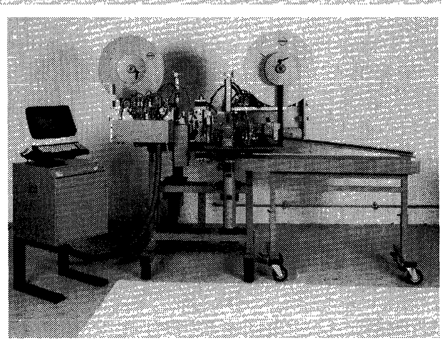
FEATURES AND SPECIFICATIONS — *Available only in Europe*

Features

- Komax* 40 attaches telephone plugs to one or both ends of multicore telephone cable
- Computer controlled with VDU readout
- Simple production program entry in English, German, Italian or French (other languages by request)

Specifications

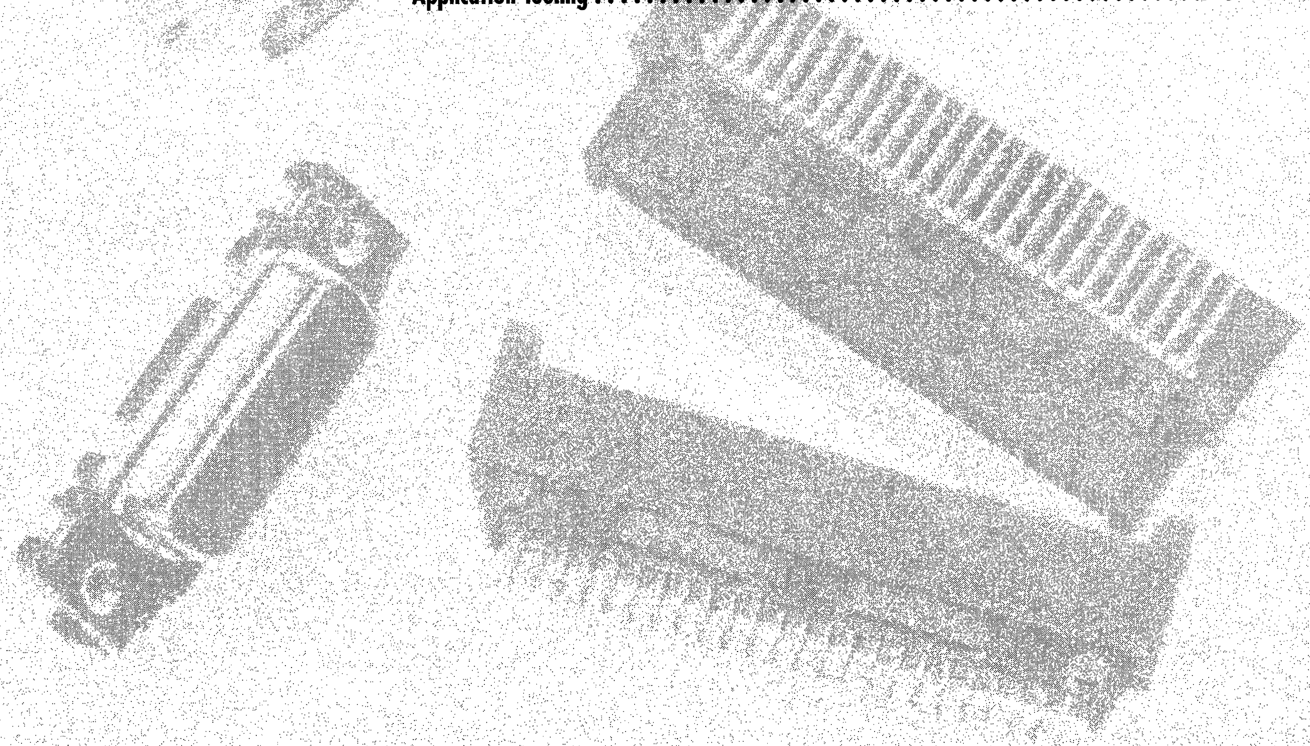
Cable Length: 50mm min. to 100m max.
Production Rate: Up to 3200 telephone cables (terminated both ends) per hour, according to length



* Komax is a registered trademark of Komax Corporation. If customer has US version TM-40/42 press, it can be modified to accommodate Euro tooling.

Note: For more information reference section "W"

LFH™ Matrix 50 and 75



P

FEATURES AND SPECIFICATIONS

LFH™ Matrix 50 and 75 Connector Systems

Features and Benefits

- Low insertion forces of 42g per contact
- Redundant contact points for long-term reliability
- Normal forces of 75g per beam
- Contact (Hertz) forces averaging 225K psi
- High cycle life via controlled plating and contact surfaces
- Good electrical performance for high-speed applications
- Blind mate options available
- SMT-compatible materials
- Cable assemblies available directly through Molex-approved assemblers
- Termination of high-performance wire—26 to 36 AWG (depending upon application)
- Solder, weld and paddle card terminations
- M3 and 4-40 hardware
- I/O system is D-sub size for standard panel cutouts, overmolds and hardware use (60 and 96 circuits)
- 30μ" min. Gold/50μ" min. Nickel plating (other plating available)
- Docking hardware for I/O systems
- Matrix 50 contact layout is on .050 x .050" spacing. Matrix 75 layout is on .075 x .075" spacing.

Mechanical

Please refer to individual product pages for details

Materials

Please refer to individual product pages for details

Environmental/Durability

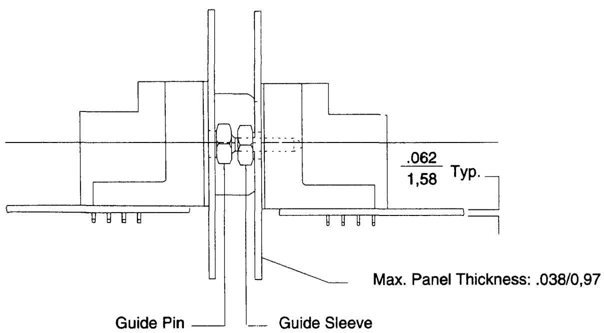
After Temperature Cycling: <10mΩ ΔR
After Cycle Humidity: <10mΩ ΔR
After Flowing Mixed Gas Test: <10mΩ ΔR
After 5000 Mated Cycles Durability: <10mΩ ΔR
Please refer to individual product pages for more details

Electrical Characteristics

Capacitance: 0.98 pF
Impedance: 85Ω average at 45 picoseconds rise time
Cross Talk (Single Driven Line): 10mV at 1V-1 ns
Propagation Delay: 139 picoseconds
Band Width: 0.95 GHz
Data Rate: 235 MBd
Please refer to individual product pages for more details

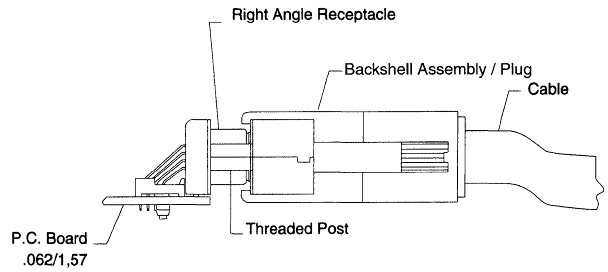
The Low Force Helix (LFH) contact was designed for high-pin-count signal applications where there is a need for reliability and performance. Designed for both cable I/O and board-to-board applications, the system's low insertion forces make it ideal for situations where multiple signal lines need to be terminated or packaged in a limited space. The patented "helix" plug pin interfaces with a split-beam receptacle contact giving a low insertion force with 2-point contact reliability.

Circuit sizes range from 60 to 160 circuits in the Matrix 50 system and 68 to 240 circuits in the Matrix 75 system. Matrix 50 features I/O shielding exclusively, while Matrix 75 offers shielded and unshielded versions. Both systems support vertical and right angle board mounting.



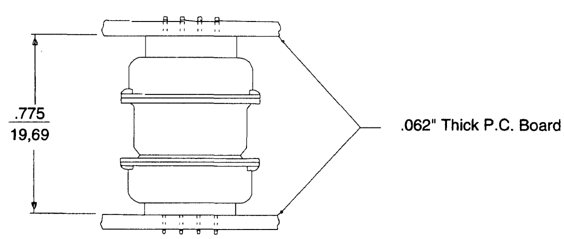
Matrix 50 I/O

Blind Mate Docking
Right Angle Plug to Right Angle Receptacle
60 and 160 Circuit



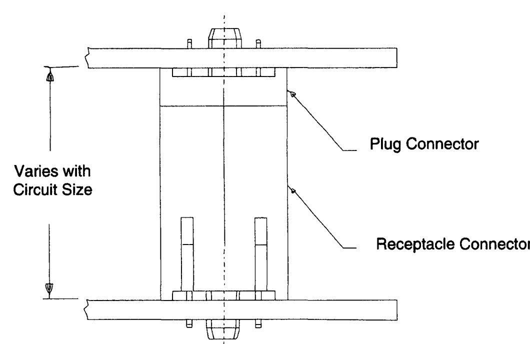
Matrix 50 I/O

Right Angle Receptacle to Cable Plug
60 and 160 Circuit



Matrix 75 I/O

Vertical Stacking
96 and 130 Circuit



Matrix 75 Board-to-Board

Vertical Stacking
68, 96, 136 and 240 Circuit Board-to-Board

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Plug

70929

60 Circuit, Vertical

FEATURES AND SPECIFICATIONS

Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Same size as 15-pin D-sub for standard panel cut-outs and hardware use

Reference Information

Product Specification: PS-70928
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70928
Designed In: Inches

Electrical

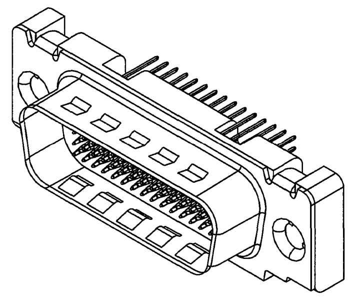
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

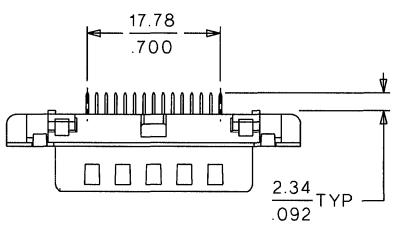
Mechanical

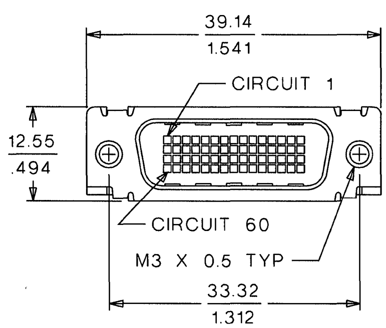
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

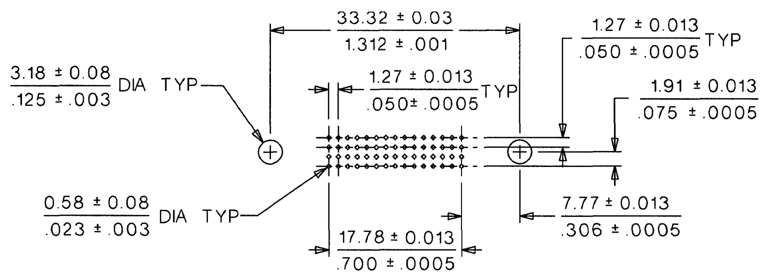
Physical

Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C

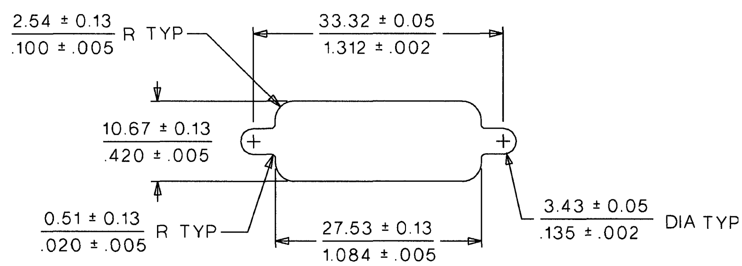








PCB LAYOUT: COMPONENT SIDE



ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Hardware
60	15-92-2251	70929-1001	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits

FEATURES AND SPECIFICATIONS

molex

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Receptacle

70928

60 Circuit, Vertical

Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Same size as 15-pin D-sub for standard panel cut-outs and hardware use

Reference Information

Product Specification: PS-70928
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70929
Designed In: Inches

Electrical

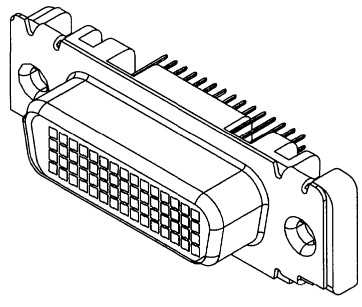
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

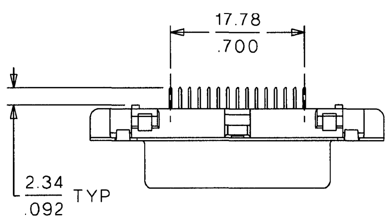
Mechanical

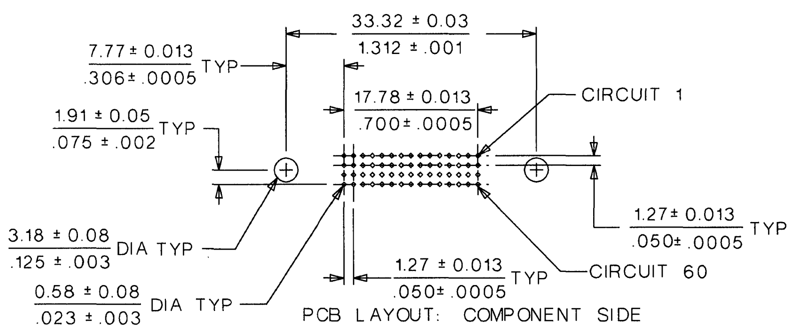
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

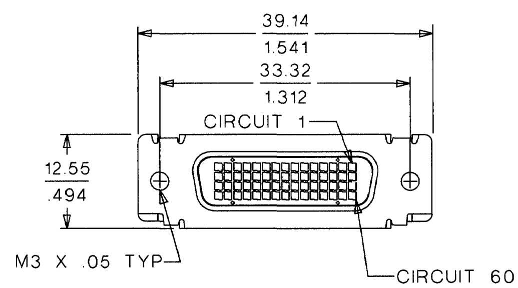
Physical

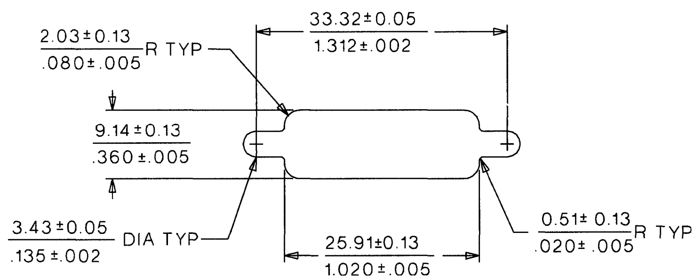
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields — 150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C











ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Hardware
60	70928-0002	70928-0002	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Plug

70929
60 Circuit, Right Angle

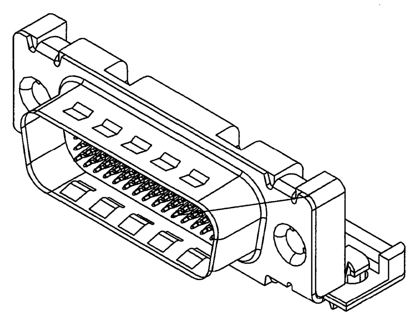
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Same size as 15-pin D-sub for standard panel cut-outs and hardware use

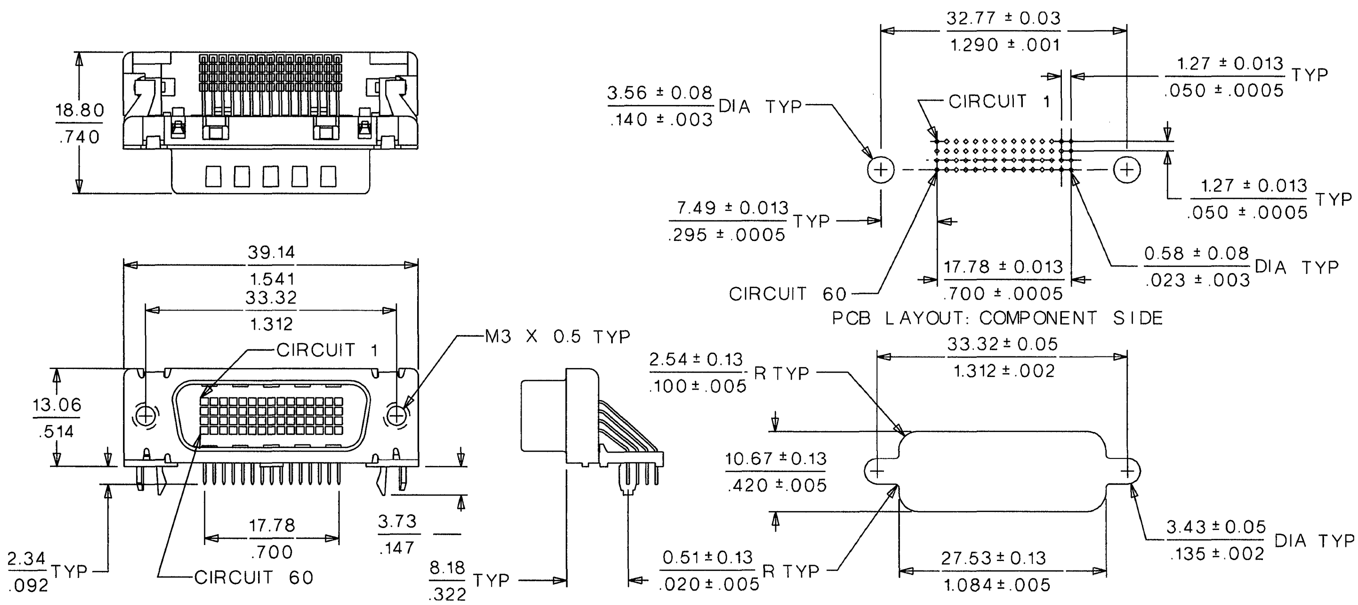
Reference Information
Product Specification: PS-70928
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70928
Designed In: Inches

Electrical
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields — 150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C





ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Hardware
60	15-92-2250	70929-0001	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Receptacle

70928

60 Circuit, Right Angle

Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Same size as 15-pin D-sub for standard panel cut-outs and hardware use

Reference Information

Product Specification: PS-70928
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70929
Designed In: Inches

Electrical

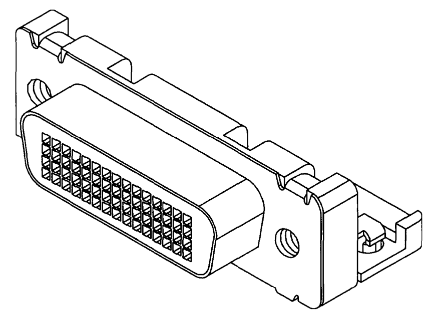
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

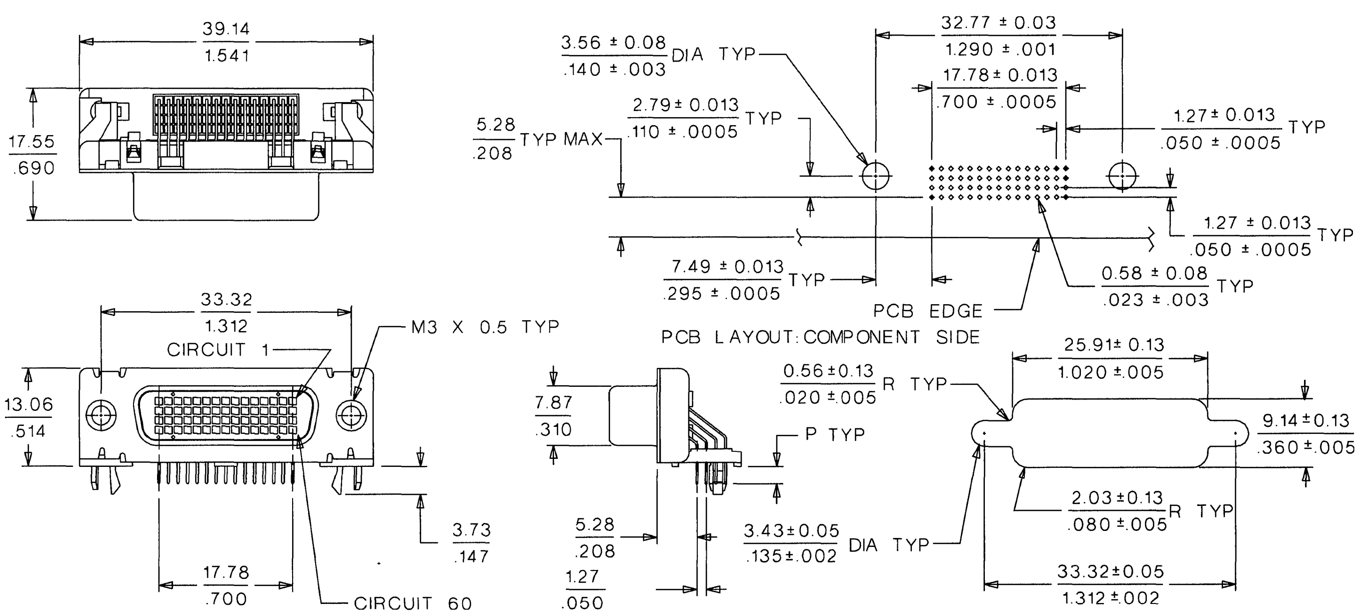
Mechanical

Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical

Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30µ" min. Gold over 50µ" min. Nickel in contact area, 100µ" min. Tin/Lead over 50µ" min. Nickel in PC tail area
Shields—150µ" min. bright Tin over 50µ" Nickel all over Copper flash
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension P	PCB Thickness	Hardware
60	70928-2000	70928-2000	2.01 (.079)	1.57 (.062)	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits
	70928-2001	70928-2001	2.34 (.092)	1.57 (.062)	
	70928-2002	70928-2002	2.64 (.104)	2.36 (.093)	

1.27mm (.050") Pitch LFH™ Matrix 50 Plug Cable Kit

70929/70984 Subassembly and Terminal Sticks 60 Circuit

FEATURES AND SPECIFICATIONS

Features and Benefits

- Cable assemblies available through Molex-approved suppliers
- Termination of a variety of wire types 28 to 36 AWG (depending on application)
- Wire terminated by direct weld, solder or paddle card (see Cable Termination Options page P-33)
- 4 terminal sticks required per subassembly (terminal sticks sold separately)
- Same size as 15-pin D-sub for standard overmolding and back shell hardware

Reference Information

Product Specification: PS-70928
Application Specification: PS-70929
Termination Specification: ES-70929
Packaging: Box and tray
Tooling Information: See pages P-34 and P-35
Mates With: 70928
Designed In: Inches

Electrical

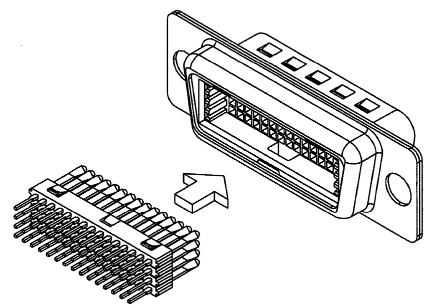
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical

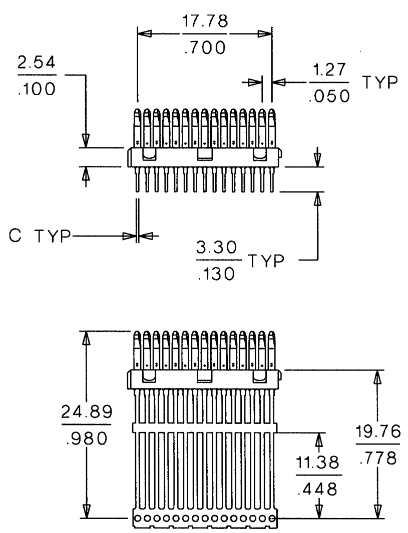
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical

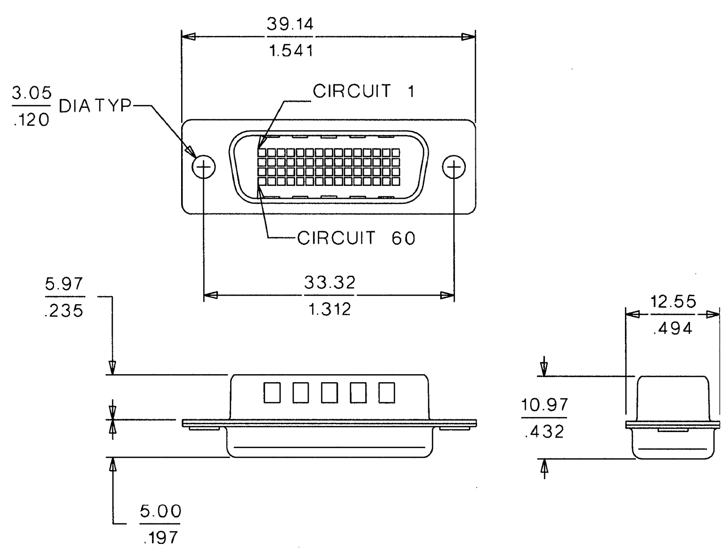
Housing: Glass-filled polymer, UL 94V-0
Contact:
  Plugs—Phosphor Bronze Alloy
  Receptacle—Beryllium Copper Alloy
Plating:
  Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
  Shields—150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C



TERMINAL STICKS



SUBASSEMBLY



ORDERING INFORMATION AND DIMENSIONS

Subassembly		
Order No.	**Engineering No.**	**Description**
70929-2000	70929-2000	60-Circuit I/O Plug Connector Subassembly

Terminal Sticks				
Order No.	**Engineering No.**	**Description**	**Dimension A**	**Trim Length**
51-24-2022	70984-1002	Trimmed to Length without Carrier	.013	.130"
51-24-2021	70984-1001	With Carrier	.013	
70984-1007*	70984-1007	With Busbar	.020	
70984-1010†	70984-1010	With Busbar	.020	

* Nickel plating
† Tin/Lead over Nickel plating

FEATURES AND SPECIFICATIONS

Features and Benefits

- Cable assemblies available through Molex-approved suppliers
- Termination of a variety of wire types 28 to 36 AWG (depending on application)
- Wire terminated by direct weld, solder or paddle card (see Cable Termination Options page P-33)
- 4 terminal sticks required per subassembly (terminal sticks sold separately)
- Same size as 15-pin D-sub for standard overmolding and back shell hardware

Reference Information

Product Specification: PS-70928
Application Specification: PS-71691
Termination Specification: ES-70929
Packaging: Box and tray
Tooling Information: See pages P-34 and P-35
Mates With: 70929
Designed In: Inches

Electrical

Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

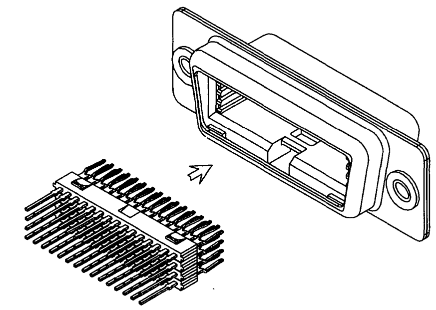
Physical

Housing: Glass-filled polymer, UL 94V-0
Contact:
Receptacle—Beryllium Copper Alloy
Plating:
Terminals—30µ" min. Gold over 50µ" min. Nickel in contact area, 100µ" min. Tin/Lead over 50µ" min. Nickel in PC tail area
Shields—100µ" min. bright Tin over 50µ" Copper
Temperature: -20 to +80°C

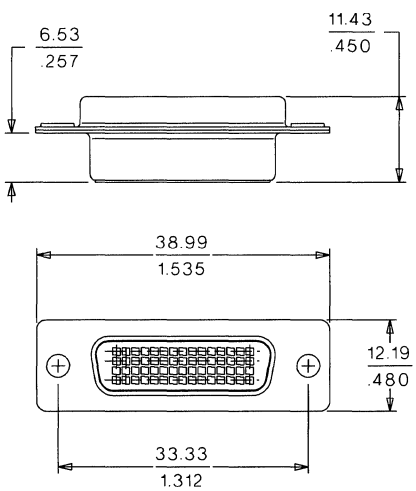
1.27mm (.050") Pitch LFH™ Matrix 50 Receptacle Cable Kit

71691/70985

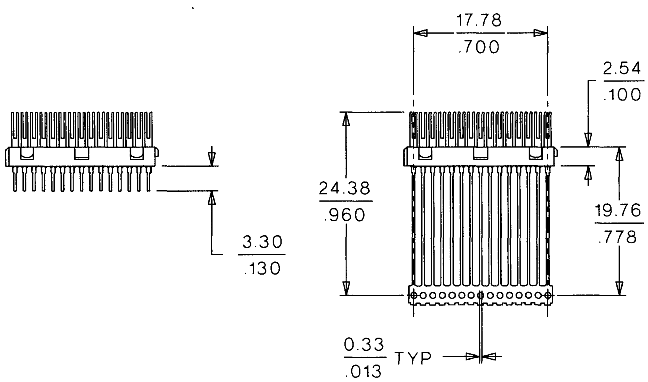
Subassembly and Terminal Sticks 60 Circuit



SUBASSEMBLY



TERMINAL STICKS



ORDERING INFORMATION AND DIMENSIONS

Subassembly		
Order No.	**Engineering No.**	**Description**
71691-0003	71691-0003	60-Circuit I/O Recptacle Connector Subassembly

Terminal Sticks			
Order No.	**Engineering No.**	**Description**	**Trim Length**
51-25-2012	70985-1002	Trimmed to Length without Carrier	.215
51-25-2011	70985-1001	With Carrier	

1.25mm (.050") Pitch LFH™ Matrix 50 Hardware

71245/71256 Overmold Can Kit and Crimp Ferrule

FEATURES AND SPECIFICATIONS

Features and Benefits

- Use with 60-circuit plug cable kit
- Each can kit includes top and bottom pieces
- Crimp ferrule used for grounding cable shield (sold separately)
- Can pieces snap together to provide continuous electrical shielding with connector and cable

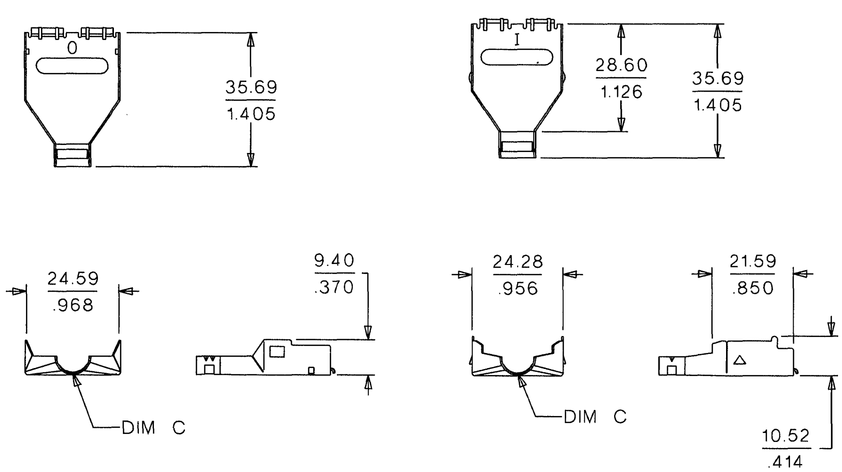
Reference Information

Application Specification: PS-70929
Packaging: Bag
Tooling Information: See pages P-34 and P-35
Designed In: Inches

Physical

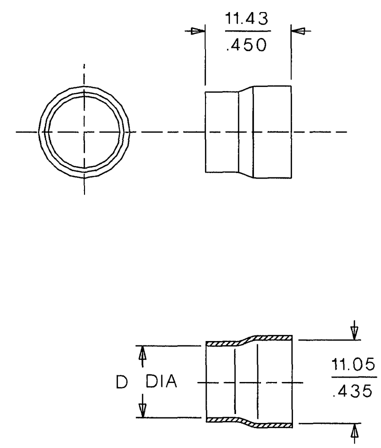
Plating: Bright Tin over Copper flash

OVERMOLD CAN KIT



UPPER HALF LOWER HALF

CRIMP FERRULE



CRIMP FERRULE

ORDERING INFORMATION AND DIMENSIONS

Overmold Can			
Order No.	**Engineering No.**	**Dimension A**	**Cable Sizes**
71245-2000	71245-2000	4.45 (.175)	.440 max.
71245-3000	71245-3000	6.35 (.250)	.495 max.

Crimp Ferrule			
Order No.	**Engineering No.**	**Dimension A**	**Cable Sizes**
71256-0001	71256-0001	5.84 (.230)	.190-.217
71256-0002	71256-0002	9.53 (.375)	.327-.375
71256-0003	71256-0003	14.22 (.560)	.420-.440

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Plug

71624 160 Circuit, Vertical

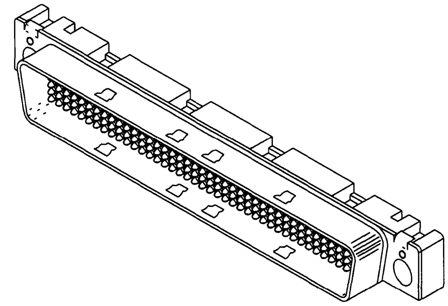
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Docking hardware available for I/O systems

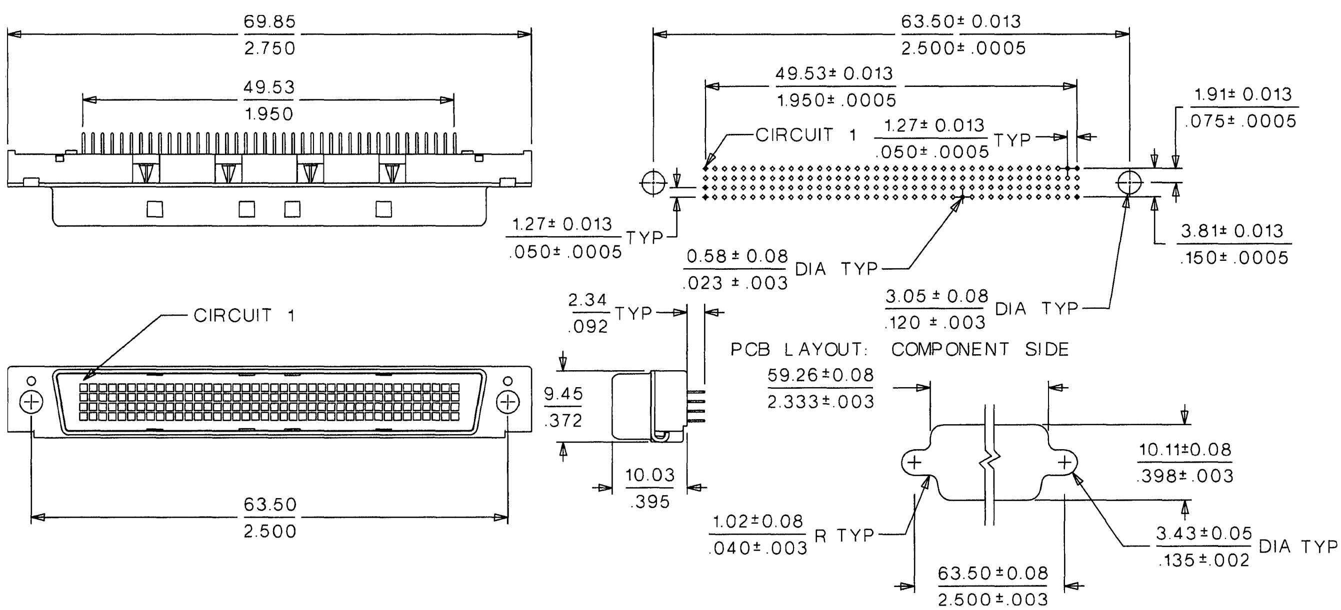
Reference Information:
Product Specification: PS-71626
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 71626
Designed In: Inches

Electrical
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C





LFH Matrix 50 and 75

P

ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Feature	Hardware
160	51-25-1030	71624-1000	M3 Threaded Insert only	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits
	51-25-1032	71624-1002	Board Lock only	
	71624-1001	71624-1001	Threaded Insert with Board Lock	

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Receptacle

71626

160 Circuit, Vertical

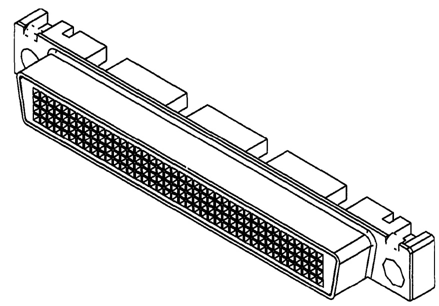
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Docking hardware available for I/O systems

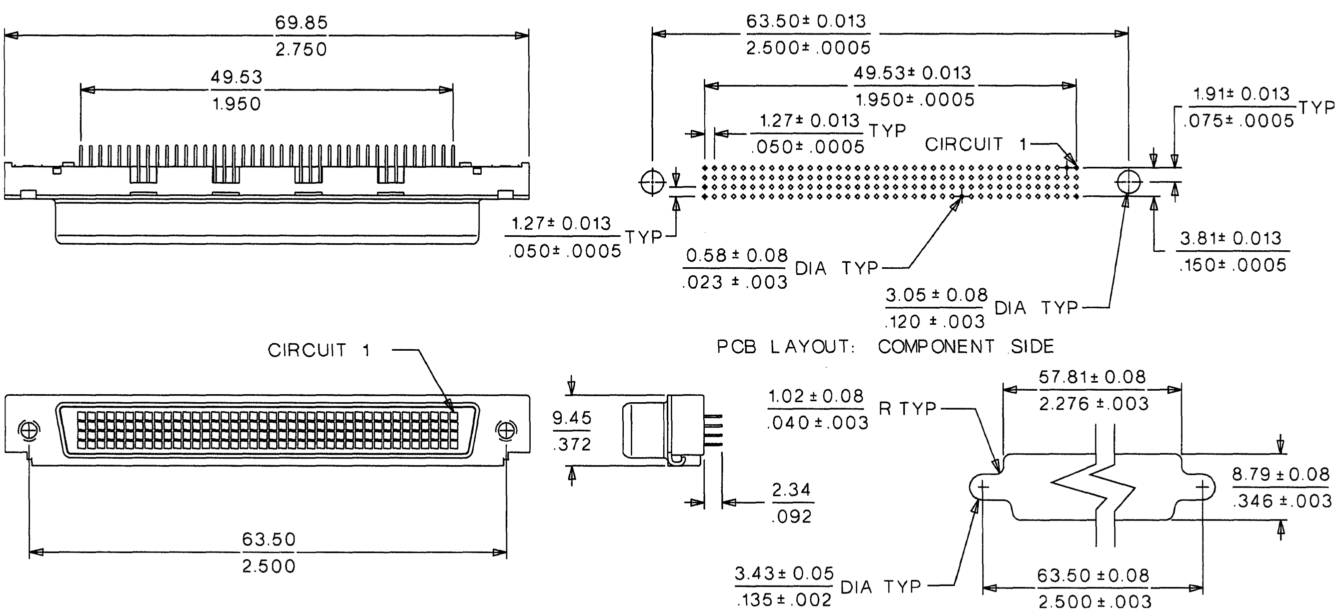
Reference Information
Product Specification: PS-71626
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 71624
Designed In: Inches

Electrical
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C





ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Feature	Hardware
160	51-24-1030	71626-1000	M3 Threaded Insert only	See pages P-31 and P-32 for guide pins,guide sleeves and hex screw kits
	71626-1001	71626-1001	Threaded Insert with Board Lock	

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Plug

71624
160 Circuit, Right Angle

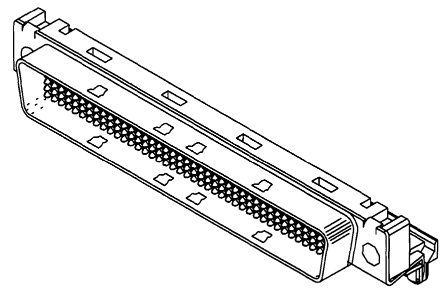
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Docking hardware available for I/O systems

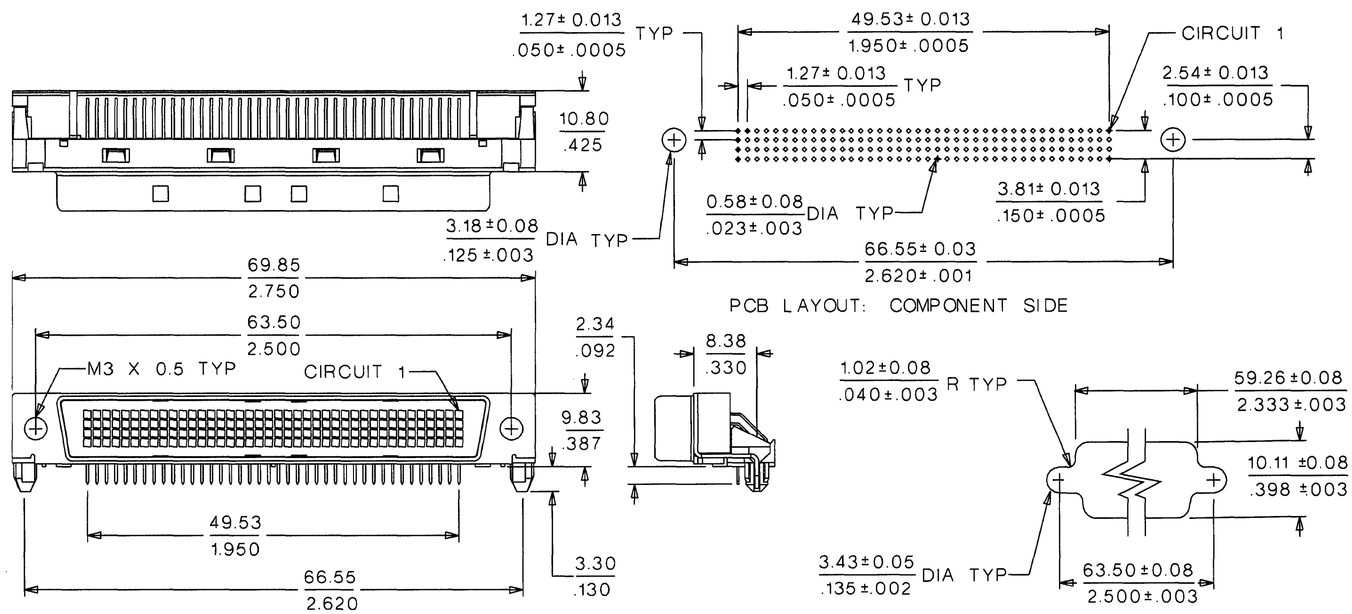
Reference Information
Product Specification: PS-71626
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 71626
Designed In: Inches

Electrical
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C





ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Description	Hardware
160	51-25-1040	71624-2000	With Threaded Insert	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits
	71624-2004	71624-2004	Without Threaded Insert	

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Shielded Receptacle

71626

160 Circuit, Right Angle

Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .050 x .050"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Docking hardware available for I/O systems

Reference Information

Product Specification: PS-71626
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 71624
Designed In: Inches

Electrical

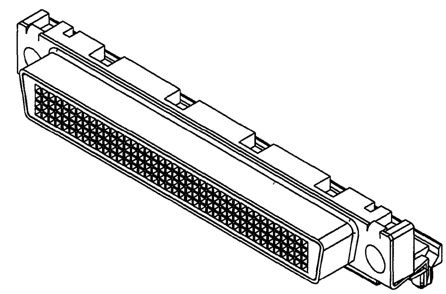
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

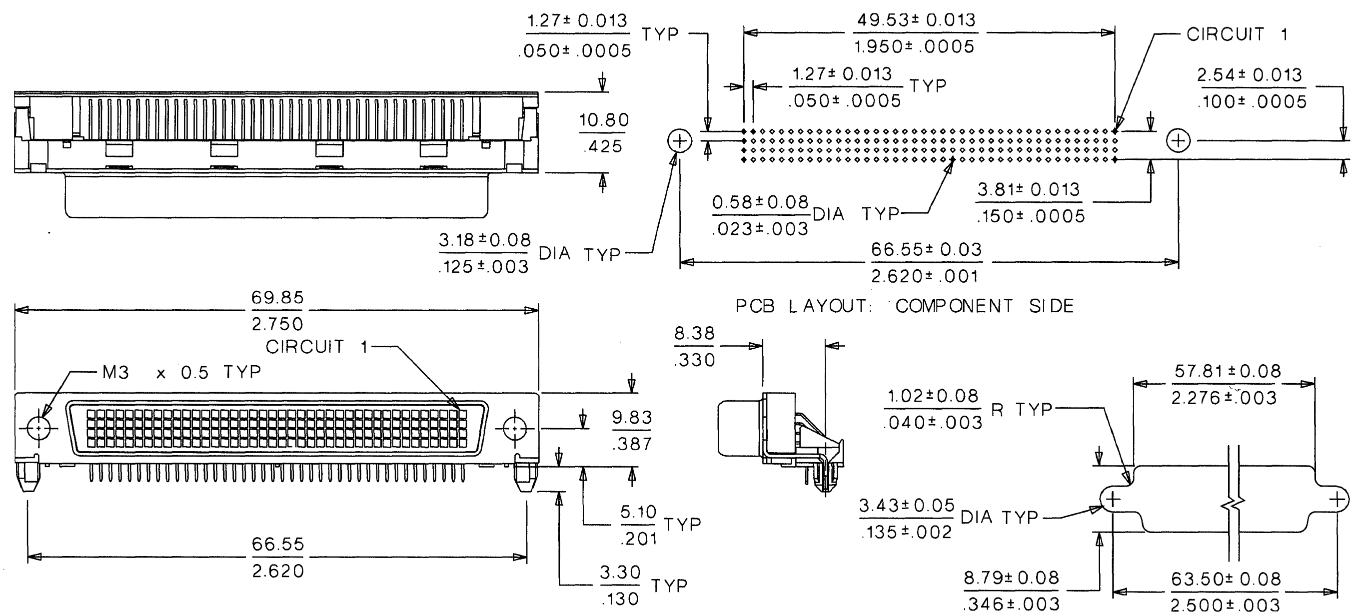
Mechanical

Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical

Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30µ" min. Gold over 50µ" min. Nickel in contact area, 100µ" min. Tin/Lead over 50µ" min. Nickel in PC tail area
Shields—150µ" min. bright Tin over 50µ" Nickel all over Copper flash
Temperature: -20 to +80°C





ORDERING INFORMATION

Circuits	Order No.	Engineering No.	Hardware
160	51-24-1040	71626-2000	See pages P-31 and P-32 for guide pins, guide sleeves and hex screw kits
	71626-4000*	71626-4000	

* Guide hardware attached (71629-4000)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch LFH™ Matrix 50 Male Cable Kit

71624/70984

Subassembly and Terminal Sticks 160 Circuit

Features and Benefits

- Cable assemblies available through Molex-approved suppliers
- Termination of a variety of wire types 28 to 36 AWG (depending on application)
- Wire terminated by direct weld, solder or paddle card (see Cable Termination Options page P-33)
- 4 terminal sticks required per subassembly (terminal sticks sold separately)

Reference Information

Product Specification: PS-71626
Application Specification: PS-71624
Termination Specification: ES-70929
Packaging: Box and tray
Tooling Information: See pages P-34 and P-35
Mates With: 71626
Designed In: Inches

Electrical

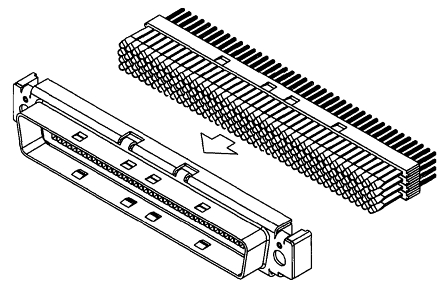
Voltage: 40V
Current: 0.75A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 500V
Insulation Resistance: 100 MΩ min.

Mechanical

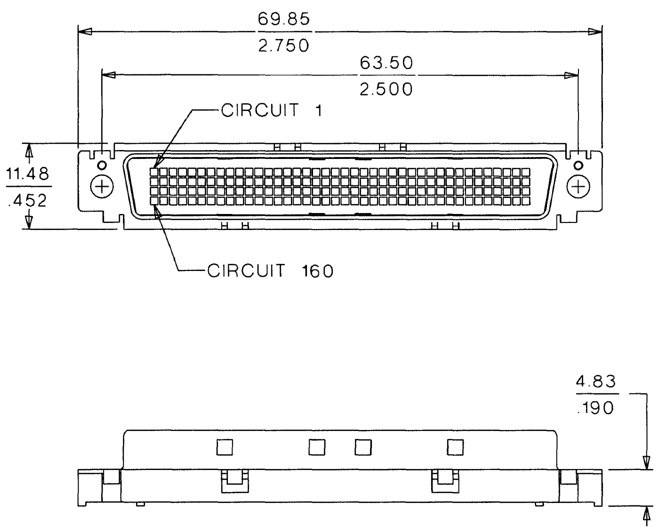
Contact Insertion Force: 60g max.
Mating Force: 50g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 5000 cycles business/office environment and 500 cycles harsh environment

Physical

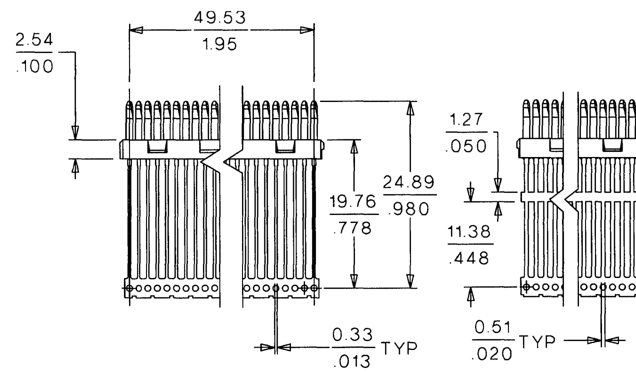
Housing: Glass-filled polymer, UL 94V-0
Contact:
Plugs—Phosphor Bronze Alloy
Plating:
Terminals—30µ" min. Gold over 50µ" min. Nickel in contact area, 100µ" min. Tin/Lead over 50µ" min. Nickel in PC tail area
Shields—150µ" min. bright Tin over 50µ" Nickel all over 50µ" Copper
Temperature: -20 to +80°C



SUBASSEMBLY



TERMINAL STICKS



ORDERING INFORMATION AND DIMENSIONS

Subassembly		
Order No.	**Engineering No.**	**Description**
71624-3000	71624-3000	160-Circuit I/O Plug Connector Subassembly

Terminal Sticks			
Order No.	**Engineering No.**	**Description**	**Trim Length**
70984-4002	70984-4002	Trimmed to Length without Carrier	.130"
51-25-1020	70984-4000	With Carrier	
70984-4003*	70984-4003	With Busbar	
70984-4008†	70984-4008	With Busbar	

* 50µ" Nickel plating on tails
† 200µ" 90/10 Tin/Lead over 75µ" Nickel on tails

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Plug

71687

68 Circuit, Vertical

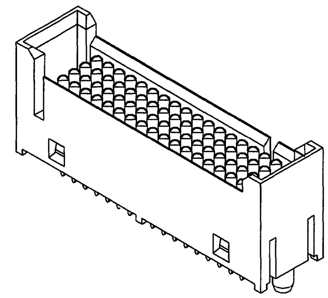
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

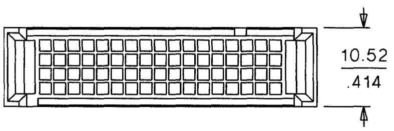
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71688
Designed In: Inches

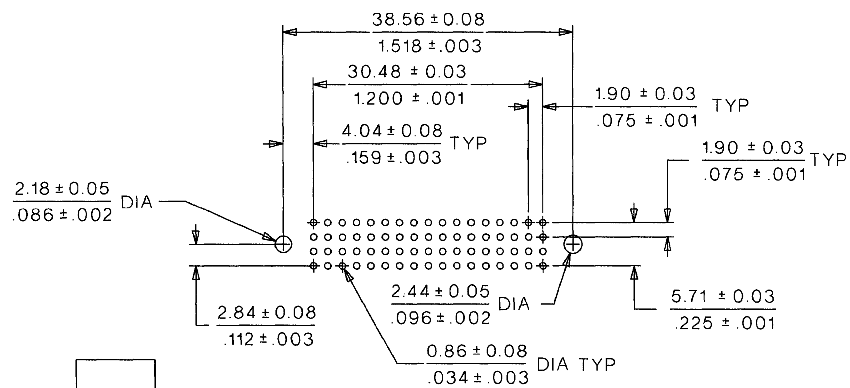
Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

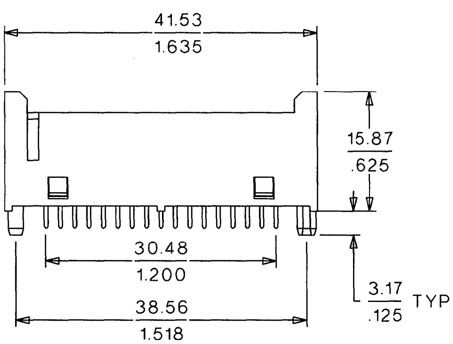
Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

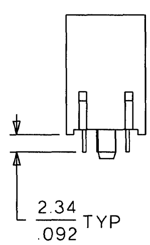
Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C











ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
68	51-26-0070	71687-0001	71688	18.75 (.738)

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Receptacle

71688
68 Circuit, Vertical

FEATURES AND SPECIFICATIONS

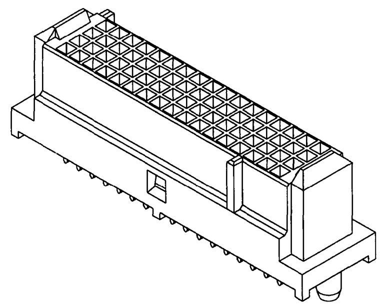
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

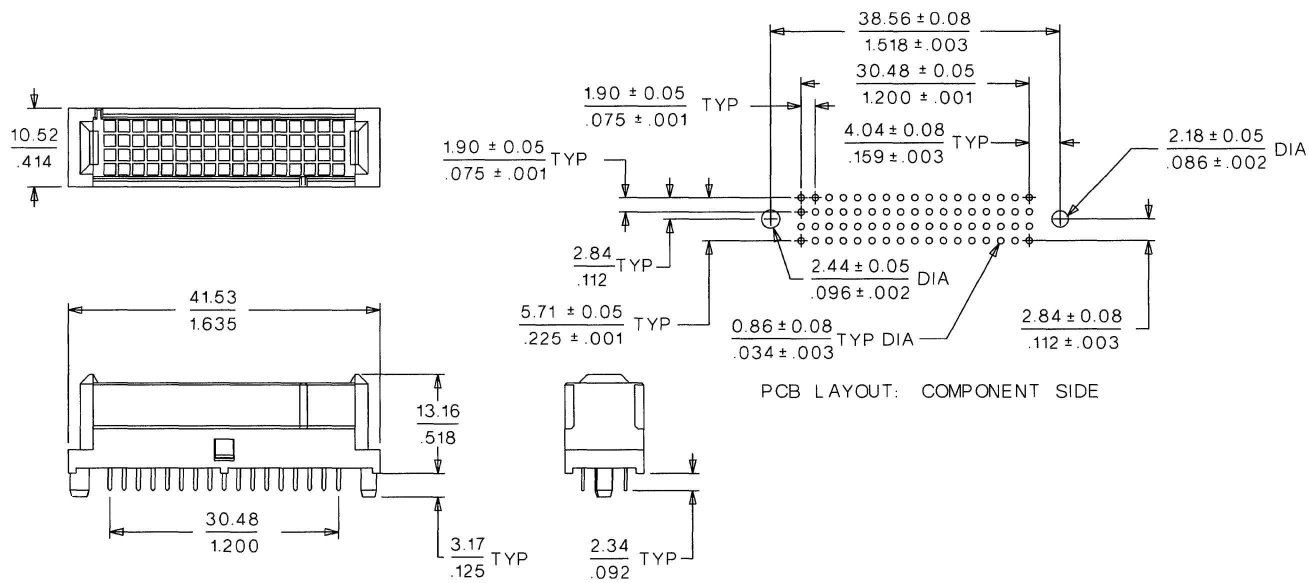
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71687
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
68	51-26-0080	71688-0001	71687	18.75 (.738)

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Plug

71633
96 Circuit, Vertical

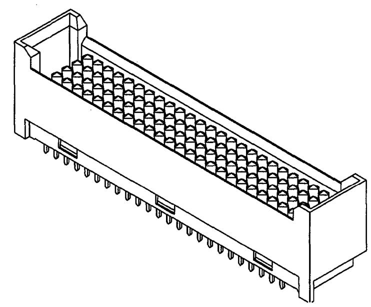
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

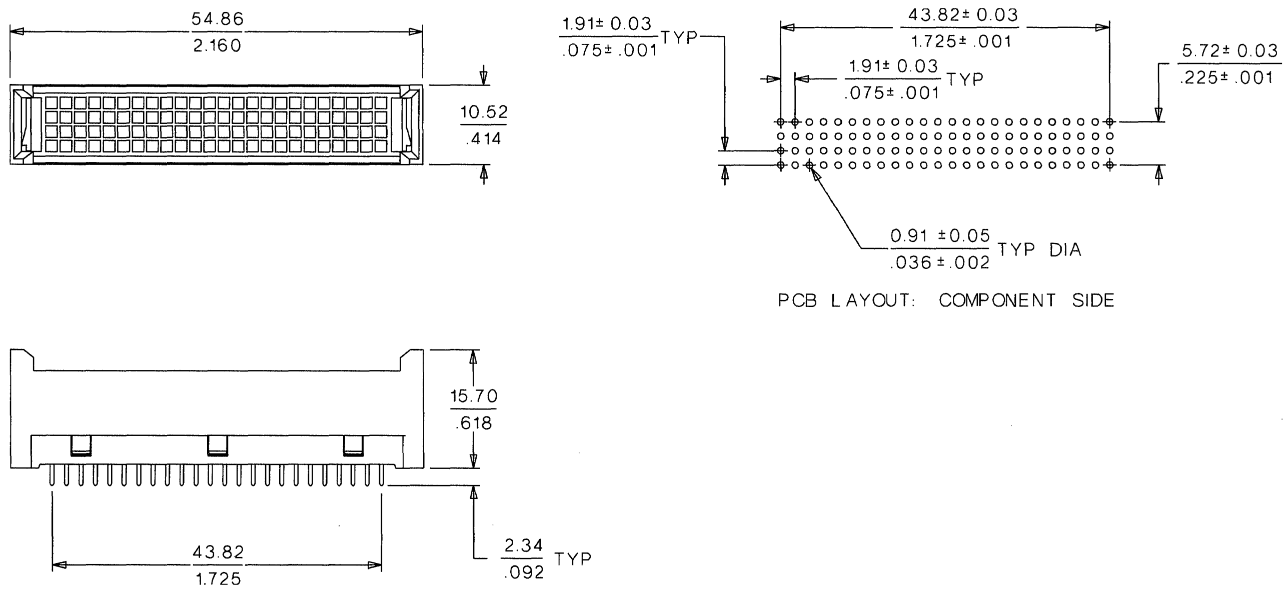
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71631
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C





LFH Matrix 50 and 75

P

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
96	51-26-0051	71633-1000	71631 Vertical Receptacle	18.57 (.731)
			71631 Right Angle Receptacle	See Drawing

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Receptacle

71631

96 Circuit, Vertical

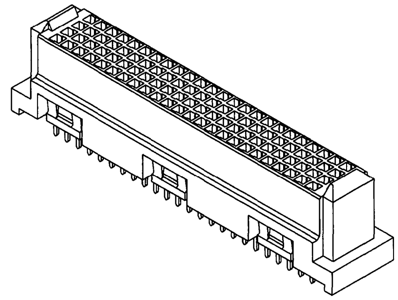
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

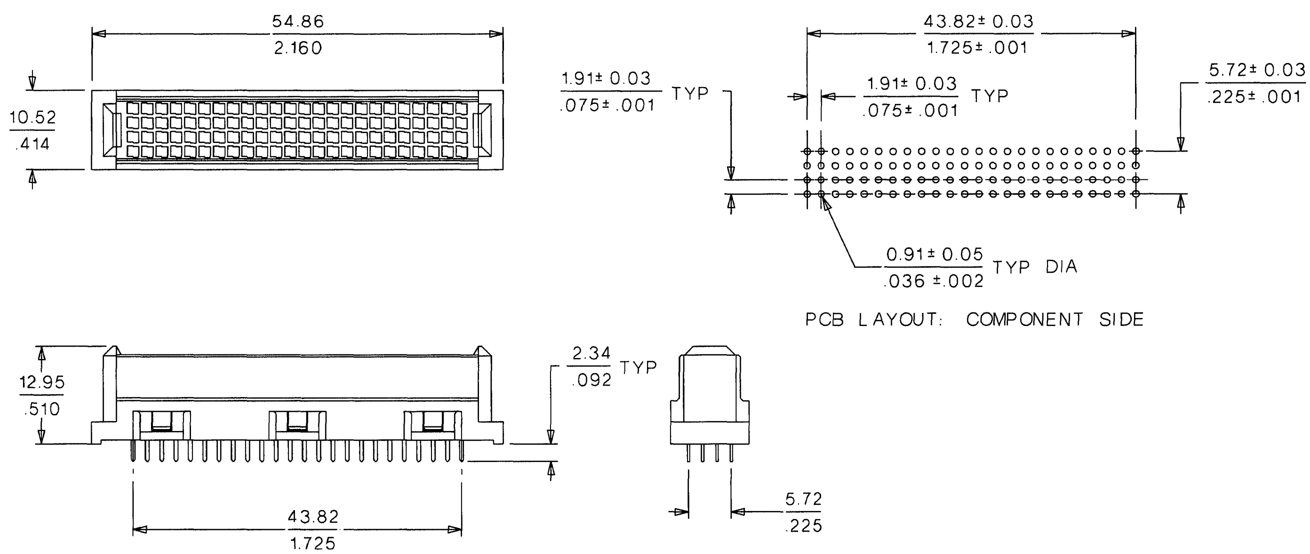
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71633
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C





LFH Matrix 50 and 75

P

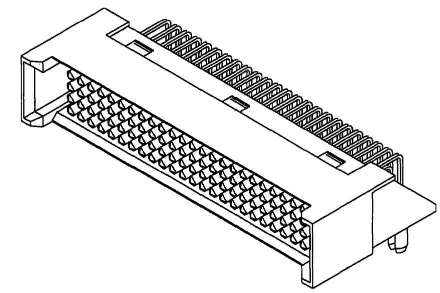
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
96	51-26-0041	71631-1000	71633 Vertical Plug	18.57 (.731)
			71633 Right Angle Plug	See Drawing

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Plug

71633
96 Circuit, Right Angle



Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

Reference Information

Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71631
Designed In: Inches

Electrical

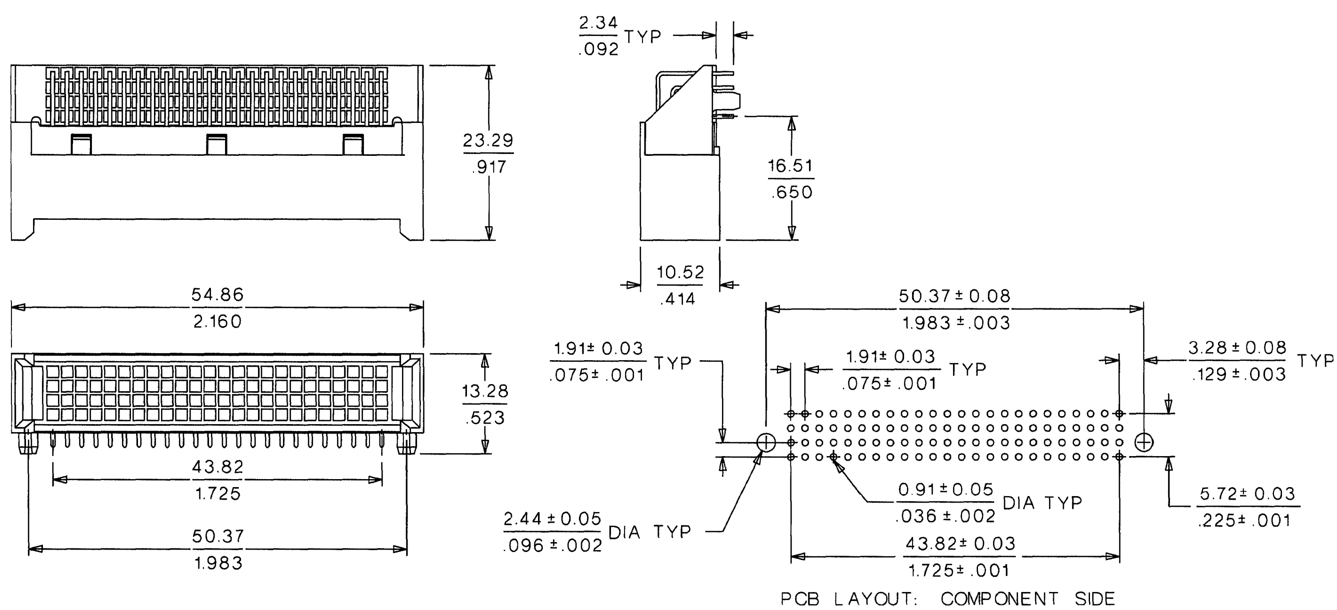
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical

Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical

Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
96	51-26-0050	71633-2000	71631 Right Angle Receptacle	35.71 (1.406)
			71631 Vertical Receptacle	See Drawing

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Receptacle

71631 96 Circuit, Right Angle

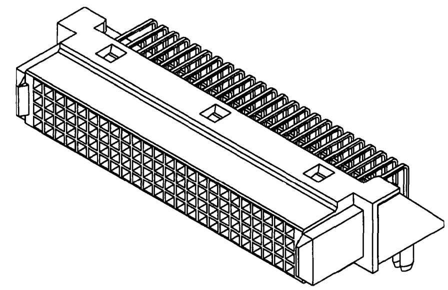
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

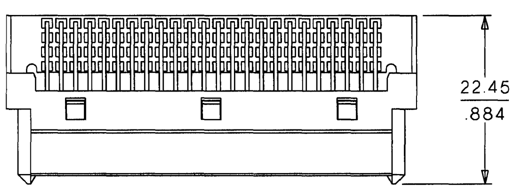
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71633
Designed In: Inches

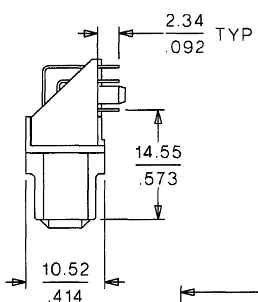
Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

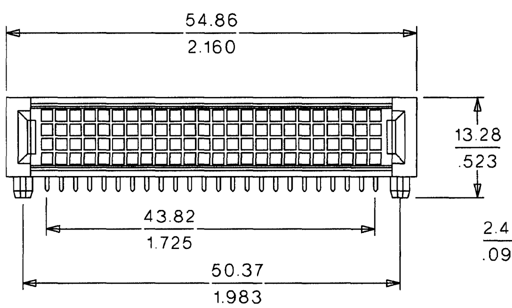
Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

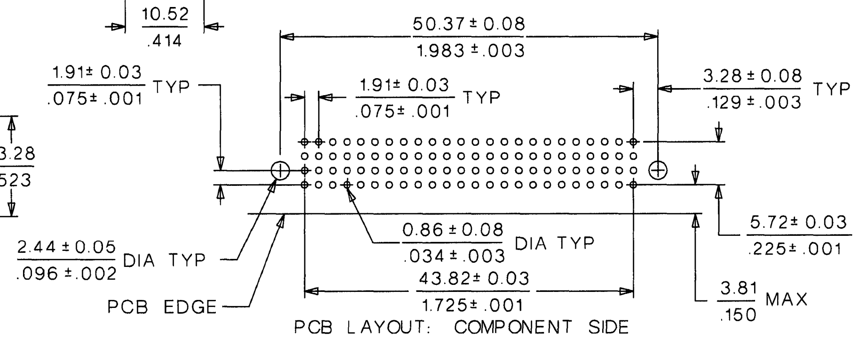
Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C











ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
96	71631-3000	71631-3000	71633 Right Angle Plug	35.71 (1.406)
			71633 Vertical Plug	See Drawing

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Plug

71235

136 Circuit, Vertical

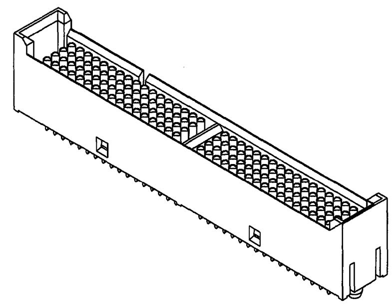
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

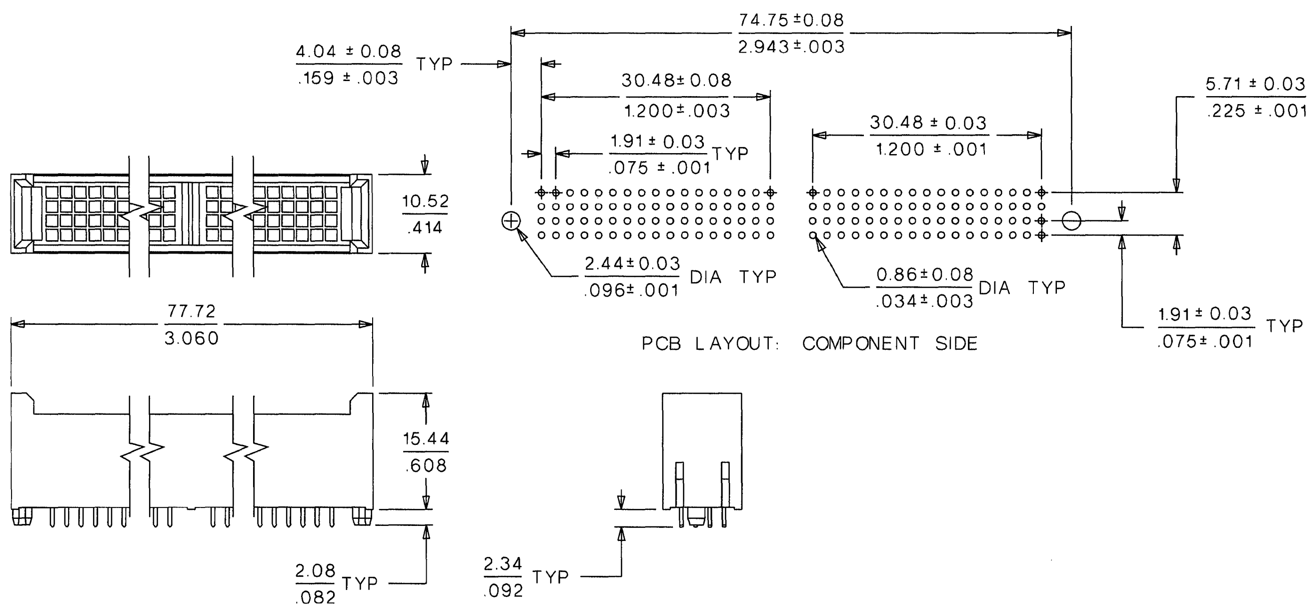
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71230
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
136	71235-1001	71235-1001	71230 Vertical Receptacle	18.11 (.713)

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Receptacle

71230
136 Circuit, Vertical

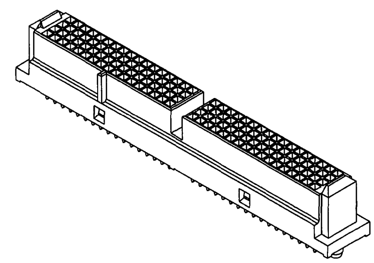
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Molded-in guiding features for blind mating

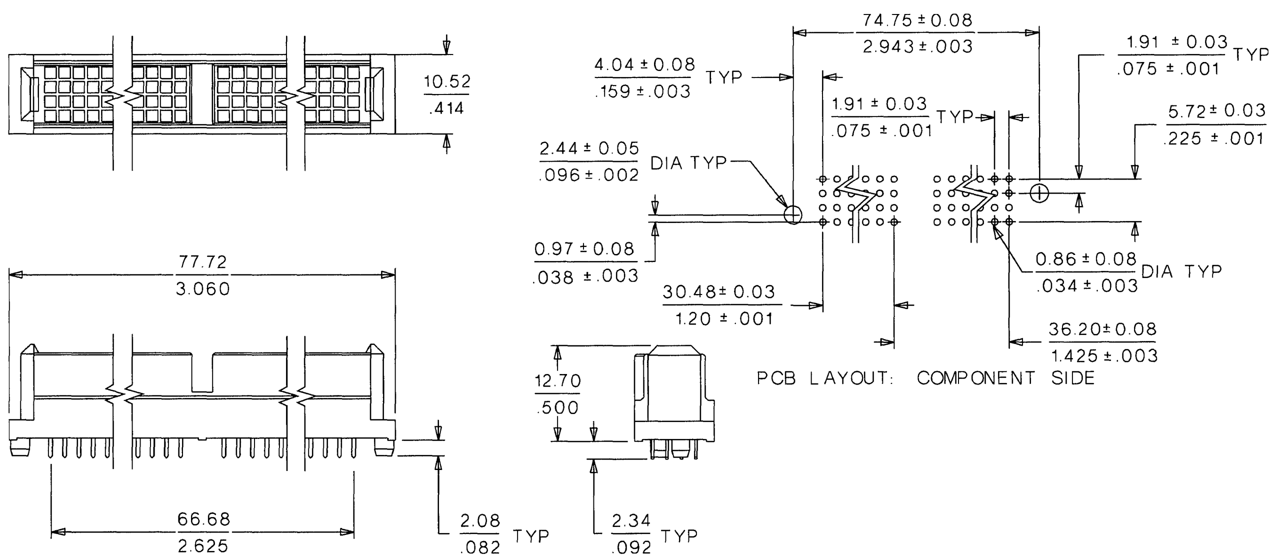
Reference Information
Product Specification: PS-71631
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71235
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C





LFH Matrix 50 and 75

P

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Stacking Height When Mated With:	
136	71230-1001	71230-1001	71235 Vertical Plug	18.11 (.713)

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Plug

71537

240 Circuit, Vertical

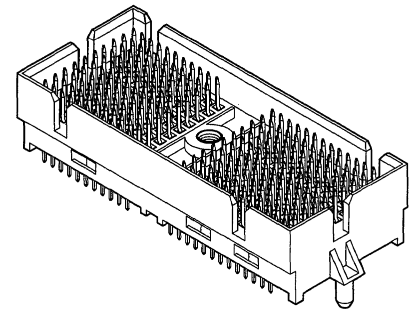
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Center screw and threaded insert facilitate board stacking

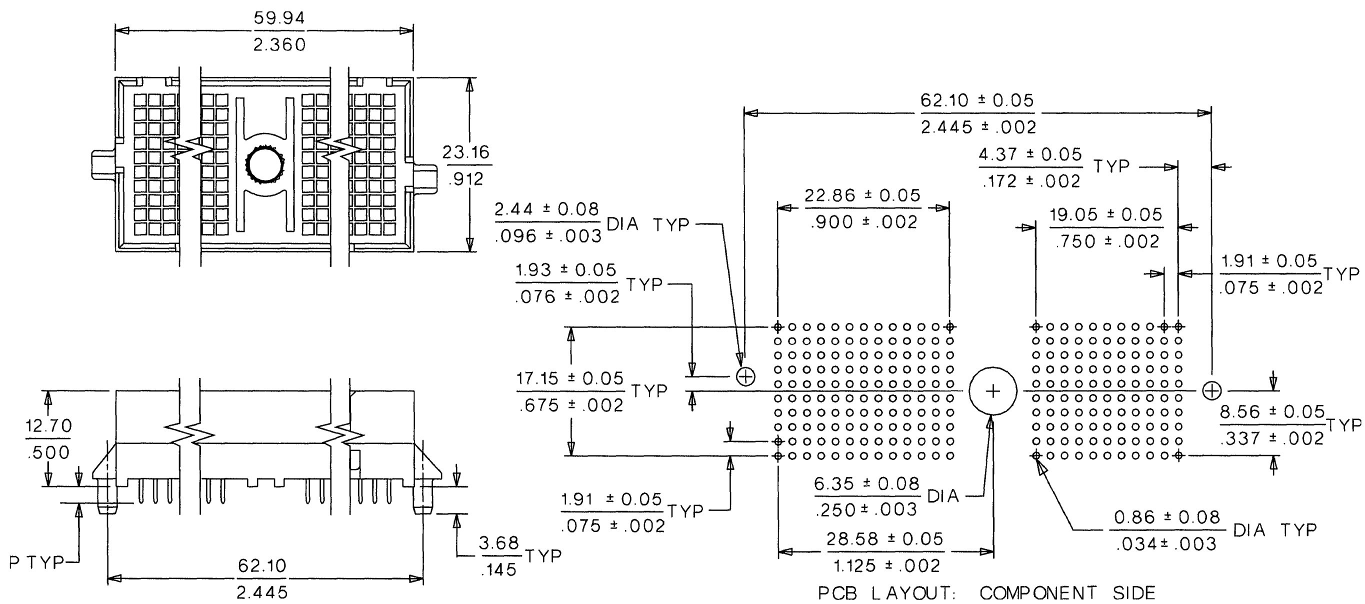
Reference Information
Product Specification: PS-71536
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71536
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension P	Stacking Height When Mated With:	
240	15-92-2240	71537-2401	2.16 (.085)	71536 Vertical Receptacle	18.80 (.740)
	15-92-2242	71537-2402	5.08 (.200)		

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Unshielded Receptacle

71536

240 Circuit, Vertical

Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Center screw and threaded insert facilitate board stacking

Reference Information

Product Specification: PS-71536
Packaging: Tray
Tooling Information: See pages P-34 and P-35
Mates With: 71537
Designed In: Inches

Electrical

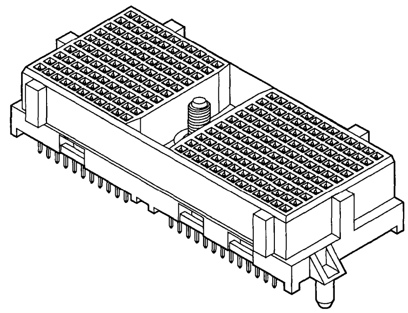
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

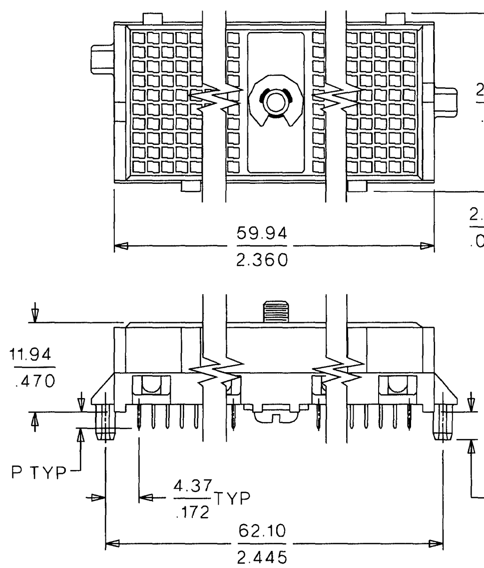
Mechanical

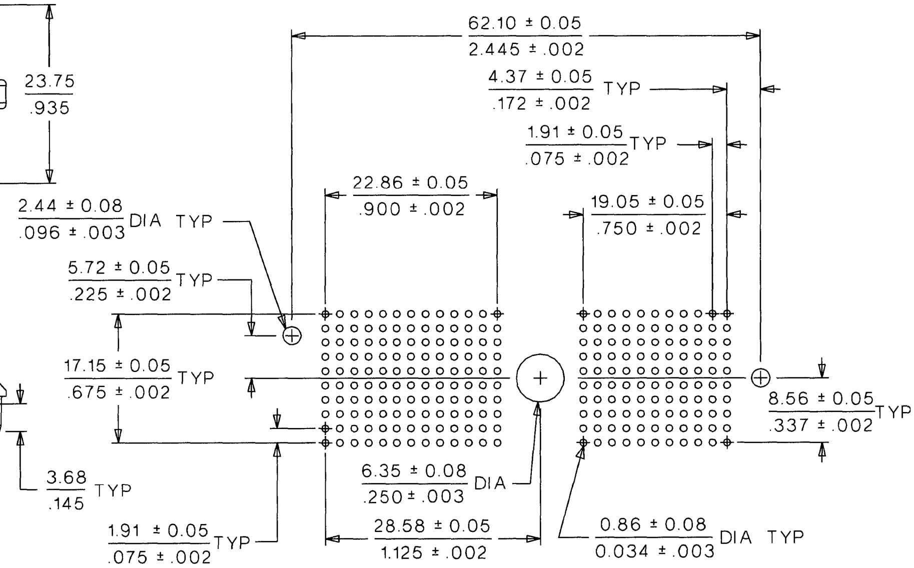
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical

Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals — 30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Temperature: -20 to +80°C







PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension P	Stacking Height When Mated With:	
240	15-92-3240	71536-2401	2.16 (.085)	71537 Vertical Plug	18.80 (.740)
	15-92-3242	71536-2402	5.08 (.200)		

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Shielded Plug

70665/71995 96 and 130 Circuit Vertical

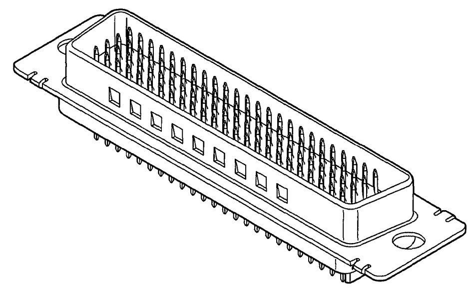
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Generous lead-in for blind mating

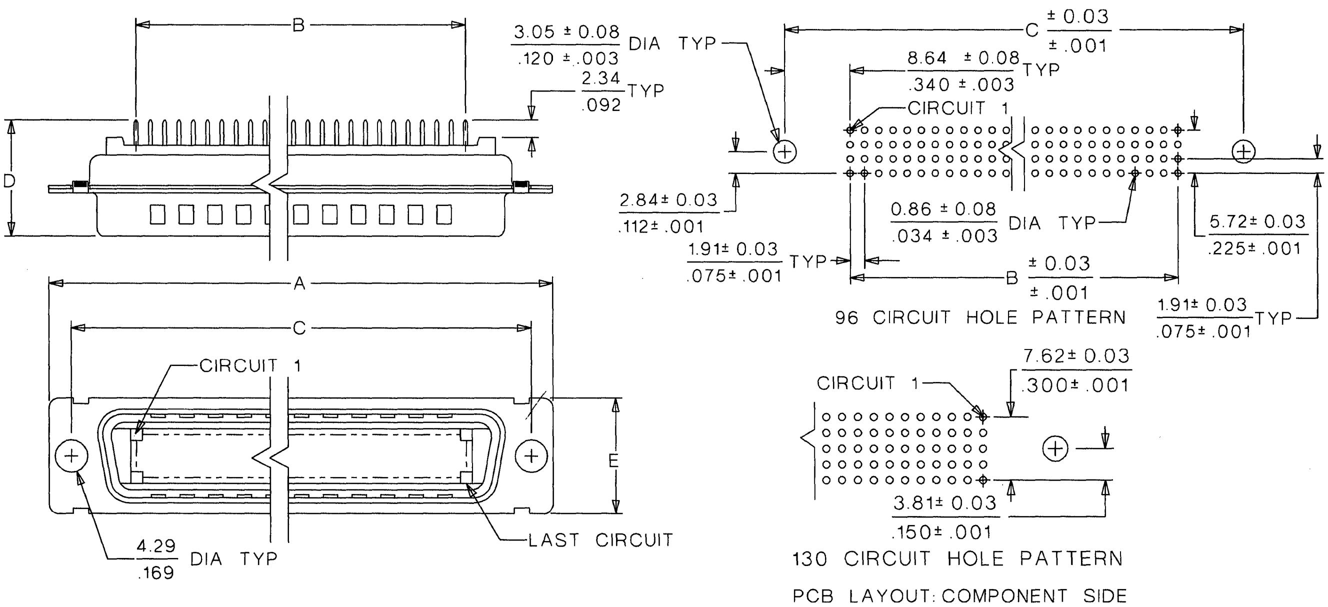
Reference Information
Product Specification: PS-70660
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70660 and 71990
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating: Terminal—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—100μ" min. bright Tin over 100μ" min. Copper
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension A	B	C	D	E
96	51-26-0011	70665	66.93 (2.635)	43.82 (1.725)	61.11 (2.406)	14.66 (.616)	15.37 (.605)
130	51-26-0031	71995	69.32 (2.729)	47.63 (1.875)	63.50 (2.500)	14.71 (.610)	16.97 (.668)

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Shielded Receptacle

70660/71990 96 and 130 Circuit Vertical

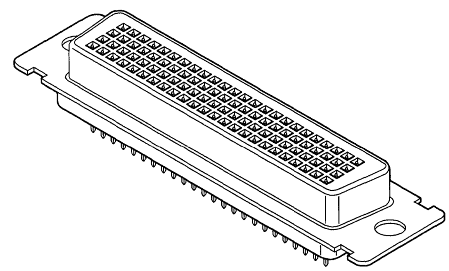
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Generous lead-in for blind mating

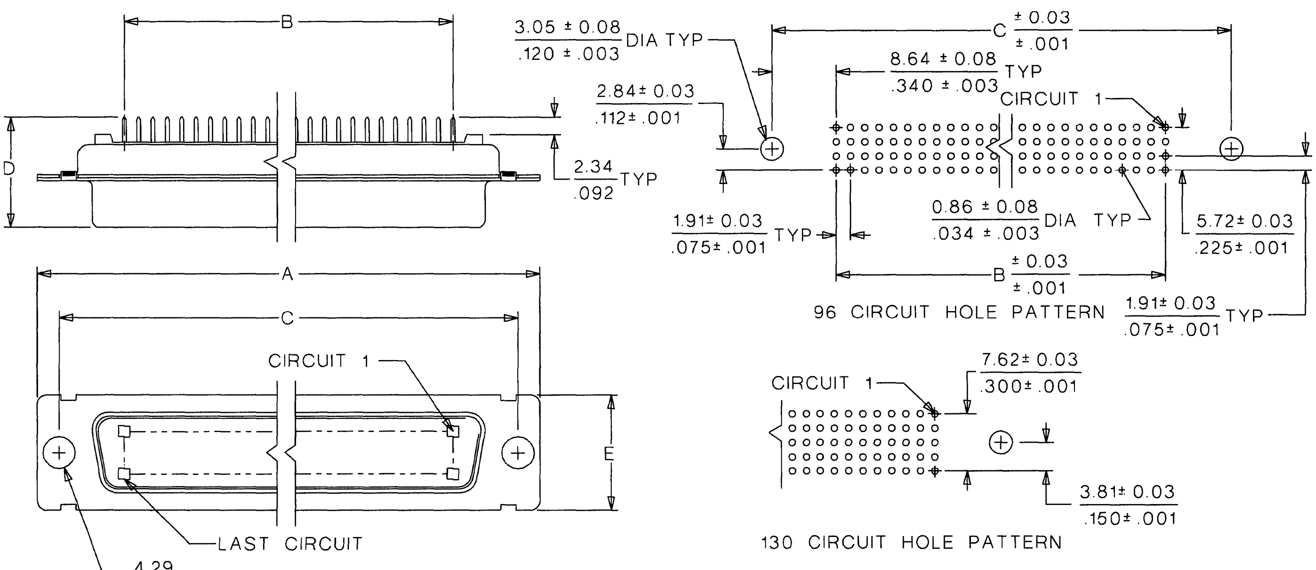
Reference Information
Product Specification: PS-70660
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70665 and 71995
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—100μ" min. bright Tin over 100μ" min. Copper
Temperature: -20 to +80°C





PCB LAYOUT: COMPONENT SIDE

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
96	51-26-0001	70660	66.93 (2.635)	43.82 (1.725)	61.11 (2.406)	14.66 (.616)	15.37 (.605)
130	51-26-0021	71990	69.32 (2.729)	47.63 (1.875)	63.50 (2.500)	14.71 (.610)	16.97 (.668)

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Shielded Plug

70665/71995 96 and 130 Circuit Right Angle

Features and Benefits

- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Generous lead-in for blind mating

Reference Information

Product Specification: PS-70660
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70660 and 71990
Designed In: Inches

Electrical

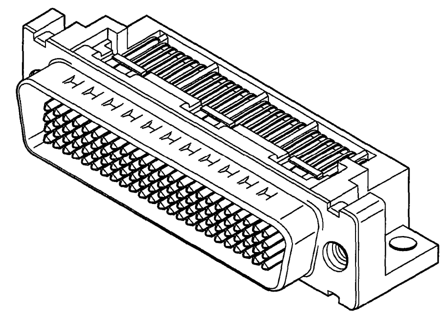
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

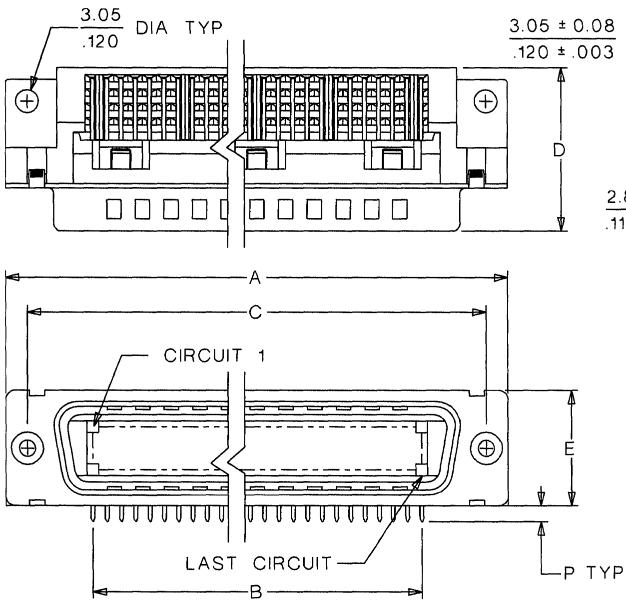
Mechanical

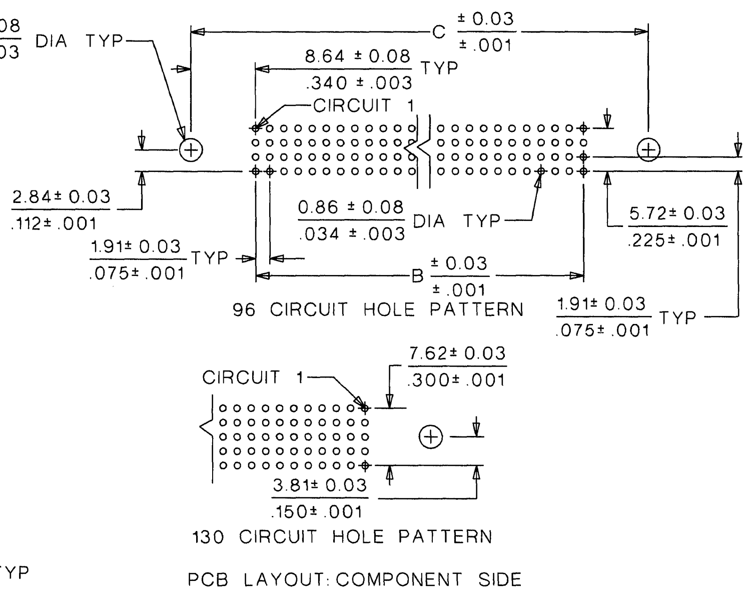
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical

Housing: Glass-filled polymer, UL 94V-0
Contact: Phosphor Bronze Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—100μ" min. bright Tin over 100μ" min. Copper
Temperature: -20 to +80°C







ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension					
			A	B	C	D	E	P
96	51-26-0010	70665	66.93 (2.635)	43.82 (1.725)	61.11 (2.406)	21.92 (.863)	15.37 (.605)	2.34 (.092)
130	51-26-0030	71995	69.32 (2.729)	47.63 (1.875)	63.50 (2.500)	23.70 (.933)	16.97 (.668)	2.08 (.082)

FEATURES AND SPECIFICATIONS

1.90mm (.075") Pitch LFH™ Matrix 75 Shielded Receptacle

70660/71990 96 and 130 Circuit Right Angle

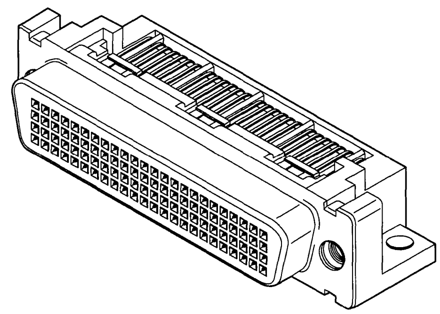
Features and Benefits
- Unique Low Force Helix terminal
- Contact layout .075 x .075"
- SMT-compatible materials
- High cycle life from controlled plating and contact surfaces
- Suitable for high-density and high-performance applications
- Generous lead-in for blind mating

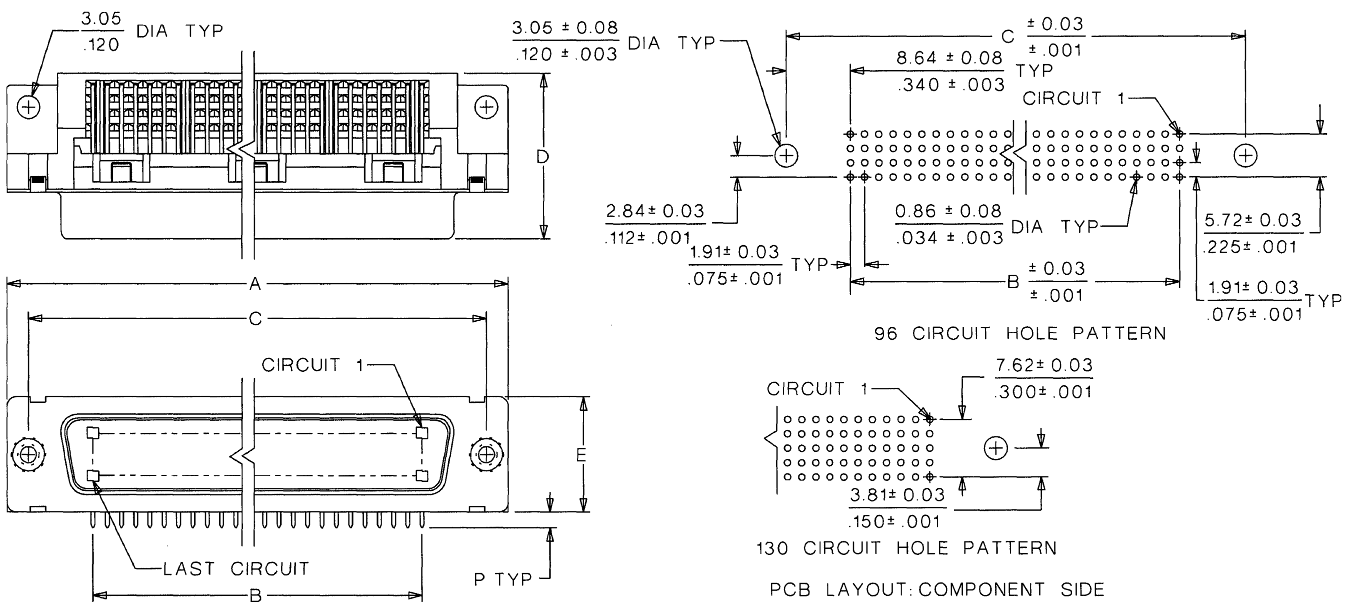
Reference Information
Product Specification: PS-70660
Packaging: Tube
Tooling Information: See pages P-34 and P-35
Mates With: 70665 and 71995
Designed In: Inches

Electrical
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 84g max.
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical
Housing: Glass-filled polymer, UL 94V-0
Contact: Beryllium Copper Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—100μ" min. bright Tin over 100μ" min. Copper
Temperature: -20 to +80°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Engineering No.	Dimension					
			A	B	C	D	E	P
96	51-26-0000	70660	66.93 (2.635)	43.82 (1.725)	61.11 (2.406)	21.92 (.863)	15.37 (.605)	2.34 (.092)
130	51-26-0020	71990	69.32 (2.729)	47.63 (1.875)	63.50 (2.500)	23.70 (.933)	16.97 (.668)	2.08 (.082)

1.90mm (.075") Pitch LFH™ Matrix 75 Plug Cable Kit

70665/71995 Subassembly and Terminal Sticks

FEATURES AND SPECIFICATIONS

Features and Benefits

- Cable assemblies available through Molex-approved suppliers
- Termination of a variety of wire types 26 to 36 AWG (depending on application)
- Wire terminated by direct weld, solder or paddle card (see Cable Termination Options page P-33)
- 4 terminal sticks required per subassembly (terminal sticks sold separately)
- 96-circuit same size as 50-pin D-sub for standard overmolding and back shell hardware

Reference Information

Packaging: Box and tray
Tooling Information: See pages P-34 and P-35
Mates With: 70660 and 71990
Designed In: Inches

Electrical

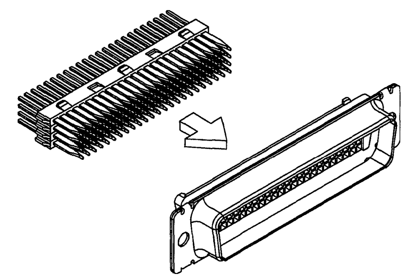
Voltage: 40V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ min.

Mechanical

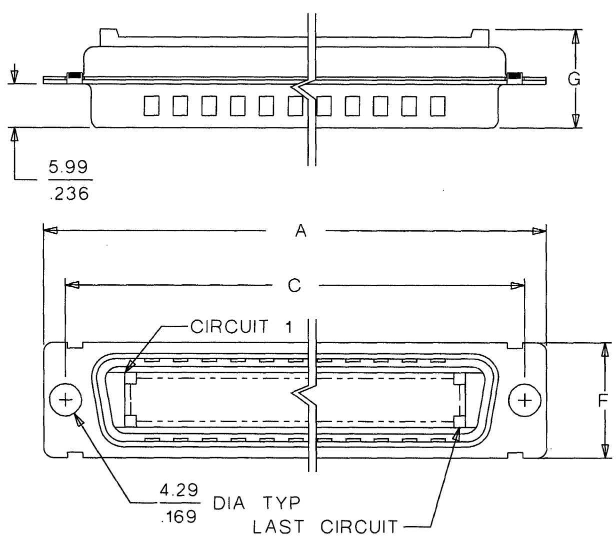
Mating Force: 60g nominal per circuit
Unmating Force: 20g min. per circuit
Durability: 500 cycles max.

Physical

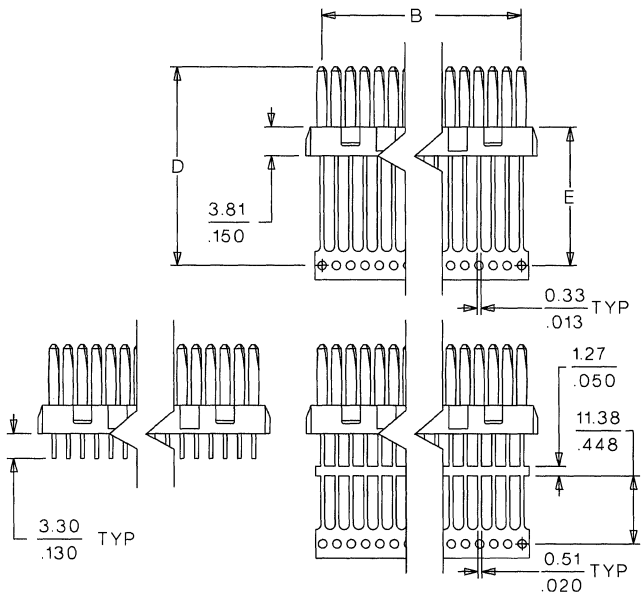
Housing: Glass-filled polymer, UL 94V-0
Contact:
Plugs—Phosphor Bronze Alloy
Receptacle—Beryllium Copper Alloy
Plating:
Terminals—30μ" min. Gold over 50μ" min. Nickel in contact area, 100μ" min. Tin/Lead over 50μ" min. Nickel in PC tail area
Shields—150μ" min. bright Tin over 50μ" Nickel all over Copper flash
Temperature: -20 to +80°C



SUBASSEMBLY



TERMINAL STICKS



ORDERING INFORMATION AND DIMENSIONS

Subassembly			
Circuits	Order No.	Engineering No.	Description
96	51-26-0012	70665-2001	I/O Plug Connector Subassembly
130	51-26-0032	71995-2001	

Circuits	Dimension					
	A	B	C	D	F	G
96	2.635	1.725	2.406	1.470	.605	.524
130	2.729	1.875	2.500	1.470	.668	.518

Terminal Sticks				
Circuits	Order No.	Engineering No.	Description	Tail Width
96	51-25-1005	71989-4002	Trimmed to length without carrier	.020
	51-25-1004	71989-4001	With carrier	.020
130	51-25-1002	71989-2001	With carrier	.020
	51-25-1007	71989-2002	Trimmed to length without carrier	.020

FEATURES AND SPECIFICATIONS

Features and Benefits
- For use with Matrix 50 and 75 products
- Guide pin is heat-treated steel material; guide sleeve is cold-drawn steel material
- Socket size 3/16"
- M3 external thread
- Suitable for docking applications
- Recommended panel thickness is .040" max.

Reference Information
Packaging: Bag
Designed In: Inches

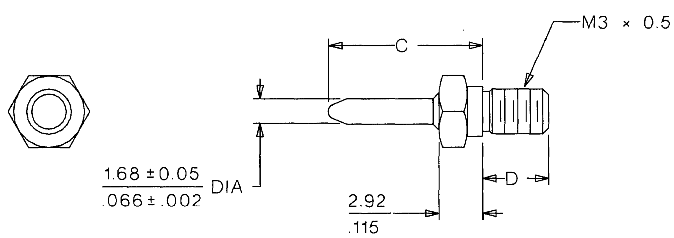
Mechanical
Assembly Torque: 5 in.-lb max.

Physical
Plating: Nickel

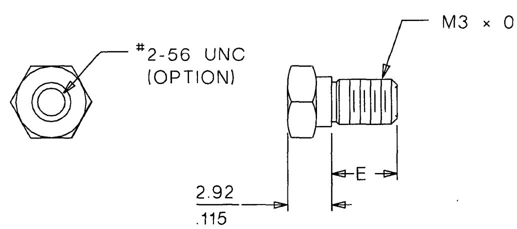
LFH™ Matrix 50 and 75 Docking Hardware

71628/71629 Guide Pin and Guide Sleeve

GUIDE PIN



GUIDE SLEEVE



RECOMENDED PANEL THICKNESS : 0.97± 0.03 / .038± .001

ORDERING INFORMATION AND DIMENSIONS

Guide Pin			
Order No.	Engineering No.	Dimension	
		C	D
89-00-2190	71628-1000	10.85 (.427)	4.37 (.172)
89-00-2180	71628-1001	11.94 (.470)	4.37 (.172)
71628-2000‡	71628-2000	10.85 (.427)	3.35 (.132)
71628-3000	71628-3000	11.68 (.460)	4.37 (.172)

Guide Sleeve		
Order No.	Engineering No.	Dimension A
89-00-2191	71629-1000	4.37 (.172)
71629-2000‡	71629-2000	3.35 (.132)
71629-3000*	71629-3000	4.37 (.172)
71629-4000†	71629-4000	4.37 (.172)

* Has 2-56 internal thread for use in board-to-board and cable-to-board applications
† Countersink .050" x 45°
‡ For use in vertical applications

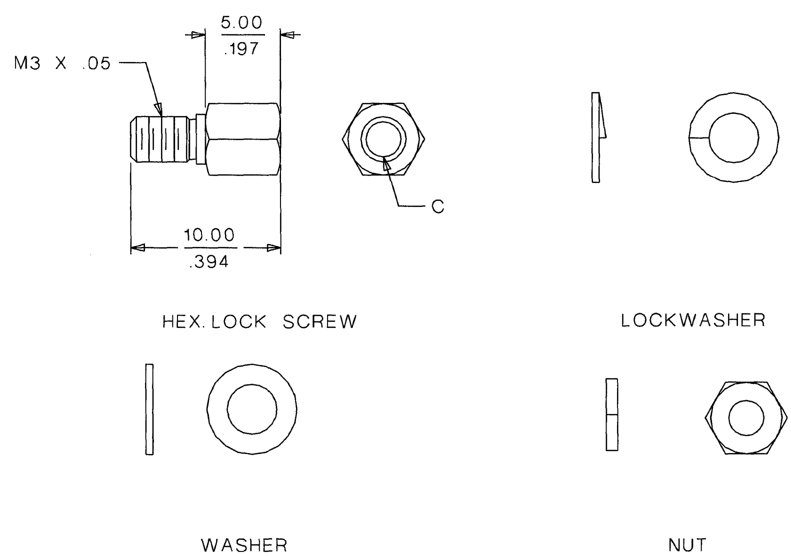
FEATURES AND SPECIFICATIONS

LFH™ Matrix 50 and 75 Hardware

70982
Panel Mount Hex Screw Kit

Features and Benefits
- For use with Matrix 50 and 75 products
- Each kit includes 2 hex lock screws, 4 washers, 2 lockwashers and 2 nuts
- Screws available separately
- Socket size 3/16"
- 4-40 or M3 internal threads
- Recommended panel thickness is .025" max.

Reference Information
Packaging: Bag
Designed In: Inches



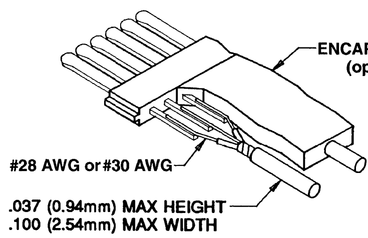
ORDERING INFORMATION

4-40 Thread (Internal and M3 External)			
Kit Order No.	**Quantity**	**Description**	**Plating**
70982-1003	1	Hex Lock Screw (4-40/M3 screw only)	Yellow Chromate
70982-1002	2	Hex Lock Screw (4-40/M3)	Tin
	4	Washer	
	2	Lockwasher	
	2	Nut	
71108-0001	1	4-40/M3 Knurled	Yellow Chromate

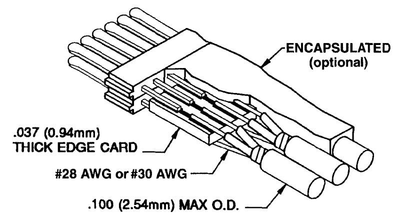
M3 Thread (Internal and External)			
Kit Order No.	**Quantity**	**Description**	**Plating**
70982-1004	1	Hex Lock Screw (M3/M3 screw only)	Tin
70982-0002	2	Hex Lock Screw (M3/M3)	
	4	Washer	
	2	Lockwasher	
	2	Nut	
70892-1006	Kit of above	With .630" tail length instead of .394"	

LFH™ Matrix 50 Cable Termination Options

SHIELDED TWISTED PAIR WITH DRAIN

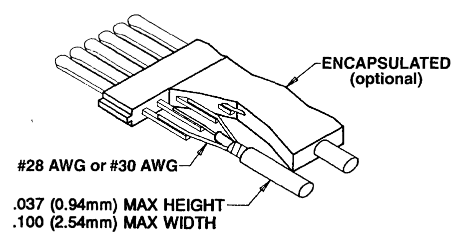


Wires Soldered or Welded Directly to Stick

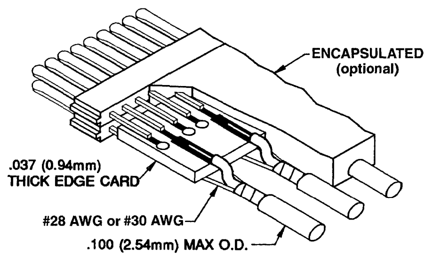


Wires Terminated to PCB Paddle Card

COAX

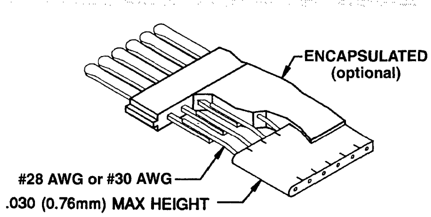


Wires Soldered or Welded Directly to Stick

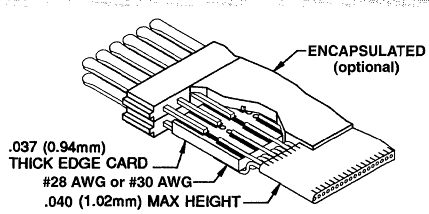


Wires Terminated to PCB Paddle Card

FLAT RIBBON CABLE



Wires Soldered or Welded Directly to Stick



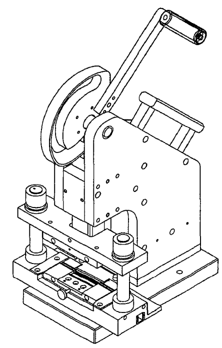
Wires Terminated to PCB Paddle Card

Manual Press for Stick Preparation

FEATURES AND SPECIFICATIONS

Features
- Removes carrier strip and trims terminal tail to correct length for welding
- Removes busbar either selectively or completely to accommodate all possible bussing options
- Die set construction installs easily into standard manual press

Specifications
Size: Width—230mm (9")
Depth—350mm (14")
Height—530mm (21")
Weight: 29.5kg (65 lb)
Rate: Up to 150 LFH sticks per hour, dependent on operator speed



ORDERING INFORMATION

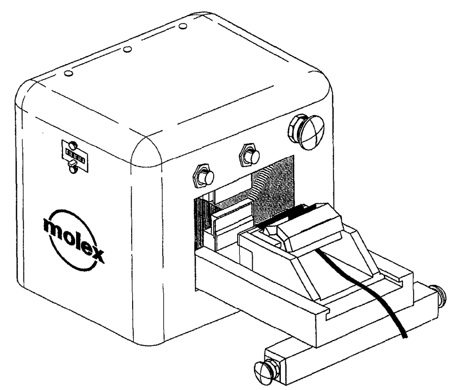
Description	Order No.	Use with LFH Terminal Stick
Basic Press	11-31-6356	
LFH Stick Preparation Tool Kit	62200-1100	51-24-2021, 51-25-2011, 70984-4000, 70984-1007, 70984-1010, 70984-4003, 70984-4008

Wire Preparation Tool

FEATURES AND SPECIFICATIONS

Features
- Used to prepare 28 AWG stranded wire .032" (.035" OD) for weld termination:
  1) Strips wire to a uniform length
  2) Twists wire strands together to minimize strand dispersion under weld pressure
  3) Trims wires to proper length for termination
- Wire strip, twist and trim performed in a single operation, initiated by dual palm safety buttons
- For use with standard wire clamps (from semi-automatic weld terminator)

Specifications
Size: Width—300mm (12")
Depth—500mm (20")
Height—300mm (12")
Weight: 45kg (100 lb)
Pneumatics: Pressure—5.5 BAR (80psig)
Consumption—28L per minute (1 CFM)
Electrical: Voltage—120V AC, 60 Hz or 220V AC, 50 Hz
Current—5.0A at 120 or 3.0A at 220
Rate: Up to 20 loaded standard wire clamps per hour, dependent on operator speed and application (1 clamp holds all wires from 1 cable end)



ORDERING INFORMATION

Description	Order No.
Wire Preparation Tool	62900-3500

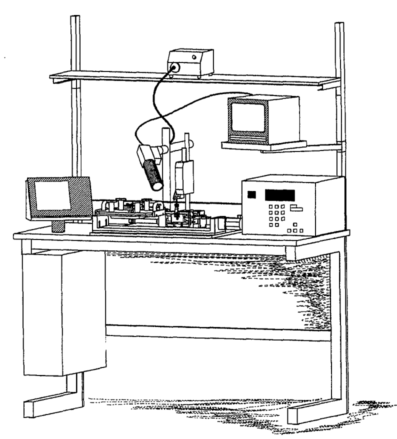
Unless otherwise specified, the machine will be delivered to be operated at 120V AC

Semi-Automatic Weld Termination Unit

FEATURES AND SPECIFICATIONS

Features
- Wire is fixtured in clamps mounted on removable pallet, which may be prepared off line to increase productivity
- Up to 25 jobs can be stored in machine memory
- Job storage data includes stick circuit size and pitch, void positions and welding parameters specific to the job
- Operator can inspect wire position (via zoom video microscope) prior to welding
- Weld power supply has built-in process monitor
- Touch screen operator control panel
- Unit is integrated into free-standing workstation

Specifications
Size: Width—1500mm (60")
Depth—800mm (32")
Height—1900mm (76")
Weight: 140kg (300 lb)
Pneumatics: Pressure—5.4 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Electrical: Voltage—120V, 50 to 60 Hz
Current—10.0A
Rate: Up to 14 fully terminated 60 circuit (7 fully terminated 160 circuit) LFH connectors per hour, dependent on operator speed and application



ORDERING INFORMATION

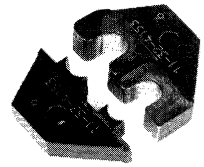
Description	Order No.	Use with LFH Terminal Stick
Semi-Automatic Weld Terminator with 1 pallet and 1 set of standard (28 AWG, .035" OD) wire clamps	11-20-1330	51-24-2021, 51-25-2011, 70984-4000, 70984-1007, 70984-1010, 70984-4003, 70984-4008
Additional pallet with 1 set of standard wire clamps	11-20-1344	

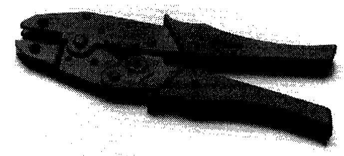
Application Tooling LFH™

Ferrule Crimp Hand Tool

FEATURES

- Crimp die has 2 positions to crimp the large and small diameter in a 2 step operation
- For low volume, prototype or repairs





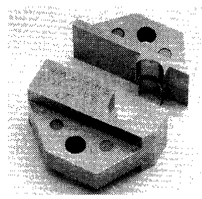
ORDERING INFORMATION

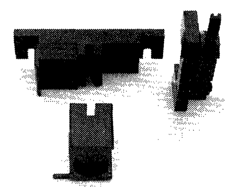
Description	Order No.	For Ferrule No.
Ferrule Hand Tool with Dies	62100-0100	71256-0001
Ferrule Hand Tool with Dies	62100-0200	71256-0002
Untooled Hand Tool	11-31-6379	
Ferrule Crimping Die	62100-0101	71256-0001
Ferrule Crimping Die	62100-0201	71256-0002

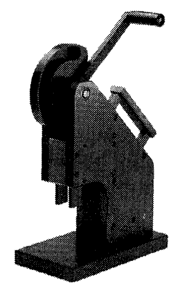
Manual Press for Ferrule Crimp

FEATURES

- Able to crimp both large and small diameter of the ferrule in 1 step
- Ratchet terminator assures completion of full cycle
- Modularity, able to use same press for stick prep and ferrule crimp with a simple die change







ORDERING INFORMATION

Description	Order No.	For Ferrule No.
Ferrule Manual Press with Dies and Fixture	62200-1200	71256-0001
Ferrule Manual Press with Dies and Fixture	62200-1300	71256-0002
Untooled Manual Press with Fixture	11-21-9507	
Fixture Only	11-31-7559	
Ferrule Crimping Die	62200-1201	71256-0001
Ferrule Crimping Die	62200-1301	71256-0002

Stick Loading Tool

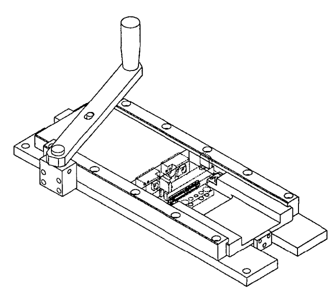
FEATURES AND SPECIFICATIONS

Features

- Used for inserting terminated LFH sticks into LFH connector housing
- All 4 sticks are simultaneously inserted
- Stick-holding nest has feature to prevent loading sticks upside down
- Insertion lever has positive stop for consistent insertions
- Holes provided for mounting to workbench

Specifications

Size: Width—400mm (16")
Depth—250mm (10")
Height—130mm (5")
Weight: 11.3kg (25 lb)
Rate: Up to 60 plugs per hour, dependent on operator speed and application

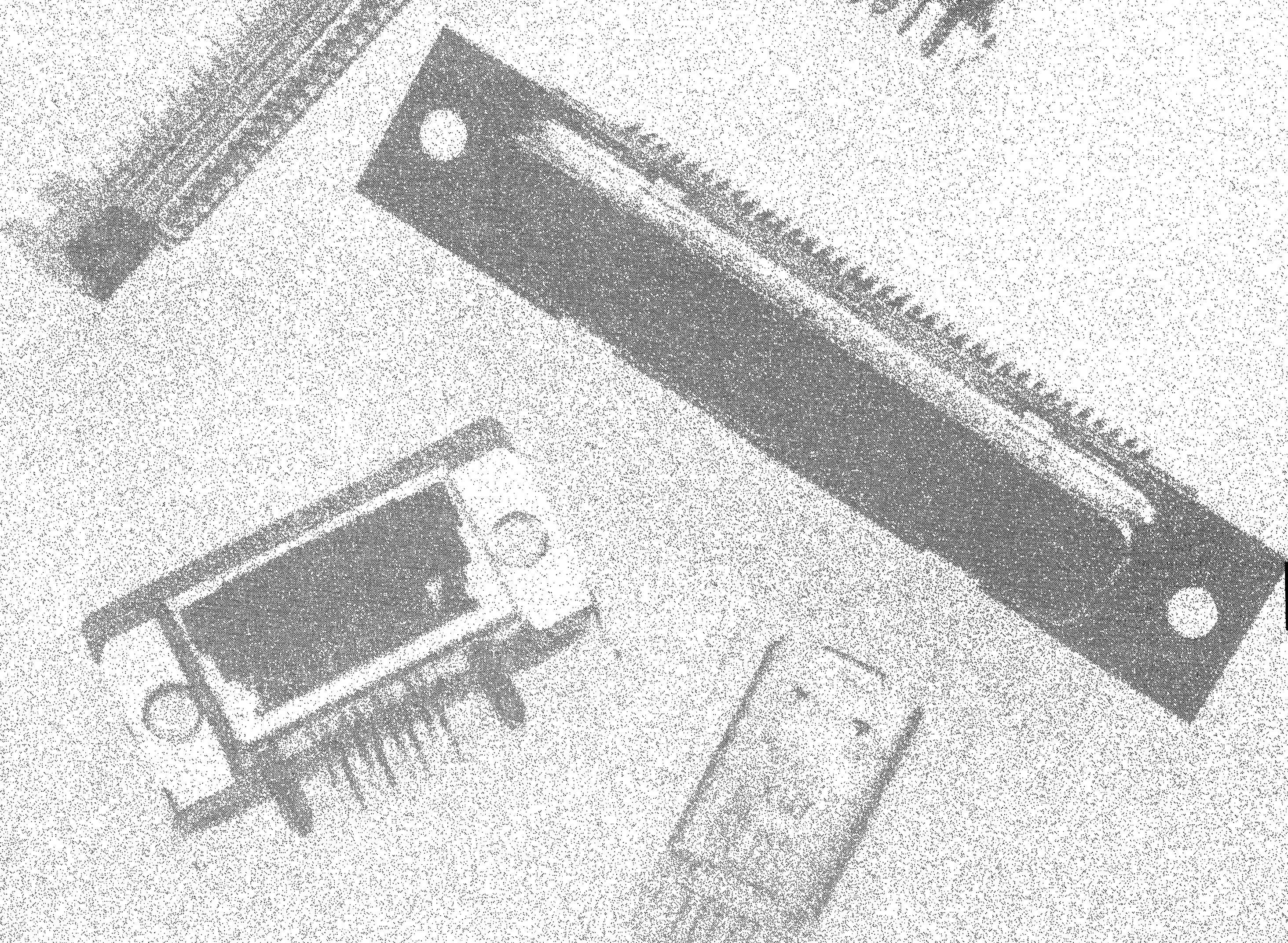


ORDERING INFORMATION

Description	Order No.		Use with Molex Connector
	Complete Tool	Tool Kit Only	
Stick Insertion Tool, 60 circuit plug	62200-1500	62200-0800	70929-2000
Stick Insertion Tool, 60 circuit receptacle	62200-1600	62200-0900	71691-0003
Stick Insertion Tool, 160 circuit plug	62200-1700	62200-1000	71624-3000

Shielded I/O

* ACCESS.bus is a registered trademark of Digital Equipment Corp.



FEATURES

- Sizes 4, 6, 8 and 16 circuits
- Dual-point contact system
- Industry-compatible unkeyed plug and receptacle for use with any other plug or receptacle
- 2 keyed version options available
- Receptacle housing is high-temperature material — SMT compatible
- Plug, shroud and receptacle 94V-0 thermoplastic
- Low cost mass termination using insulation displacement method
- Low applied cost for cable assembly
- Positive latching system with audible "click" eliminates additional locking hardware

molex®

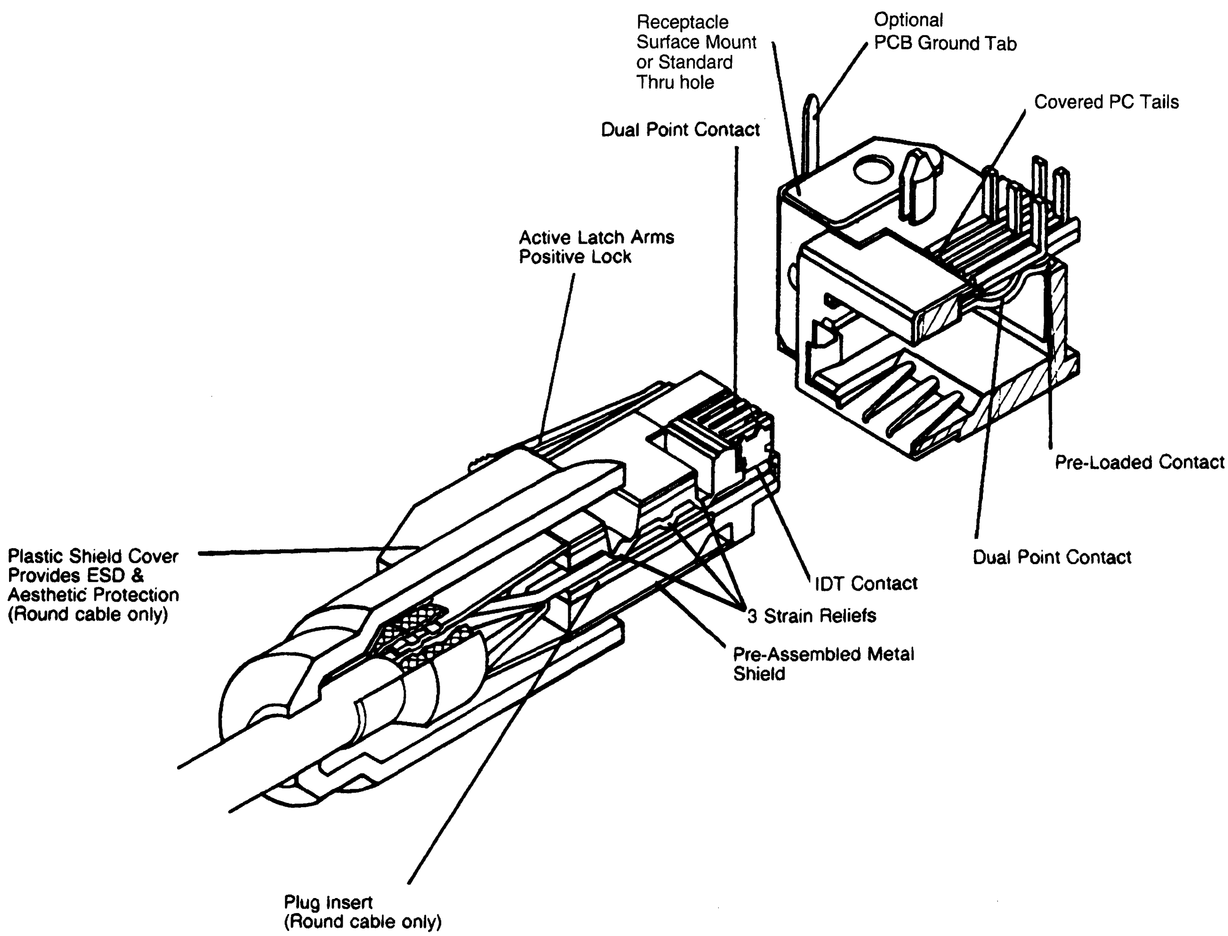
SEMCONN™ Shielded I/O Connector System

The patented 2-piece Molex SEMCONN System is fully shielded for EMI/RFI for use in critical I/O applications.

Positive-locking plugs feature redundant Gold-plated, dual point contacts. Made of clear or smoked gray polycarbonate and shielded with Tin-plated Brass, the plugs are available to terminate both flat and round shielded cables.

Receptacles are available in right angle or vertical styles. Through-hole versions feature the industry standard dual row .050 x .100" footprint; the surface mount version has a single row .050" footprint.

With the demand for higher density, rugged, user friendly I/O systems, SEMCONN replaces existing I/O connectors in keyboards, graphics tablets, modems, bar code readers, cellular phones, audio/video and medical instrumentation.

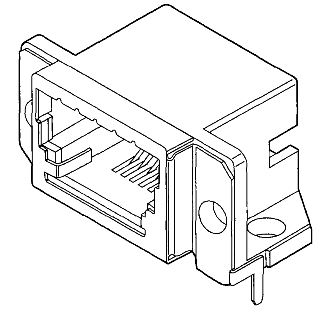


FEATURES AND SPECIFICATIONS

SEMCONN™ Shielded Receptacle

71355

Right Angle with PCB Ground Tab



Features and Benefits

- Preloaded contact assures low insertion force-to-normal force ratio
- Covered PC leads reduce contamination during soldering operation
- High-temperature plastic housing—SMT compatible

Reference Information

Product Specification: PS-71350A
Packaging: Tray
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical

Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

Electrical (cont'd)

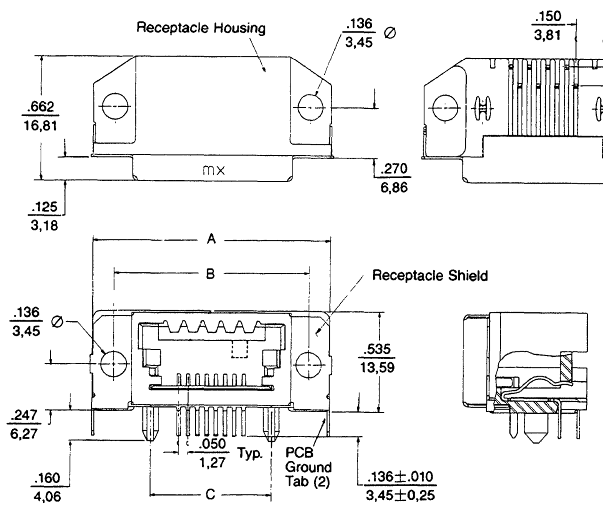
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

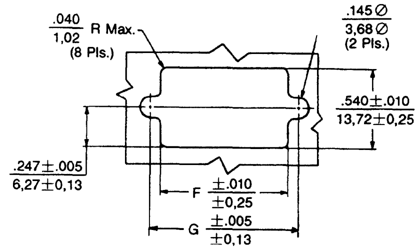
Mechanical

Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical

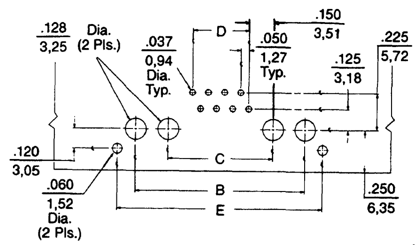
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable





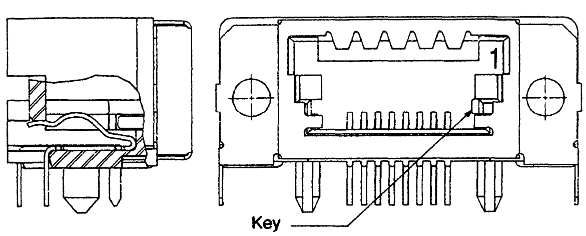
Panel Cut Out

NOTE: Maximum Panel Thickness .250

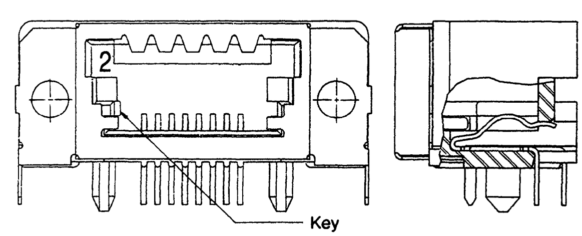


Recommended P.C.B. Layout
Foil Side Shown

inch / mm



Keying Option 1



Keying Option 2

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension						
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C	D	E	F	G
4	• 15-83-0304*	• 15-83-0334	• 15-83-0354	27.43 (1.080)	21.59 (.850)	11.43 (.450)	3.81 (.150)	27.25 (1.073)	17.78 (.700)	21.59 (.850)
6	• 15-83-0306*	• 15-83-0336	• 15-83-0356	29.97 (1.180)	24.13 (.950)	13.97 (.550)	6.35 (.250)	29.79 (1.173)	20.32 (.800)	24.13 (.950)
8	• 15-83-0308*	• 15-83-0338	• 15-83-0358	32.51 (1.280)	26.67 (1.050)	16.51 (.650)	8.89 (.350)	32.33 (1.273)	22.86 (.900)	26.67 (1.050)
16	• 15-83-0316*	• 15-83-0346	• 15-83-0366	42.67 (1.680)	36.83 (1.450)	26.67 (1.050)	19.05 (.750)	42.49 (1.673)	33.02 (1.300)	36.83 (1.450)

• US Standard Product, available through Molex franchised distributors
* Industry compatible

Shielded I/O
Q

FEATURES AND SPECIFICATIONS

SEMCONN™ Shielded Receptacle

71355

Right Angle with Panel Ground

Features and Benefits
- Preloaded contact assures low insertion force-to-normal force ratio
- Covered PC leads reduce contamination during soldering operation
- High-temperature plastic housing—SMT compatible

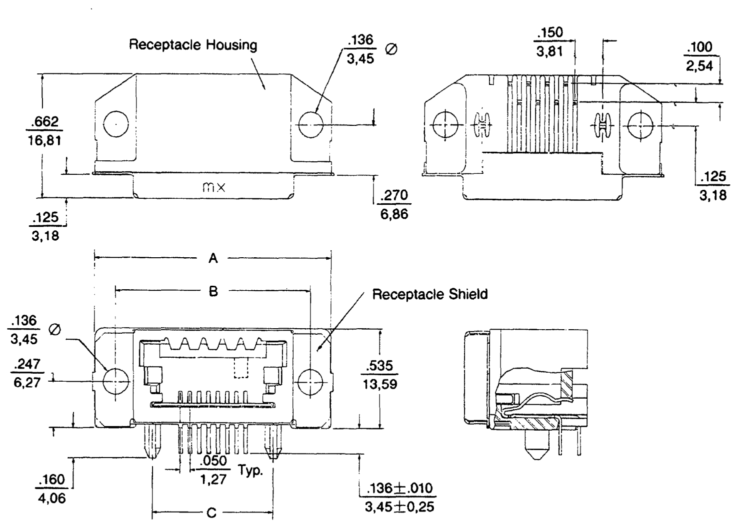
Reference Information
Product Specification: PS-71350A
Packaging: Tray
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

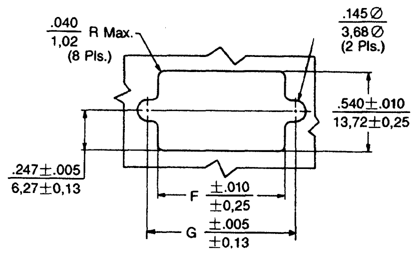
Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

Electrical (cont'd)
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

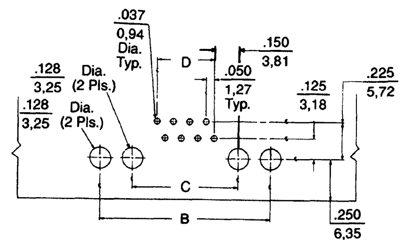
Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable



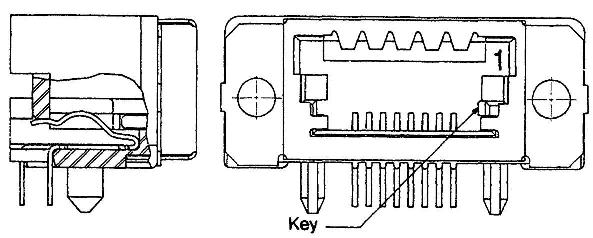


Panel Cut Out
NOTE: Maximum Panel Thickness .250

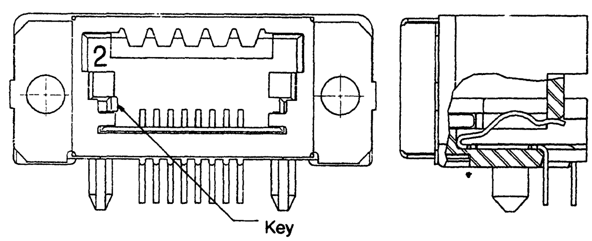


Recommended P.C.B. Layout
Foil Side Shown

inch
mm



Keying Option 1



Keying Option 2

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension					
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C	D	F	G
4	• 15-83-0004*	• 15-83-0034	• 15-83-0054	27.43 (1.080)	21.59 (.850)	11.43 (.450)	3.81 (.150)	17.78 (.700)	21.59 (.850)
6	• 15-83-0006*	• 15-83-0036	• 15-83-0056	29.97 (1.180)	24.13 (.950)	13.97 (.550)	6.35 (.250)	20.32 (.800)	24.13 (.950)
8	• 15-83-0008*	• 15-83-0038	• 15-83-0058	32.51 (1.280)	26.67 (1.050)	16.51 (.650)	8.89 (.350)	22.86 (.900)	26.67 (1.050)
16	• 15-83-0016*	• 15-83-0046	• 15-83-0066	42.67 (1.680)	36.83 (1.450)	26.67 (1.050)	19.05 (.750)	33.02 (1.300)	36.83 (1.450)

• US Standard Product, available through Molex franchised distributors
* Industry compatible

FEATURES AND SPECIFICATIONS

SEMCONN™ Shielded Receptacle

71355

Right Angle, SMT

Features and Benefits
- Preloaded contact assures low insertion force-to-normal force ratio
- With panel ground only
- High-temperature plastic housing—SMT compatible

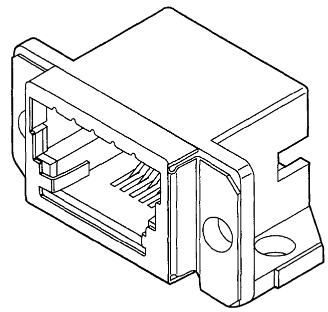
Reference Information
Product Specification: PS-71350A
Packaging: Tray
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

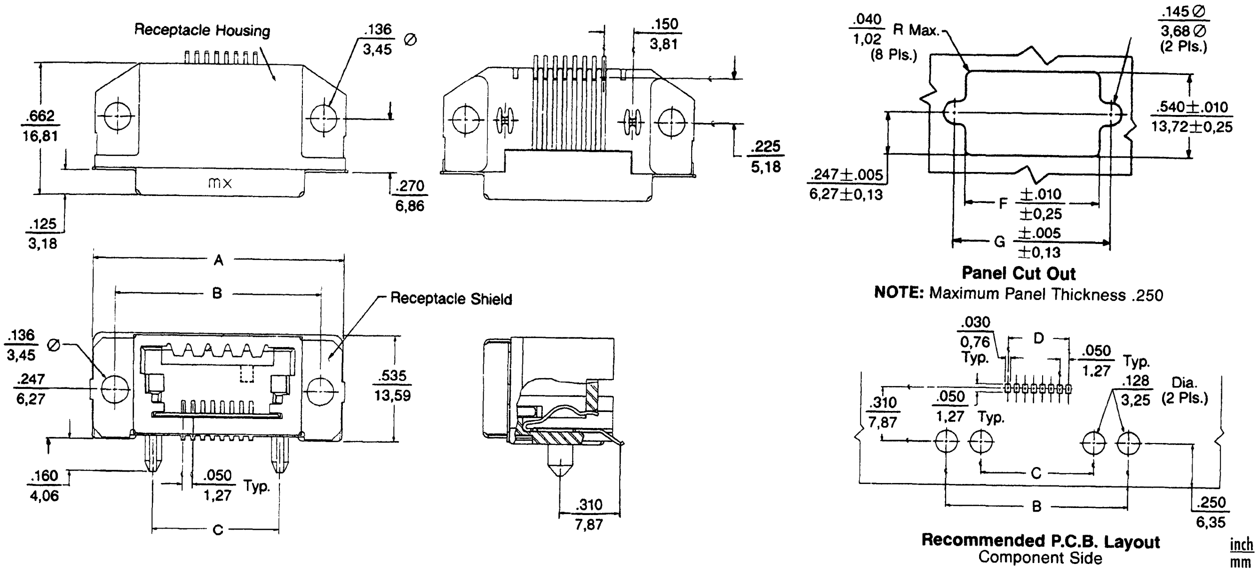
Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

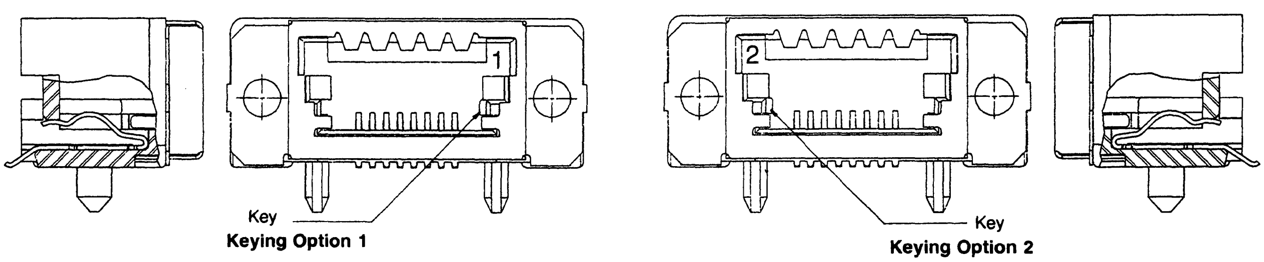
Electrical (cont'd)
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable







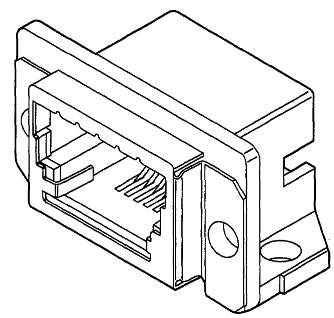
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension					
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C	D	F	G
4	• 15-83-0204*	• 15-83-0234	• 15-83-0254	27.43 (1.080)	21.59 (.850)	11.43 (.450)	3.81 (.150)	17.78 (.700)	21.59 (.850)
6	• 15-83-0206*	• 15-83-0236	• 15-83-0256	29.97 (1.180)	24.13 (.950)	13.97 (.550)	6.35 (.250)	20.32 (.800)	24.13 (.950)
8	• 15-83-0208*	• 15-83-0238	• 15-83-0258	32.51 (1.280)	26.67 (1.050)	16.51 (.650)	8.89 (.350)	22.86 (.900)	26.67 (1.050)
16	• 15-83-0216*	• 15-83-0246	• 15-83-0266	42.67 (1.680)	36.83 (1.450)	26.67 (1.050)	19.05 (.750)	33.02 (1.300)	36.83 (1.450)

• US Standard Product, available through Molex franchised distributors
* Industry compatible

FEATURES AND SPECIFICATIONS

SEMCONN™
Flanged, Shielded Receptacle
71355
Right Angle with PCB Ground



Features and Benefits
- Preloaded contact assures low insertion force-to-normal force ratio
- Covered PC leads reduce contamination during soldering operation
- High-temperature plastic housing—SMT compatible

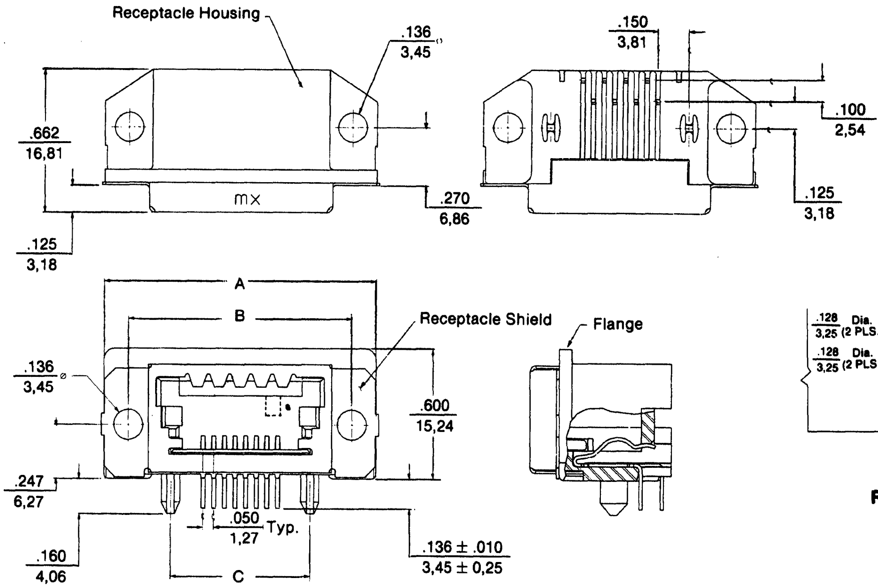
Reference Information
Product Specification: PS-71350A
Packaging: Tray
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

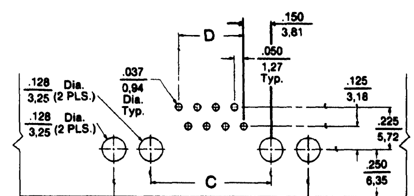
Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

Electrical (cont'd)
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

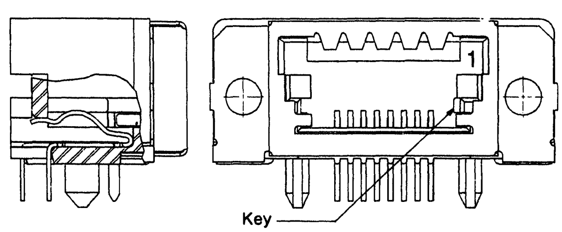
Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable



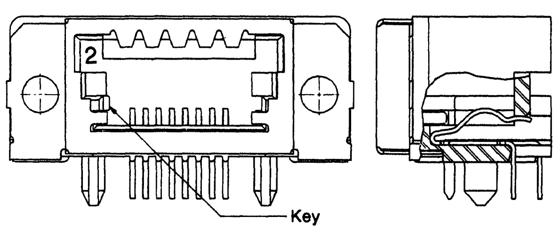


Recommended P.C.B. Layout
Foil Side Shown

inch / mm



KEYING OPTION 1



KEYING OPTION 2

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension				
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C	D	E
4	15-83-0404*	15-83-0434	15-83-0454	27.43 (1.080)	21.59 (.850)	11.43 (.450)	3.81 (.150)	27.25 (1.073)
6	15-83-0406*	15-83-0436	15-83-0456	29.97 (1.180)	24.13 (.950)	13.97 (.550)	6.35 (.250)	29.79 (1.173)
8	15-83-0408*	15-83-0438	15-83-0458	32.51 (1.280)	26.67 (1.050)	16.51 (.650)	8.89 (.350)	32.33 (1.273)
16	15-83-0416*	15-83-0446	15-83-0466	42.67 (1.680)	36.83 (1.450)	26.67 (1.050)	19.05 (.750)	42.49 (1.673)

* Industry compatible

FEATURES AND SPECIFICATIONS

Features and Benefits
- Preloaded contact assures low insertion force-to-normal force ratio
- Covered PC leads reduce contamination during soldering operation
- High-temperature plastic housing—SMT compatible

Reference Information
Product Specification: PS-71350A
Packaging: Tray
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

Electrical (cont'd)
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

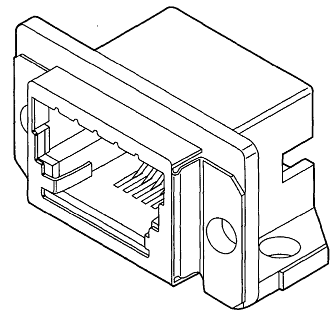
Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to AWG 28 foil-shielded flat, round and retractile cable

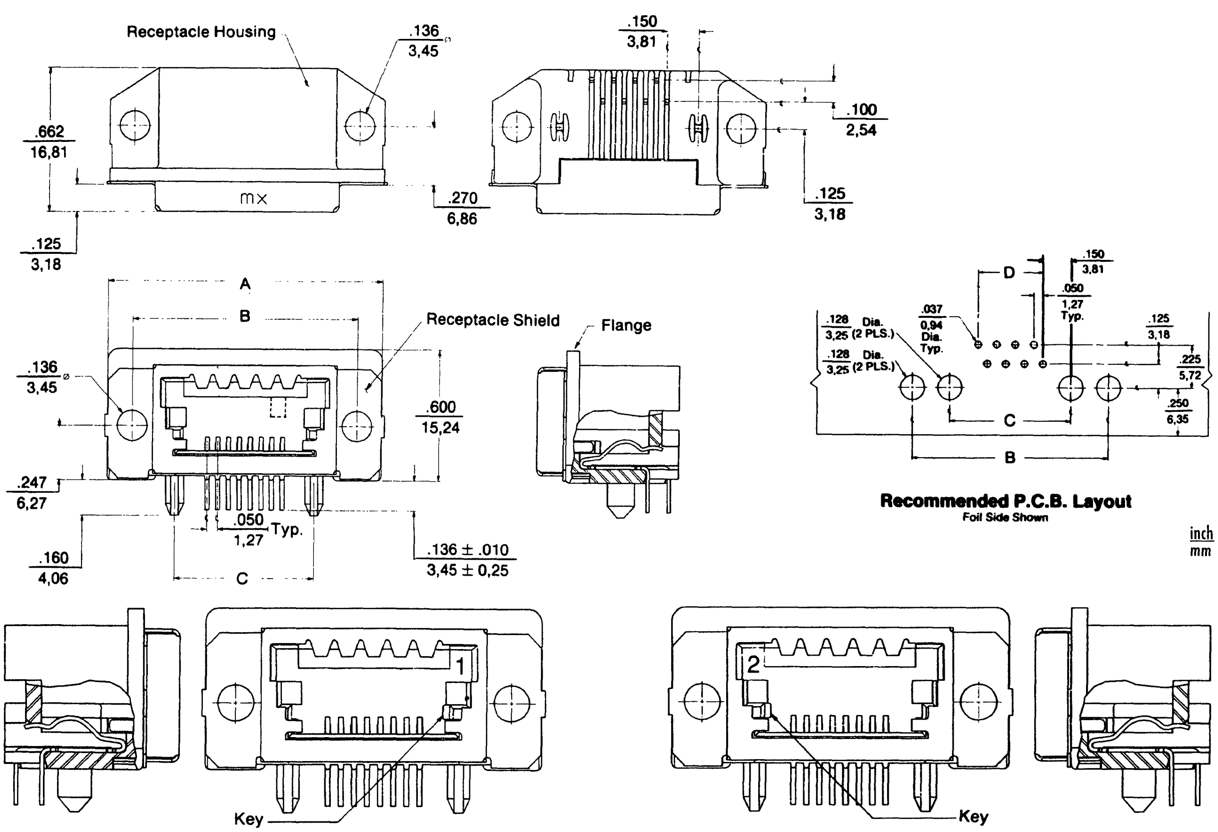
molex®

SEMCONN™ Flanged, Shielded Receptacle

71355

Right Angle with Panel Ground





KEYING OPTION 1

KEYING OPTION 2

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension			
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C	D
4	15-83-0104*	15-83-0134	15-83-0154	27.43 (1.080)	21.59 (.850)	11.43 (.450)	3.81 (.150)
6	15-83-0106*	15-83-0136	15-83-0156	29.97 (1.180)	24.13 (.950)	13.97 (.550)	6.35 (.250)
8	15-83-0108*	15-83-0138	15-83-0158	32.51 (1.280)	26.67 (1.050)	16.51 (.650)	8.89 (.350)
16	15-83-0116*	15-83-0146	15-83-0166	42.67 (1.680)	36.83 (1.450)	26.67 (1.050)	19.05 (.750)

* Industry compatible

Shielded I/O

Q

FEATURES AND SPECIFICATIONS

SEMCONN™ Shielded Receptacle

71505

Vertical with PCB Ground

Features and Benefits
- 4 integral PCB shield ground tabs assure positive ground without hardware
- Covered PC leads allow close placement of other components
- Preloaded contacts assure high normal force with low insertion force
- Molded flange provides stability and accurately locates PC ground tabs
- High-temperature LCP housing—SMT compatible

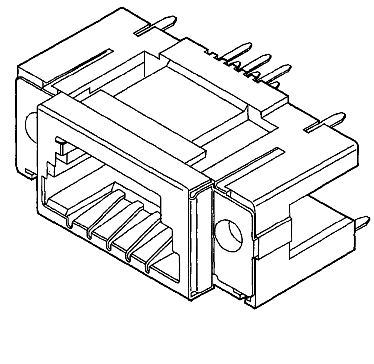
Reference Information
Product Specification: PS-71350A
Packaging: Tray
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

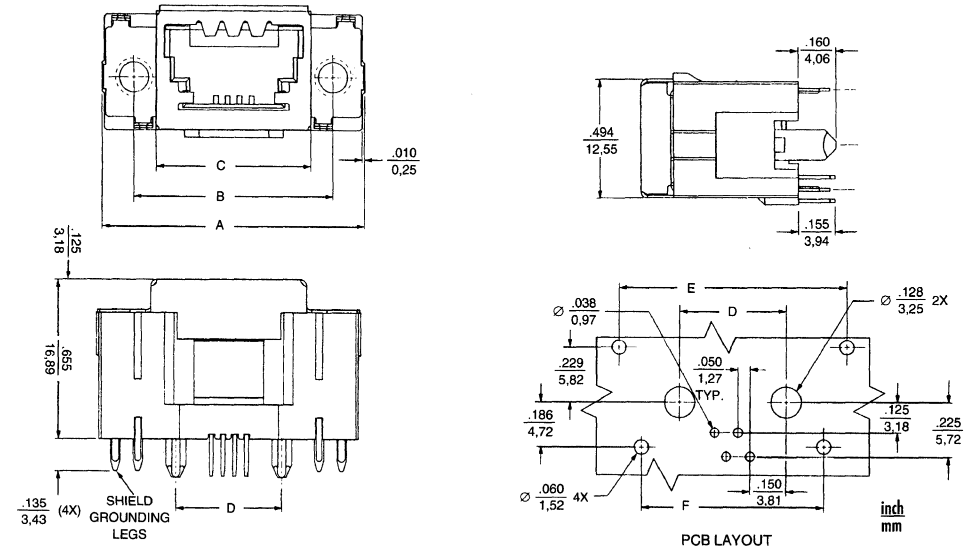
Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.

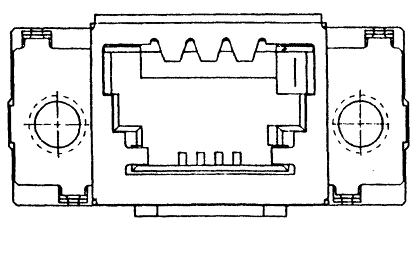
Electrical (cont'd)
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

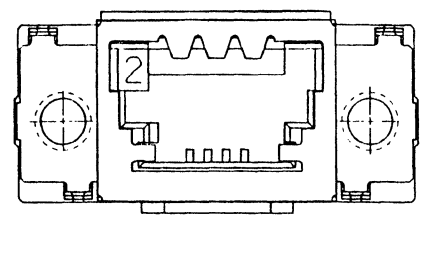
Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable







KEYING OPTION 1



KEYING OPTION 2

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension					
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C	D	E	F
4	• 15-83-0904*	• 15-83-0934	• 15-83-0954	28.45 (1.120)	21.59 (.850)	16.76 (.660)	11.43 (.450)	24.38 (.960)	19.51 (.768)
6	• 15-83-0906*	• 15-83-0936	• 15-83-0956	30.99 (1.220)	24.13 (.950)	19.30 (.760)	13.97 (.550)	26.92 (1.060)	22.05 (.868)
8	• 15-83-0908*	• 15-83-0938	• 15-83-0958	33.53 (1.320)	26.67 (1.050)	21.84 (.860)	16.51 (.650)	29.46 (1.160)	24.59 (.968)
16	• 15-83-0916*	• 15-83-0946	• 15-83-0966	43.69 (1.720)	36.83 (1.450)	32.00 (1.260)	26.67 (1.050)	39.62 (1.560)	34.75 (1.368)

• US Standard Product, available through Molex franchised distributors
* Industry compatible

FEATURES AND SPECIFICATIONS

SEMCONN™ Round Cable Plug System

Features and Benefits

- Plug with pre-assembled shield
- Plug insert provides proper sequencing of wires and proper length for correct termination
- Plug kits are packaged with plug, plug insert, ferrule and shield cover in separate poly bags
- Shield cover for aesthetics and ESD protection
- Low applied cost for cable assembly
- Clear polycarbonate housing for termination inspection

Reference Information

Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical

Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

Electrical (cont'd)

Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

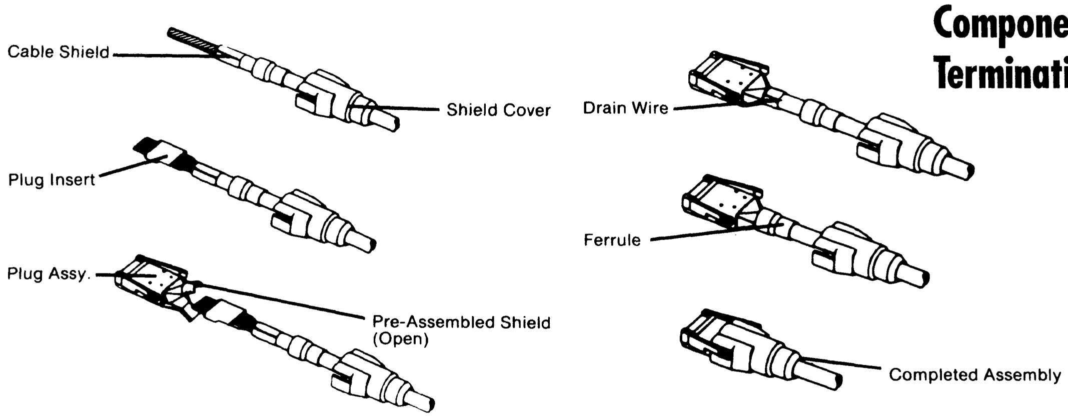
Mechanical

Cable Pull-Out Force: 30 lb min.
Plug to Socket Latch Strength: 15 lb min.
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical

Housing: Plug and plug insert—clear thermoplastic, UL 94V-0
Round cable shroud—black thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50µ" select Gold in contact area, Tin/Lead in insulation displacement section, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable

Round Cable Plug Components and Wire Termination Sequence



Shielded I/O

Q

SEMCONN™ Shielded Plug Assembly for Shielded Round Cable

71310

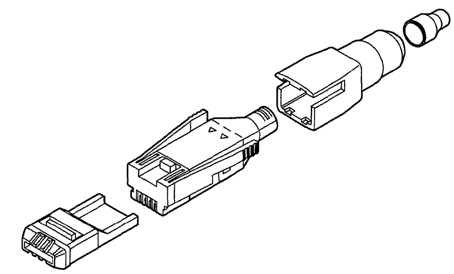
Features and Benefits
- Pre-assembled 1-piece shield
- Nonmetallic shield cover optional
- 3 strain reliefs
- Wire management plug insert provided

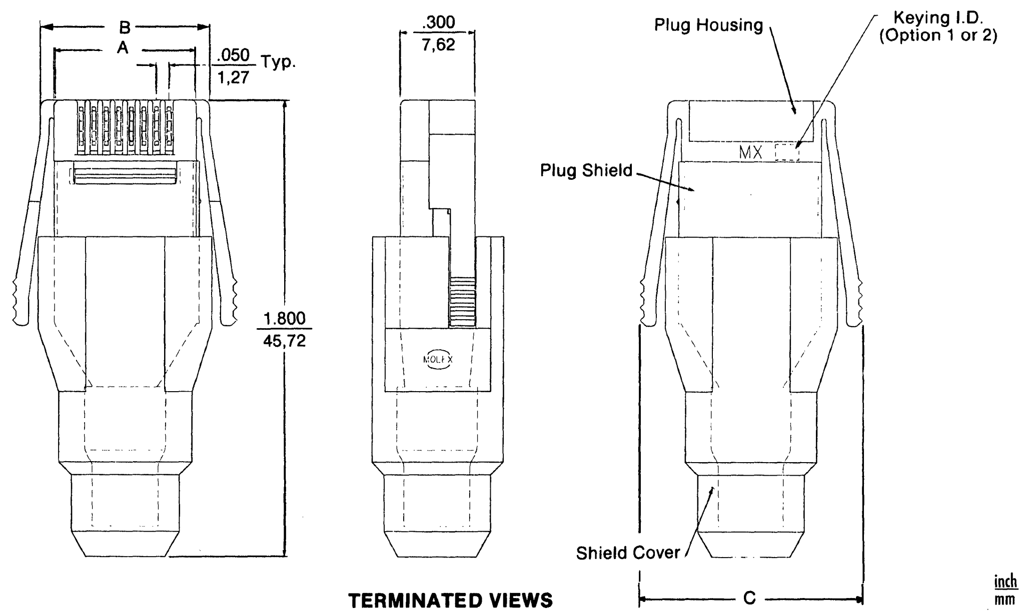
Reference Information
Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

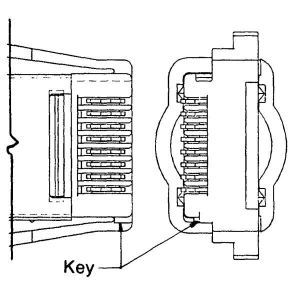
Mechanical
Cable Pull-Out Force: 30 lb min.
Plug to Socket Latch Strength: 15 lb min.
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical
Housing: Plug and plug insert—clear thermoplastic, UL 94V-0
Round cable shroud—black thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50µ" select Gold in contact area, Tin/Lead in insulation displacement section, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable

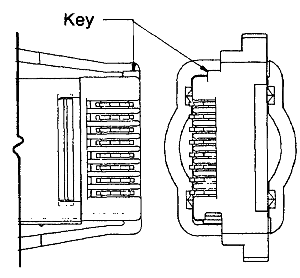




TERMINATED VIEWS



KEYING OPTION 1



KEYING OPTION 2

molex®

SEMCONN™ Shielded Plug Assembly for Shielded Round Cable

71310

Clear Plug Kits* with Black Shield Covers						
Circuits	Order No.			Dimension		
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C
4	• 15-83-0504	• 15-83-0534	• 15-83-0554	9.30 (.366)	12.07 (.475)	17.22 (.678)
6	• 15-83-0506	• 15-83-0536	• 15-83-0556	11.84 (.466)	14.61 (.575)	19.76 (.778)
8	• 15-83-0508	• 15-83-0538	• 15-83-0558	14.38 (.566)	17.15 (.675)	22.30 (.878)
16	• 15-83-0516	• 15-83-0546	• 15-83-0566	24.54 (.966)	27.31 (1.075)	32.40 (1.278)
6/4†	15-83-1506	15-83-1536	15-83-1556	11.84 (.466)	14.61 (.575)	19.76 (.778)
8/6‡	15-83-1508	15-83-1538	15-83-1558	14.38 (.566)	17.15 (.675)	22.70 (.896)

• US Standard Product, available through Molex franchised distributors

* Kit includes plug with pre-assembled shield, plug insert, crimp ferrule and black shield cover

Clear Plug Kits* with Gray Shield Covers						
Circuits	Order No.			Dimension		
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C
4	15-83-1104	15-83-1124	15-83-1144	9.30 (.366)	12.07 (.475)	17.22 (.678)
6	15-83-1106	15-83-1126	15-83-1146	11.84 (.466)	14.61 (.575)	19.76 (.778)
8	15-83-1108	15-83-1128	15-83-1148	14.38 (.566)	17.15 (.675)	22.70 (.896)
16	15-83-1116	15-83-1136	15-83-1156	24.54 (.966)	27.31 (1.075)	32.40 (1.278)

* Kit includes plug with pre-assembled shield, plug insert, crimp ferrule and gray shield cover

Clear Plug Kits* without Shield Covers						
Circuits	Order No.			Dimension		
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C
4	15-83-0804	15-83-0829	15-83-0854	9.30 (.366)	12.07 (.475)	17.22 (.678)
6	15-83-0806	15-83-0831	15-83-0856	11.84 (.466)	14.61 (.575)	19.76 (.778)
8	15-83-0808	15-83-0833	15-83-0858	14.38 (.566)	17.15 (.675)	22.30 (.878)
16	15-83-0816	15-83-0841	15-83-0866	24.54 (.966)	27.31 (1.075)	32.40 (1.278)
6/4 †	15-83-0807	15-83-0832	15-83-0857	11.84 (.466)	14.61 (.575)	19.76 (.778)
8/6 ‡	15-83-0809	15-83-0834	15-83-0859	14.38 (.566)	17.15 (.675)	22.70 (.896)
6/4 §	15-83-1516	N/A	N/A	11.84 (.466)	14.61 (.575)	19.76 (.778)

* Kit includes plug with pre-assembled shield, plug insert and crimp ferrule

†Requires cable OD of .218; 4 circuits loaded, 6-circuit connector

‡Requires cable OD of .234; 6 circuits loaded, 8-circuit connector

§Requires cable OD of .190; 4 circuits loaded, 6-circuit connector

Smoke Gray Plug Kits* with Black Shield Covers						
Circuits	Order No.			Dimension		
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C
4	15-83-2504	15-83-2534	15-83-2554	9.30 (.366)	12.07 (.475)	17.22 (.678)
6	15-83-2506	15-83-2536	15-83-2556	11.84 (.466)	14.61 (.575)	19.76 (.778)
8	15-83-2508	15-83-2538	15-83-2558	14.38 (.566)	17.15 (.675)	22.30 (.878)
16	15-83-2516	15-83-2546	15-83-2566	24.54 (.966)	27.31 (1.075)	32.40 (1.278)

* Kit includes plug with pre-assembled shield, plug insert, crimp ferrule and black shield cover

Smoke Gray Plug Kits* without Shield Covers						
Circuits	Order No.			Dimension		
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C
4	15-83-1804	15-83-1834	15-83-1854	9.30 (.366)	12.07 (.475)	17.22 (.678)
6	15-83-1806	15-83-1836	15-83-1856	11.84 (.466)	14.61 (.575)	19.76 (.778)
8	15-83-1808	15-83-1838	15-83-1858	14.38 (.566)	17.15 (.675)	22.30 (.878)
16	15-83-1816	15-83-1846	15-83-1866	24.54 (.966)	27.31 (1.075)	32.40 (1.278)

* Kit includes plug with pre-assembled shield, plug insert and crimp ferrule

FEATURES AND SPECIFICATIONS

Features and Benefits
- Plug with pre-assembled 1-piece shield
- Plug shield covered at seam
- Low applied cost for cable assembly
- Clear polycarbonate housing

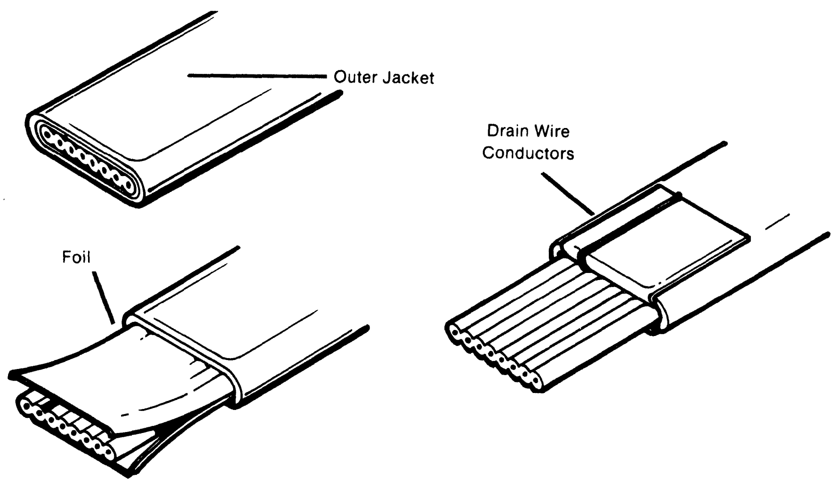
Reference Information
Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Cable Pull-Out Force: 30 lb min.
Plug to Socket Latch Strength: 15 lb min.
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

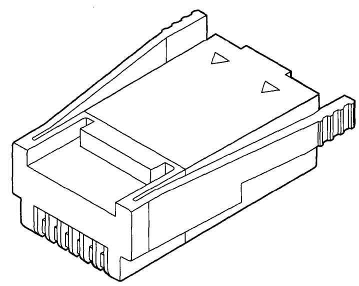
Physical
Housing: Clear thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead in insulation displacement section, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable

Flat Cable Plug Components and Wire Termination Sequence



SEMCONN™ Shielded Plug Assembly for .050" Pitch Shielded Flat Cable

71350



FEATURES AND SPECIFICATIONS

Features and Benefits
- Pre-assembled shield
- Plug shield coined at seam
- 1-step termination for low applied cost in cable assembly
- Clear polycarbonate housing for termination inspection
- 2 strain reliefs

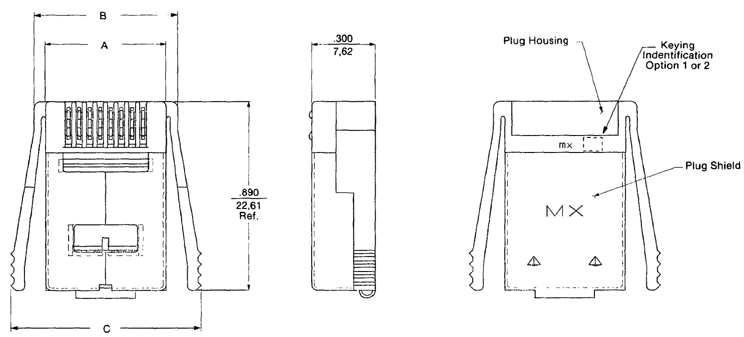
Reference Information
Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.

Electrical (cont'd)
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Cable Pull-Out Force: 30 lb min.
Plug to Socket Latch Strength: 15 lb min.
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical
Housing: Clear thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead in insulation displacement section, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension		
	Non-Keyed Version	Keying Option 1	Keying Option 2	A	B	C
4	• 15-83-0604*	• 15-83-0634	• 15-83-0654	9.30 (.366)	12.06 (.475)	17.22 (.678)
6	• 15-83-0606*	• 15-83-0636	• 15-83-0656	11.84 (.466)	14.60 (.575)	19.76 (.778)
8	• 15-83-0608*	• 15-83-0638	• 15-83-0658	14.38 (.566)	17.14 (.675)	22.30 (.878)
16	• 15-83-0616*	• 15-83-0646	• 15-83-0666	24.54 (.966)	27.30 (1.075)	32.46 (1.278)

• US Standard Product, available through Molex franchised distributors
* Industry compatible

SEMCONN™ ACCESS.bus* Shielded Plug

71564

Features and Benefits
- 2 integral wire strain reliefs
- Optional ferrule provides positive ground and pre-aligns wires for termination
- Dual integral locking latch

Reference Information
Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

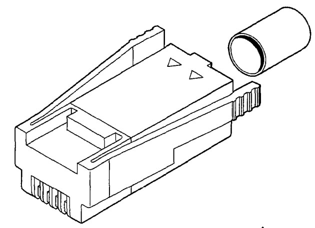
Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

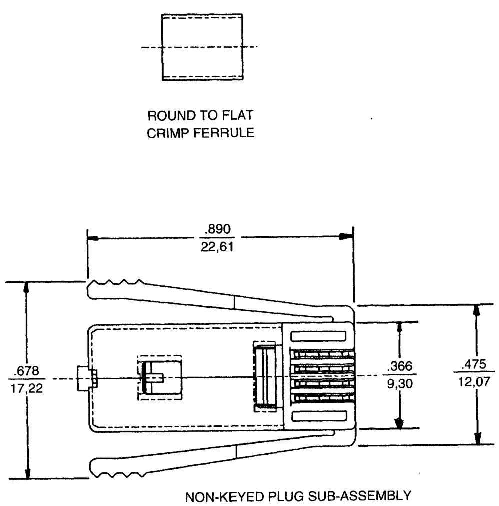
Mechanical
Cable Pull-Out Force: 30 lb min.
Plug to Socket Latch Strength: 15 lb min.
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

Physical
Housing: Plug and plug insert—clear thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead in insulation displacement section, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable

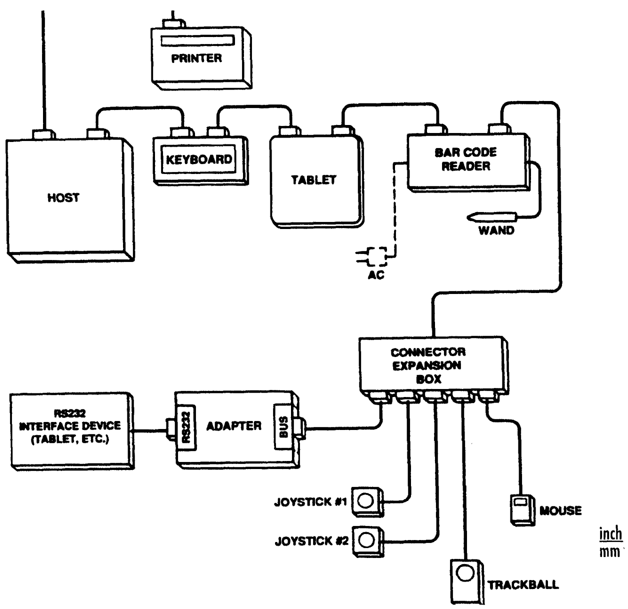
The 4-wire ACCESS.bus system greatly simplifies connection of peripherals such as a keyboard, digitizing pad, mouse, track ball, joystick, bar code reader, etc. to a PC or workstation by allowing up to 125 devices to be daisy chained together from a single port.

ACCESS.bus allows hot plugging and automatically reconfigures the operating system for the device just added to (or removed from) the bus.





Round to Flat Cable Plug Kit



inch
mm

Shielded I/O

Q

ORDERING INFORMATION

Housing Color	Order No.	
	With Ferrule	Without Ferrule
Clear	15-83-1564	• 15-83-0604
Smoked Gray	15-83-1604	15-83-0684

• US Standard Product, available through Molex franchised distributors
* ACCESS.bus is a registered trademark of Digital Equipment Corp.

FEATURES AND SPECIFICATIONS

molex®

SEMCONN™ ACCESS.bus* Full Shield Receptacle

71565

Features and Benefits
- 4-sided shield for maximum EMI/RFI control
- Flangeless design minimizes PCB real estate
- Dual panel grounds for maximum EMI/RFI control
- Panel stops prevent overstress of panel grounds
- High-temperature LCP housing for SMT processing

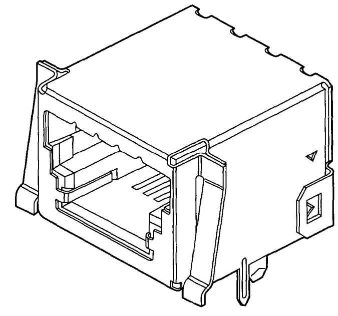
Reference Information
Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms

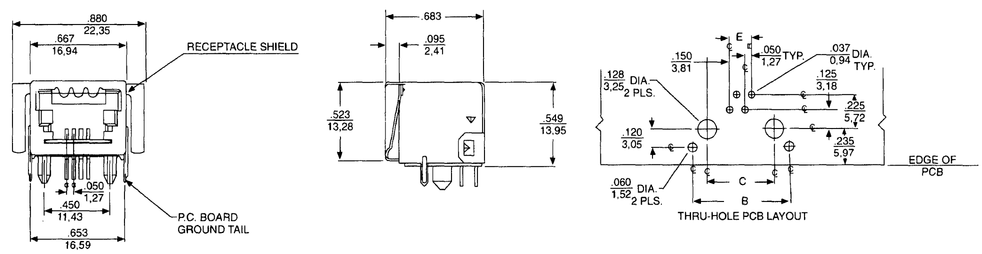
Electrical (cont'd)
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

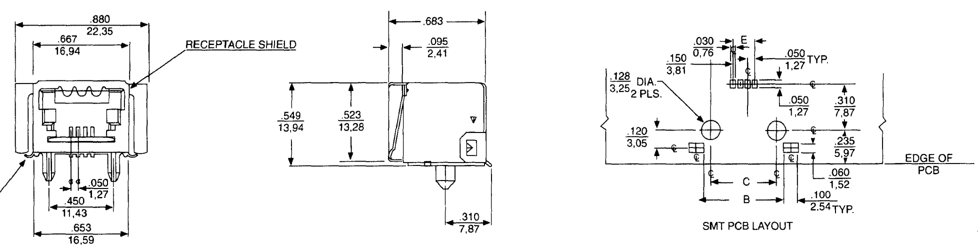
Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50μ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable



Thru-Hole



SMT



inch
mm

ORDERING INFORMATION AND DIMENSIONS

Version	Order No.	Dimension		
		B	C	E
Through-Hole	• 15-83-0164	16.54 (.651)	11.43 (.450)	3.81 (.150)
SMT	15-83-0364	16.23 (.639)	11.43 (.450)	3.81 (.150)

• US Standard Product, available through Molex franchised distributors

* ACCESS.bus is a registered trademark of Digital Equipment Corp.

FEATURES AND SPECIFICATIONS

SEMCONN™ ACCESS.bus* Partial Shield Receptacle

71565

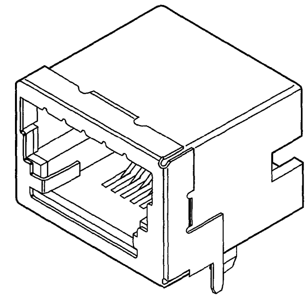
Features and Benefits
- Partial shield assures cable shield ground to PCB
- Flangeless design minimizes PCB real estate
- High-temperature LCP housing for SMT processing

Reference Information
Product Specification: PS-71350A
Packaging: Bulk
Tooling Information: See pages Q-56 to Q-59
UL File No.: E29179
CSA File No.: LR19980
Designed In: Inches

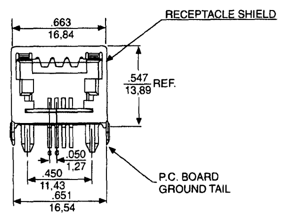
Electrical
Voltage: 30V
Current: 1.5A
Contact Resistance: 10mΩ max.
Dielectric Withstanding Voltage: 1000V AC rms
Insulation Resistance: 500 MΩ min.
Shielding Effectiveness: 30 to 500 MHz—20 dB min.
500 MHz to 1 GHz—10 dB min.
Electrostatic Discharge Protection: 20kV min.

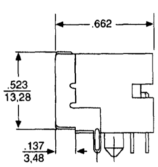
Mechanical
Mating Force: 1.4 lb
Unmating Force: 1.3 lb
Normal Force: 100g min.
Durability: 500 cycles min.

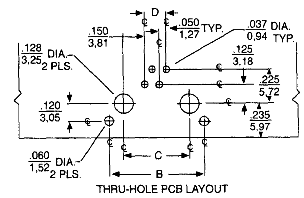
Physical
Housing: Black SMT-compatible thermoplastic, UL 94V-0
Contact: Phosphor Bronze
Plating: 50µ" select Gold in contact area, Tin/Lead on solder tails, both over Nickel plate
Shields: Brass with Tin-over-Nickel plate
Temperature: -20 to +80°C
Wire Accommodation: 24 to 28 AWG foil-shielded flat, round and retractile cable



Thru-Hole







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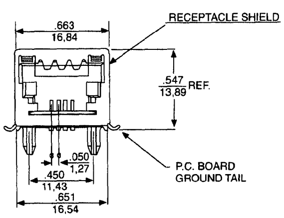
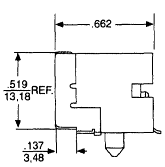
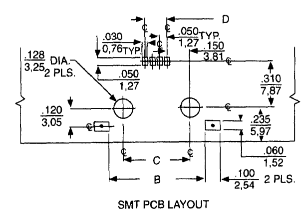






inch
mm

ORDERING INFORMATION AND DIMENSIONS

Version	Order No.	Dimension		
		B	C	E
Through-Hole	15-83-0064	16.54 (.651)	11.43 (.450)	3.81 (.150)
SMT	15-83-0264	16.23 (.639)	11.43 (.450)	3.81 (.150)

FEATURES AND SPECIFICATIONS

Mini-DIN PCB Receptacle

87220 Front Shield Design

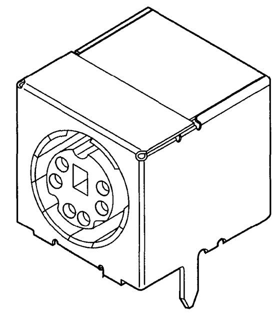
Features and Benefits
- EMI/RFI shielding
- Kinked metal PCB hold downs provide stable retention to the PCB
- Positive polarization
- Select terminal loading—contact factory

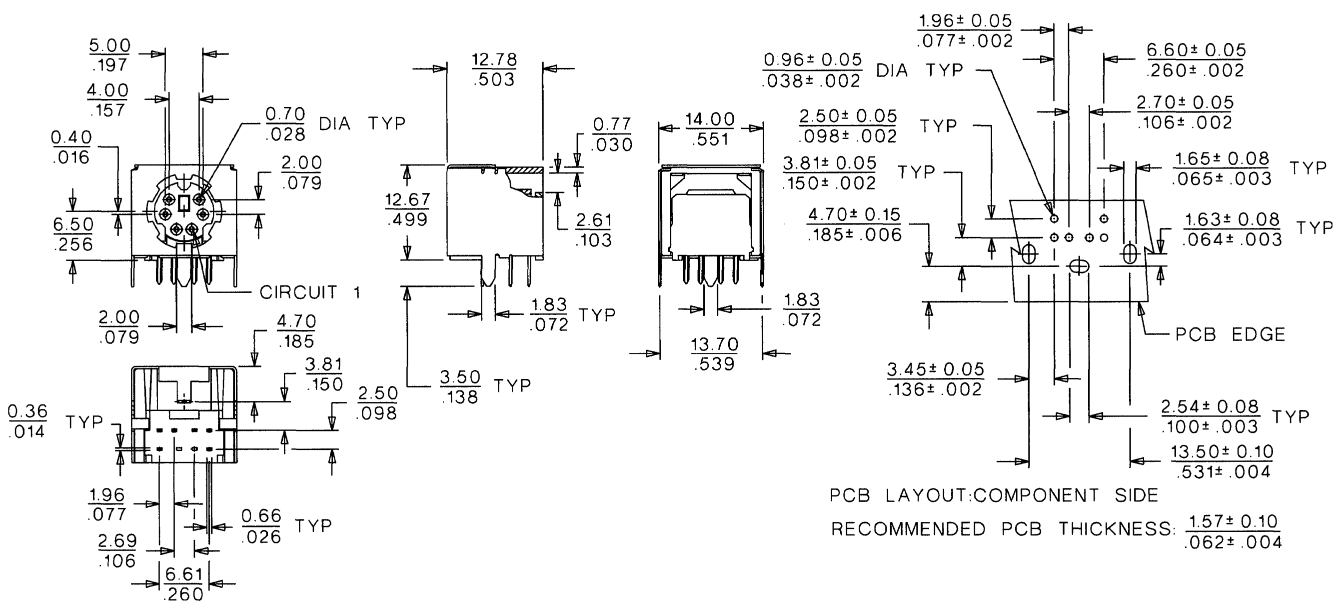
Reference Information
Product Specification: PS-87220
Packaging: Tube
UL File No.: E29179(N)
Mates With: Industry standard Mini-DIN plug
Designed In: Millimeters

Electrical
Voltage: 12V
Current: 2.0A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 250V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 71g (2.50 oz)
Contact Retention to Housing: 2kg (4.41 lb) min.
Mating Force: 4.5kg (9.92 lb) max.
Unmating Force: 0.9kg (1.98 lb) min.
Durability: 500 cycles min.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 0.76μm (30μ") min. select Gold with Tin/Lead on PC tails
Temperature: -40 to +105°C





ORDERING INFORMATION

Circuits	Order No.			
	Without Kink		With Kink	
	Gray Housing	Black Housing	Gray Housing	Black Housing
4	87220-0410	87220-0411	87220-1410	87220-1411
6	87220-0610	87220-0611	87220-1610	• 87220-1611
8	87220-0810	87220-0811	87220-1810	87220-1811

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Mini-DIN PCB Receptacle

87123 Full Shield Design

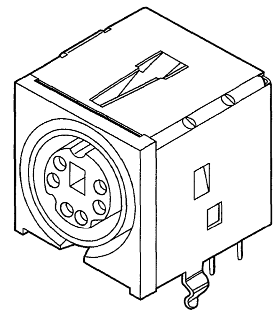
Features and Benefits
- EMI/RFI shielding
- Fully shielded top, back and sides
- Kinked metal hold-down provides stable retention to PCB
- Positive polarization
- Select terminal loading—contact factory

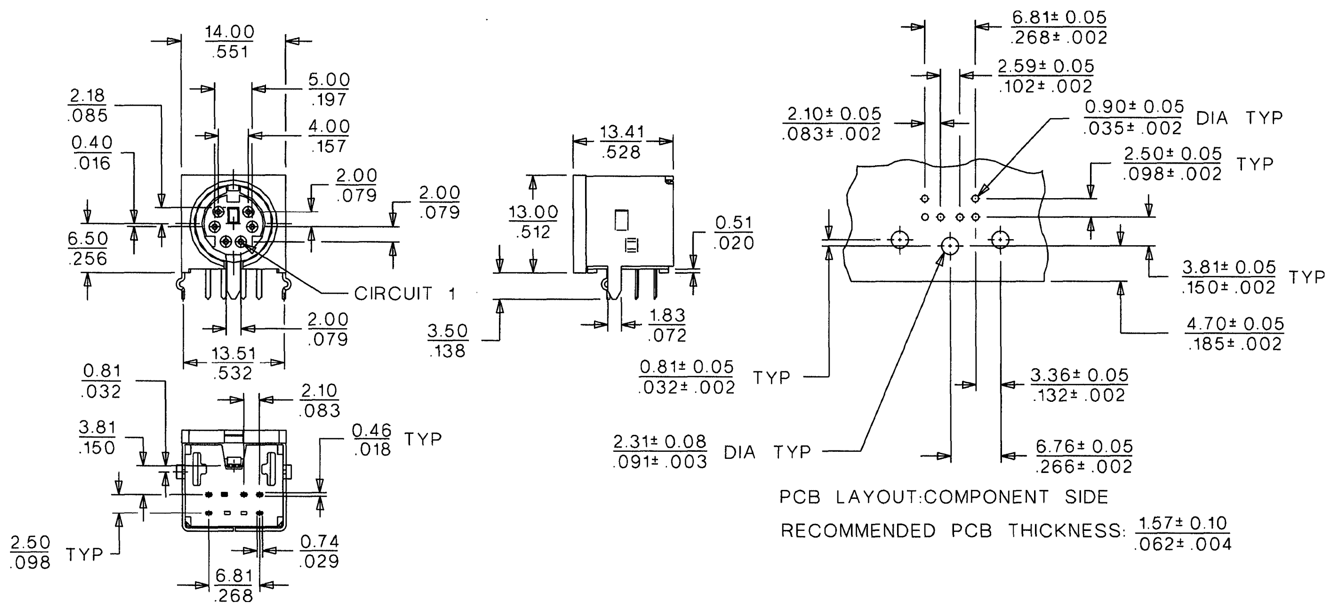
Reference Information
Product Specification: PS-87123
Packaging: Tube
UL File No.: E29179(N)
Mates With: Industry standard Mini-DIN plug
Designed In: Inches

Electrical
Voltage: 12V
Current: 1.0A
Contact Resistance: 20mΩ max.
Dielectric Withstanding Voltage: 250V AC rms
Insulation Resistance: 100 MΩ min.

Mechanical
Contact Insertion Force: 4.5kg (9.9 lb)
Contact Retention to Housing: 2kg (4.4 lb) min.
Insertion Force to PCB: 4.55kg (10 lb)
Mating Force: 4.5kg (9.92 lb) max.
Unmating Force: 0.9kg (2 lb) min.
Normal Force: 80g (2.8 oz)
Durability: 500 cycles min.

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 0.76μm (30μ") min. select Gold with Tin/Lead on PC tails
Temperature: -40 to +105°C





ORDERING INFORMATION

Circuits	Order No.
4	87123-0401
6	• 87123-0601
8	87123-0801

• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Mini-DIN PCB Receptacle

87391

SMT, Full Shield Design With Fork Lock or Fitting Nail Full Shield

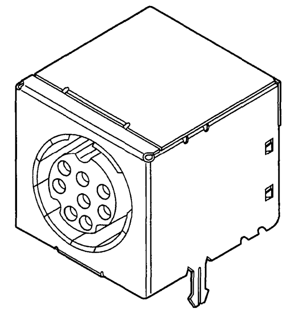
Features and Benefits
- Fully shielded for maximum EMI/RFI protection
- Available in 2 styles: fork lock for additional PCB retention and fitting nail for true SMT
- Dual-cantilever contact design for repeated cycling
- Preloaded SMT leads help insure coplanarity
- Positive polarization

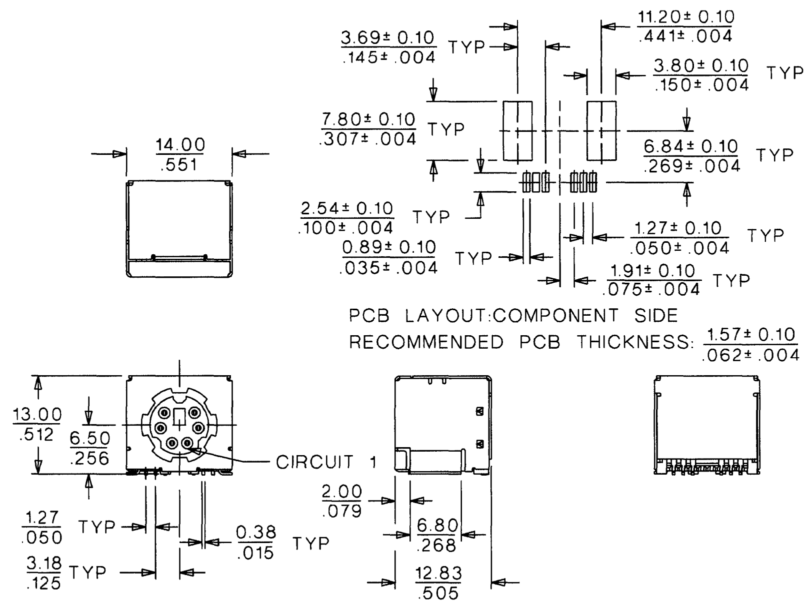
Reference Information
Product Specification: PS-87391
Packaging: Tube
Designed In: Millimeters

Electrical
Voltage: 30V
Current: 2.0A
Contact Resistance: 30mΩ max.
Dielectric Withstanding Voltage: 250V AC rms
Insulation Resistance: 1000 MΩ min.

Mechanical
Contact Insertion Force: 500g (17.63 oz)
Contact Retention to Housing: 1kg (2.20 lb) min.
Mating Force: 4.5kg (9.92 lb) max.
Unmating Force: 0.9kg (1.98 lb) min.
Durability: 500 cycles

Physical
Housing: Glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 0.76μm (30μ") min. select Gold with Tin/Lead on PC tails
Temperature: -40 to +105°C





ORDERING INFORMATION

Circuits	Order No.	
	Fork Lock	Fitting Nail
4	87391-6401	87391-0401
6	87391-6601	87391-0601
8	87391-6801	87391-0801

FEATURES AND SPECIFICATIONS

.350" Footprint D-Subminiature Receptacle

87112

High Density, Female PCB-Mount

Features and Benefits

- EMI/RFI suppression
- High-density design offers PC board space savings
- 15 circuit, shell size E (#1)
- Fork boardlock ensures connector is secure prior to wave soldering
- Intermateable with industry standard high-density D-Subminiature crimp connectors
- Available with voided circuit—contact factory

Reference Information

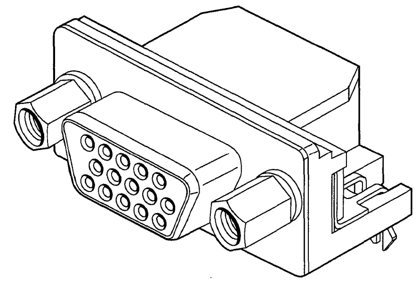
Product Specification: PS-87112
Packaging: Tube
UL File No.: E29179(N)
CSA File No.: LR19980
Designed In: Millimeters

Electrical

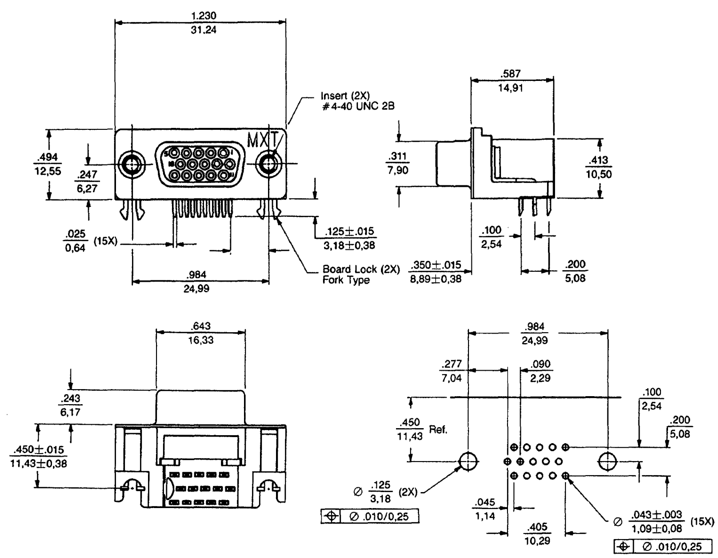
Current: 1.0A
Contact Resistance: 15mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Glass-filled PET, UL 94V-0
Contact: Phosphor Bronze
Plating: Selective Gold in contact area with Tin/Lead on PC tails
Temperature: -55 to +105°C



Preferred Version in Europe and the Far East



Recommended PCB Layout
(Component Side)

inch
mm

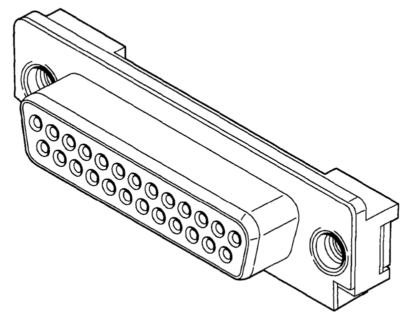
ORDERING INFORMATION

Order No.	Contact Plating Code	Face Mounting Hardware
87112-6042	0.76μm (30μ") Gold	Flush insert (threaded)
87112-6052	0.38μm (15μ") Gold	Flush insert (threaded)
87112-6062	Gold Flash	Flush insert (threaded)
87112-6044	0.76μm (30μ") Gold	Removable hex screwlock
87112-6054	0.38μm (15μ") Gold	Removable hex screwlock
87112-6064	Gold Flash	Removable hex screwlock

FEATURES AND SPECIFICATIONS

Slimline D-Subminiature Receptacle

89221 Female, SMT

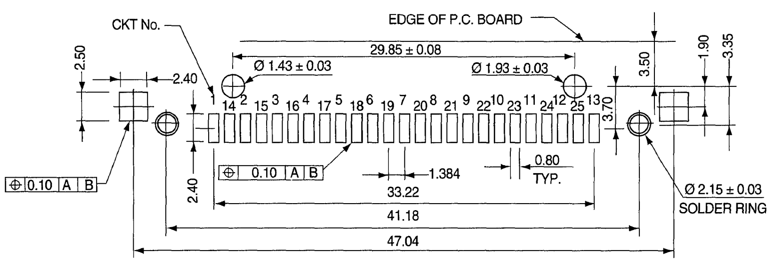


Features and Benefits
- 25 female circuits
- Fork board lock provides positive PCB retention
- Grounding indents in metal shell ensure reliable ground connection
- Single in-line tail pattern
- Less PCB space required

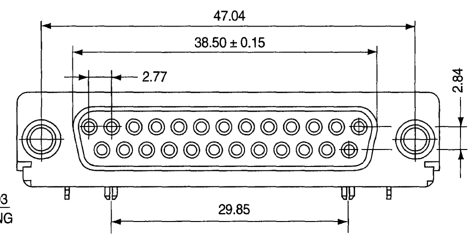
Reference Information
Product Specification: PS-89221
Packaging: Tube or tray
Designed In: Millimeters

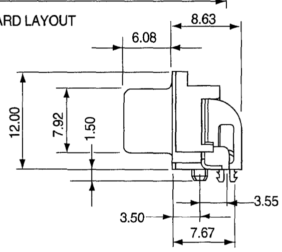
Electrical
Current: 1.0A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

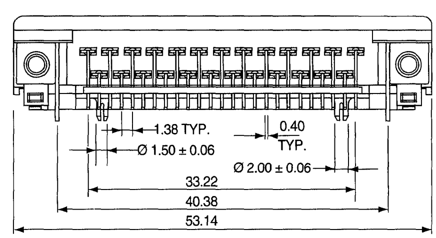
Physical
Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Select Gold
Temperature: -55 to +105°C



RECOMMENDED P.C. BOARD LAYOUT







ORDERING INFORMATION

89221 - X X X X
A B C D

A	
Packaging	
3	Tube
7	Tray

B	
Plating	
1	0.76µm (30µ") Gold min.
2	0.38µm (15µ") Gold min.

C	
Screw Type	
0	Without screws
1	M2.6 screw with M2.6 inner thread, hex length 5.00mm
3	4-40 screw with 4-40 inner thread, hex length 5.00mm

D	
Accessories	
0	4-40 flush insert only
1	M2.6 flush insert only
2	Attached screw
3	Attached screw with washer

Note: Natural housing color and version without peg optional, contact factory

FEATURES AND SPECIFICATIONS

Slimline D-Subminiature Receptacle

89220 Female, High Density

Features and Benefits

- 15 circuits female high-density design
- Fork board lock provides positive PCB holddown
- Grounding indents in metal shell ensure reliable ground connection
- Single in-line tail pattern
- Less PCB space required

Reference Information

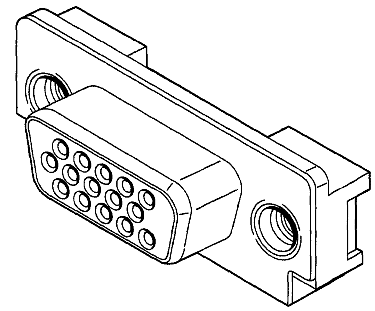
Product Specification: PS-89220
Packaging: Tube or tray
Designed In: Millimeters

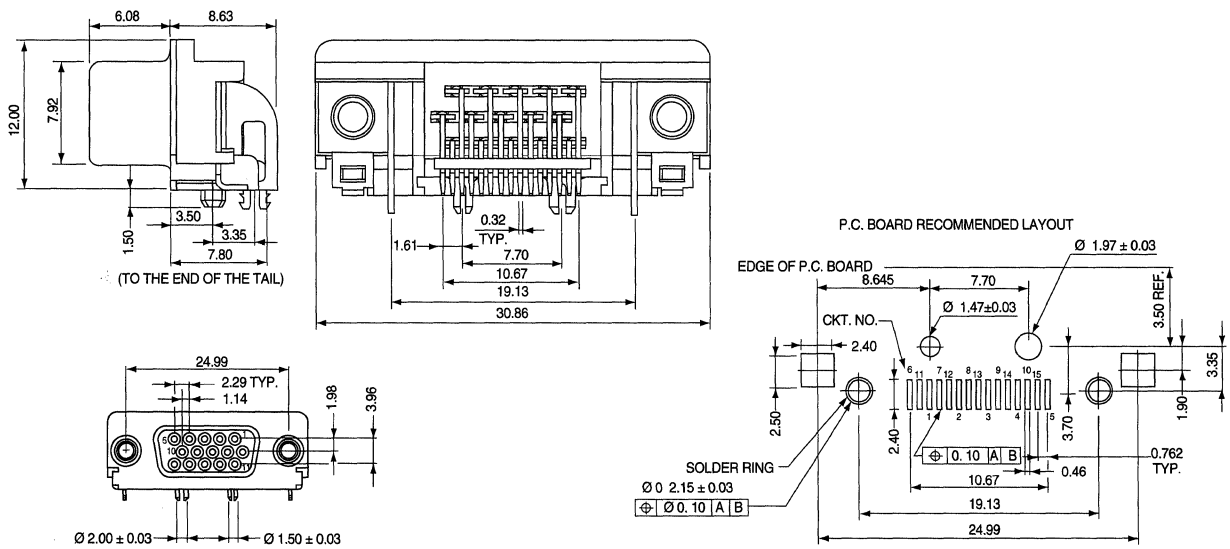
Electrical

Current: 1.0A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Select Gold
Temperature: -55 to +105°C





ORDERING INFORMATION

89220 - X X X X
A B C D

A	
Packaging	
3	Tube
7	Tray

B	
Plating	
1	0.76μm (30μ") Gold min.
2	0.38μm (15μ") Gold min.

C	
Screw Type	
0	Without screws
1	M2.6 screw with M2.6 inner thread, hex length 5.00mm
3	4-40 screw with 4-40 inner thread, hex length 5.00mm

D	
Accessories	
0	4-40 flush insert only
1	M2.6 flush insert only
2	Attached screw
3	Attached screw with washer

Note: Natural housing color and version without peg optional, contact factory

FEATURES AND SPECIFICATIONS

Slimline D-Subminiature Plug

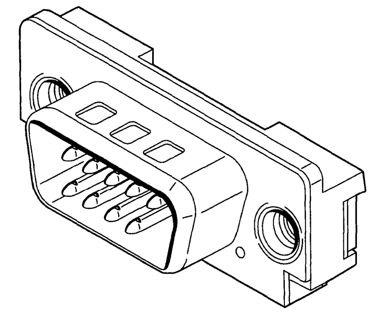
89219 Male, SMT

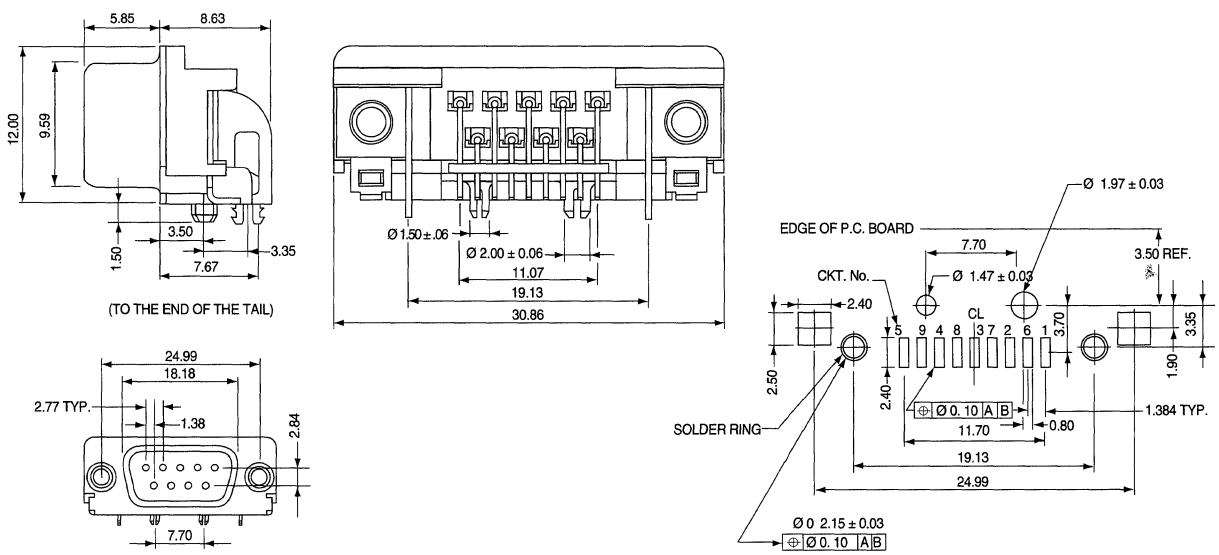
Features and Benefits
- 9 male circuits
- Fork board lock provides positive PCB holddown
- Grounding indents in metal shell ensure reliable ground connection
- Single in-line tail pattern
- Less PCB space required

Reference Information
Product Specification: PS-89219
Packaging: Tube or tray
Designed In: Millimeters

Electrical
Current: 1.0A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 1000 MΩ min.

Physical
Housing: Black LCP, UL 94V-0
Contact: Brass
Plating: Select Gold
Temperature: -55 to +105°C





ORDERING INFORMATION

89219 - X X X X
A B C D

A	
Packaging	
3	Tube
7	Tray

B	
Plating	
1	0.76µm (30µ") Gold min.
2	0.38µm (15µ") Gold min.

C	
Screw Type	
0	Without screws
1	M2.6 screw with M2.6 inner thread, hex length 5.00mm
3	4-40 screw with 4-40 inner thread, hex length 5.00mm

D	
Accessories	
0	4-40 flush insert only
1	M2.6 flush insert only
2	Attached screw
3	Attached screw with washer

Note: Natural housing color and version without peg optional, contact factory

FEATURES AND SPECIFICATIONS

Features and Benefits
- High-temperature LCP housing
- Fully shielded
- Low mating force
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

Reference Information
Packaging: Tray
Mates With: 52502
Designed In: Millimeters

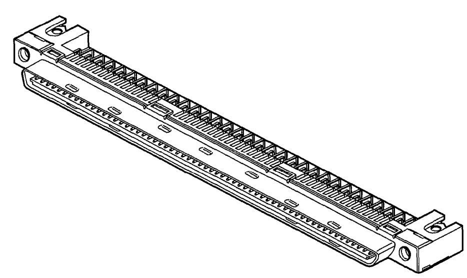
Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

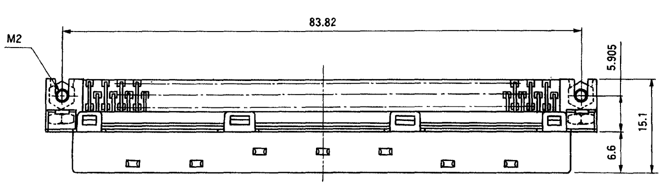
Mechanical
Durability: 2000 cycles min.

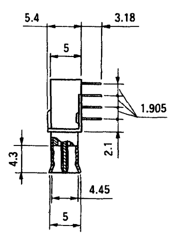
Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +85°C

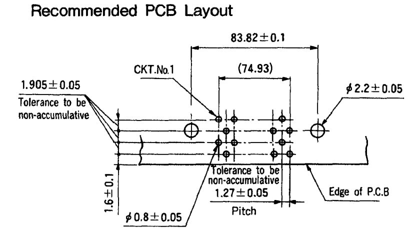
1.27mm (.050") Pitch Docking Station Shielded Plug

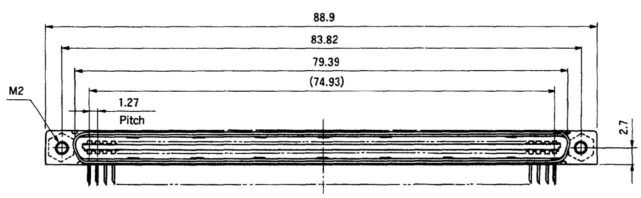
52504 Right Angle, Low Profile

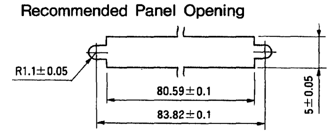












ORDERING INFORMATION

Circuits	Order No.
120	52504-1200

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Docking Station Shielded Receptacle

52502 Right Angle, Low Profile

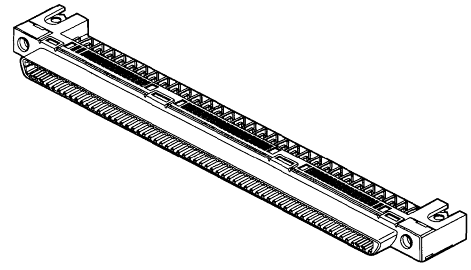
Features and Benefits
- High-temperature LCP housing
- Fully shielded
- Low mating force
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

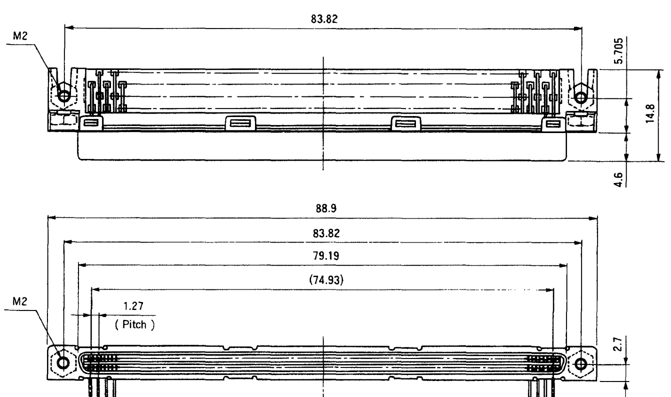
Reference Information
Packaging: Tray
Mates With: 52504
Designed In: Millimeters

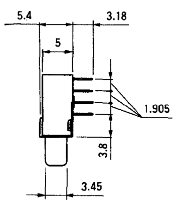
Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 40mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 2000 cycles min.

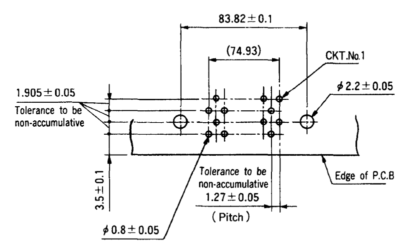
Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +85°C



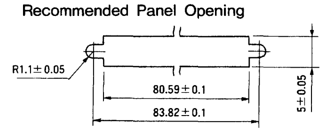




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
120	52502-1200

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Docking Station Shielded Plug

52554

Straight, Low Profile

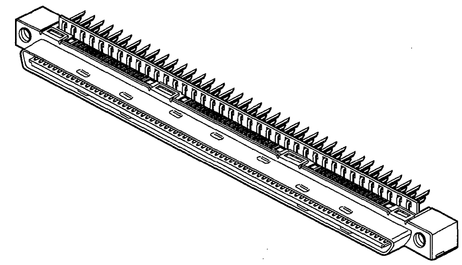
Features and Benefits
- High-temperature LCP housing
- Fully shielded
- Low mating force
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

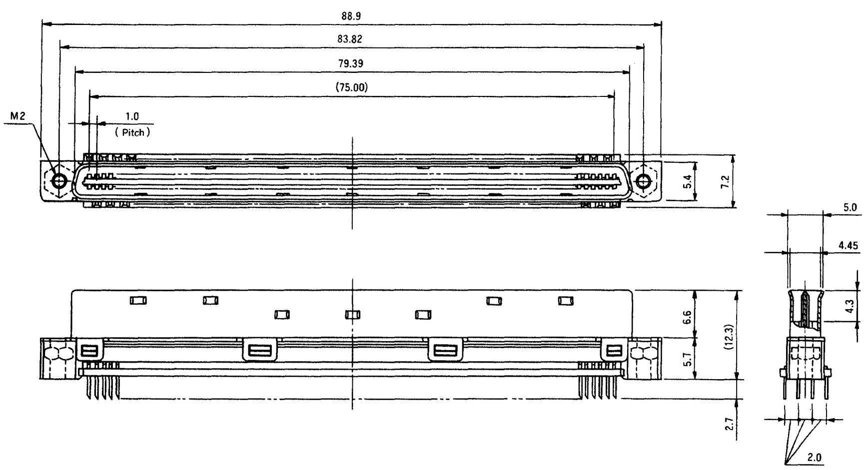
Reference Information
Packaging: Tray
Mates With: 52552
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

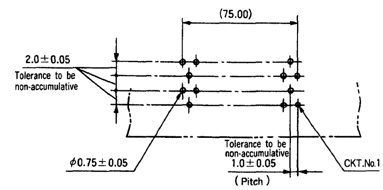
Mechanical
Durability: 2000 cycles min.

Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +85°C

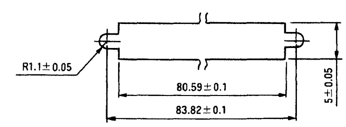




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
152	52554-1520

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Docking Station Shielded Receptacle

52552 Right Angle, Low Profile

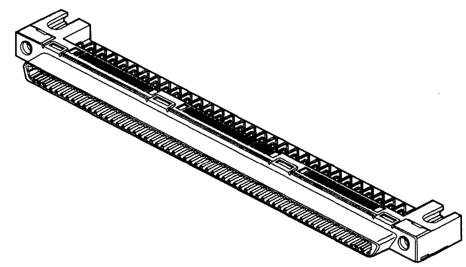
Features and Benefits
- High-temperature LCP housing
- Fully shielded
- Low mating force
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

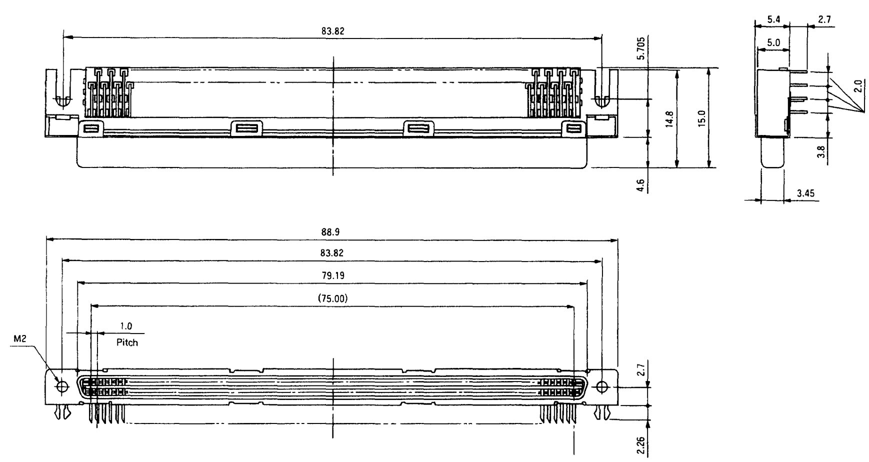
Reference Information
Packaging: Tray
Mates With: 52554
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

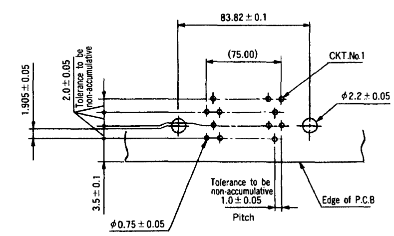
Mechanical
Durability: 2000 cycles min.

Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +85°C

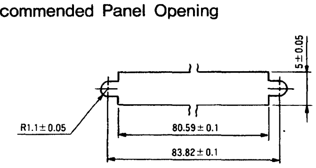




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
152	52552-1520

1.27mm (.050") Pitch Docking Station Shielded Plug

52539

Right Angle

FEATURES AND SPECIFICATIONS

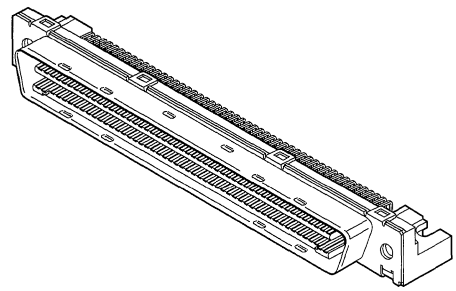
Features and Benefits
- Suitable for high-speed .bus applications
- Fully shielded
- Low mating force
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

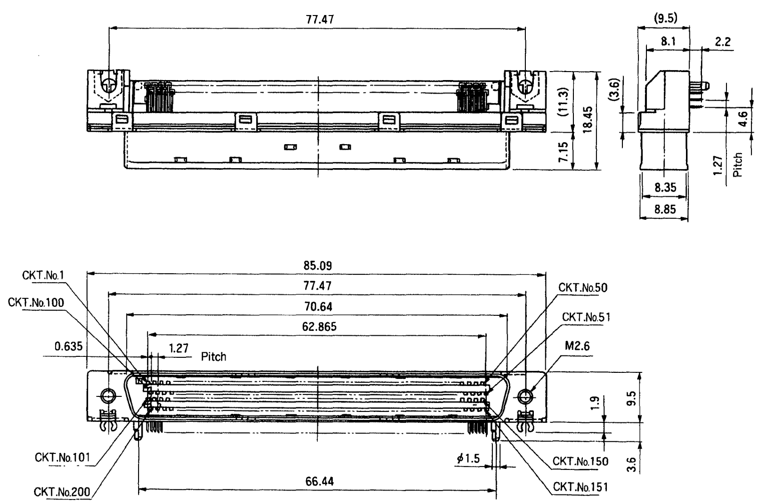
Reference Information
Packaging: Tray
Mates With: 52537 and 52569 only
Designed In: Millimeters

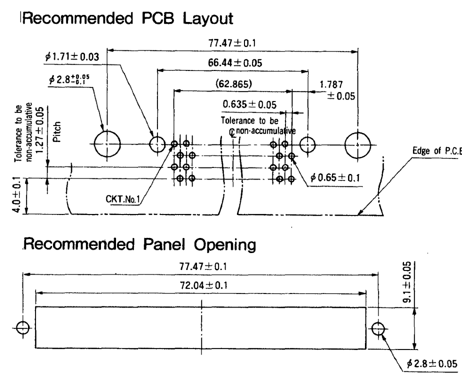
Electrical
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C







ORDERING INFORMATION

Circuits	Order No.
200	52539-2001

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Docking Station Shielded Receptacle

52537 Right Angle

Features and Benefits

- Suitable for high-speed .bus applications
- Fully shielded
- Staggered contact, low mating force
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

Reference Information

Packaging: Tray
Mates With: 52539 only
Designed In: Millimeters

Electrical

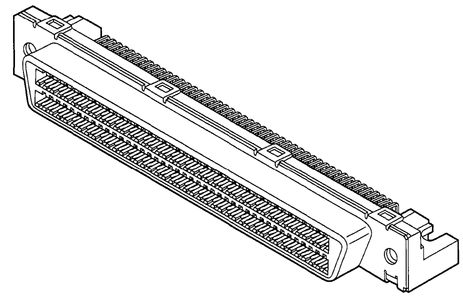
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

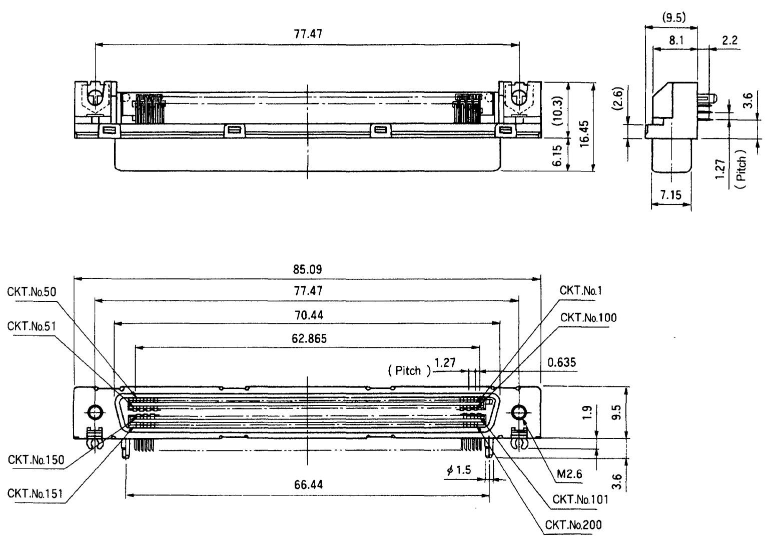
Mechanical

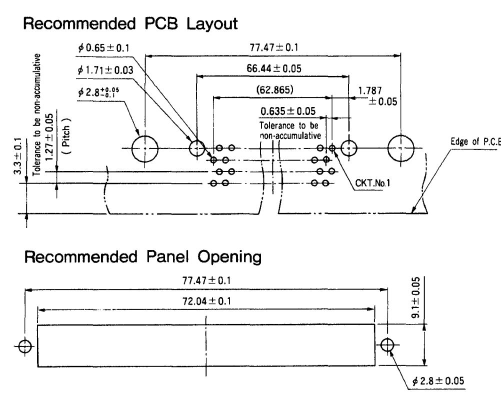
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical

Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C







ORDERING INFORMATION

Circuits	Order No.
200	52537-2001

Shielded I/O

Q

1.27mm (.050") Pitch Docking Station Shielded Receptacle

52569

Straight

FEATURES AND SPECIFICATIONS

Features and Benefits

- Suitable for high-speed .bus applications
- Fully shielded
- Staggered contact, low mating force
- Leaf-style contacts prevent stubbing
- First mate-last break contacts for grounding

Reference Information

Packaging: Tray
Mates With: 52539 only
Designed In: Millimeters

Electrical

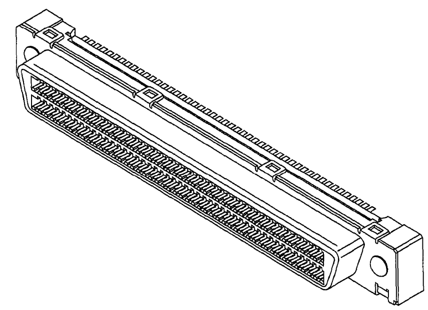
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

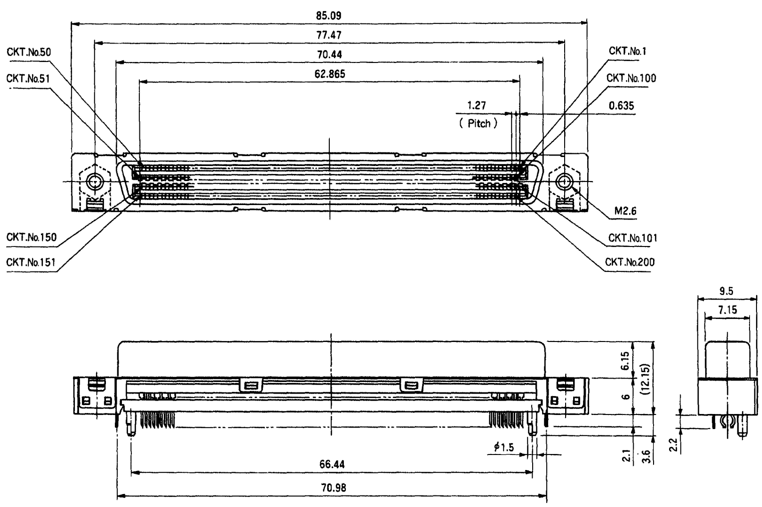
Mechanical

Durability: 2000 cycles min. (contact factory for 5000 cycles)

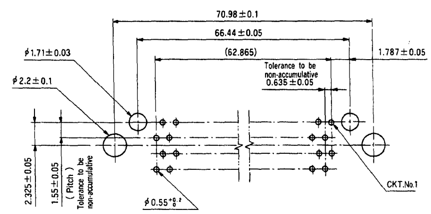
Physical

Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30µ" Gold over Nickel
Temperature: -55 to +100°C

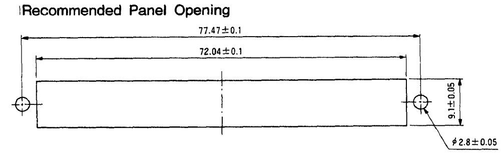




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
200	52569-2000

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Docking Station Shielded Plug

52688 Right Angle

Features and Benefits

- Suitable for high-speed .bus applications
- Fully shielded
- Low mating force
- Guide pin allows blind mating
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

Reference Information

Packaging: Tray
Mates With: 52686 only
Designed In: Millimeters

Electrical

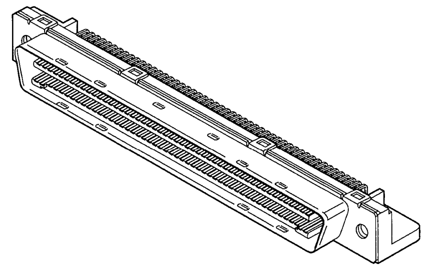
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

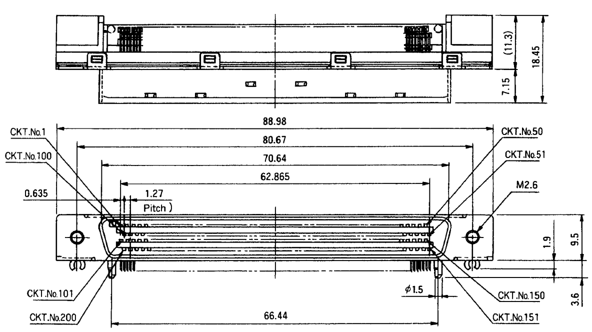
Mechanical

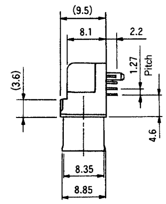
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical

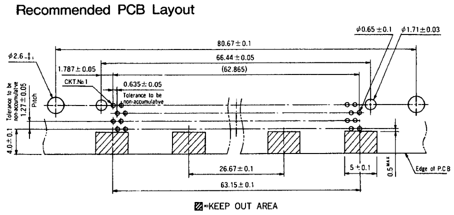
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C



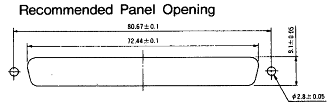




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.	Loose-Piece Guide Pin Order No.
200	52688-2001	59667-0010

Shielded I/O

Q

1.27mm (.050") Pitch Docking Station Shielded Receptacle

52686

Right Angle

FEATURES AND SPECIFICATIONS

Features and Benefits

- Suitable for high-speed .bus applications
- Fully shielded
- Staggered contact, low mating force
- Guide bushing allows blind mating
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

Reference Information

Packaging: Tray
Mates With: 52688 only
Designed In: Millimeters

Electrical

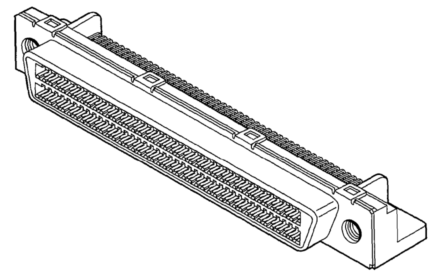
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

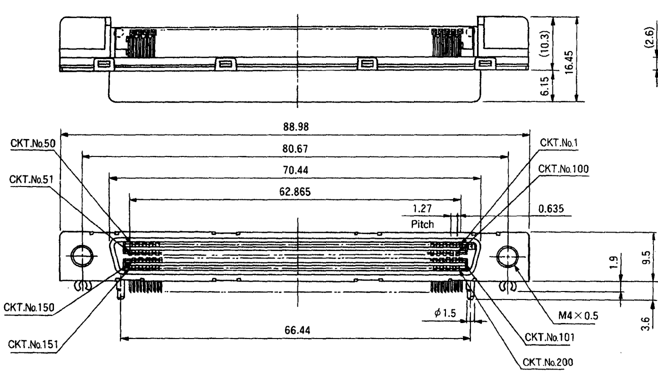
Mechanical

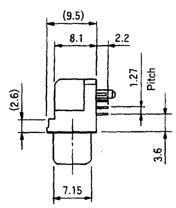
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical

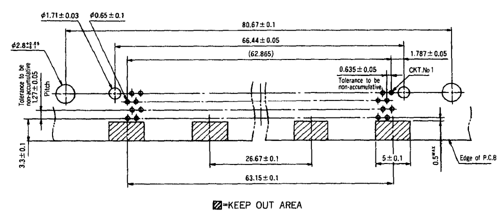
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C



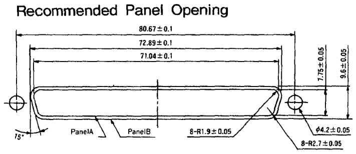




Recommended PCB Layout



Recommended Panel Opening



Shielded I/O

Q

ORDERING INFORMATION

Circuits	Order No.	Loose-Piece Bushing Order No.
200	52686-2001	59666-0010

1.27mm (.050") Pitch Docking Station Shielded Plug

52580 Right Angle

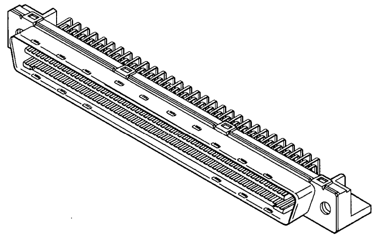
Features and Benefits
- Suitable for high-speed .bus applications
- Fully shielded
- Low mating force
- Guide pin allows blind mating
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

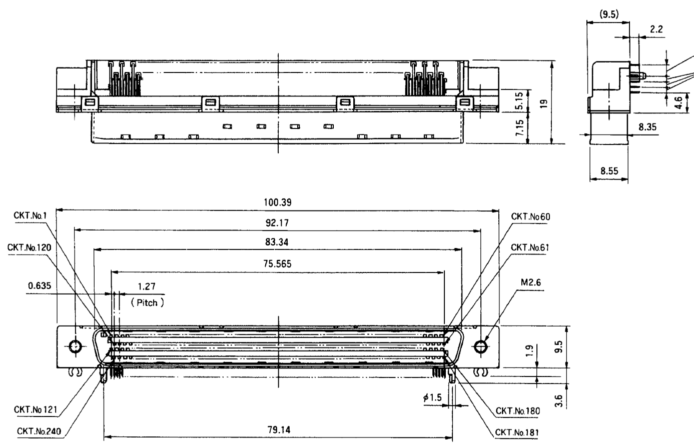
Reference Information
Packaging: Tray
Mates With: 52578 only
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

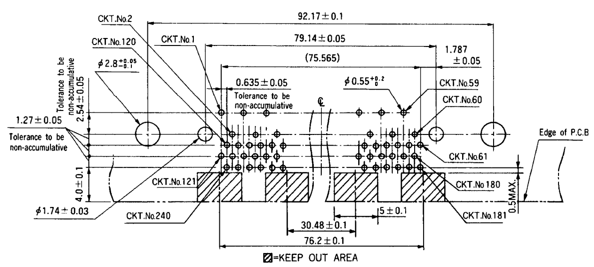
Mechanical
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C

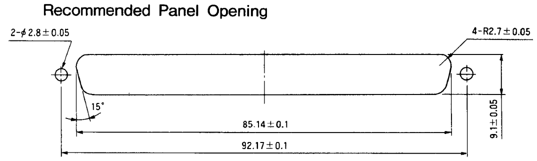




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.	Loose-Piece Guide Pin Order No.
240	52580-2400	59667-0010

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Docking Station Shielded Receptacle

52578

Right Angle

Features and Benefits

- Suitable for high-speed .bus applications
- Fully shielded
- Staggered contact, low mating force
- Guide bushing allows blind mating
- Leaf-style contacts prevents stubbing
- First-mate-last-break contacts for grounding

Reference Information

Packaging: Tray
Mates With: 52580 only
Designed In: Millimeters

Electrical

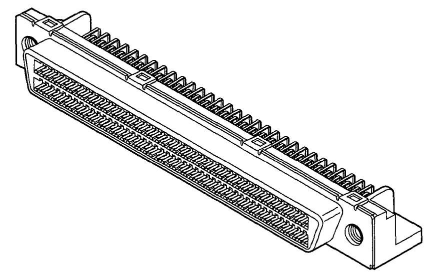
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

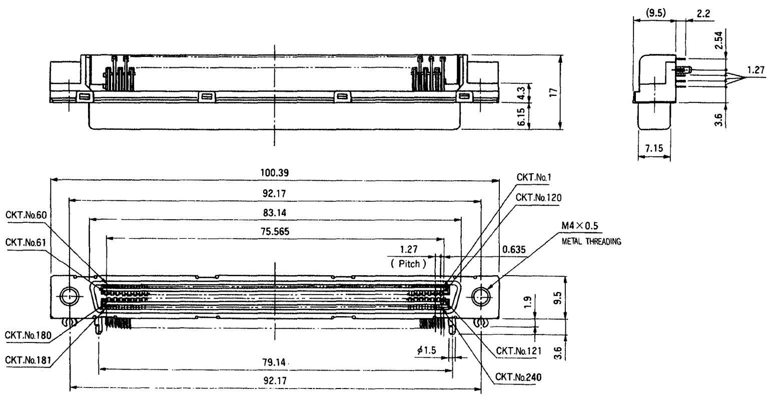
Mechanical

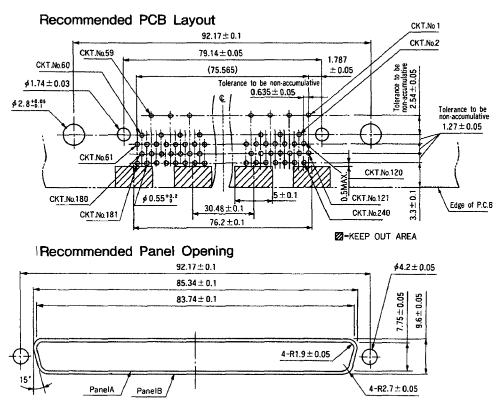
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical

Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C







ORDERING INFORMATION

Circuits	Order No.	Loose-Piece Guide Bushing Order No.
240	52578-2400	59666-0010

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Docking Station Shielded Plug

52635 Right Angle

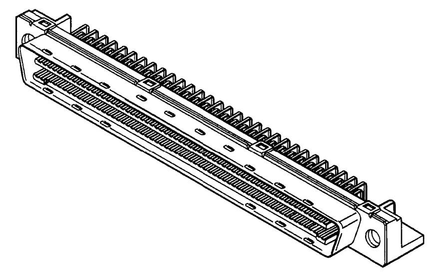
Features and Benefits
- Suitable for high-speed .bus applications
- Fully shielded
- Low mating force
- Guide bushing allows blind mating
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

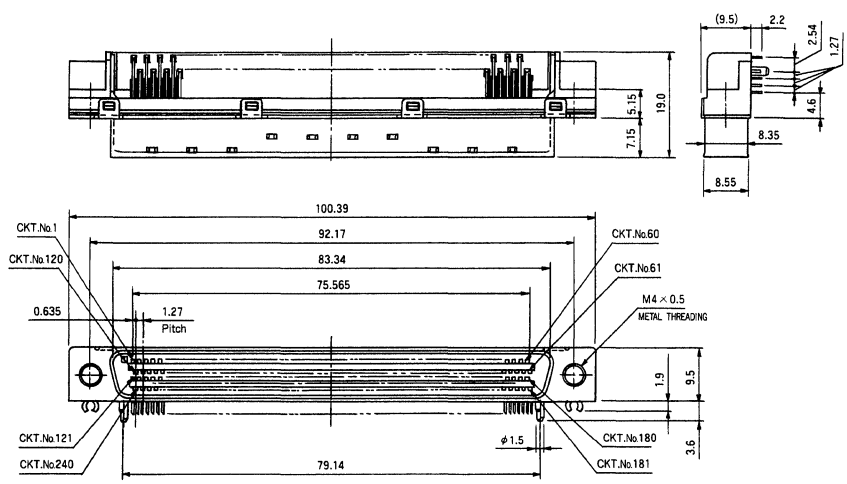
Reference Information
Packaging: Tray
Mates With: 52637 and 52802
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

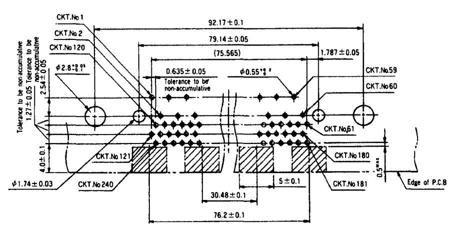
Mechanical
Durability: 2000 cycles min. (contact factory for 5000 cycles)

Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C



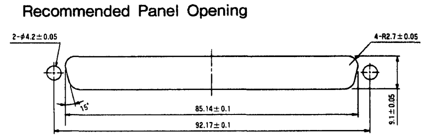


Recommended PCB Layout



▨=KEEP OUT AREA

Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.	Loose-Piece Guide Bushing Order No.
240	52635-2400	59666-0010

1.27mm (.050") Pitch Docking Station Shielded Receptacle

52637 Right Angle

FEATURES AND SPECIFICATIONS

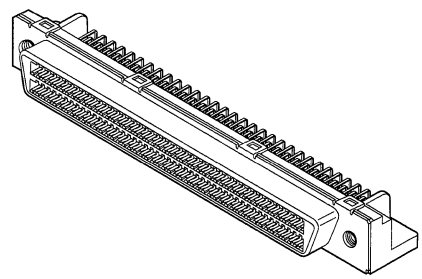
Features and Benefits
- Suitable for high-speed .bus applications
- Fully shielded
- Staggered contact, low mating force
- Guide pin allows blind mating
- Leaf-style contacts prevent stubbing
- First-mate-last-break contacts for grounding

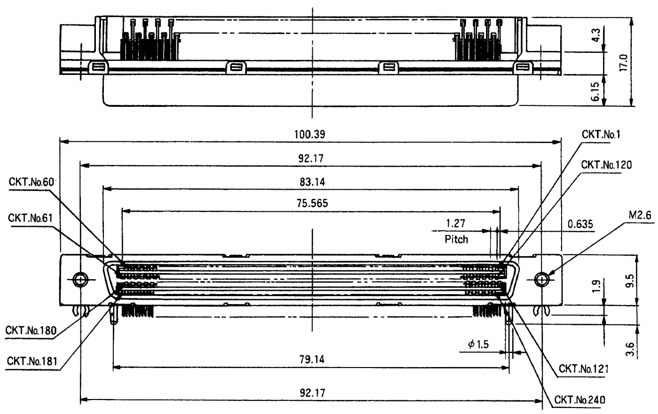
Reference Information
Packaging: Tray
Mates With: 52635 only
Designed In: Millimeters

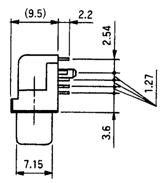
Electrical
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Mechanical
Durability: 2000 cycles min. (contact factory for 5000 cycles)

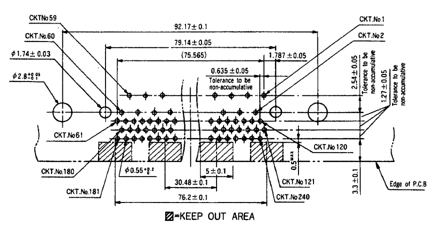
Physical
Housing: White glass-filled LCP, UL 94V-0
Shield Cover: Steel with Nickel plating
Contact: Phosphor Bronze
Plating: 30μ" Gold over Nickel
Temperature: -55 to +100°C



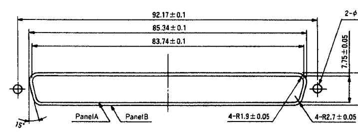




Recommended PCB Layout



Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.	Loose-Piece Guide Pin Order No.
240	52637-2400	59667-0010

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SCSI+ Shielded Plug

79058

For Discrete Wire

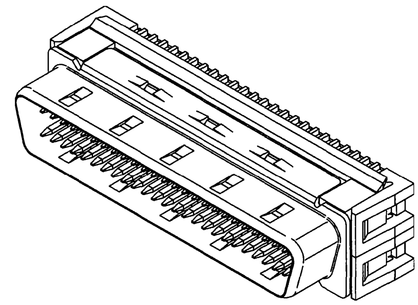
Features and Benefits
- Available in 50 circuit (SCSI-2) and 68 circuit (SCSI-3)
- Semi-automatic termination machine (Raptor)
- Full conformance to SCSI specifications
- Strain relieved plug subassembly
- Closed back end

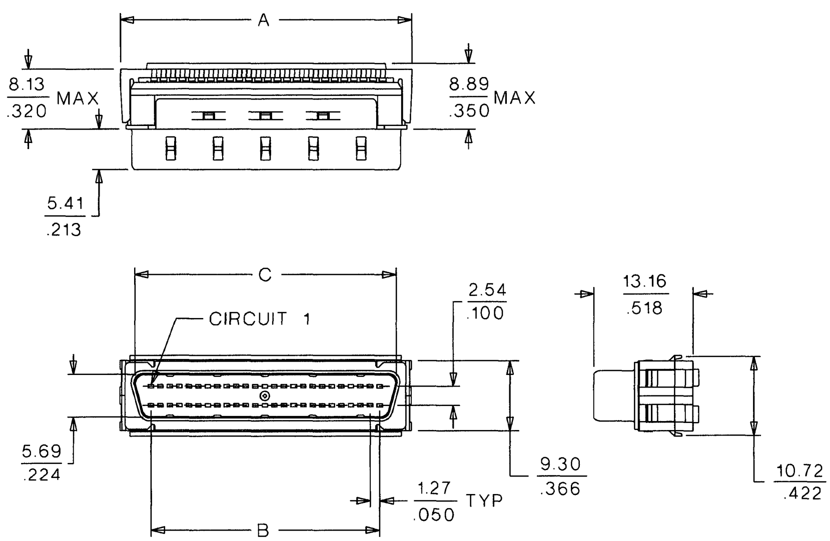
Reference Information
Product Specification: PSX79058
Tooling Information: See page Q-55
UL File No.: E29179
CSA File No.: LR19980A-281
Use With: 79079 back shells
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Mating Force: 5.3 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold in contact area, 78μ" Tin/Lead on solder tails or IDT area, all over 50μ" Nickel overall
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Description	Dimension		
			A	B	C
50	15-87-1050	Plug assembly and upper housings	38.86 (1.530)	30.48 (1.200)	34.85 (1.372)
68	15-87-1068	Plug assembly and upper housings	50.29 (1.980)	41.91 (1.650)	46.28 (1.822)

Note: Upper housing shown assembled, however parts are shipped loose

FEATURES AND SPECIFICATIONS

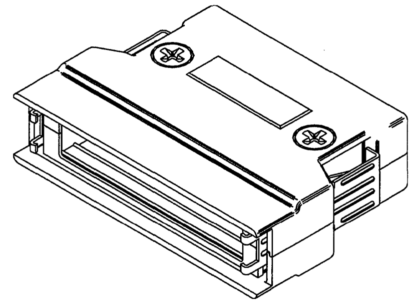
Features and Benefits
- Optional latch available
- Custom insertable logos
- Zinc die-cast, Nickel plated
- 2 Stainless Steel latches and screws
- Cable pull-out force 30 lb min.

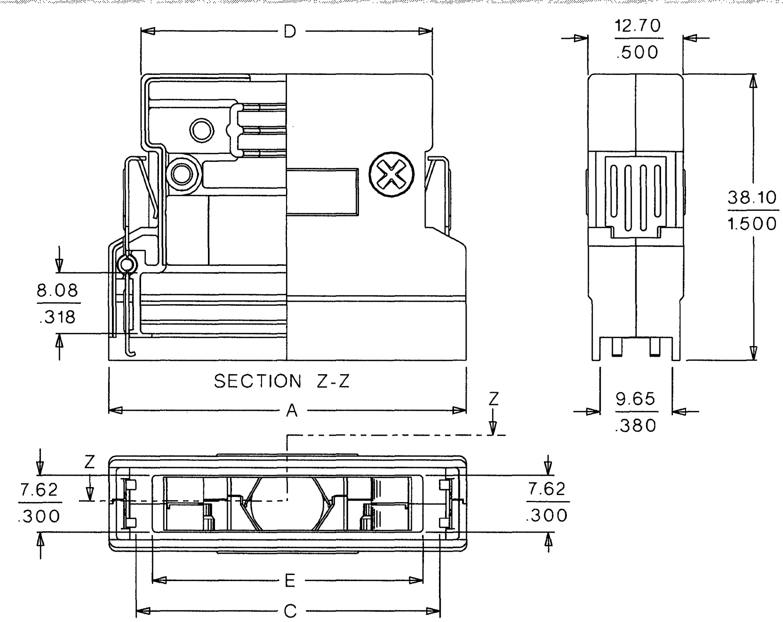
Reference Information
Product Specification: PSX70958
UL File No.: E29179
CSA File No.: LR19980-281
Use With: 79058
Designed In: Inches

SCSI+ Back Shell Assembly

79079

Zinc Die-Cast, 50 Circuit





Shielded I/O

Q

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Description	Cable OD	Dimension A	Dimension B	Dimension C	Dimension D
50	15-87-0050	Back shells, latches and screws	11.43 (.450)	47.75 (1.880)	40.28 (1.586)	39.12 (1.540)	38.86 (1.530)

FEATURES AND SPECIFICATIONS

Features and Benefits

- Available with jackscrew
- Custom insertable logos
- Zinc die-cast, Nickel plated
- Steel with Nickel-plated jackscrews
- Cable pull-out force 30 lb min.

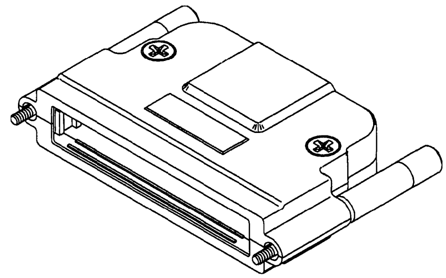
Reference Information

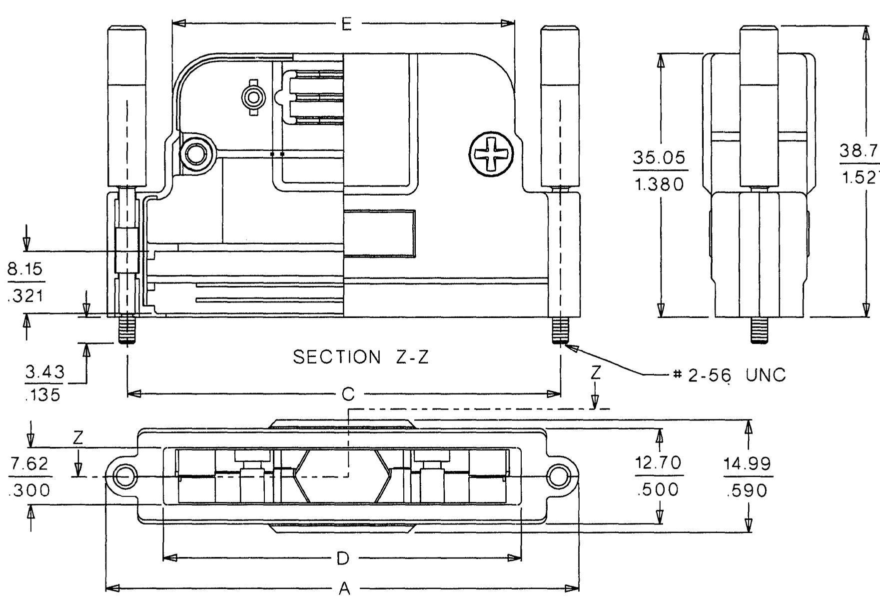
Product Specification: PSX79058
UL File No.: E29179
CSA File No.: LR19980-281
Use With: 79058
Designed In: Inches

SCSI+ Back Shell Assembly

79079

Zinc Die-Cast, 68 Circuit





Shielded I/O

Q

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Description	Cable OD	Dimension				
				A	B	C	D	E
68	15-87-5068	Back shells, jackscrews and screws	12.83 (.505)	63.25 (2.490)	57.91 (2.280)	50.54 (1.990)	47.75 (1.880)	45.72 (1.800)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SCSI+ Shielded Plug

71295

For Discrete Wire and Overmolding Applications

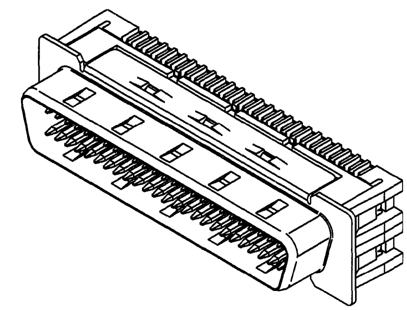
Features and Benefits
- Available in 50 circuit (SCSI-2) and 68 circuit (SCSI-3)
- Semi-automatic termination machine (Raptor)
- Full conformance to SCSI specifications
- Strain relieved plug subassembly
- Closed back end
- Expanded flange facilitates 360° soldering of shield to Copper wrapped pre-mold

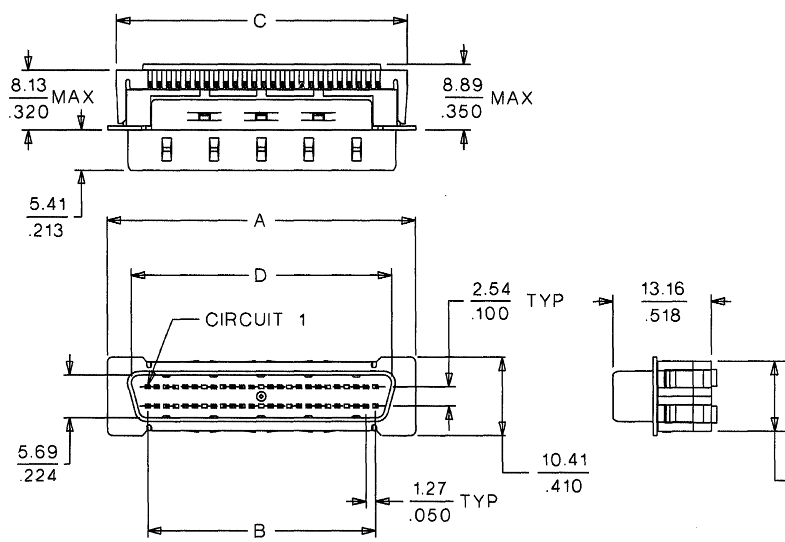
Reference Information
Product Specification: PSX79058
Tooling Information: See page Q-55
UL File No.: E29179
CSA File No.: LR19980A-281
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Mating Force: 5.3 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold in contact area, 78μ" Tin/Lead on solder tails or IDT area, all over 50μ" Nickel overall
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Description	Dimension A	Dimension B	Dimension C	Dimension D
50	71295-2050	Plug assembly and upper housings	41.15 (1.620)	30.48 (1.200)	38.86 (1.530)	34.85 (1.372)
68	71295-2068	Plug assembly and upper housings	52.58 (2.070)	41.91 (1.650)	50.29 (1.980)	46.28 (1.822)

Note: Upper housing shown assembled, however parts are shipped loose

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SCSI+ Unshielded Plug

70498

For .025" Ribbon Cable, All Plastic

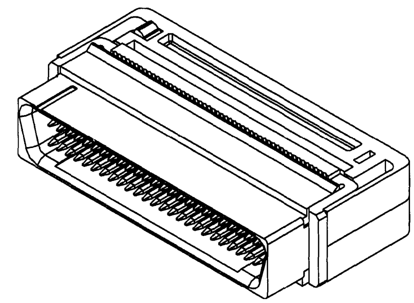
Features and Benefits
- Unique 2-piece strain relief provides true 2-sided strain relief
- Available as kit, with or without strain relief
- Conforms to SCSI requirements
- Contact factory for other circuit sizes available
- Contact factory regarding termination equipment
- Optional dust cover available (68 circuit only), see page Q-45

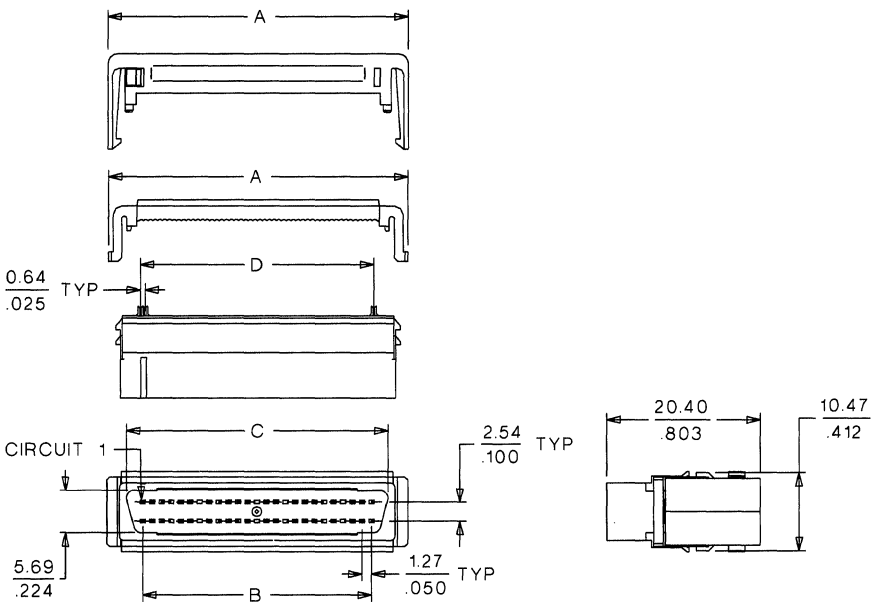
Reference Information
Product Specification: PSX79058
Tooling Information: See page Q-55
UL File No.: E29179
CSA File No.: LR19980A-281
Mates With: 70491 and 79059
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Pull-Out Force: 30 lb max.
Mating Force: 5.3 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g

Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold in contact area, 78μ" Tin/Lead on solder tails or IDT area, all over 50μ" Nickel overall
Temperature: -55 to +105°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Description	Dimension			
	With Strain Relief	Without Strain Relief		A	B	C	D
50	70498-3050	70498-4050	Plug assembly and upper housings	40.05 (1.577)	30.48 (1.200)	34.84 (1.372)	31.12 (1.225)
68	70498-3068	70498-4068	Plug assembly and upper housings	51.49 (2.027)	41.91 (1.650)	46.28 (1.822)	42.54 (1.675)

Note: Shielded versions of this product are available, contact factory

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SCSI+ Shielded Receptacle

79059 Right Angle with Latches

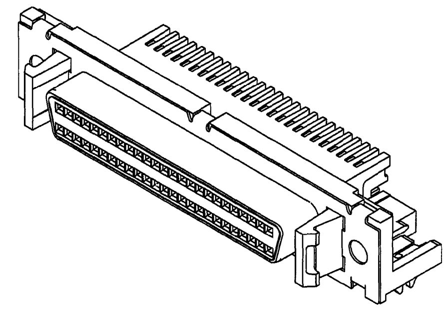
Features and Benefits
- LCP housing is compatible with SMT processing
- Blanked tuning fork terminal, smooth contact surface
- Optimum tail true position control
- Date-coded assembly
- Fork lock retention to board

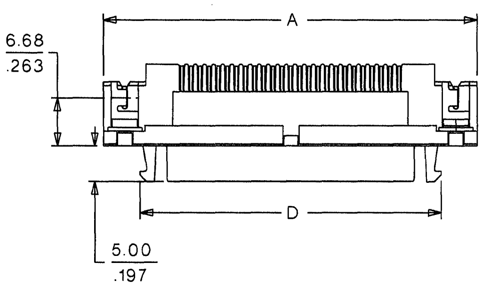
Reference Information
Product Specification: PSX79058
Tooling Information: See page Q-55
UL File No.: E29179
CSA File No.: LR19980A-281
Designed In: Inches

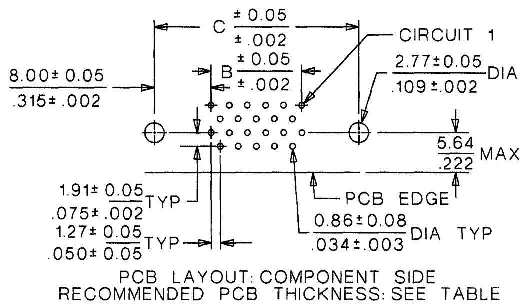
Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

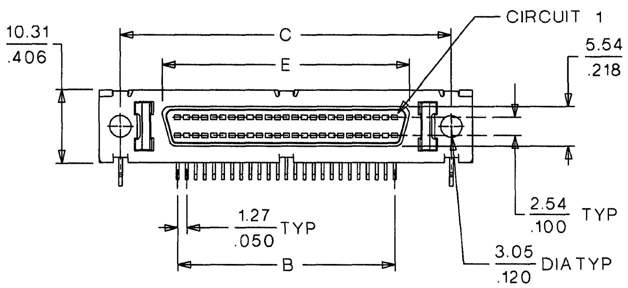
Mechanical
Wire Pull-Out Force: 30 lb max.
Mating Force: 5.3 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g

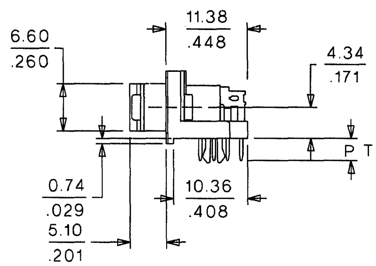
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold in contact area, 78μ" Tin/Lead on solder tails or IDT area, all over 50μ" Nickel overall
Temperature: -55 to +105°C











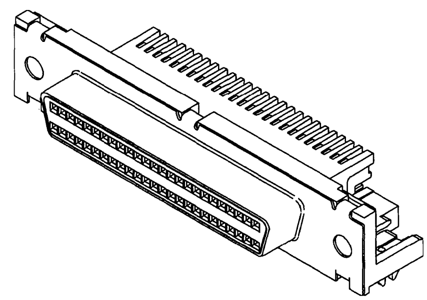
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Thread	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension P	Recommended PCB Thickness
50	15-87-6050	4-40	52.54 (2.065)	30.48 (1.200)	46.48 (1.830)	42.29 (1.665)	34.69 (1.366)	3.18 (.125)	1.57 (.062)
	15-87-6051		52.54 (2.065)	30.48 (1.200)	46.48 (1.830)	42.29 (1.665)	34.69 (1.366)	3.18 (.125)	2.36 (.093)
	15-87-6052		52.54 (2.065)	30.48 (1.200)	46.48 (1.830)	42.29 (1.665)	34.69 (1.366)	4.19 (.165)	3.18 (.125)
	15-87-6010	2-56	52.54 (2.065)	30.48 (1.200)	46.48 (1.830)	42.29 (1.665)	34.69 (1.366)	3.18 (.125)	1.57 (.062)
	15-87-6011		52.54 (2.065)	30.48 (1.200)	46.48 (1.830)	42.29 (1.665)	34.69 (1.366)	3.18 (.125)	2.36 (.093)
	15-87-6012		52.54 (2.065)	30.48 (1.200)	46.48 (1.830)	42.29 (1.665)	34.69 (1.366)	4.19 (.165)	3.18 (.125)
68	15-87-6020	4-40	63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	53.72 (2.115)	46.13 (1.816)	3.18 (.125)	1.57 (.062)
	15-87-6021		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	53.72 (2.115)	46.13 (1.816)	3.18 (.125)	2.36 (.093)
	15-87-6022		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	53.72 (2.115)	46.13 (1.816)	4.19 (.165)	3.18 (.125)
	15-87-6023	2-56	63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	53.72 (2.115)	46.13 (1.816)	3.18 (.125)	1.57 (.062)
	15-87-6024		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	53.72 (2.115)	46.13 (1.816)	3.18 (.125)	2.36 (.093)
	15-87-6025		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	53.72 (2.115)	46.13 (1.816)	4.19 (.165)	3.18 (.125)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SCSI+ Shielded Receptacle

79059 Right Angle without Latches



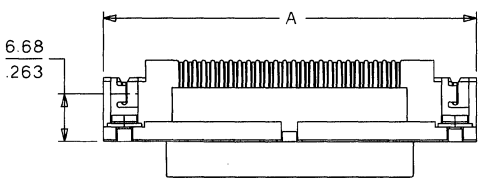
Features and Benefits
- LCP housing is compatible with SMT processing
- Blanked tuning fork terminal, smooth contact surface
- Optimum tail true position control
- Date-coded assembly
- Fork lock retention to board

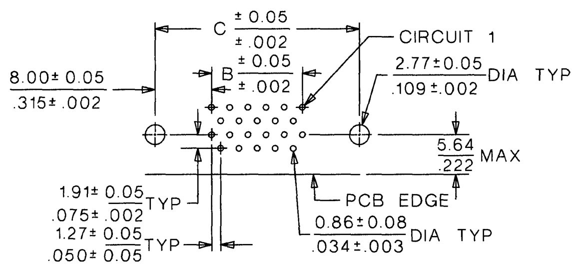
Reference Information
Product Specification: PSX79058
Tooling Information: See page Q-55
UL File No.: E29179
CSA File No.: LR19980A-281
Designed In: Inches

Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

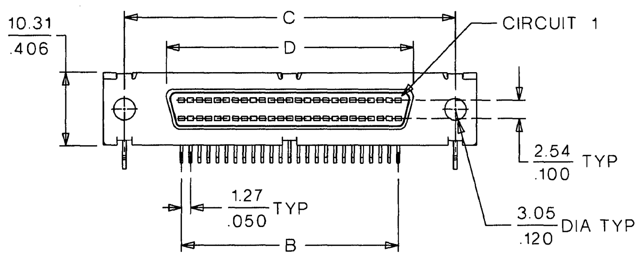
Mechanical
Wire Pull-Out Force: 30 lb max.
Mating Force: 5.3 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g

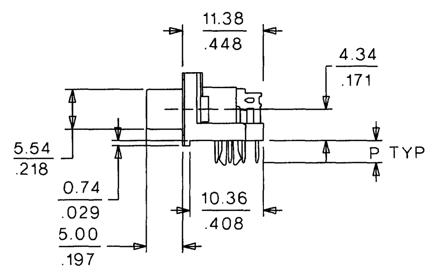
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 30μ" Gold in contact area, 78μ" Tin/Lead on solder tails or IDT area, all over 50μ" Nickel overall
Temperature: -55 to +105°C





PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Thread	Dimension A	Dimension B	Dimension C	Dimension D	Dimension P	Recommended PCB Thickness
50	15-87-6040	4-40	52.45 (2.065)	30.48 (1.200)	46.48 (1.830)	34.70 (1.366)	3.18 (.125)	1.57 (.062)
	15-87-6041		52.45 (2.065)	30.48 (1.200)	46.48 (1.830)	34.70 (1.366)	3.18 (.125)	2.36 (.093)
	15-87-6042		52.45 (2.065)	30.48 (1.200)	46.48 (1.830)	34.70 (1.366)	4.19 (.165)	3.18 (.125)
	15-87-6043	2-56	52.45 (2.065)	30.48 (1.200)	46.48 (1.830)	34.70 (1.366)	3.18 (.125)	1.57 (.062)
	15-87-6044		52.45 (2.065)	30.48 (1.200)	46.48 (1.830)	34.70 (1.366)	3.18 (.125)	2.36 (.093)
	15-87-6045		52.45 (2.065)	30.48 (1.200)	46.48 (1.830)	34.70 (1.366)	4.19 (.165)	3.18 (.125)
68	15-87-6200	4-40	63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	46.13 (1.816)	3.18 (.125)	1.57 (.062)
	15-87-6201		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	46.13 (1.816)	3.18 (.125)	2.36 (.093)
	15-87-6202		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	46.13 (1.816)	4.19 (.165)	3.18 (.125)
	15-87-6060	2-56	63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	46.13 (1.816)	3.18 (.125)	1.57 (.062)
	15-87-6061		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	46.13 (1.816)	3.18 (.125)	2.36 (.093)
	15-87-6062		63.88 (2.515)	41.91 (1.650)	57.91 (2.280)	46.13 (1.816)	4.19 (.165)	3.18 (.125)

Note: Available screwlock hardware provides panel mounting, maintains cable-ground connection and accepts mating and jackscrew hardware to provide plug retention. Please see page Q-45.

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch SCSI+ Unshielded Receptacle

70491

Vertical, All Plastic

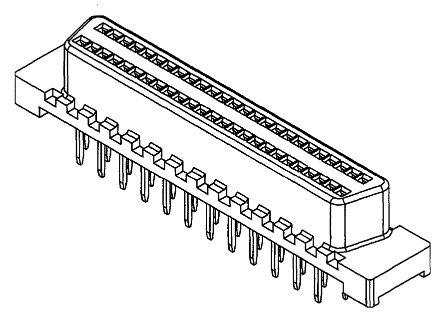
Features and Benefits
- LCP housing is compatible with SMT processing
- Board polarization peg available
- Date-coded assembly
- Tail lengths available: .080, .125 and .165"
- Contact factory for other circuit sizes available
- Smooth contact surface, blanked terminal

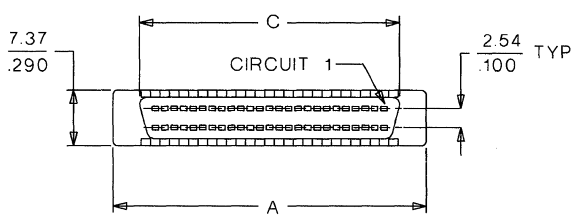
Reference Information
Product Specification: PSX79058
Tooling Information: See page Q-55
UL File No.: E29179
CSA File No.: LR19980A-281
Designed In: Inches

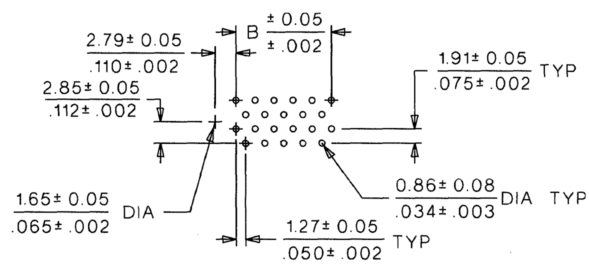
Electrical
Voltage: 30V
Current: 1.0A
Contact Resistance: 25mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 MΩ min.

Mechanical
Wire Pull-Out Force: 30 lb max.
Mating Force: 5.3 oz max. per circuit
Unmating Force: 1.0 oz min. per circuit
Normal Force: 100g

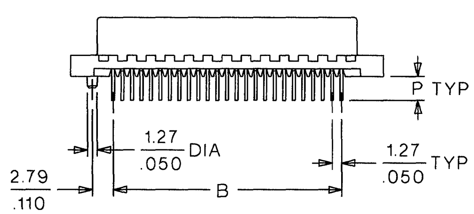
Physical
Housing: Black glass-filled polyester, UL 94V-0
Contact: Phosphor Bronze
Plating: 30µ" Gold in contact area, 78µ" Tin/Lead on solder tails or IDT area, all over 50µ" Nickel overall
Temperature: -55 to +105°C

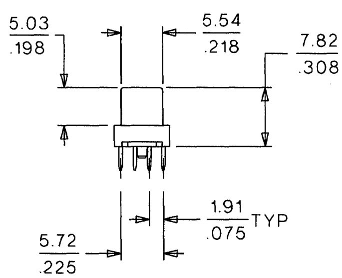






PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE TABLE





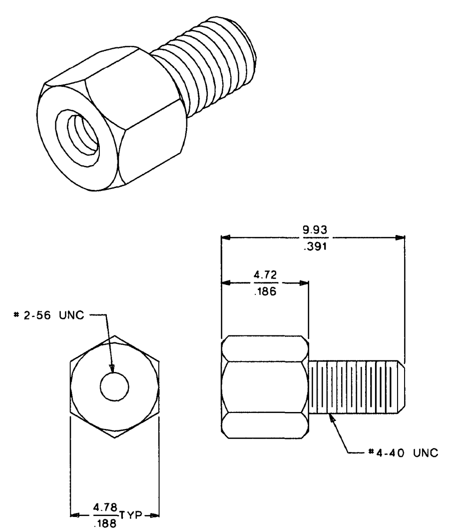
ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.		Dimension			Tail Length
	With Peg	Without Peg	A	B	C	
50	15-87-0301	15-87-0201	41.78 (1.645)	30.48 (1.200)	34.70 (1.366)	.125
	15-87-0303	15-87-0203	41.78 (1.645)	30.48 (1.200)	34.70 (1.366)	.165
	15-87-0309	15-87-0209	41.78 (1.645)	30.48 (1.200)	34.70 (1.366)	.080
68	15-87-0305	15-87-0205	53.21 (2.095)	41.91 (1.650)	46.13 (1.816)	.125
	15-87-0307	15-87-0207	53.21 (2.095)	41.91 (1.650)	46.13 (1.816)	.165
	15-87-0311	15-87-0211	53.21 (2.095)	41.91 (1.650)	46.13 (1.816)	.080

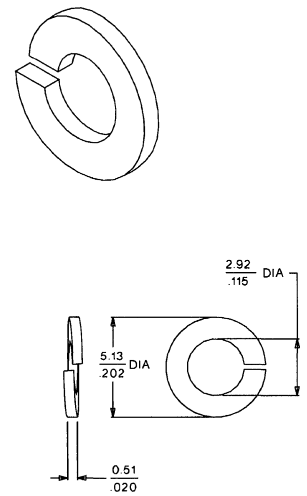
Note: Omit .065 hole on PCB for version without peg

Screwlock Hardware

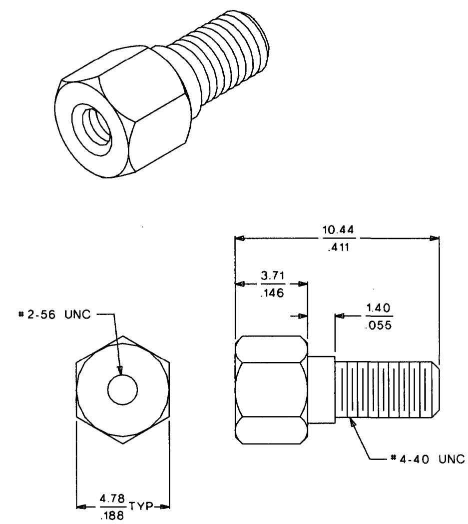
Please contact factory for availability.



Order No.
89-00-3252



Order No.
89-00-3250

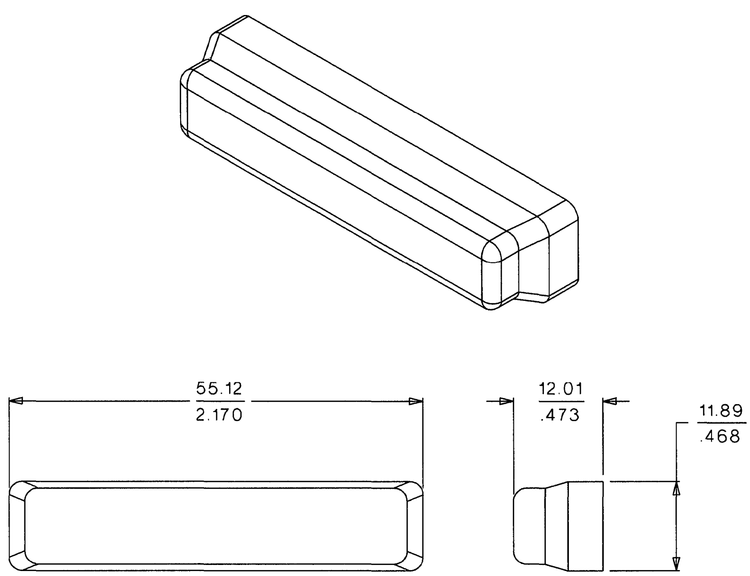


Order No.
89-00-3254

Dust Cover

Dust cover provides electrical isolation and environmental protection (68 circuit only).

Order No.
70469-2068



FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Shielded Plug

52316

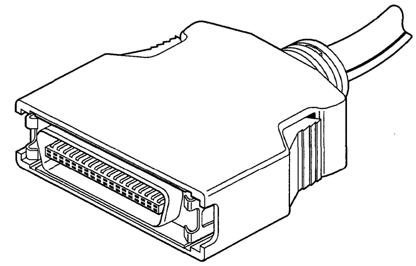
Dual Row

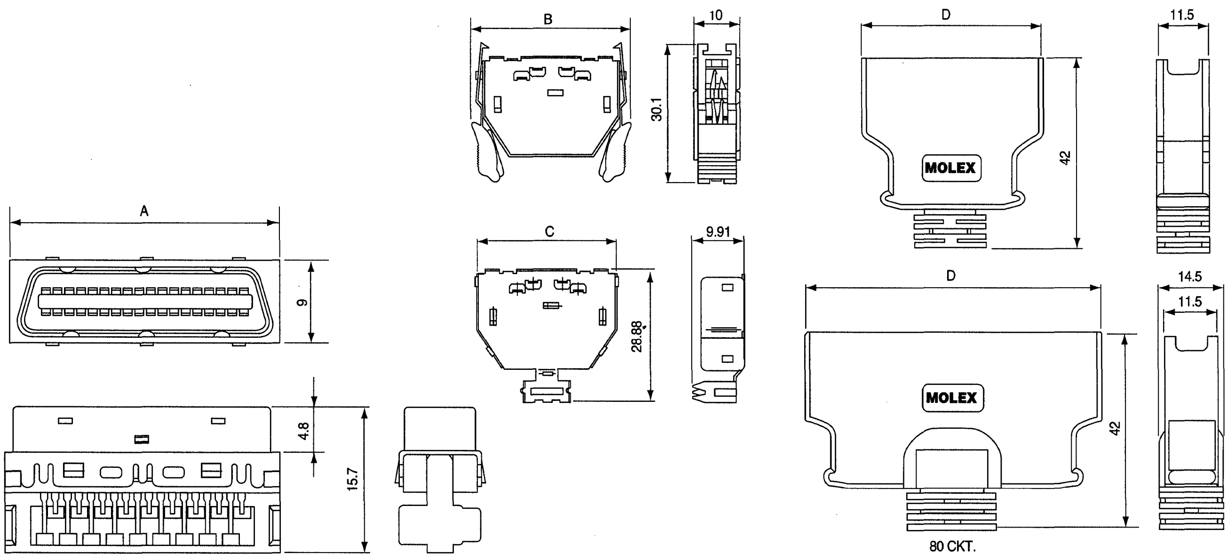
Features and Benefits
- Meets IEEE 1284 standard
- Mating and unmating made easy by the 1-touch lock

Reference Information
Packaging: Tray
Mates With: 52311 and 52515
Use With: 52370 shell kit
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 35mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 5000 MΩ min.

Physical
Housing: Glass-filled PBT
Contact: Phosphor Bronze
Plating: 0.76μm select Gold in contact area, Tin/Lead in IDT area, all over Nickel base
Temperature: -55 to +125°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Shell Kit	Dimension			
			A	B	C	D
26	52316-2611	52370-2610	22.99 (.905)	31.57 (1.242)	25.43 (1.001)	33.41 (1.315)
36	52316-3611	52370-3610	29.34 (1.155)	37.92 (1.492)	31.78 (1.251)	39.76 (1.565)
80	52316-8011	52370-8010	57.28 (2.255)	65.86 (2.592)	59.72 (2.351)	67.70 (2.665)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Shielded Receptacle

52515

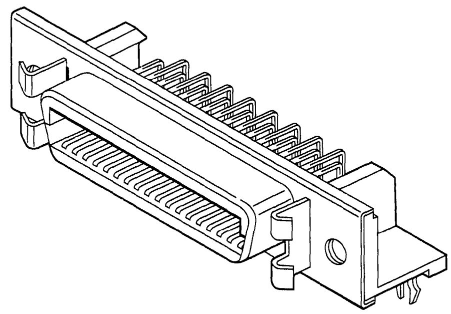
Right Angle, Dual Row, DIP

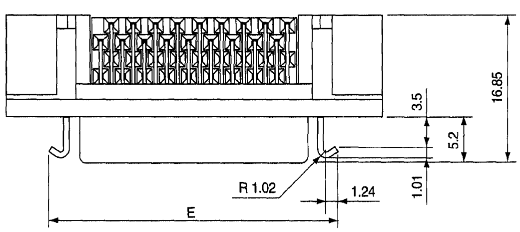
Features and Benefits
- Meets IEEE 1284 standard
- 1-piece metal shell with fork lock offers direct electrical grounding

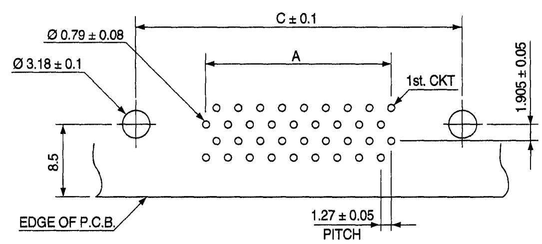
Reference Information
Packaging: Tray
Mates With: 52316
Designed In: Millimeters

Electrical
Voltage: 250V
Current: 1.0A
Contact Resistance: 35mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 5000 MΩ min.

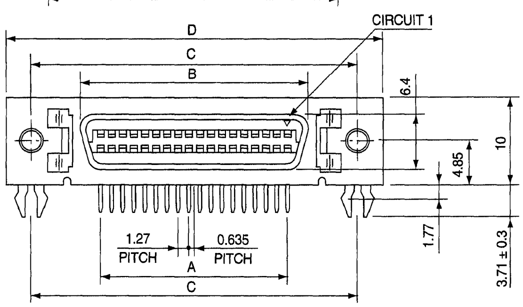
Physical
Housing: Glass-filled heat-resistant LCP plastic
Contact: Phosphor Bronze
Plating: 0.76μm min. Gold over 1.0μm min. Tin/Lead all over 2.0μm min. Nickel base
Temperature: -55 to +125°C

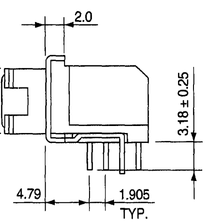






RECOMMENDED P.C.B. LAYOUT (COMPONENT SIDE)





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension					
		A	B	C	D	E	F
14	52515-1411	7.62 (.299)	12.62 (.496)	23.64 (.930)	29.54 (1.162)	19.74 (.777)	19.90 (.783)
20	52515-2011	11.43 (.449)	16.43 (.646)	27.45 (1.080)	33.35 (1.312)	23.55 (.927)	24.04 (.946)
36	52515-3611	21.59 (.849)	26.59 (1.046)	37.61 (1.480)	43.51 (1.712)	33.71 (1.327)	33.87 (1.333)
80	52515-8011	49.53 (1.949)	54.53 (2.146)	65.55 (2.580)	71.45 (2.812)	61.65 (2.427)	61.81 (2.433)

FEATURES AND SPECIFICATIONS

1.27mm (.050") Pitch Shielded Receptacle

52311

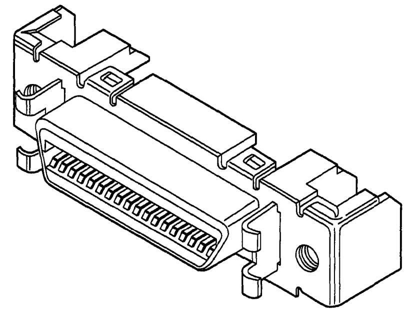
Right Angle, Dual Row, SMT

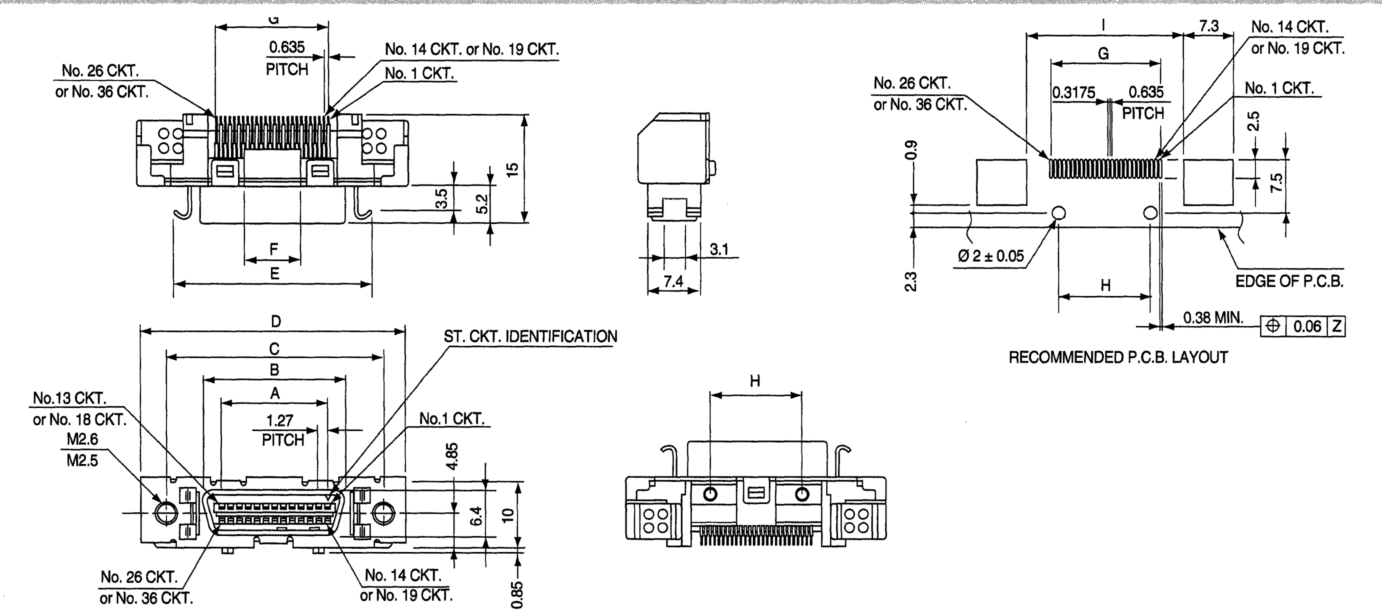
Features and Benefits
- Meets IEEE 1284 standard
- 1-piece metal shell with fork lock offers direct electrical grounding

Reference Information
Packaging: Stick
Mates With: 52316
Designed In: Millimeters

Electrical
Voltage: 125V
Current: 0.5A
Contact Resistance: 35mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Physical
Housing: Glass-filled heat-resistant plastic
Contact: Phosphor Bronze
Plating: 0.76µm min. Gold over 3.05µm min. Tin/Lead all over 2.0µm min. Nickel base
Temperature: -55 to +125°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Dimension										
		A	B	C	D	E	F	G	H	I	J	K
26	52311-2690	15.24 (.599)	20.24 (.796)	31.26 (1.230)	38.16 (1.502)	27.36 (1.077)	8.05 (.316)	15.875 (.624)	13.00 (.511)	22.60 (.889)	31.26 (1.230)	27.85 (1.096)
36	52311-3690	21.59 (.849)	26.59 (1.046)	37.61 (1.480)	44.51 (1.752)	33.71 (1.327)	14.40 (.566)	22.225 (.874)	11.00 (.433)	28.95 (1.139)	37.61 (1.480)	34.20 (1.346)

Shielded I/O

Q

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Shielded Plug

52660

Dual Row

Features and Benefits

- Mating and unmating made easy by the 1-touch lock
- The projected metal shell permits the receptacle to be face-mounted on the edge of the PCB to save space

Reference Information

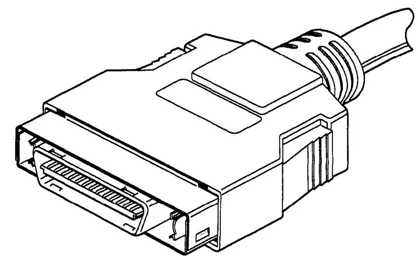
Packaging: Tray
Mates With: 52629
Use With: 52661 shell kit
Designed In: Millimeters

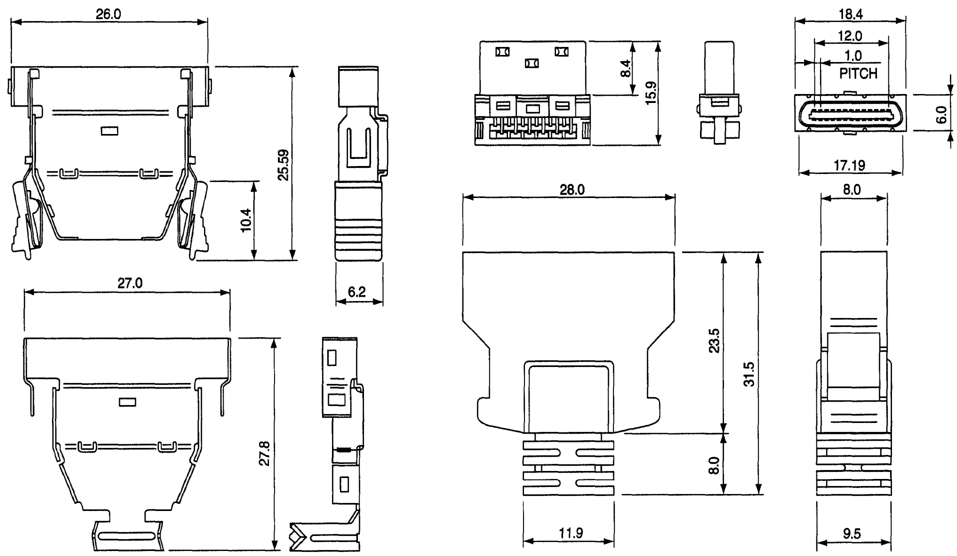
Electrical

Voltage: 125V
Current: 0.5A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Physical

Housing: Glass-filled PBT
Contact: Phosphor Bronze
Plating: 0.5μm min. in contact area, Tin/Lead in IDT area all over Nickel base
Temperature: -55 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.	Shell Kit
26	52660-2611	52661-2611

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Shielded Receptacle

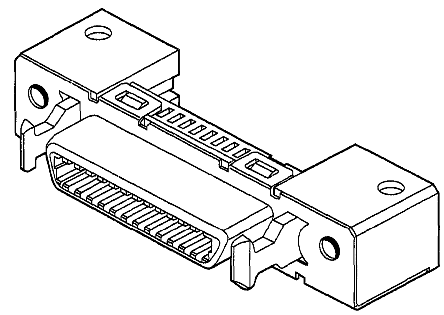
52629 Right Angle, SMT

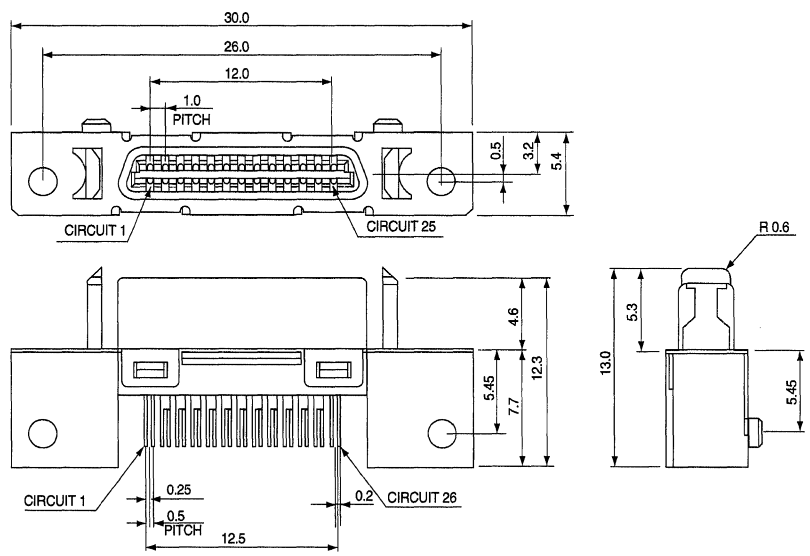
Features and Benefits
- Low profile: 5.4mm high
- Contact interface pitch — 1.0mm, tail pitch — 0.5mm (single row)
- Made of heat-resistant LCP for use in I.R. process
- First-mate-last-break contacts for electrical grounding purposes

Reference Information
Packaging: Tray
Mates With: 52660
Designed In: Millimeters

Electrical
Voltage: 1.25V
Current: 0.5A
Contact Resistance: 50mΩ max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Physical
Housing: Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: 0.5μm min. Gold over 1.0μm min. Tin/Lead all over 2.0μm min. Nickel base
Temperature: -55 to +85°C





ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.
26	52629-2611

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Docking Station Shielded Plug

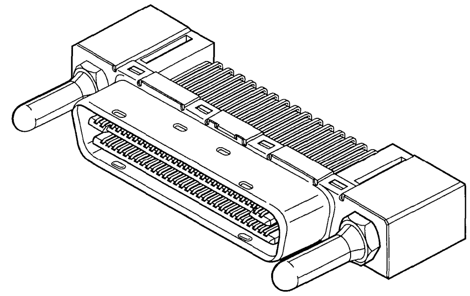
52758 Four Row, Right Angle DIP

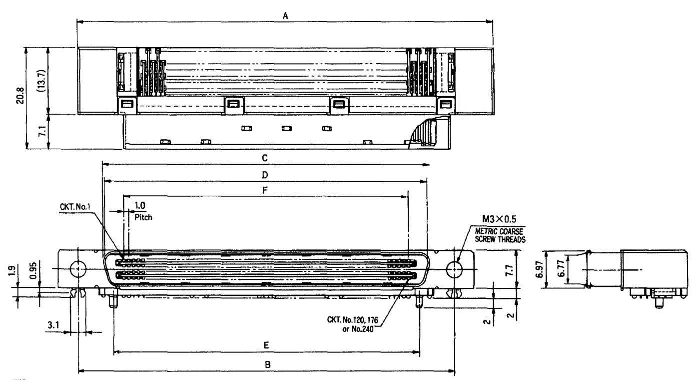
Features and Benefits
- Size 120 circuits
- Low profile: 7.7mm high
- Leaf-style contact
- EMI/RFI shielding
- First-mate-last-break contacts for electrical grounding purposes
- Heavy-duty guide system with wide range mating tolerances

Reference Information
Packaging: Tray
Mates With: 52755
Designed In: Millimeters

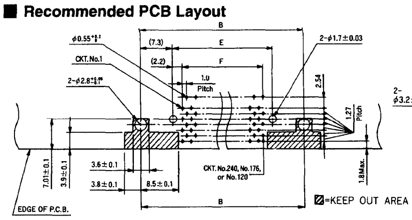
Electrical
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dieletric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Physical
Housing: Glass-filled heat-resistant plastic
Contact: Phosphor Bronze
Plating: 0.76μm Gold over Tin/Lead all over Nickel
Temperature: -55 to +85°C

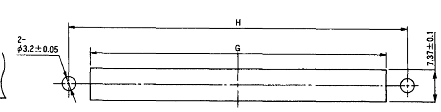




■ Recommended PCB Layout



■ Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
120	52758-1200

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Docking Station Shielded Plug

52758

Four Row, Right Angle DIP

Features and Benefits
- Size 240 circuits
- Low profile: 7.7mm high
- Leaf-style contact
- EMI/RFI shielding
- First-mate-last-break contacts for electrical grounding purposes
- Heavy-duty guide system with wide range mating tolerances

Reference Information

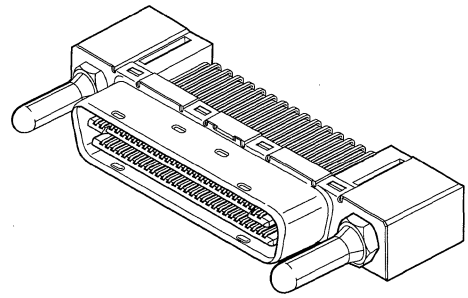
Packaging: Tray
Mates With: 52755
Designed In: Millimeters

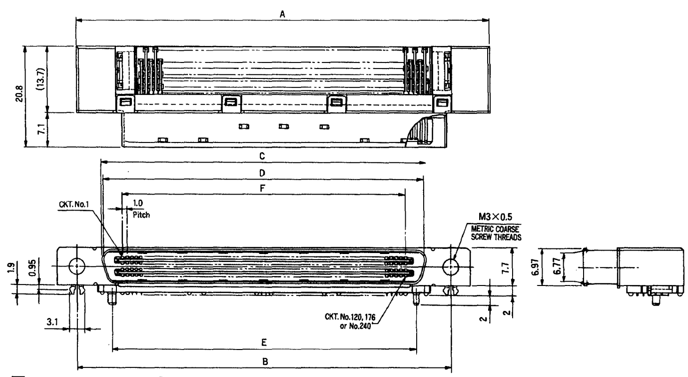
Electrical

Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dieletric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

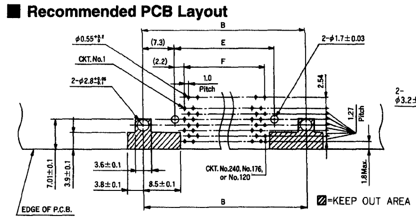
Physical

Housing: Glass-filled heat-resistant plastic
Contact: Phosphor Bronze
Plating: 0.76μm Gold over Tin/Lead over Nickel
Temperature: -55 to +85°C

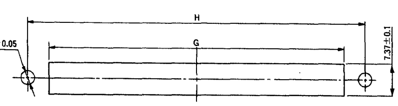




■ Recommended PCB Layout



■ Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
240	52758-2400

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Docking Station Shielded Receptacle

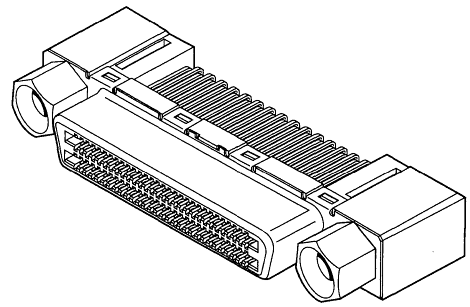
52755 Four Row, Right Angle DIP

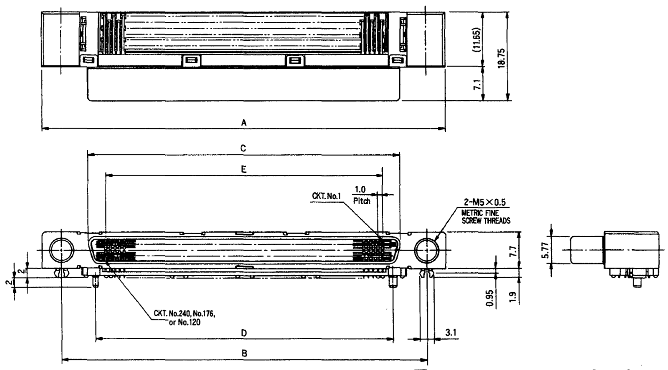
Features and Benefits
- Size 120 circuits
- Low profile: 7.7mm high
- Leaf-style contact
- EMI/RFI shielding
- First-mate-last-break contacts for electrical grounding purposes
- Heavy-duty guide system with wide range mating tolerances

Reference Information
Packaging: Tray
Mates With: 52758
Designed In: Millimeters

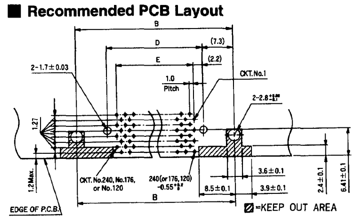
Electrical
Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dieletric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

Physical
Housing: Glass-filled heat-resistant plastic
Contact: Phosphor Bronze
Plating: 0.76μm Gold over Tin/Lead over Nickel
Temperature: -55 to +85°C

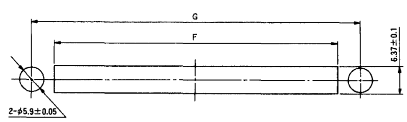




■ Recommended PCB Layout



■ Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
120	52755-1200

Shielded I/O

Q

FEATURES AND SPECIFICATIONS

1.00mm (.039") Pitch Docking Station Shielded Receptacle

52755

Four Row, Right Angle DIP

Features and Benefits

- Size 240 circuits
- Low profile: 7.7mm high
- Leaf-style contact
- EMI/RFI shielding
- First-mate-last-break contacts for electrical grounding purposes
- Heavy-duty guide system with wide range mating tolerances

Reference Information

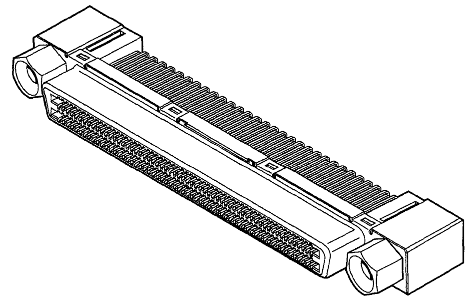
Packaging: Tray
Mates With: 52758
Designed In: Millimeters

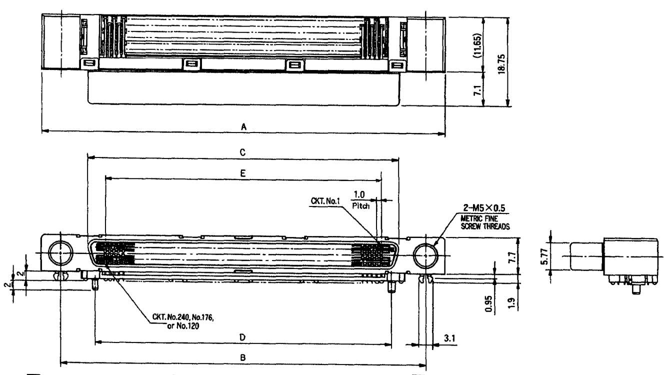
Electrical

Voltage: 125V
Current: 0.4A
Contact Resistance: 70mΩ max.
Dieletric Withstanding Voltage: 500V AC
Insulation Resistance: 500 MΩ min.

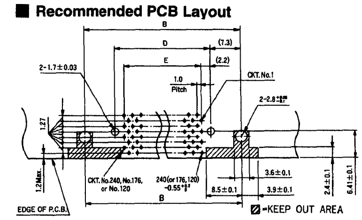
Physical

Housing: Glass-filled heat-resistant plastic
Contact: Phosphor Bronze
Plating: 0.76µm Gold over Tin/Lead over Nickel
Temperature: -55 to +85°C

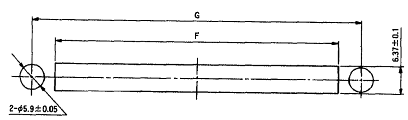




■ Recommended PCB Layout



■ Recommended Panel Opening



ORDERING INFORMATION

Circuits	Order No.
240	52755-2400

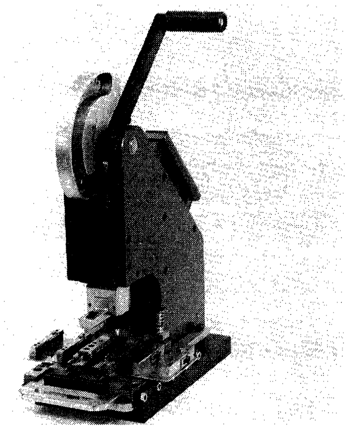
FEATURES AND SPECIFICATIONS

Features
- Cable is located and clamped before termination
- Feed-through and feed-to capability
- Tooling slides out of press for convenient plug and cable loading
- Press has full cycle ratchet to ensure complete termination
- Connectors may be spaced as close as 35mm (1.4")

Specifications
Size: Width—230mm (9")
Depth—457mm (18")
Height—457mm (18")
Weight: 27kg (60 lb)
Rate: Up to 100 connectors per hour, dependent on operator speed and application

SCSI+ Connector Manual and Semi-Automatic Presses

Manual Press for SCSI+ for 0.63mm (.025") Pitch Ribbon Cable



ORDERING INFORMATION

Description	Order No.			Connector
	Press with Tooling	Tool Kit Only*	Circuit Size Change Kit Only†	
Press for 50 Circuit Ribbon Cable	11-20-1341	62200-2200	11-32-7223	79058-5050
Press for 68 Circuit Ribbon Cable	11-20-1340	62200-1900	11-32-7224	79058-5068
Press for 50 Circuit Ribbon Cable	11-20-1343	62200-2000	11-32-7860	79058-3050
Press for 68 Circuit Ribbon Cable	11-20-1342	62200-2100	11-32-7861	79058-3068

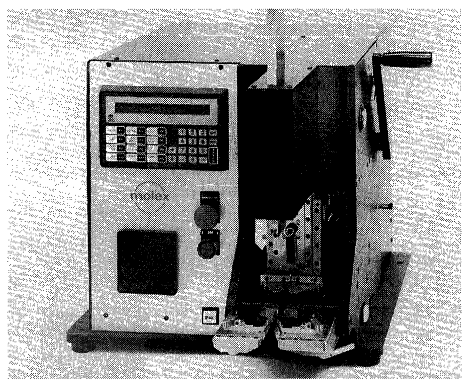
* If you already own a press, only tool kit is necessary
† If you already have a press and tooling running 1 circuit size, only a new nest is necessary to run a second circuit size

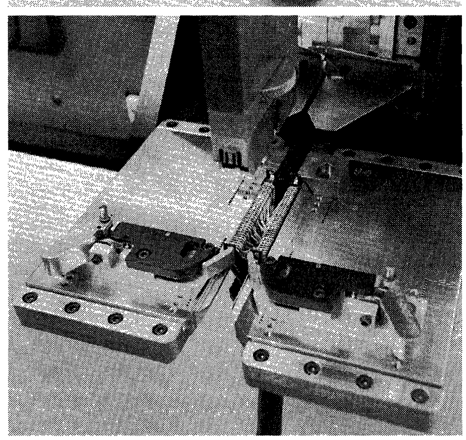
FEATURES AND SPECIFICATIONS

Features
- All electric operation; no air required
- Easy to set up and operate
- Up to 25 different jobs can be saved in memory
- Optional speech synthesizer to announce wire color
- Keypad with display shows operator connector position, number of connectors made and diagnostic faults messages

Specifications
Size: Width—560mm (22")
Depth—660mm (26")
Height—580mm (23")
Weight: 55kg (120 lb)
Electrical: Voltage—110/220V AC, 50/60 Hz
Current—10.0A at 120V or 5.0A at 220V
Rate: Up to twenty 50 circuit (or fifteen 68 circuit) plugs per hour, dependent on operator speed and application

Semi-Automatic Terminator for SCSI+ for Jacketed Multi-Conductor Cable





ORDERING INFORMATION

Description	Order No.		Connector*
	Semi-Automatic Terminator	Semi-Automatic Terminator with Speech Synthesizer	
Semi-Automatic Press for Jacketed Cable	11-20-1315†	11-20-1334†	15-87-1050, 15-87-1068, 71295-2050, 71295-2068, 79058-8050, 79058-8060

*Terminator is furnished with tooling to process 50 and 68 position connectors
†Unless otherwise specified, terminator will be delivered to operate at 120V AC. If 220V is specified, machine will be delivered with US standard plug.

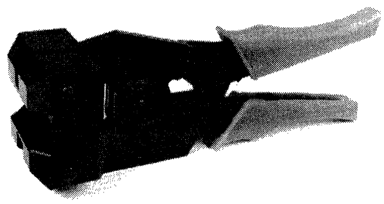
ORDERING INFORMATION

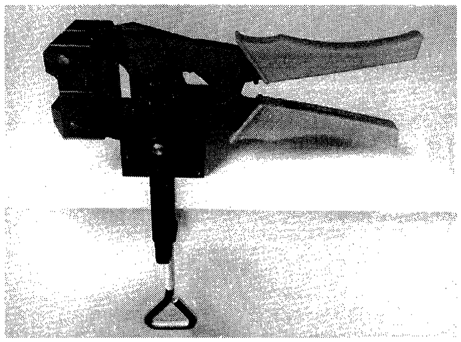
Description	Order No.	For Use With
Hand Tool Frame*	11-32-4141	Plug Insert and Plug Termination Dies
Hand Tool Bench Clamp	11-32-4142	SEMCONN Hand Tool Frame

* Dies must be ordered separately

SEMCONN™ Hand Tools and Dies

Basic Hand Tool Frame and Bench Clamp for Round and Flat Shielded Cable Plugs


Frame

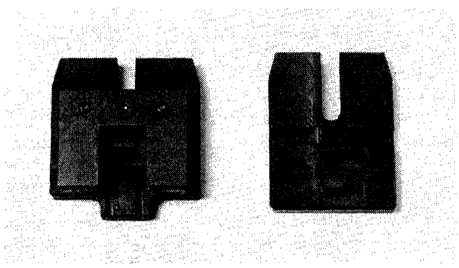

Clamp with Frame

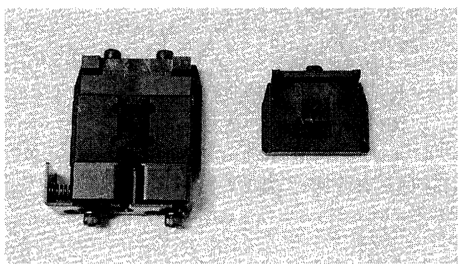
ORDERING INFORMATION

Tooling Required for Plug and Plug Insert Termination

Circuits	Tooling Order No.	
	Plug Termination*	Plug Insert Termination†
4	11-32-4144	11-32-4148
6	11-32-4145	11-32-4149
8	11-32-4146	11-32-4150
16	11-32-4147	11-32-4151

* This is tooling required for plug termination (flat and round cable)
† This is tooling required for plug insert termination (round cable)


Tooling for Plug Termination


Tooling for Plug Insert Termination

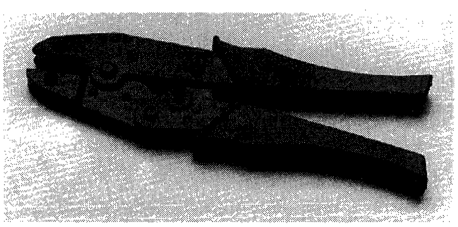
ORDERING INFORMATION

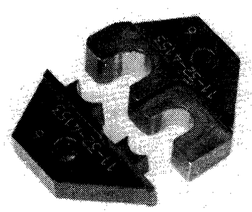
Ferrule Crimp Hand Tool and Dies for Round Cable

Circuits	Order No. Dies
4	11-32-4152
6	11-32-4153
8	11-32-4154
16	11-32-4155

Description	Order No.
Hand Tool Frame	11-31-6379

See Application Tooling Section W for additional information on these tools


Ferrule Crimp Hand Tool Frame


Ferrule Crimp Die

FEATURES

- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle
- Reliable, low cost assembly

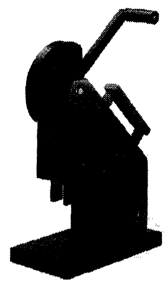
Application Tooling Shielded I/O

SEMCONN™ Manual Presses

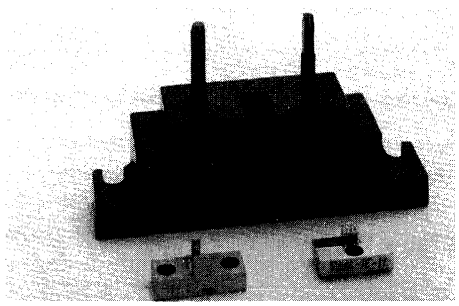
Manual Press Tooling for Plug Termination for Round and Flat Shielded Cable Plugs

ORDERING INFORMATION

Circuits	Order No.	
	Press and Tooling	Circuit Size Change Only
4	11-31-6357	11-31-6361
6	11-31-6358	11-31-6362
8	11-31-6359	11-31-6363
16	11-31-6360	11-31-6364



Manual Press



Plug Change Tooling

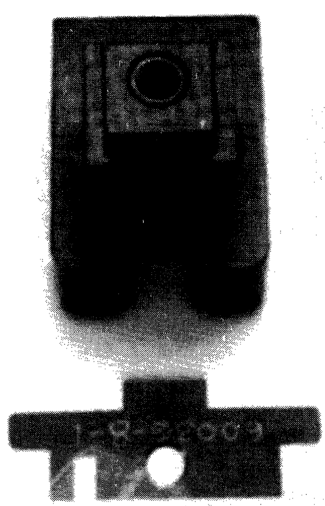
Manual Press Tooling for Plug Insert Termination for Round Cable Plugs

ORDERING INFORMATION

Circuits	Order No.	
	Press and Tooling	Circuit Size Change Only
4	11-31-6365	11-31-6369
6	11-31-6366	11-31-6370
8	11-31-6367	11-31-6371
16	11-31-6368	11-31-6372
6-Loaded-4	11-31-8633	11-31-8630
8-Loaded-6	11-31-8634	11-31-8631

Note: To terminate round cable plugs, 3 applicators are required: 1) plug insert termination 2) plug termination 3) ferrule crimp
To terminate flat cable plugs, only plug termination is required
See Application Tooling Section W for additional information on these tools

Press with Plug Insert Terminator



Plug Insert Change Tooling

SEMCONN™ Manual and Electric Presses and Tooling

Manual Press for Ferrule Crimping to Round Cable

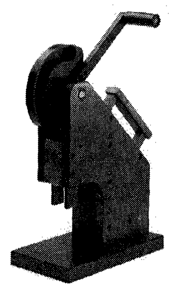
FEATURES

- Quick tooling changeovers
- Full cycle ratchet assures completion of crimp operation
- Plug shield and cable jacket crimped in 1 operation
- Fine adjust on ram with locking screw
- For medium volume

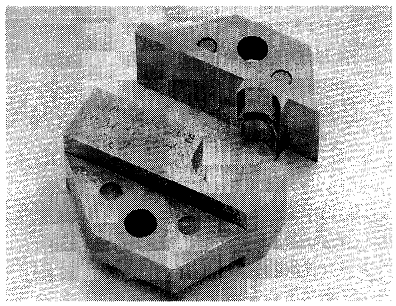
ORDERING INFORMATION

Circuits	Order No.		
	Manual Press and Fixturing*	Fixturing Only†	Ferrule Crimping Dies Only‡
4	11-21-9507	11-31-7559	11-31-6382
6	11-21-9507	11-31-7559	11-31-6383
8	11-21-9507	11-31-7559	11-31-6384
16	11-21-9507	11-31-7559	11-31-6385

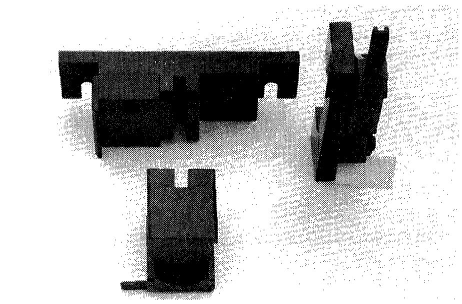
* Manual press and fixturing come without crimp dies
† For changeover with plug insert tooling
‡ For use in manual press only



Manual Press

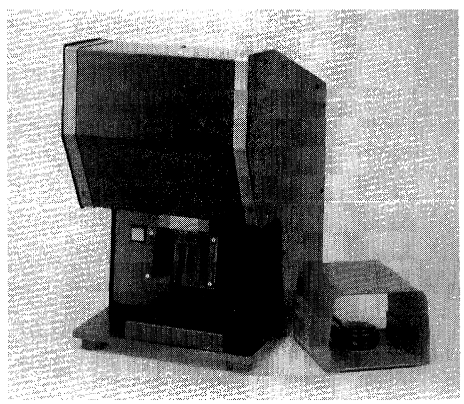


Crimping Dies



Press Fixture

Electric Foot-Actuated Press



FEATURES

- Accepts all SEMCONN tool kits
- OSHA safety guard
- Motor drive reduces operator fatigue
- Fine adjust on ram with lock screw

ORDERING INFORMATION

Description	Order No.	
	120V	220V*
Foot Switch Electric Press (Press Only)	11-32-1089	11-32-1088

* Unless otherwise specified at time of order, 220V presses are shipped with US plugs on power cord

Presses with Tooling Installed—120V

Circuits	Order No.		
	Plug Terminators	Insert Terminators	Ferrule Crimpers
4	11-32-1453	11-32-1448	11-32-1457
6	11-32-1454	11-32-1449	11-32-1458
8	11-32-1455	11-32-1450	11-32-1459
16	11-32-1456	11-32-1451	11-32-1460
6/4	11-32-1454	11-32-1255	11-32-1458
8/6	11-32-1455	11-32-1452	11-32-1459

Presses with Tooling Installed—220V

Circuits	Order No.		
	Plug Terminators	Insert Terminators	Ferrule Crimpers
4	11-32-1445	11-32-1440	11-32-1437
6	11-32-0580	11-32-1441	11-32-0581
8	11-32-1446	11-32-1442	11-32-1438
16	11-32-1447	11-32-1443	11-32-1439
6/4		11-32-0579	
8/6		11-32-1444	

See Application Tooling Section W for additional information on these tools

Application Tooling Shielded I/O

SEMCONN™ ACCESS.bus† Manual Press

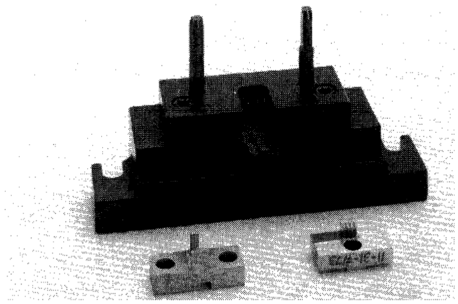
Manual Press for Plug Termination for Flat Shielded Cable Plugs

ORDERING INFORMATION

Circuits	Order No.		Connector
	Press Assembly*	Tool Change Kit	
4	11-31-6357	11-31-6361	71564

* Press assembly includes basic manual press, fixturing and tooling


Manual Press

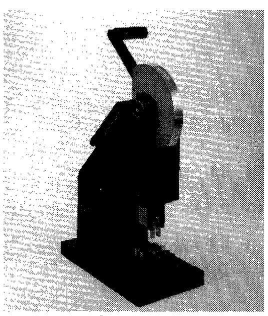

Tool Change Kit

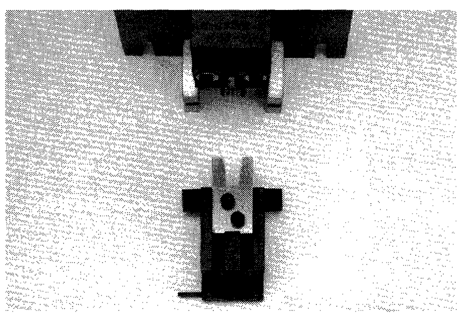
Manual Press for Round-to-Flat Cable Ferrule Crimp

ORDERING INFORMATION

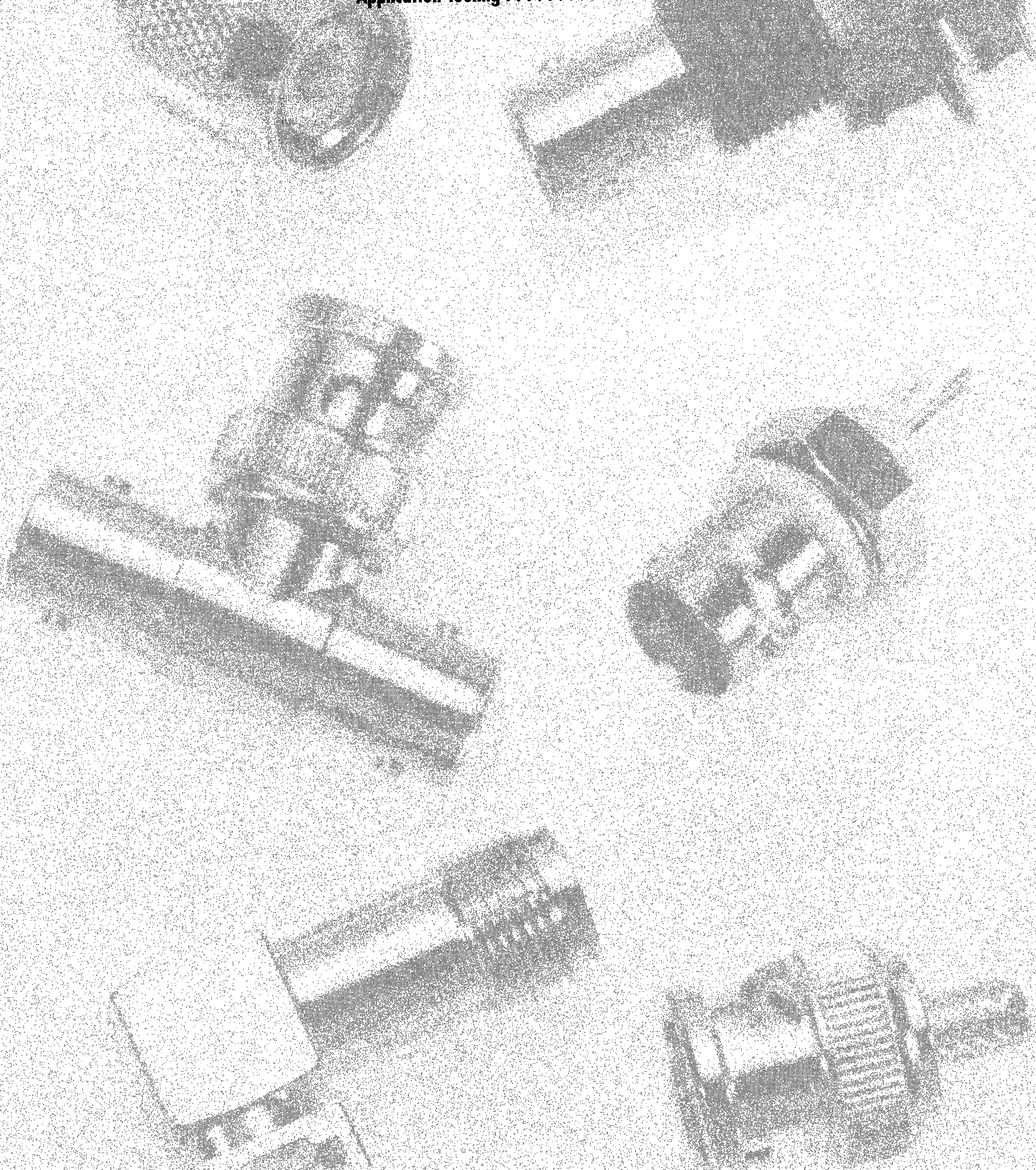
Circuits	Order No.		Connector
	Press Assembly*	Fixture and Tooling Only	
4	11-20-1246	11-21-9921	71564

* Press assembly includes basic manual press, fixturing and tooling
† ACCESS.bus is a trademark of Digital Equipment Corp.
See Application Tooling Section W for additional information on these tools


Press Assembly


Fixture and Tooling

RF Coaxial Connectors



R

RF Coaxial Connectors
BNC and TNC Specifications

Molex offers both BNC and TNC products in a variety of styles, platings and termination methods. These products are available in both 50 and 75Ω (limited) impedances. Molex BNC and TNC connectors are fully compatible with the interface requirements of MIL-C-39012 which has been adopted as the industry standard.

The BNC series series features a bayonet coupling mechanism which facilitates connector mating in applications with frequencies up to 4 GHz. Typical applications include test systems and equipment and signal distribution systems such as LAN networks. This series is best suited for ground-based stationery RF applications.

The TNC series has similiar interface characteristics to the BNC series connector, with screw threads substituted as the coupling mechanism. The screw coupled TNC maintains a consistent level of performance in applications that are subjected to vibration and mechanical shock such as those seen in mobile communications. Operating frequencies up to 11 GHz can be realized.

Electrical	**BNC**	**TNC**
Impedence	50Ω	50Ω
Frequency Range	0-4 GHz	0-11 GHz
VSWR	1.3 max. 0-4 GHz	1.3 max. 0-11 GHz
Dielectric Withstanding Voltage	1500V rms	1500V rms
RF Leakage	-55 dB min. at 2-3 GHz	-55 dB min. at 2-3 GHz
Insertion Loss	0.2 dB max. at 3 GHz	0.2 dB max. at 3 GHz
Voltage Rating	500V rms	500V rms
Insulation Resistance	5000 MΩ min.	5000 MΩ min.
Contact Resistance (mΩ)	Inner Contact: 1.5 max. Outer Contact: 1.0 max.	Inner Contact: 1.5 max Outer Contact: 1.0 max.
Materials		
Body	Brass/Zinc Alloy (Nickel or Silver Plated)	Brass/Zinc Alloy (Nickel or Silver Plated)
Male Contacts	Brass (Tin, Silver or Gold Plated)	Brass (Silver or Gold Plated)
Female Contacts	Phosphor Bronze or Berylium Copper (Tin, Silver or Gold Plated)	Phosphor Bronze or Berylium Copper
Insulator	Polypropylene or Teflon*	Polypropylene or Teflon
Gasket	Silicone Rubber	Silicone Rubber
Crimp Ferrule	Annealed Copper	Annealed Copper
Mechanical		
Mating	2 Stud Bayonet Locking	7/16-28 Threaded Coupling
Cable Termination (braid or jacket)	Crimp-Hex Crimp, Clamp-Screw Threaded Nut	Crimp-Hex Crimp, Clamp-Screw Coupled Nut
Cable Termination (center conductor)	Crimp or Solder	Crimp or Solder
Cable Retention	40 lb min. (Clamp/Solder), 20-100 lb (Crimp) depends on cable size	40 lb min. (Clamp/Solder), 20-100 lb (Crimp) depends on cable size
Environmental		
Moisture Resistance	MIL-STD 202 Method 106	MIL-STD 202 Method 106
Vibration	MIL-STD 202 Method 204 (Test Condition D)	MIL-STD 202 Method 204 (Test Condition D)
Shock	MIL-STD 202 Method 213 (Test Condition B)	MIL-STD 202 Method 213 (Test Condition B)
Corrosion	MIL-STD 202 Method 101 (Test Condition B)	MIL-STD 202 Method 101 (Test Condition B)
Thermal Shock	MIL-STD 202 Method 107 (Test Condition D)	MIL-STD 202 Method 107 (Test Condition D)
Operating Temperature: Polypropylene	-55 to +85°C	-55 to +85°C
Operating Temperature: Teflon	-65 to +165°C	-55 to +199°C

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company

Note: Specifications are typical and may not apply to all connectors

FEATURES AND SPECIFICATIONS

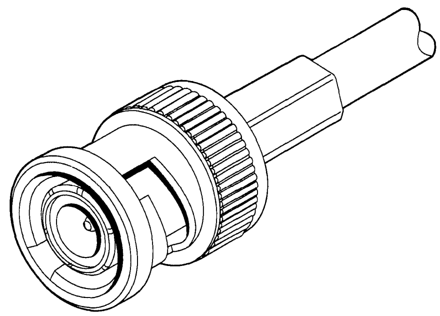
Features and Benefits

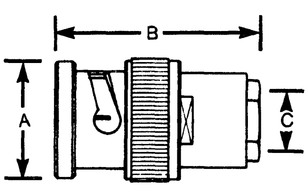
- MIL-C-39012 compatible
- Quick connect-disconnect
- 50 and 75Ω versions available

See BNC and TNC Specifications Table on Page R-2
For More Information

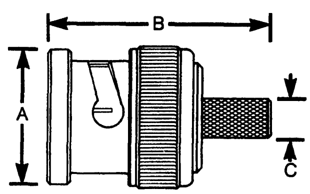
RF Coaxial Connectors
BNC Series

73100/73104/73105/73106/73174
Straight Cable Plug

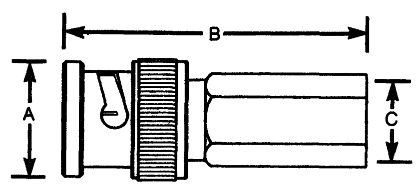




Clamp/Solder



Crimp/Crimp



Screw-On

ORDERING INFORMATION AND DIMENSIONS

RG/U Cable	Order No.	Contact Plating	Termination Style Body/Contact	Dimension			Features	Dielectric Materials
				A	B	C		
58, 141	73100-5001	Silver	Clamp/Solder	14.50 (.571)	22.70 (.984)	5.30 (.208)		Polypropylene
58, 141	73100-5003	Gold	Clamp/Solder	14.50 (.571)	22.70 (.984)	5.30 (.208)		Polypropylene
58, 141	73104-5001	Silver	Crimp/Crimp	14.50 (.571)	22.30 (.877)	3.20 (.126)		Polypropylene
58, 141	73174-0083	Gold	Crimp/Crimp	14.50 (.571)	23.30 (.917)	3.20 (.126)	Captive Contact	Polypropylene
58, 141	73174-0093	Gold	Crimp/Crimp	14.50 (.571)	23.30 (.917)	3.20 (.126)	Captive Contact	Teflon*
59, 62	73105-5001	Silver	Crimp/Crimp	14.50 (.571)	22.30 (.877)	3.90 (.154)		Polypropylene
59, 62	73105-5003	Gold	Crimp/Crimp	14.50 (.571)	22.30 (.877)	3.90 (.154)		Polypropylene
59, 62	73106-5001	Silver	Screw-On	14.50 (.571)	36.00 (1.420)	5.40 (.213)		Polypropylene
59, 62	73174-0103	Gold	Crimp/Crimp	14.50 (.571)	23.30 (.917)	3.90 (.154)	75Ω Captive Contact	Polypropylene

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company

FEATURES AND SPECIFICATIONS

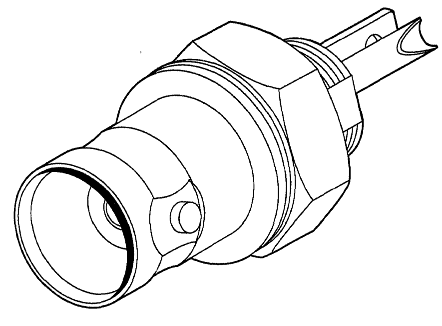
Features and Benefits

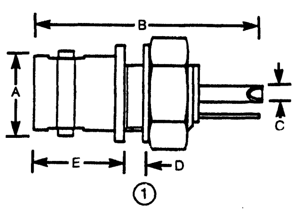
- MIL-C-39012 compatable
- Quick connect-disconnect
- 50 and 75Ω versions available

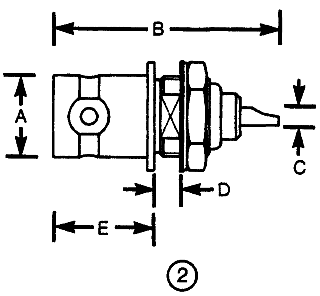
See BNC and TNC Specifications Table on Page R-2
For More Information

RF Coaxial Connectors
BNC Series

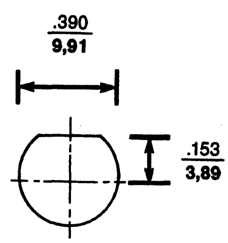
73115/73119
Straight Bulkhead Jack Receptacle







Panel Cut Out



ORDERING INFORMATION AND DIMENSIONS

Order No.	Contact Plating	Style	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Features	Dielectric Materials
73115-5001	Silver	1	11.00 (.433)	30.00 (1.180)	2.10 (.082)	5.10 (.200)	12.00 (.472)	Front Mount with Ground Wire	Polypropylene
73119-5001	Silver	2	11.00 (.433)	26.80 (1.060)	2.10 (.082)	2.70 (.106)	12.00 (.472)	Front Mount with Solder Ring	Teflon*
73119-5003	Gold	2	11.10 (.437)	26.80 (1.060)	2.10 (.082)	2.70 (.106)	12.00 (.472)	Front Mount with Solder Ring	Teflon

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company

Note: Nut and washer included with each connector

FEATURES AND SPECIFICATIONS

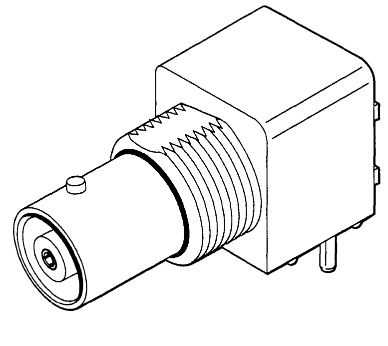
RF Coaxial Connectors BNC Series

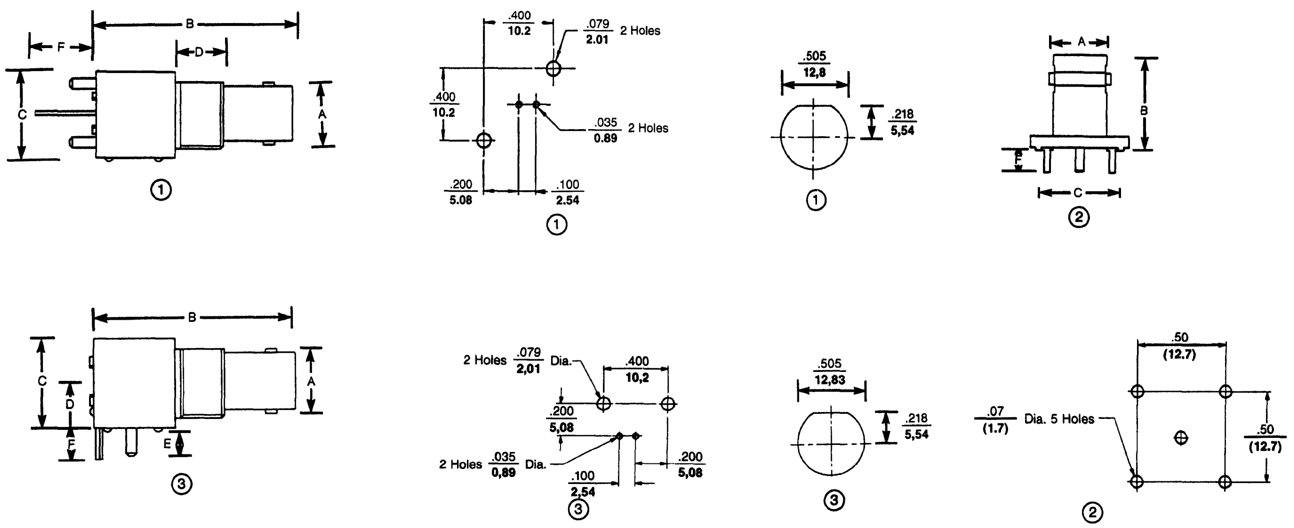
73131/73133/73137/ 73138

PCB Jack Receptacle Vertical and Right Angle

Features and Benefits
- MIL-C-39012 compatable
- Quick connect-disconnect
- 50 and 75Ω versions available

See BNC and TNC Specifications Table on Page R-2 For More Information





ORDERING INFORMATION AND DIMENSIONS

Order No.	Contact Plating	Diagram	Style	Dimension A	B	C	D	E	F	Features	Dielectric Materials
73131-5003	Gold	1	Vertical	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.64 (.340)	4.10 (.161)	10.30 (.405)	Black Molded Body	Polypropylene
73131-5005	Tin	1	Vertical	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.64 (.340)	4.10 (.161)	10.30 (.405)	Black Molded Body	Polypropylene
73133-5001	Silver	2	Vertical	11.00 (.433)	16.80 (.661)	17.40 (.677)			3.90 (.154)	Brass Body	Teflon*
73133-5003	Gold	2	Vertical	11.10 (.437)	16.80 (.661)	17.40 (.677)			3.90 (.154)	Brass Body	Teflon
73137-5003	Gold	3	Right Angle	11.00 (.433)	34.90 (1.370)	13.20 (.519)	6.91 (.272)	4.10 (.161)	4.75 (.187)	Black Molded Body Low Profile	Polypropylene
73137-5005	Tin	3	Right Angle	11.00 (.433)	34.90 (1.370)	13.20 (.519)	6.91 (.272)	4.10 (.161)	4.75 (.187)	Black Molded Body Low Profile	Polypropylene
73137-5013	Gold	3	Right Angle	11.00 (.433)	34.90 (1.370)	13.20 (.519)	6.91 (.272)	4.10 (.161)	4.75 (.187)	White Molded Body Low Profile	Polypropylene
73137-5015	Tin	3	Right Angle	11.00 (.433)	34.90 (1.370)	13.20 (.519)	6.91 (.272)	4.10 (.161)	4.75 (.187)	White Molded Body Low Profile	Polypropylene
73138-5003	Gold	3	Right Angle	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.59 (.338)	4.10 (.161)	4.75 (.187)	Black Molded Body	Polypropylene
73138-5005	Tin	3	Right Angle	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.59 (.338)	4.10 (.161)	4.75 (.187)	Black Molded Body	Polypropylene
73138-5013	Gold	3	Right Angle	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.59 (.338)	4.10 (.161)	4.75 (.187)	White Molded Body	Polypropylene
73138-5015	Tin	3	Right Angle	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.59 (.338)	4.10 (.161)	4.75 (.187)	White Molded Body	Polypropylene
73138-5033	Gold	3	Right Angle	11.00 (.433)	34.90 (1.370)	15.90 (.625)	8.59 (.338)	4.10 (.161)	4.75 (.187)	All Die-Cast Body	Polypropylene

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company

Note: Nut and washer are included with each connector

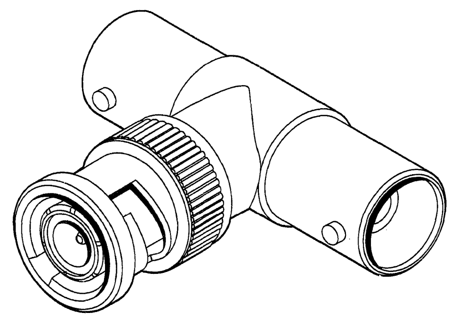
FEATURES AND SPECIFICATIONS

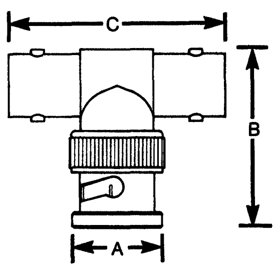
RF Coaxial Connectors
BNC Series

73148/73151
Tee and Right Angle Adapter

Features and Benefits
- MIL-C-39012 compatible
- Quick connect-disconnect
- 50Ω versions available

See BNC and TNC Specifications Table on Page R-2
For More Information





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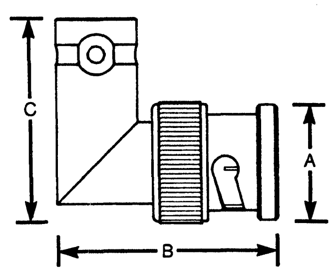


2

ORDERING INFORMATION AND DIMENSIONS

Order No.	Contact Plating	Style	Diagram	Dimension A	Dimension B	Dimension C	Features	Dielectric Materials
73148-5001	Silver	Tee J-P-J	1	14.50 (.571)	27.00 (1.060)	32.50 (1.280)	Die-Cast Body	Polypropylene
73148-5003	Gold	Tee J-P-J	1	14.50 (.571)	27.00 (1.060)	32.50 (1.280)	Die-Cast Body	Polypropylene
73151-5001	Silver	Right Angle J-P	2	14.50 (.571)	26.30 (1.040)	21.00 (.826)		Polypropylene

FEATURES AND SPECIFICATIONS

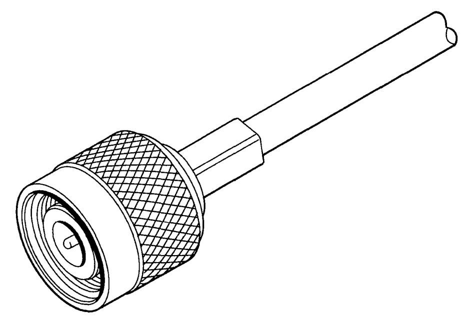
Features and Benefits

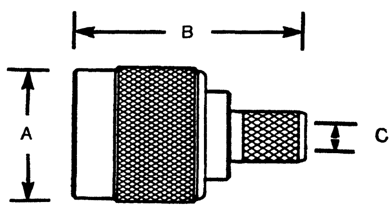
- MIL-C-39012 compatible
- 50 and 75Ω versions available
- Stability under vibration and shock

See BNC and TNC Specifications Table on Page R-2
For More Information

RF Coaxial Connectors
TNC Series

73178/73179/73219
Straight Cable Plug





Crimp/Crimp

ORDERING INFORMATION AND DIMENSIONS

RG/U Cable	Order No.	Contact Plating	Termination Style Body/ Contact	Dimension A	Dimension B	Dimension C	Features	Dielectric Materials
58,141	73178-5001	Silver	Crimp/Crimp	14.50 (.571)	25.30 (.100)	3.20 (.125)	Captive Contact	Polypropylene
58,141	73219-0023	Gold	Crimp/Crimp	14.50 (.571)	25.30 (.100)	3.20 (.125)	Captive Contact	Polypropylene
59,62	73179-5001	Silver	Crimp/Crimp	14.50 (.571)	25.30 (.100)	3.90 (.153)	Captive Contact	Polypropylene
59,62	73219-0043	Gold	Crimp/Crimp	14.50 (.571)	25.30 (.100)	3.90 (.153)	75Ω Captive Contact	Polypropylene

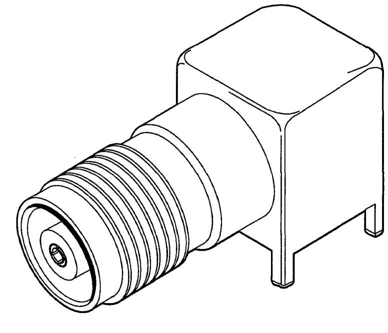
FEATURES AND SPECIFICATIONS

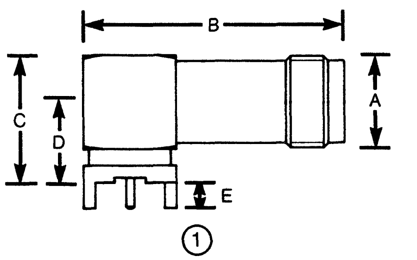
RF Coaxial Connector TNC Series

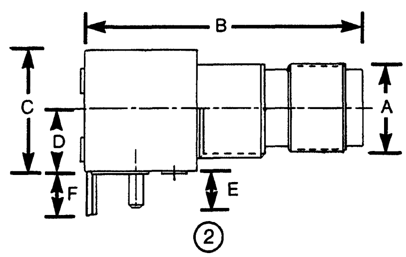
73204/73205 PCB Jack Receptacle Right Angle

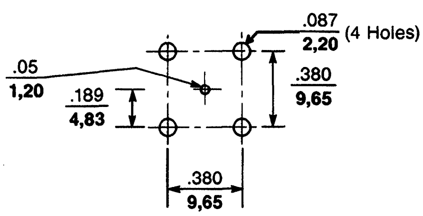
Features and Benefits
- MIL-C-39012 compatible
- 50 and 75Ω versions available
- Stability under vibration and shock

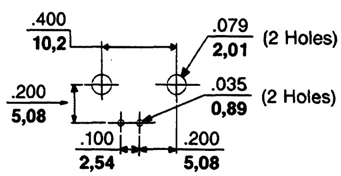
See BNC and TNC Specifications Table on Page R-2 For More Information

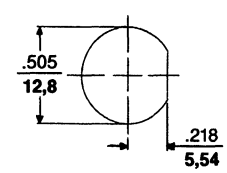












ORDERING INFORMATION AND DIMENSIONS

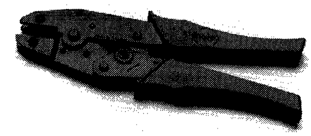
Order No.	Contact Plating	Diagram	Dimension A	B	C	D	E	F	Features	Dielectric Materials
73204-5003	Gold	1	7/16-28 UNEF	31.00 (1.220)	15.00 (.590)	9.50 (.374)	3.00 (.118)		Brass Body	Teflon*
73205-5033†	Gold	2	7/16-28 UNEF	34.90 (1.380)	15.90 (.625)	8.59 (.338)	4.10 (.161)	4.75 (.187)	Die-Cast	Polypropylene

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company
† Note: Nut and washer included with P/N 73205-5033 only
PCB style connectors are packaged in trays

FEATURES

- Molex crimp tools offer quality and durability as well as reliability
- Each tool is fully racheted to assure a complete cycle for every crimp
- Tools are only required for crimp version connectors

Hand Tool



ORDERING INFORMATION

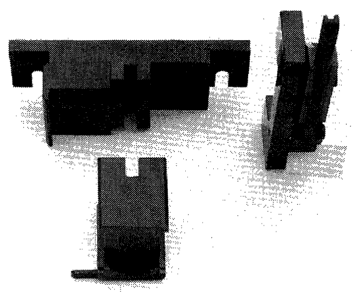
RG/U Cable	Series	Order No.	
		Hand Tool	Dies
55, 58, 141A, 142B	BNC, TNC	11-31-6379	11-31-9025
59, 62	BNC, TNC	11-31-6379	11-31-9026

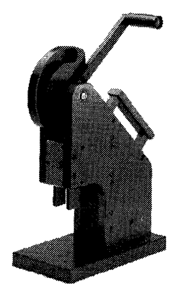
Hand tool and dies most be ordered separately

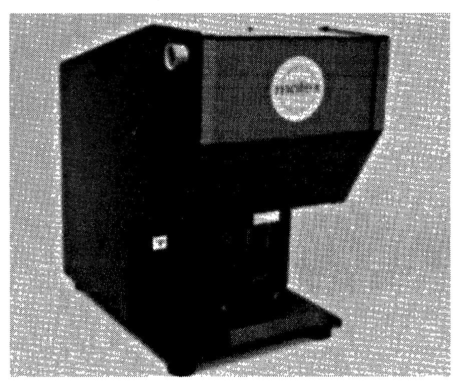
FEATURES

- Full cycle ratchet on manual press
- Employs same crimp dies as hand tools (not included)
- Complete tool requires press, fixture and a die
- Hand tools and die must be ordered separately

Manual and Electric Presses

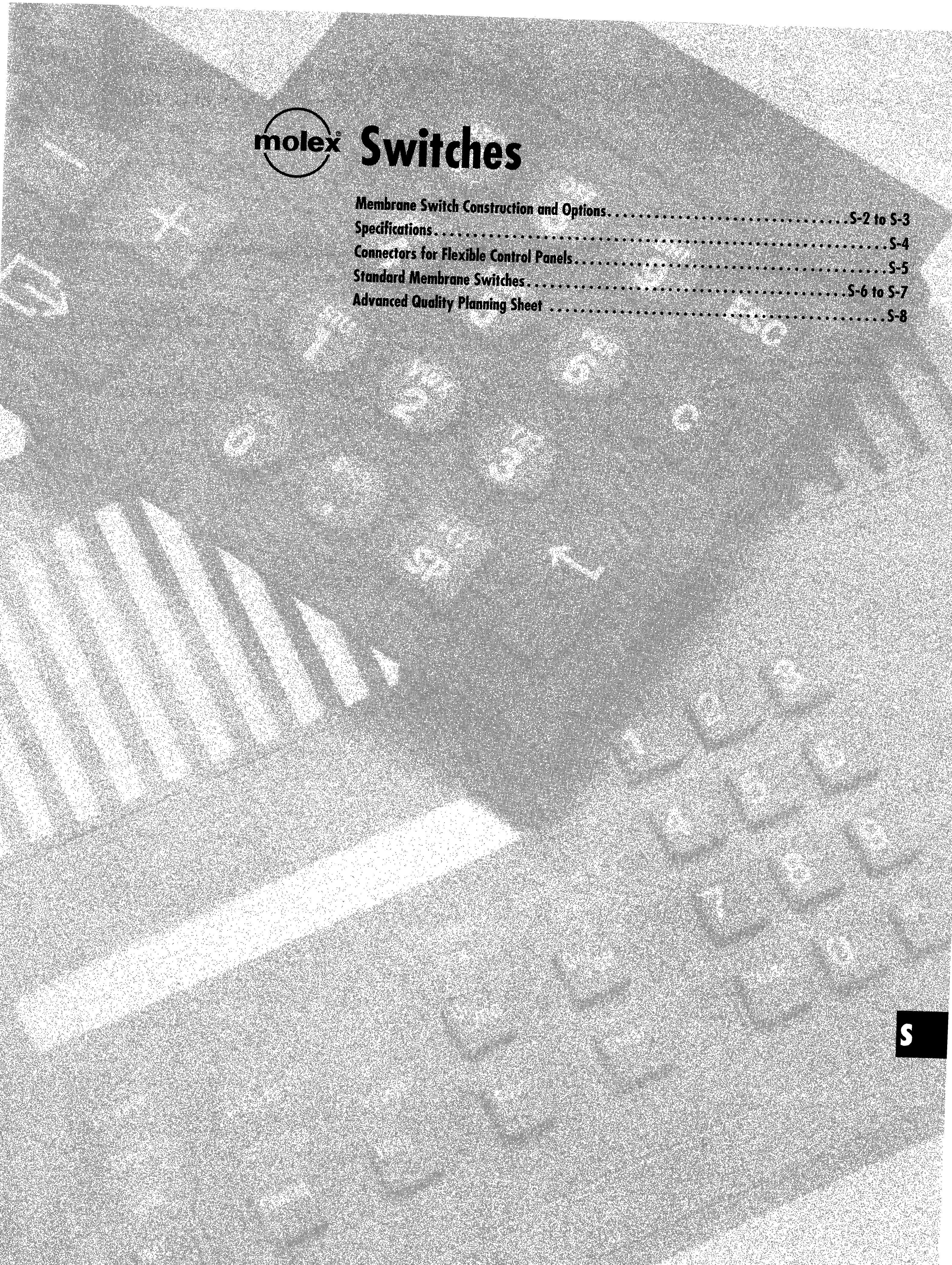






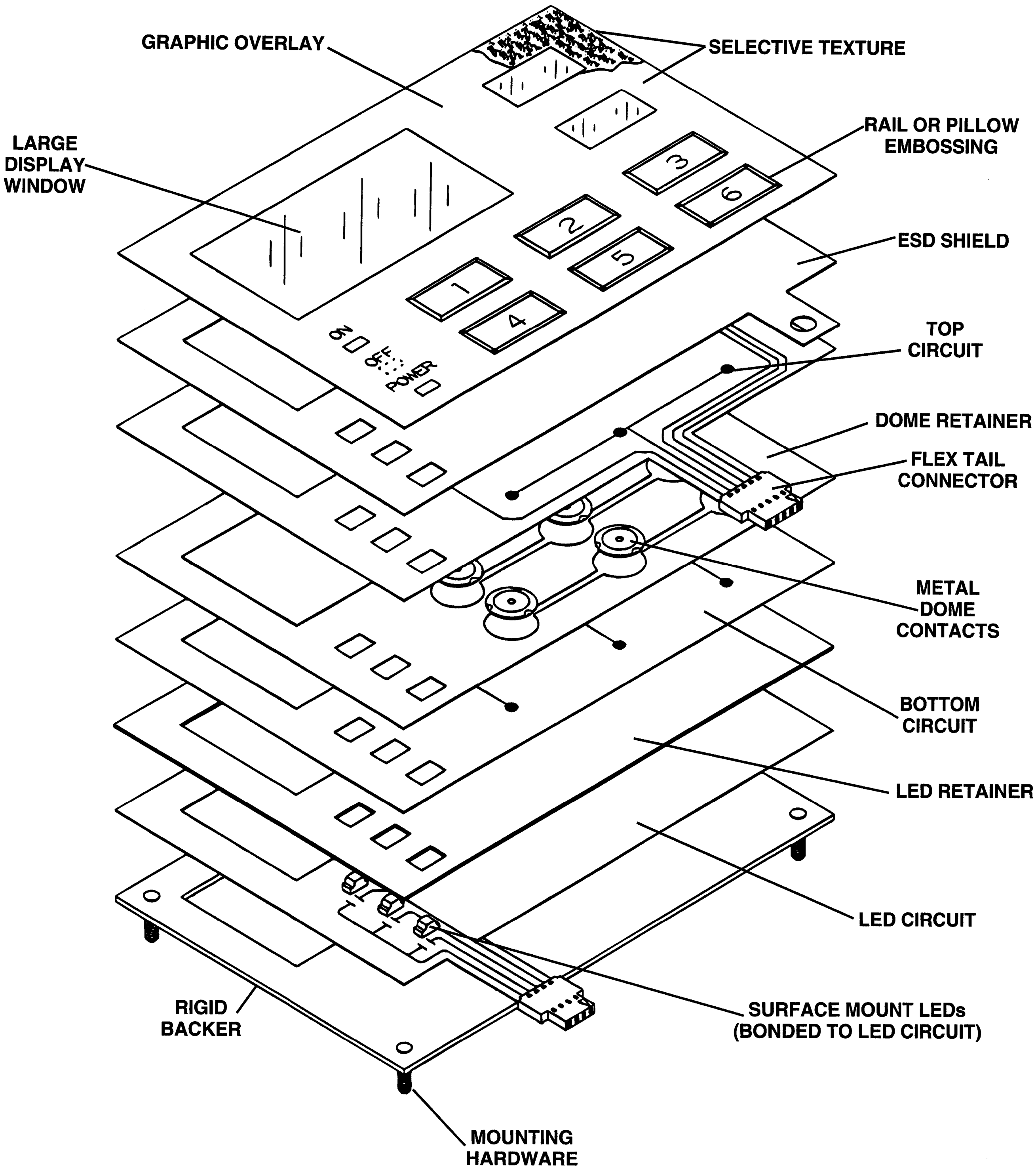
ORDERING INFORMATION

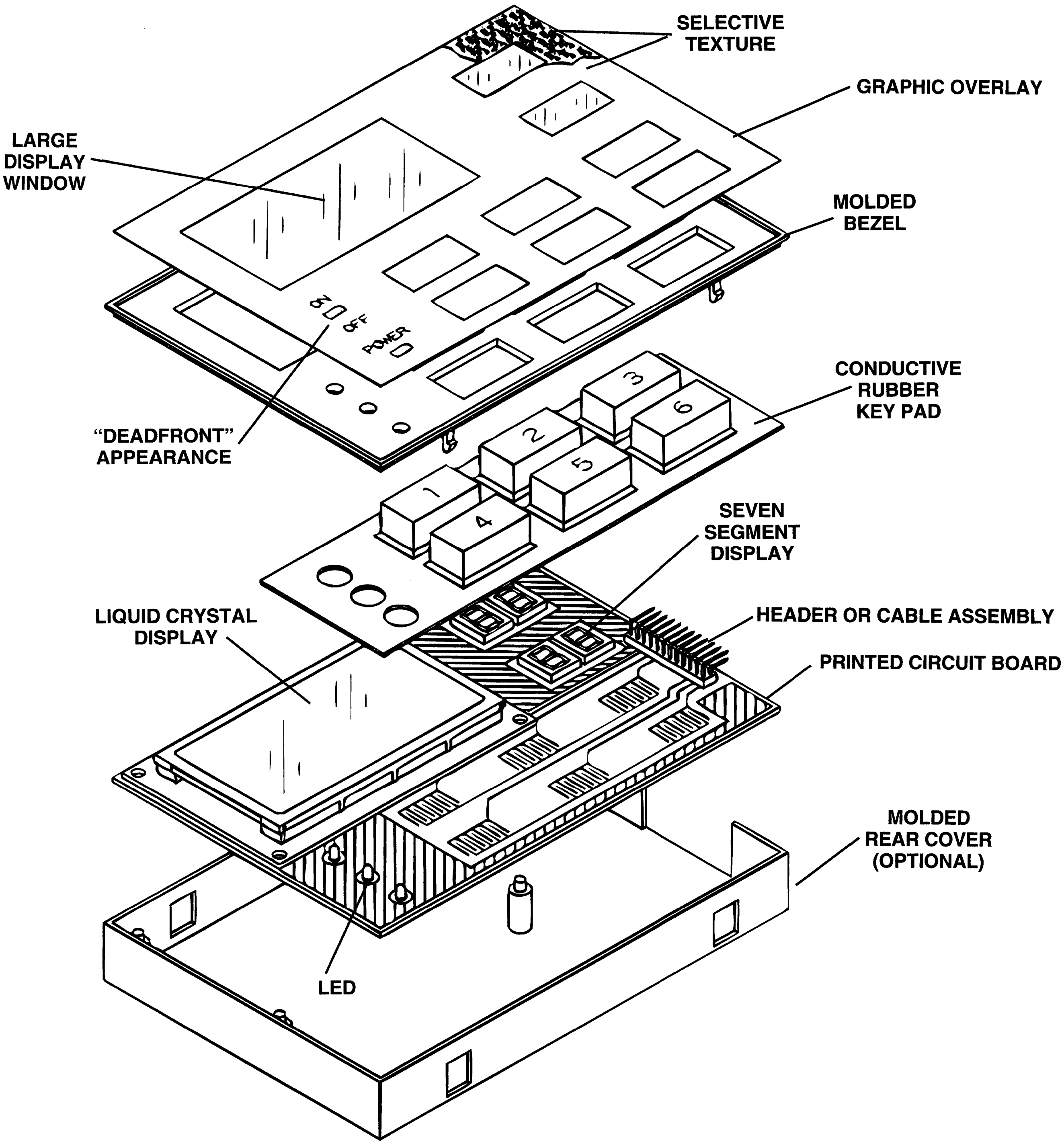
Description	Order No.
Basic Manual Press	11-31-6356
Die Holder Fixture	11-31-7559
Basic Press and Fixture	11-21-9507
Electric Press (120V)	11-31-9639
Electric Press (220V)	11-31-9243



molex® Switches

Typical Membrane Switch Construction and Options




SELECTIVE TEXTURE
GRAPHIC OVERLAY
LARGE DISPLAY WINDOW
MOLDED BEZEL
ON
OFF
POWER
CONDUCTIVE RUBBER KEY PAD
"DEADFRONT" APPEARANCE
1
2
3
4
5
6
SEVEN SEGMENT DISPLAY
LIQUID CRYSTAL DISPLAY
HEADER OR CABLE ASSEMBLY
PRINTED CIRCUIT BOARD
MOLDED REAR COVER (OPTIONAL)
LED

Membrane Switch Technical Specifications

Nontactile, Tactile and Bonded Components

Electrical
Contact Rating: 28V DC, 30mA
Life, Nontactile: 5,000,000 operations minimum at maximum rated load
Life, Tactile: 1,000,000 operations minimum at maximum rated load
Termination Resistance: 100Ω max.
Contact Bounce, Nontactile: <3 milliseconds
Contact Bounce, Tactile: <10 milliseconds
Switch Capacitance: <20 picofarads (without shielding option)

Mechanical
Actuation Force: 2 oz min., nontactile; 16 oz nom., tactile
Button Travel, Nontactile: .003 to .008"
Button Travel, Tactile: .015 to .025", depending on dome contact style
Shock: 50 G. (3 hits on each axis)
Panel Thickness: .032 or .090" (typical)

Environmental
Temperature Range: -40 to +70°C
Humidity: Per MIL Standard 202E, Method 103B
Salt Fog: 5% solution for 48 hours

Hybrids and Control Panels

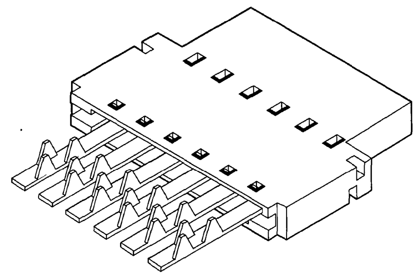
Electrical
Contact Rating: 28V DC, 30mA
Life, Nontactile: 5,000,000 operations minimum at maximum rated load
Life, Tactile: 1,000,000 operations minimum at maximum rated load
Life, Silicone Rubber Design: 200,000 to 5,000,000 operations, depending on actuator design and actuation force
Termination Resistance: 100Ω max.
Contact Bounce, Nontactile: <3 milliseconds
Contact Bounce, Tactile: <10 milliseconds
Contact Bounce, Silicone Rubber: <10 milliseconds
Switch Capacitance: <20 picofarads (without shielding option)

Mechanical
Actuation Force, Nontactile: 2 oz min.
Acutation Force, Tactile: 16 oz nom.
Actuation Force, Silicone Rubber: 2 oz min., depending on actuator design
Button Travel, Nontactile: .003 to .008"
Button Travel, Tactile: .015 to .025", depending on dome contact style
Button Travel, Silicon Rubber: .040" (typical)
Shock: 50 G. (3 hits on each axis)
Panel Thickness: Construction dependent

Environmental
Temperature Range: -40 to +70°C
Humidity: Per MIL Standard 202E, Method 103B
Salt Fog: 5% solution for 48 hours

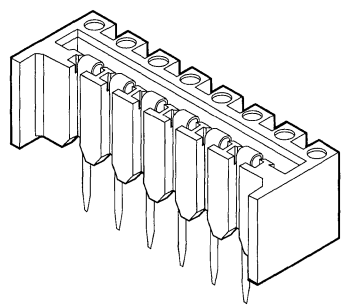
40556

- Sizes 4 to 27 circuits
- Industry compatible
- Phosphor Bronze box terminal
- Mass termination
- 94V-0 polyester housing



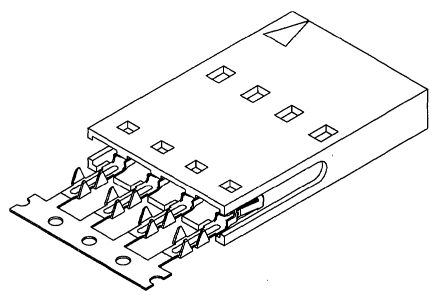
5229

- Sizes 3 to 27 circuits
- Low insertion force
- Low profile
- Pretinned Phosphor Bronze contacts
- 94V-0 glass-filled polyester housing



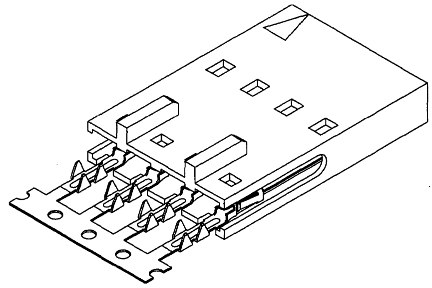
70430

- Sizes 2 to 25 circuits
- Industry compatible
- Polarizing options available
- Locking options available
- 94V-0 polyester



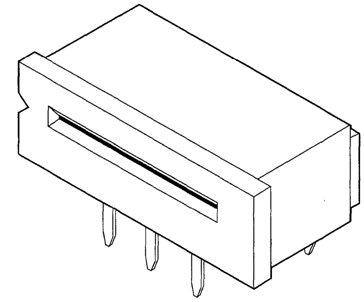
70431

- Sizes 2 to 25 circuits
- Male pins
- Industry compatible
- Polarizing options available
- Locking options available
- 94V-0 polyester



5597/5598

- Sizes 3 to 30 circuits
- Zero insertion force
- Straight or right angle PC tails
- Tin-plated Phosphor Bronze contacts
- 94V-0 polyester housing



FEATURES AND SPECIFICATIONS

Standard Membrane Switches
10920/11920

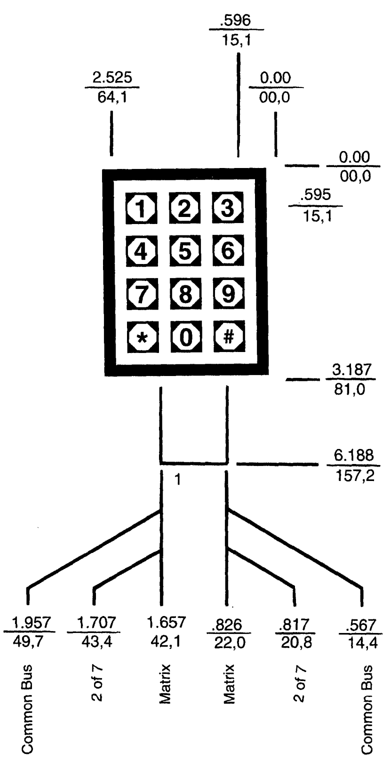
Features and Benefits
- Sealed construction
- Momentary contacts
- Various circuit styles available
- Available with or without graphics
- Available with or without mounting adhesive
- May be trimmed to smaller configurations

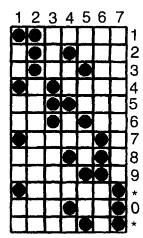
Electrical
Contact Rating: 28V DC, 30mA
Life, Nontactile: 5,000,000 operations minimum at maximum rated load
Life, Tactile: 1,000,000 operations minimum at maximum rated load
Termination Resistance: 10 to 15Ω nom., 100Ω max.
Contact Bounce, Nontactile: < 3 milliseconds
Contact Bounce, Tactile: <10 milliseconds
Switch Capacitance: <20 picofarads

Mechanical
Actuation Force: 2 to 8 oz typical, nontactile; 16 oz nom., tactile
Button Travel: .003 to .008" typical, nontactile; up to .025" typical, tactile
Thickness: .018 to .055" typical
Shock: 50 G. (3 hits on each axis)

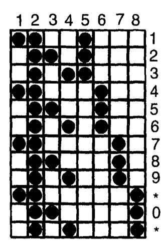
Environmental
Temperature Range: -40 to +70°C
Humidity: Per MIL Standard 202E, Method 103B
Salt Fog: 5% solution for 48 hours

Preferred in North and South America

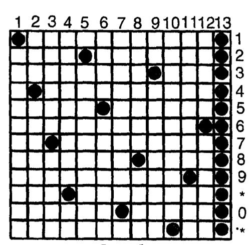




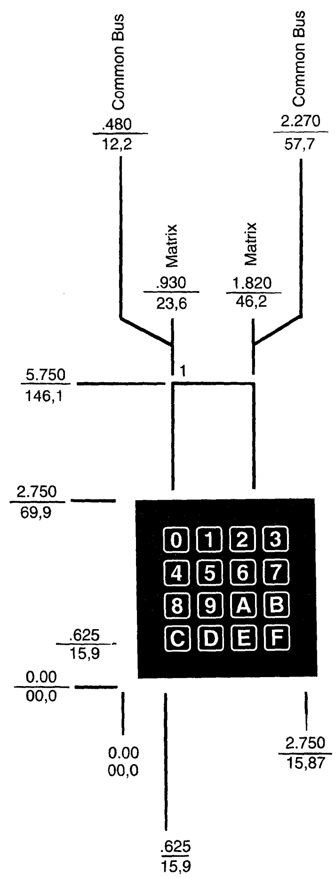
3 x 4
Matrix

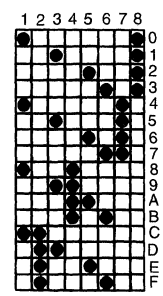


3 x 4
2 of 7

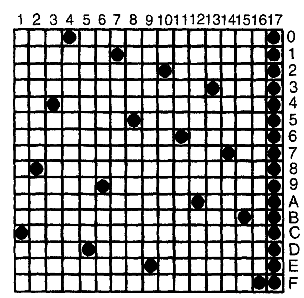


3 x 4
Common bus





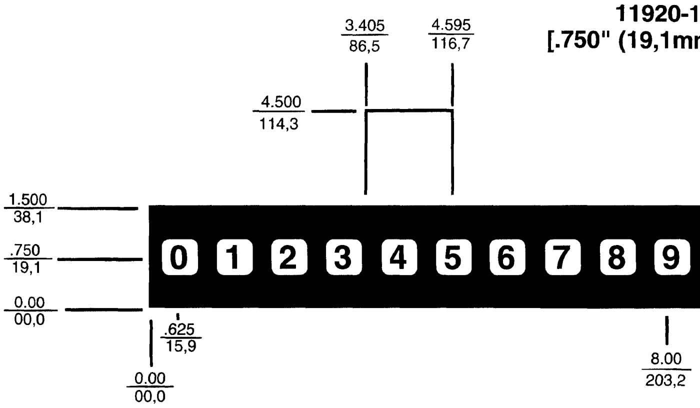
4 x 4
Matrix

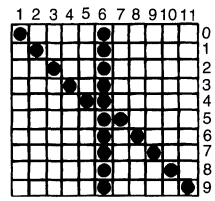


4 x 4
Common bus

Switches
S

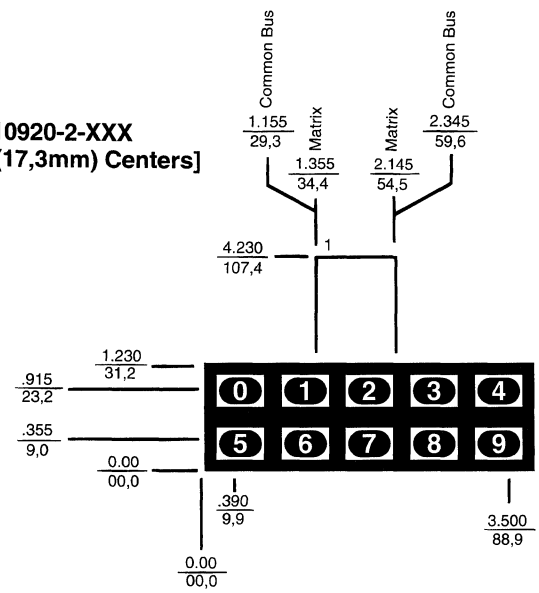
10920-1-XXX
11920-1-XXX
[.750" (19,1mm) Centers]

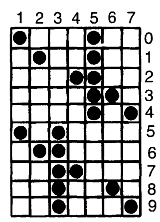




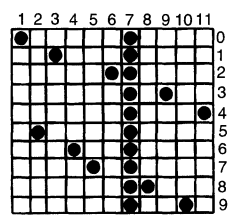
1 x 10

10920-2-XXX
[.680" (17,3mm) Centers]





2 x 5
Matrix



2 x 5
Commom bus

ORDERING INFORMATION

Preferred in North and South America

A	
Switch Action	
0	Nontactile
1	Tactile
Only available on 1 x 10 and 3 x 4 configurations	

B	
Configuration	
1	1 x 10
2	2 x 5
3	3 x 4
4	4 x 4

1 [X] 920 - [X] - [X] [X] [X]
A B C D E

EXAMPLE: 10920-4-221
4 x 4
Standard Graphics
X-Y Matrix
No Mounting Sheet

C	
Graphics	
1	No graphics
2	Graphics

D	
Circuitry	
1	SPST/Common
2	X-Y Matrix
3	2 or 7 (Nontactile only)

E	
Mounting	
1	None
2	Mounting Sheet

Switches

S

Advanced Quality Planning Sheet for Membrane Switches

Company: ______________________ Date: ______________________

Address: ______________________ Contact: ______________________

City/State: ______________ Phone: ______________ Type of control panel:

Estimated annual usage: ______________________ ____ Membrane ____ Hybrid

Price objective: ______________________ ____ Bonded Components ____ Tactile Membrane

____ Conductive Rubber

GRAPHIC SHEET MATRIX

No. of colors: ______________ Material: ______________ Thickness: ______________

Texture: ____ Matte Embossing: ____ Rail Display windows: ____ LCD

____ Gloss ____ Pillow ____ LED

____ Selective ____ Height ____ Vacuum

POTENTIAL CHEMICAL EXPOSURE: ______________________

ELECTRICAL SPECIFICATIONS

Contact resistance (at termination): ______________________ Max.

Operating voltage: ______________ Operating current: ______________

Shielding requirements: ____ ESD ____ RFI ____ EMI

Switch circuitry: ____ Matrix ____ SPST/COM ____ Other

Max. contact bounce: ______________

MECHANICAL SPECIFICATIONS

Life requirements: ______________ Cycles Panel size: __________ x __________

Mounting method: ______________ Flex tail length: ______________

Critical dimensions: ______________________

Termination at tail: ______________ Contact force: ______________

Optional components required: Tactile feedback: ______________

____ Backlighting ____ LEDs Dimensional tolerances required:

____ Conductive rubber ____ Backer Overall size: +/- __________

____ Molded housing ____ LCD Registration: +/- __________

ENVIRONMENTAL SPECIFICATIONS

Storage temperature: __________ min. to __________ max. Humidity: ______________

Operational temperature: __________ min. to __________ max. Altitude: ______________

User environment: ______________________

PRODUCT QUALIFICATION

Environment test: ______________________

____

Qualification process: ______________________

____

Molex Switch Products
2222 Wellington Court
Lisle, IL 60532
708-969-4550

Molex recommends photocopying this form instead of removing page from catalog.

Fiber Optics

T

Fiber Optic Interconnect Technologies, Inc.™

Single Mode Products

FEATURES AND SPECIFICATIONS

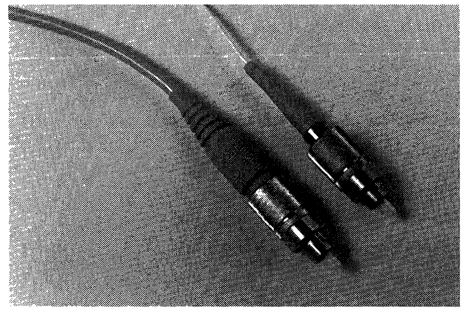
Molex Fiber Optics manufactures a full line of high performance single mode connectors designed to meet the toughest performance demands for the Telecommunications and CATV markets. These connectors and adapters are designed using the latest engineered polymeric and ceramic material technologies and are Bellcore TR 326 III compliant. Combining unique termination features, the connectors can be easily terminated in the field or factory using Molex's termination tool kits.

Note: The connectors listed in this section represent a partial listing of all single mode products available. For a complete listing of single mode fiber optic connectors and adapters please contact Molex Fiber Optics at (708) 512-8787.

FC/PC CONNECTOR

- 1-piece body design
- Low return loss 48 dB typical (Super PC) for 9/125µm fiber
- Prepolished Zirconia PC ferrule
- Compatible with NTT-FC hardware
- For 3mm cable or 900µm buffered fiber
- Meets Bellcore TR 326 Issue III specifications

Order No.	Type	Description
86057M5000	FC/PC	126µm SM, Zirconia PC ferrule, 3mm cable
86057M7000	FC/PC	127µm SM, Zirconia PC ferrule, 3mm cable
86057M5500	FC/PC	126µm SM, Zirconia PC ferrule, 900µm buffered fiber
86057M7500	FC/PC	127µm SM, Zirconia PC ferrule, 900µm buffered fiber



FC/PC AND FC/APC ADAPTER

- Zirconia or Phosphorous Bronze alignment sleeves
- Square mounting flange or "D" hole mounting flange
- FC/APC adapter with square mounting flange

Order No.	Type	Description
86152-0000	FC adapter	Zirconia sleeve, square mounting flange
86152-1000	FC adapter	Zirconia sleeve, "D" hole mount
86156-1000	FC adapter	Bronze sleeve, "D" hole mount
86152E0000	FC/APC adapter	Zirconia sleeve, square mounting flange

FC/APC (ANGLED PHYSICAL CONTACT) CONNECTOR

- 1-piece body design
- Low return loss 70 dB (APC) for 9/125µm fiber
- Standard key connectors are compatible with JIS standard
- Tight-fit key connectors are compatible with Alcoa Fujikura and Seikoh Giken
- True compatibility with all APC-type connector hardware
- For 3mm cable or 900µm buffered fiber

Order No.	Type	Description
86055D5000	FC/APC	126µm SM, standard key, 3mm cable
86055E5000	FC/APC	126µm SM, tight-fit key, 3mm cable
86055D5500	FC/APC	126µm SM, standard key, 900µm buffered fiber
86055E5500	FC/APC	126µm SM, tight-fit key, 900µm buffered fiber

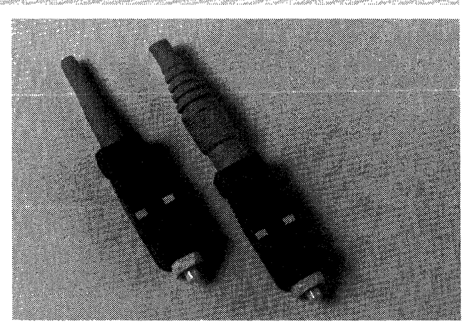
Fiber Optics

T

SC CONNECTOR

- 1-piece body design
- Low return loss 48 dB typical (Super PC) for 9/125µm fiber
- Prepolished Zirconia PC ferrule
- Compatible with NTT-SC standard
- For 3mm cable or 900µm buffered fiber
- SC housing available in red, black or blue
- Meets Bellcore TR 326 Issue III specifications

Order No.	Type	Description
86061M5000	SC	126µm SM, Zirconia PC ferrule, 3mm cable
86061M7000	SC	127µm SM, Zirconia PC ferrule, 3mm cable
86061M5500	SC	126µm SM, Zirconia PC ferrule, 900µm buffered cable
86061M7500	SC	127µm SM, Zirconia PC ferrule, 900µm buffered cable

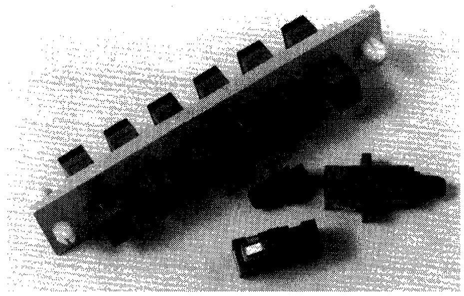


Single Mode Products

SC ADAPTER

- Gang mountable
- Push-pull coupling
- Phosphorous Bronze or Zirconia alignment sleeves
- SC 6-pack panel adapter
- SC adapters with small flange available with red or black housing

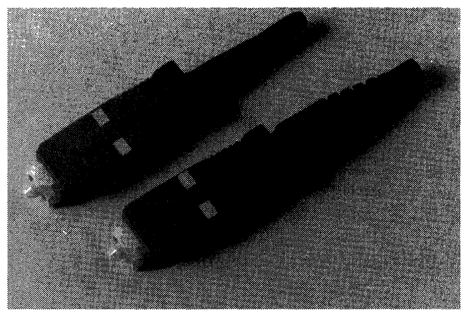
Order No.	Type	Description
86160-0000	SC adapter	Phosphorous Bronze sleeve, polymeric body
86161-0000	SC adapter	Zirconia sleeve, polymeric body
86800-6600	SC "6-pack" panel with adapters	Zirconia sleeves
86170-0100	SC adapter	Small flange, Zirconia sleeves, polymeric body



SC/APC (ANGLED PHYSICAL CONTACT) CONNECTOR

- 1-piece body design
- Low return loss 70 dB (APC) for 9/125µm fiber
- Industry standard SC connectors
- True compatibility with all APC-type connector hardware
- For 3.0 and 2.4mm cable or 900µm buffered fiber

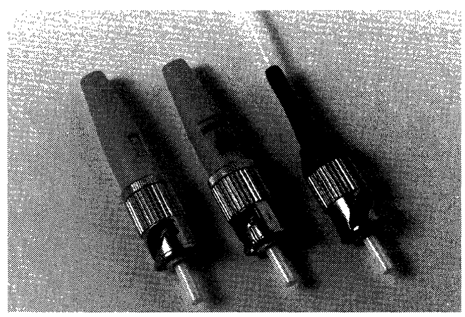
Order No.	Type	Description
86065D5000	SC/APC	126µm SM, Zirconia PC ferrule, 3.0mm cable
86065D5300	SC/APC	126µm SM, Zirconia PC ferrule, 2.4mm cable
86065D5500	SC/APC	126µm SM, Zirconia PC ferrule, 900µm buffered fiber



STII*-COMPATIBLE CONNECTOR

- Low return loss 45 dB typical (Super PC) for 9/125µm fiber
- Non-Optical Disconnect design (N.O.D.)
- For 3mm cable or 900µm buffered fiber
- Meets Bellcore TR 326 Issue III specifications

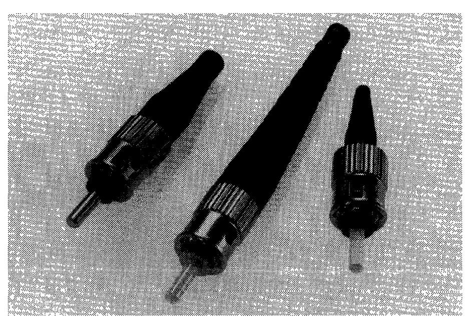
Order No.	Type	Description
86013-5000	STII	126µm SM, Zirconia PC ferrule, N.O.D., 3mm cable
86013-5100	STII	126µm SM, Zirconia PC ferrule, 3mm cable
86013-5500	STII	126µm SM, Zirconia PC ferrule, 900µm buffered fiber



ST*-COMPATIBLE CONNECTOR

- Low return loss 45 dB typical (Super PC) for 9/125µm fiber
- Metal coupling nut
- Prepolished Zirconia PC ferrule
- Long boot, short boot crimp or 900µm buffered fiber boot

Order No.	Type	Description
86012-5000	ST	126µm SM, Zirconia PC ferrule, metal nut, long boot
86012-5200	ST	126µm SM, Zirconia PC ferrule, metal nut, short boot crimp
86012-5500	ST	126µm SM, Zirconia PC ferrule, metal nut, 900µm buffered fiber boot

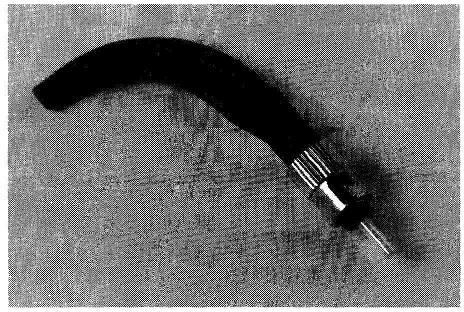


* ST and STII are registered trademarks of AT&T

ST*-COMPATIBLE CONNECTOR, 90° BOOT

- Low return loss 45 dB typical for 9/125μm fiber
- Metal coupling nut
- Prepolished Zirconia PC ferrule
- 90° boot is ideal for small or controlled-bend radius applications where space is limited

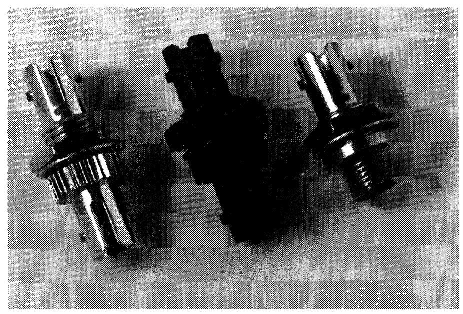
Order No.	Type	Description
86012-5400	ST	126μm SM, Zirconia PC ferrule, metal nut, 3mm cable, 90° boot
86012-7400	ST	127μm SM, Zirconia PC ferrule, metal nut, 3mm cable, 90° boot



ST-COMPATIBLE ADAPTER

- Metal or polymeric housing
- Zirconia alignment sleeve
- ST/FC adapter

Order No.	Type	Description
86110-0000	ST adapter	Zirconia sleeve, polymeric housing
86110-1000	ST adapter	Zirconia sleeve, metal housing
86172-0000	ST to FC adapter	Zirconia sleeve



* ST is a registered trademark of AT&T

FEATURES AND SPECIFICATIONS

Molex Fiber Optics manufactures a full line of quality multimode connectors for datacommunication applications including Local Area Networks, data processing networks and premise installations. These connectors and adapters are designed using the latest engineered polymer, ceramic and metal material technologies. Combining unique termination features, the connectors can be easily terminated in the field or factory using Molex's termination tool kits.

Note: The connectors listed in this section represent a partial listing of all multimode products available. For a complete listing of all multimode fiber optic connectors and adapters please contact Molex Fiber Optics at (708) 512-8787.

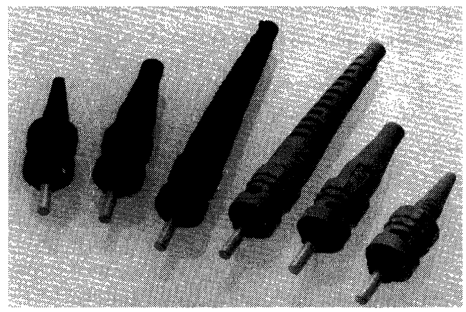
molex® Fiber Optic Interconnect Technologies, Inc.™

Multimode Products

MX PLUS, ST*-COMPATIBLE CONNECTOR

- Ceramic flat ferrule
- Low insertion loss 0.4 dB typical for 62.5/125µm fiber
- Long boot, short boot crimp or 900µm buffered fiber
- Polymer coupling nut
- For 2.4 to 3mm cable and 900µm buffered fiber boot

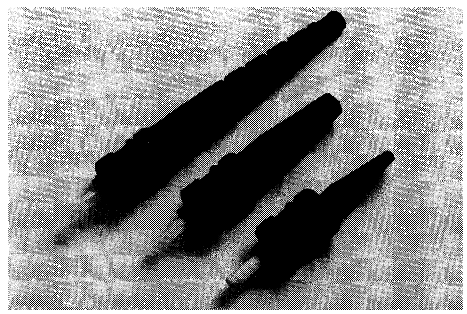
Order No.	Type	Description
86010-6000	ST	62.5/125µm, MX+ ferrule, polymer nut, long boot
86010-6200	ST	62.5/125µm, MX+ ferrule, polymer nut, short boot crimp
86010-6500	ST	62.5/125µm, MX+ ferrule, polymer nut, 900µm buffered fiber boot



PC PLUS, ST-COMPATIBLE CONNECTOR

- Zirconia PC ferrule
- Low insertion loss 0.34 dB typical for 62.5/125µm fiber
- Long boot, short boot crimp or 900µm buffered fiber boot
- Polymer coupling nut
- For 2.4 to 3mm cable and 900µm buffered fiber

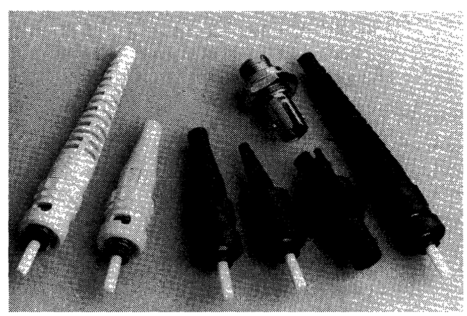
Order No.	Type	Description
86010-0000	ST	62.5/125µm, PC+ ferrule, polymer nut, long boot
86010-0200	ST	62.5/125µm, PC+ ferrule, polymer nut, short boot crimp
86010-0500	ST	62.5/125µm, PC+ ferrule, polymer nut, 900µm buffered fiber boot



ST-COMPATIBLE CONNECTOR, HIGH PERFORMANCE

- High performance prepolished Zirconia PC ferrule
- Low insertion loss 0.2 dB typical for 62.5/125µm fiber
- Long boot, short boot crimp or 900µm buffered fiber boot
- Polymer coupling nut
- For 2.4mm to 3mm cable and 900µm buffered fiber

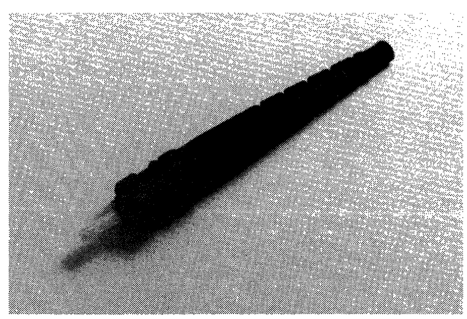
Order No.	Type	Description
86010-3000	ST	62.5/125µm, Zirconia PC ferrule, polymer nut, long boot
86010-3200	ST	62.5/125µm, Zirconia PC ferrule, polymer nut, short boot crimp
86010-3500	ST	62.5/125µm, Zirconia PC ferrule, polymer nut, 900µm buffered fiber boot



ST-COMPATIBLE CONNECTOR, 100/140µm and 200/230µm

- Ceramic flat ferrule
- Low insertion loss 0.2 dB typical for 100/140µm and 200/230µm fiber
- Long boot style
- Polymer coupling nut
- For 2.4 to 3mm cable and 900µm buffered fiber

Order No.	Type	Description
86010-1000	ST	100/140µm, Alumina flat ferrule, polymer nut, long boot
86010-9000	ST	200/230µm, Alumina flat ferrule, polymer nut, long boot



* ST is a registered trademark of AT&T

ST*-COMPATIBLE CONNECTOR, 90° BOOT

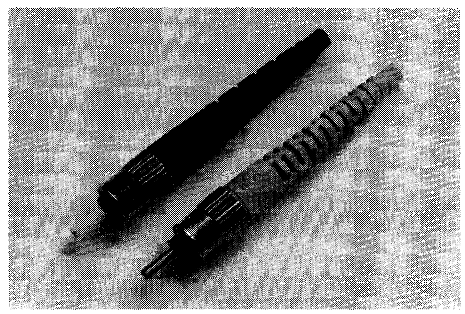
- For 62.5/125μm fiber
- MX+, PC+ or Zirconia PC ferrules
- Polymer coupling nut
- Ideal for small or controlled-bend radius applications
- For 3mm cable

Order No.	Type	Description
86010-0400	ST	62.5/125μm, PC+ ferrule, polymer nut, 90° boot
86010-3400	ST	62.5/125μm, Zirconia PC ferrule, polymer nut, 90° boot
86010-6400	ST	62.5/125μm, MX+ ferrule, polymer nut, 90° boot

ST-COMPATIBLE CONNECTOR, METAL NUT, LONG BOOT

- For 62.5/125μm fiber
- MX+, PC+, Zirconia PC or Stainless Steel ferrules
- Metal coupling nut
- For 2.4 to 3mm cable

Order No.	Type	Description
86012-0000	ST	62.5/125μm, PC+ ferrule, metal nut, long boot
86012-3000	ST	62.5/125μm, Zirconia PC ferrule, metal nut, long boot
86012-6000	ST	62.5/125μm, MX+ ferrule, metal nut, long boot
86012-8000	ST	62.5/125μm, Stainless Steel ferrule, metal nut, long boot



ST-COMPATIBLE CONNECTOR, METAL NUT, 90° BOOT

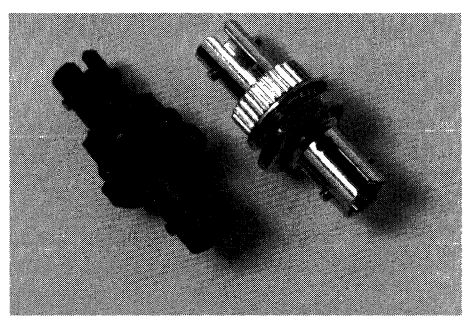
- For 62.5/125μm fiber
- MX+, PC+, PC or Stainless Steel ferrules
- Metal coupling nut
- Ideal for small or controlled-bend radius applications
- For 3mm cable

Order No.	Type	Description
86012-0400	ST	62.5/125μm, PC+ ferrule, metal nut, 90° boot
86012-3400	ST	62.5/125μm, Zirconia PC ferrule, metal nut, 90° boot
86012-6400	ST	62.5/125μm, MX+ ferrule, metal nut, 90° boot
86012-8400	ST	62.5/125μm, Stainless Steel ferrule, metal nut, 90° boot

ST-COMPATIBLE ADAPTER

- Metal or polymeric body
- Polymeric or Phosphorous Bronze alignment sleeve

Order No.	Type	Description
86112-1000	ST adapter	Metal body, Phosphorous Bronze sleeve
86113-1000	ST adapter	Metal body, Polymer sleeve
86112-0000	ST adapter	Polymer body, Phosphorous Bronze sleeve
86113-0000	ST adapter	Polymer body, Polymer sleeve



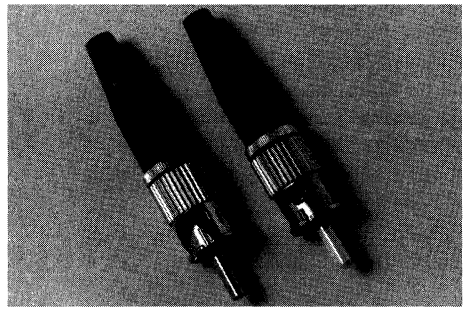
* ST is a registered trademark of AT&T

Multimode Products

STII*-COMPATIBLE CONNECTOR

- Low insertion loss .15 dB typical for 62.5/125μm fiber
- MX+, PC+, Zirconia PC or Stainless Steel ferrules, gray boot

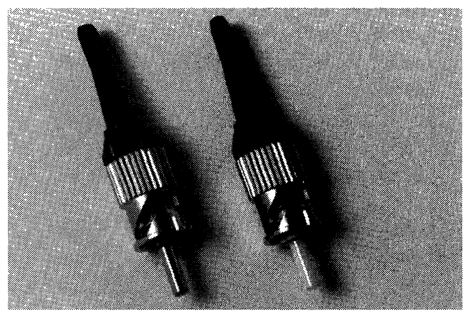
Order No.	Type	Description
86013-0100	STII	62.5/125μm, PC+ ferrule, gray boot
86013-3100	STII	62.5/125μm, Zirconia PC ferrule, gray boot
86013-6100	STII	62.5/125μm, MX+ ferrule, gray boot
86013-8100	STII	62.5/125μm, stainless steel ferrule, gray boot



STII-COMPATIBLE CONNECTOR FOR 900μm BUFFERED FIBER

- For 62.5/125μm, 900μm buffered fiber applications
- MX+, PC+, Zirconia PC or Stainless Steel ferrules
- Non-Optical Disconnect design (N.O.D.)

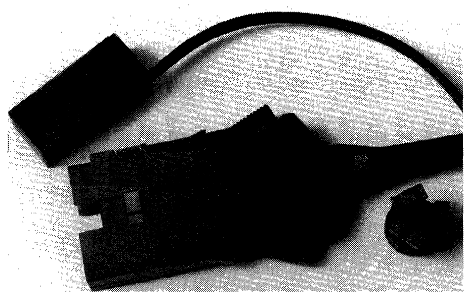
Order No.	Type	Description
86013-0500	STII	62.5/125μm, PC+ ferrule, 900μm buffered fiber, N.O.D.
86013-3500	STII	62.5/125μm, Zirconia PC ferrule, 900μm buffered fiber, N.O.D.
86013-6500	STII	62.5/125μm, MX+ ferrule, 900μm buffered fiber, N.O.D.
86013-8500	STII	62.5/125μm, Stainless Steel ferrule, 900μm buffered fiber, N.O.D.



FDDI CONNECTOR

- MX+ ferrule—low insertion loss 0.4 dB typical for 62.5/125μm
- Zirconia PC ferrule—low insertion loss 0.2 dB typical for 62.5/125μm fiber
- For 4.2mm cable or zipcord cable

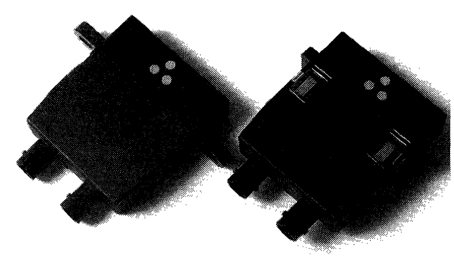
Order No.	Type	Description
86030-6000	FDDI	62.5/125μm, MX+ ferrule, 4.2mm cable
86030-6200	FDDI	62.5/125μm, MX+ ferrule, zipcord cable
86030-3000	FDDI	62.5/125μm, Zirconia PC ferrule, 4.2mm cable
86030-3200	FDDI	62.5/125μm, Zirconia PC ferrule, zipcord cable



FDDI-ST* ADAPTER

- Zirconia or Polymer alignment sleeve
- Snap-in or flange mount
- Removable keys

Order No.	Type	Description
86130A0000	FDDI-ST	Zirconia sleeve, snap-in mount
86130A0300	FDDI-ST	Zirconia sleeve, flange mount
86133A0000	FDDI-ST	Polymer sleeve, snap-in mount
86133A0300	FDDI-ST	Polymer sleeve, flange mount



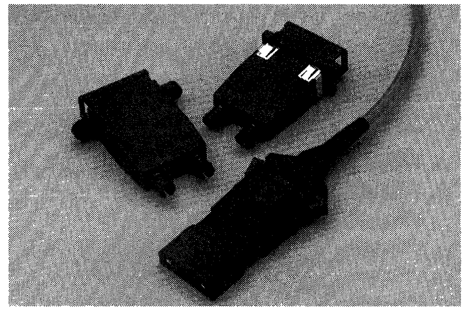
* ST and STII are registered trademarks of AT&T

Multimode Products

ESCON* CONNECTOR AND ESCON-ST† ADAPTER

- Zirconia PC ferrule
- Low insertion loss 0.15 dB typical for 62.5/125μm fiber
- For 4.8mm cable or zipcord cable
- Adapter with Zirconia alignment sleeve
- Snap-in or flange mount

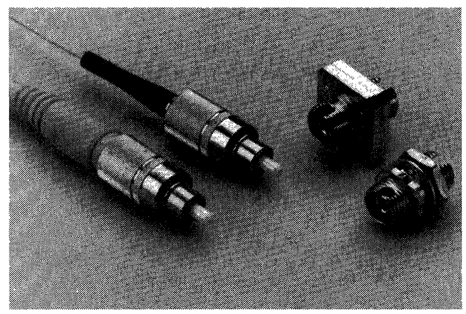
Order No.	Type	Description
86040-3100	ESCON	62.5/125μm, Zirconia PC ferrule, 4.8mm cable
86040-3200	ESCON	62.5/125μm, Zirconia PC ferrule, zipcord cable
86140-0000	ESCON-ST adapter	Zirconia sleeve, snap-in mount
86140-0300	ESCON-ST adapter	Zirconia sleeve, flange mount



FC/PC CONNECTOR AND ADAPTER

- 1-piece body design
- Zirconia PC ferrule
- Low insertion loss 0.15 dB typical for 62.5/125μm fiber
- For 3mm cable or 900μm buffered fiber
- Adapter with Phosphorous Bronze alignment sleeve, "D" hole mount

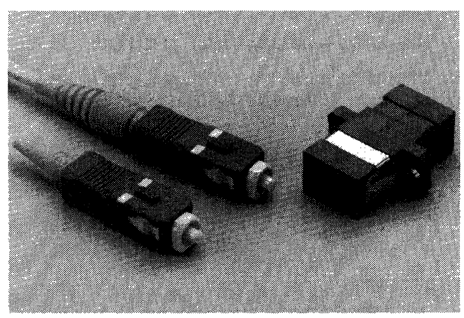
Order No.	Type	Description
86057M3000	FC/PC	62.5/125μm, Zirconia PC ferrule, 3mm cable
86057M3500	FC/PC	62.5/125μm, Zirconia PC ferrule, 900μm buffered fiber
86156-1000	FC adapter	Phosphorous Bronze sleeve, "D" hole mount



SC CONNECTOR AND ADAPTER

- 1-piece body design
- Zirconia PC ferrule
- Low insertion loss 0.15 dB typical for 62.5/125μm fiber
- For 3mm cable or 900μm buffered fiber
- Adapter with Phosphorous Bronze alignment sleeve

Order No.	Type	Description
86061M3000	SC	62.5/125μm, Zirconia PC ferrule, 3mm cable
86061M3500	SC	62.5/125μm, Zirconia PC ferrule, 900μm buffered fiber
86160-0000	SC adapter	Phosphorous Bronze sleeve



* ESCON is a registered trademark of IBM Corporation
† ST is a registered trademark of AT&T

Fiber Optic Interconnect Technologies, Inc.™

Cable Assemblies

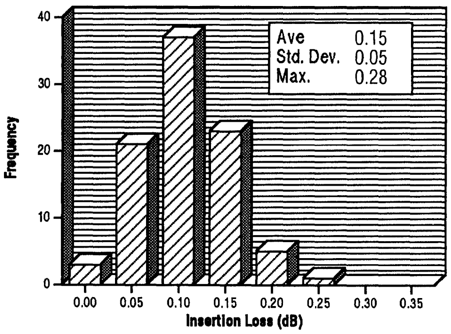
Molex Fiber Optics, a leading manufacturer in the fiber optic market, offers a variety of high quality cable assemblies suitable for datacommunication, telecommunication or CATV applications.

Exceptional Quality

Exceptional performance in our cable assemblies is the result of the advanced manufacturing processes and demanding specifications employed throughout the termination process.

Molex begins the process by specifying and maintaining strict control of the ferrule geometry. With the aid of an interferometer, the ferrule endface geometry is measured for radius, concentricity and apex offset.

A high-powered profilometer is used to precisely measure and monitor the fiber undercut and protrusion. By maintaining strict control over the ferrule endface surface, we can ensure high performance and long-term reliability of our terminations.

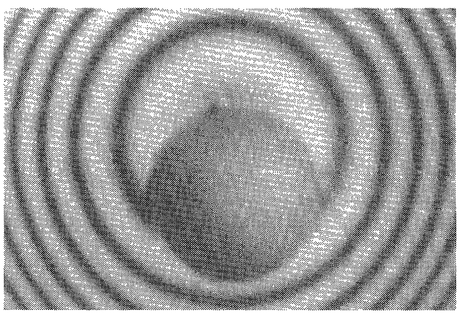


SC Connector, PC Insertion loss 9/125µm (Measured at 1550nm)

In addition to the strict design specifications, stringent quality control procedures are in place throughout the process. Assemblies are inspected for ferrule surface finish, insertion loss and return loss to ensure that all performance specifications are met. A serial number, fixed to the assemblies, provides traceability to the factory measurements.

Single Source Supplier

As a division of the second largest connector manufacturer in the world, Molex Fiber Optics has the resources and technical expertise to supply all of your fiber optic assemblies. Our superior production team will make certain your assemblies, whether standard or custom, are delivered on time and to your exact specifications.

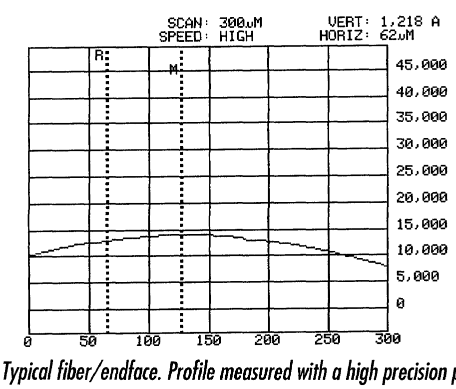


Interferometer Image

Bellcore TR 326 Compliant Connectors

Molex connectors, the key to our high quality assemblies, are designed to industry standards and are compatible with other connectors meeting these standards. These designs utilize the latest engineered polymers, precision ceramics and the finest metals. The single mode connectors, STII*, FC and SC, have been tested to and are compliant with Bellcore TR 326 III specifications.

POLISHING PROFILE CHARACTERISTICS



Typical Characteristics

Radius
Pre-radiused ferrule
∅15mm typ.

Fiber protrusion
.08µm typ.

Typical fiber/endface. Profile measured with a high precision profilometer.

SPECIFICATIONS

Finish	Units	Insertion Loss		Return Loss
		Mean	Sigma	
Standard Multimode (Ceramic Ferrule)	dB	.34	.10	
Enhanced Multimode (Ceramic Ferrule)	dB	.33	.11	
Super PC	dB	.13	.04	≥ 45
Ultra PC	dB	.13	..04	≥ 55
Angled Physical Contact (APC)	dB	.25	.06	≥ 70
Stainless Steel Ferrule	dB	.35	.17	

* STII is a registered trademark of AT&T

Fiber Optic Interconnect Technologies, Inc.™

Cable Assemblies

MX [X][XX] - [XX][X] - [XX][X] - [X][XXX] - [X][XXX] - [X][XXX]

A B C D E F G H I J K L

A	
Optical Fiber	
A	Multimode, 50/125µm
B	Multimode, 62.5/125µm
C	Multimode, 100/140µm
D	Single Mode, 9/125µm
E	Single Mode, 9/125µm, dispersion shifted

B	
Cable Construction	
AA	Simplex, 900µm buffer
AB	Simplex, 900µm buffer & Kevlar† coating
AC	Simplex, 3.0mm, OFNR
AD	Simplex, 2.4mm, OFNR
AE	Simplex, 3.0mm, Halogen Free
BA	Duplex, Zipcord, 3.0 x 6.5mm, OFNR
BB	Duplex, Zipcord, 3.0 x 6.5mm, OFNP
CA	Duplex, round 4.8mm, OFNR
CB	Duplex, round 4.8mm, OFNP
CC	Duplex, round 4.8mm, OFNR, ESCON†
DA	Distribution 4 Fiber‡
DB	Distribution 6 Fiber‡
DC	Distribution 8 Fiber‡
DD	Distribution 12 Fiber‡
DE	Distribution 24 Fiber‡
DF	Distribution 72 Fiber‡
EA	Outside Plant 4 Fiber - armored‡
EB	Outside Plant 6 Fiber - armored‡
EC	Outside Plant 12 Fiber - armored‡
EK	Outside Plant 4 Fiber - dielectric‡
EL	Outside Plant 6 Fiber - dielectric‡
EM	Outside Plant 12 Fiber - dielectric‡
FA	Breakout 4 Fiber
FB	Breakout 8 Fiber

C and E	
Connector Style End 1 and 2	
AA	ST† Compatible, polymetric coupling nut
AB	ST Compatible, metal coupling nut
AC	ST Compatible, 90° boot, metal coupling nut
BA	STII† Compatible
CA	SMA 905, metal coupling nut
DA	FDDI, black housing
DB	ESCON† Compatible
EA	FC/PC
EB	FC/APC (Standard Key)
EC	FC/APC (Tight-Fit Key)
FA	SC
FB	SC black housing and boot
FC	SC red housing and boot
FD	SC black 90° boot, black housing and boot
FE	SC red 90° boot, red housing and boot
FF	SC/APC green housing and boot
FG	SC Duplex
ZZ	No connector (for end 2 only)

D and F	
Finish End 1 and 2	
A	Multimode, ceramic ferrule, Standard PC
B	Multimode, ceramic ferrule, Enhanced PC
C	Single mode RL >45 dB, Super PC
D	Single mode RL >55 dB, Ultra PC
E	Single mode RL >70 dB, APC
F	Multimode, Stainless Steel
Z	No connector (for end 2 only)

G	
Unit of Measure*	
M	Meters
C	Centimeters
F	Feet
I	Inches

H
Length
Dimension A

I and K	
Breakout Style End 1 and 2	
A	No breakout
B	Shrink tube at breakout only
C	Fan-out, 900µm to 3mm jacket (Figure 1)
D	Fan-out, 250 to 900µm (Figure 2)
E	Fan-out, 500 to 900µm (Figure 2)
F	Fan-out with Spiral wrap, 250 to 900µm with feed through (Figure 3)
G	Fan-out, 250µm to 3.0mm jacket with feed through (Figure 4)

J
Breakout Length End
Dimension B

L
Breakout Length End 2
Dimension C

Conversion Chart		
To Convert From	**To**	**Multiply By**
Meters	Inches	39.37
Meters	Feet	3.281
Feet	Inches	12

* Numerical values must be kept consistent

† ST and STII are registered trademarks of AT&T; ESCON is a registered trademark of IBM Corporation; Kevlar is a registered trademark of E.I. DuPont De Nemours and Company

‡ Contact factory for details

molex® Fiber Optic Interconnect Technologies, Inc.™

Cable Assemblies

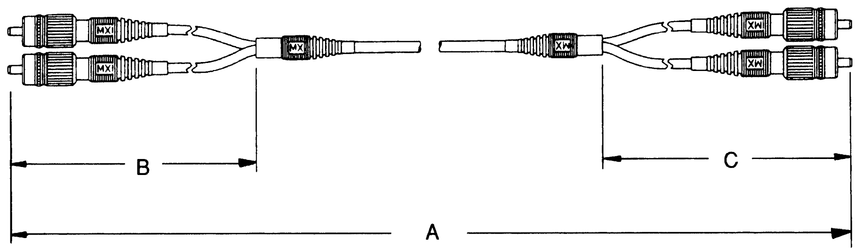


Figure 1

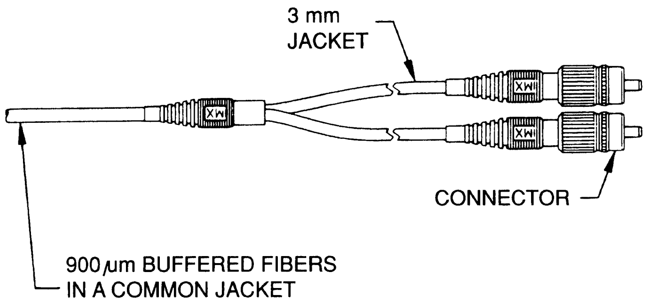


Figure 2

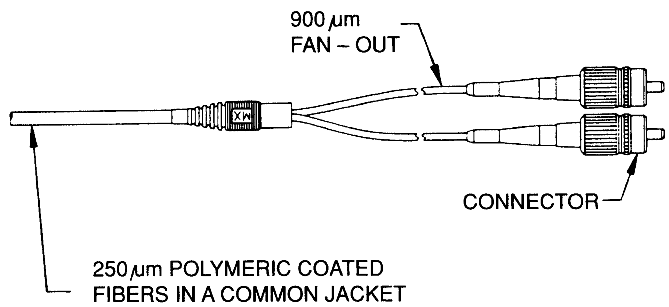


Figure 3

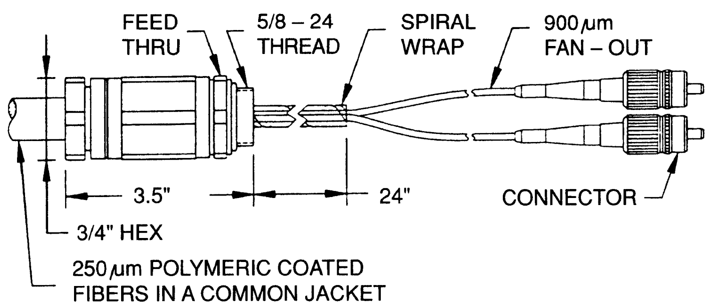
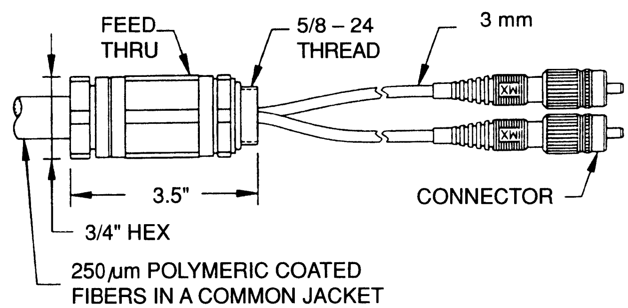


Figure 4



Fiber Optics

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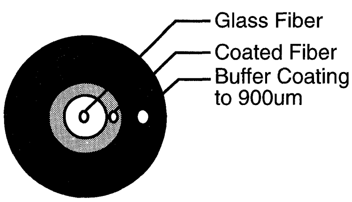
Fiber Optic Interconnect Technologies, Inc.™

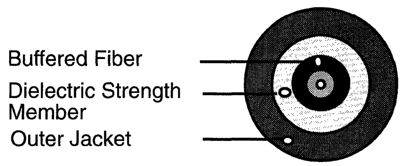
Cable Assemblies

Simplex Cable

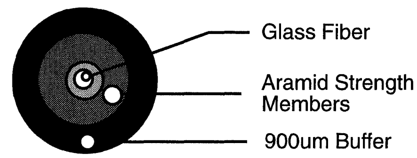
900µm Buffered Fiber



Single Fiber Cable

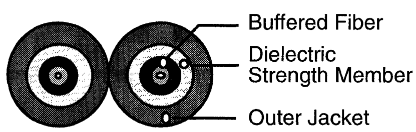


900µm Buffer and Kevlar

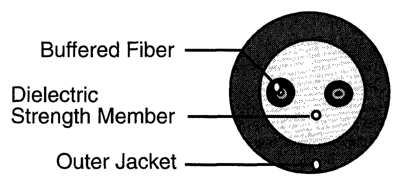


Duplex Cable

2-Fiber Zipcord Cable

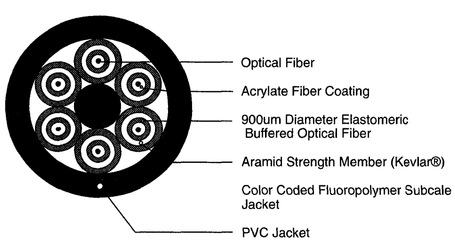


Round Cable

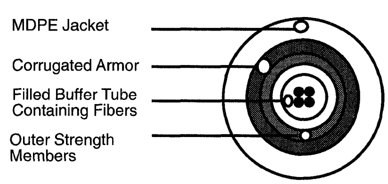


Breakout, Outside Plant and Distribution Cable

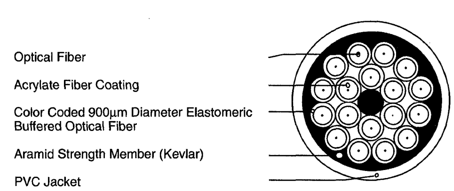
Breakout Cable



Outside Plant Cable



Distribution Cable



Fiber Optics

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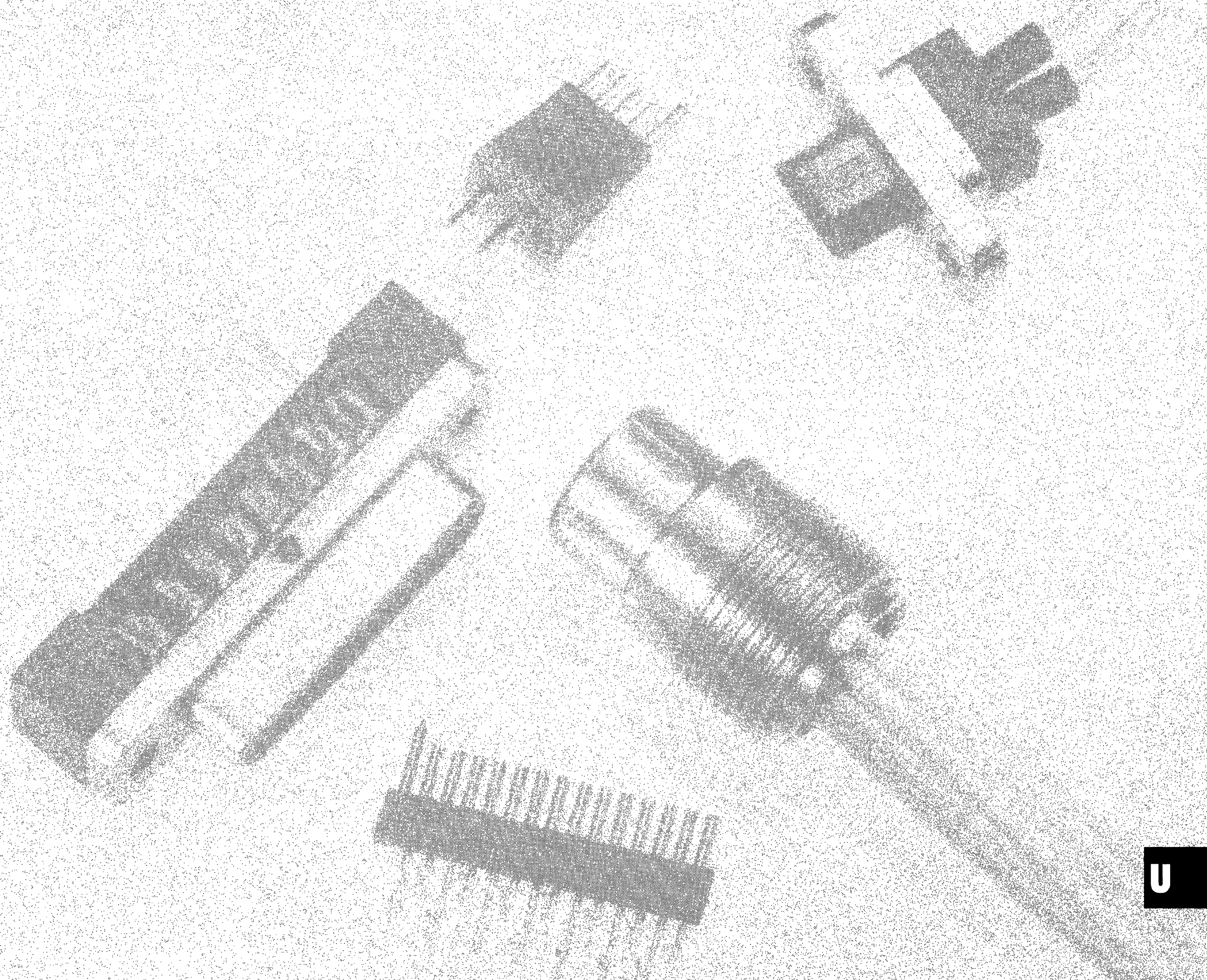
Micro/Nano Interconnections



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BENEFITS AND APPLICATIONS

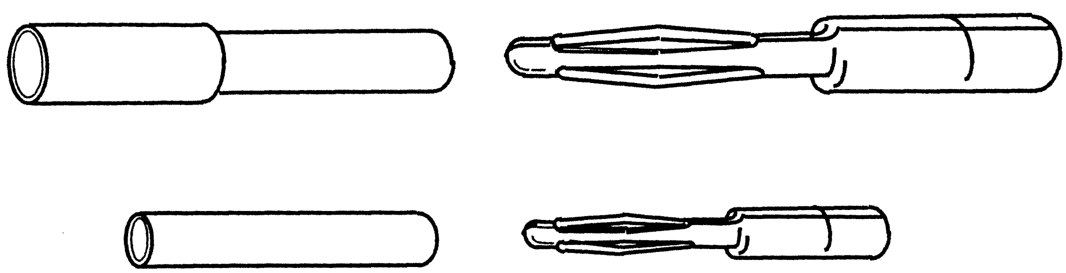
Benefits
- High density
- Low weight
- Shorter signal path
- High reliability
- Cost effective

Applications
- Any requiring high degrees of miniaturization
- High-speed computers
- Telecommunications
- Medical electronics
- High-performance aircraft
- Deep-submergence oceanographic packages
- Space and missile programs

The Ulti-Mate team is the most experienced in the 50/25 mil center connector field. We are proud of the fact that we have the broadest selection of micro and nano interconnection devices on the market, utilizing the most reliable contact design. Quality products, with a proven service record, will provide the solution to your micro/nano connector needs.

MITE-Y-PIN™ CONTACTS

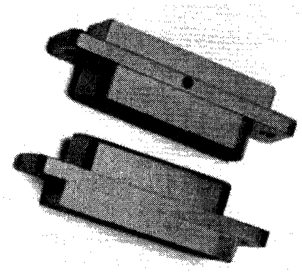
Reliability is achieved through simplicity, consistency and producibility in these 1-piece spring contacts. The No. 24 contact, for use on .050" pitch connectors, has 4 equally spaced tines that provide excellent wiping action when mated to its tubular counterpart. The No. 30 contact for use on .025" pitch has 3 tines. The low mass of these contacts and the 3 or 4 tines assure no interruption in shock and vibration modes. The No. 24 accommodates wire sizes 24 through 30 AWG and the No. 30 accommodates 30 through 36 AWG.



Socket contacts protrude pin contacts isolated in the insulator, as shown above

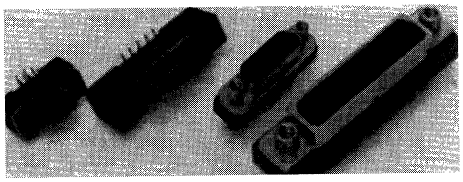
MICRO-D SUBMINIATURE

P Series: Plastic Shell, qualified to MIL-C-83513
A Series: Metal Shell
M Series: Metal Shell, qualified to MIL-C-83513
B Series: Plastic Shell



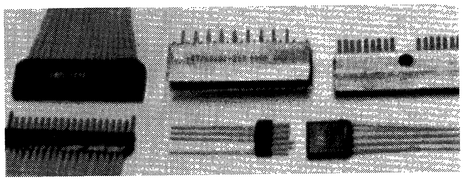
MICRO-D SUBMINIATURE CIRCUIT SERIES CONNECTORS

1.27mm (.050") pitch connectors, available in both vertical and right-angle versions, are mountable to PC boards and mate with our rectangular connector line.



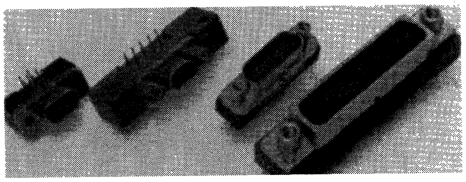
STRIP CONNECTORS

1.27mm (.050") pitch single-row strip connectors have up to 120 contacts. Also featured are strip connectors with metal shells for additional strength and shielding, cross mounting holes, coupling screws, etc.



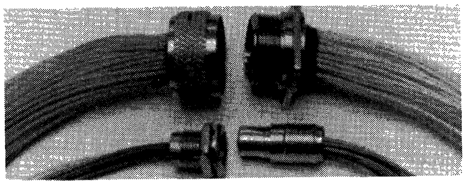
NANO CONNECTORS

0.64mm (.025") pitch single-row connectors have up to 40 contact positions. Metal shells available for strength and shielding. Also, hermaphroditic 2-row units available for higher density and strength.



CIRCULAR CONNECTORS

1.27mm (.050") pitch precision connectors provide the ultimate in microminiature metal shell circular design.



FEATURES AND SPECIFICATIONS

0.64mm (.025") Pitch Ulti-Mate™ Technical Specifications

Reference Information
Designed In: Inches
Quality Control: Exceeds MIL-I-45208 requirements

Electrical
Current: 1.0A
Contact Resistance: 60mΩ max.
Dielectric Withstanding Voltage: 300V AC at sea level
Insulation Resistance: 5000 MΩ min.

Mechanical
Mating Force: 1.0 oz average per circuit
Unmating Force: 0.5 oz min. per circuit
Durability: 500 to 5000 cycles based on application

Additional Mechanical testing data available upon request, contact factory

Physical
Metal Shells: Aluminum Alloy
Shell Plating: Cadmium with Yellow Chromate
Insulator Material: Ryton* or LCP
Interfacial Seals: Fluorosilicone elastomer
Hardware: Stainless steel
Pin Contact: Beryllium Copper
Socket Contact: Copper Alloy or leaded commercial Bronze
Plating: 50µ" gold

1.27mm (.050") Pitch

Reference Information
Designed In: Inches
Quality Control: Exceeds MIL-I-45208 requirements

Electrical
Current: 3.0A
Contact Resistance: 8mΩ max.
Dielectric Withstanding Voltage: 900V AC at sea level
Insulation Resistance: 5000 MΩ min.

Mechanical
Mating Force: 3.0 oz average per circuit
Unmating Force: 3.0 oz average per circuit
Durability: 500 to 5000 cycles based on application

Additional Mechanical testing data available upon request, contact factory

Physical
Metal Shells: Aluminum Alloy
Shell Plating: Cadmium with Yellow Chromate
Insulator Material: Ryton* or LCP
Interfacial Seals: Fluorosilicone elastomer
Hardware: Stainless steel
Pin Contact: Beryllium Copper
Socket Contact: Copper Alloy or leaded commercial Bronze
Plating: 50µ" gold

* Ryton is a registered trademark of Phillips Petroleum Company

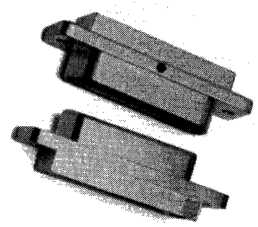
Micro-D Subminiature Connectors

Wire-to-Wire

P Series
Plastic shell, qualified to MIL-C-83513

A Series
Metal shell

Mates With

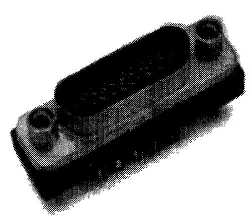


M Series
Metal shell, qualified to MIL-C-83513

B Series
Plastic shell

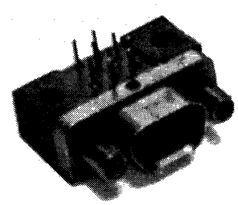
Mates With

Available to Mate With



Style 6 and 16

Vertical mount where footprint is contained within the envelope of the connector. Both styles available to mate with only B Series and M Series Micro-D Connectors. Style 6 has jackposts and style 16 has jackscrews.

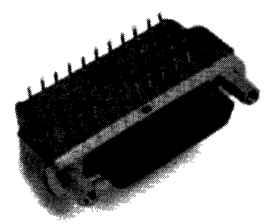


Style 8 and 18

Right angle mount where footprint is contained within the envelope of the connector. Both styles available to mate with all 4 series of Micro-D Connectors (P, A, M, B). Style 8 has jackposts and style 18 has jackscrews.

Circuit Series

Wire-to-Board



Style 1 and 11

Right angle mount with mounting holes where the footprint spreads outside of the connector body. Both styles available to mate with all 4 series of Micro-D Connectors (P, A, M, B). Style 11 has the footprints set back from the metal shell.

1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature Connectors

X	X	XXX	X	XX	-	XX	X	X	-	XXX
A	B	C	D	E		F	G	H		I

A	
Series Designation	
P	Plastic Shell (MIL-C-83513)
A	Metal Shell (Non Mil)
M	Metal Shell (MIL-C-83513)
B	Plastic Shell (Non MIL)

B	
Insulator Material	
R	Ryton‡ PPS MIL-M-24519 GST-40F
L	LCP, Vectra§ 130

C
Shell/Circuit Size
Number of Contacts: 9, 15, 21, 25, 31, 37, 51, 100

D	
Contact Type	
P	Pin, Crimp
S	Socket, Crimp
N	Pin, Solder Cup*
T	Socket, Solder Cup*

E		
Mounting/Coupling Hardware		
Circuits		**Description of Hardware**
5-65	**100**	
02	12	Jackscrew Assembly, Low Profile Allen Head†
03	13	Jackscrew Assembly, High Profile Allen Head
05	15	Jackscrew Assembly, Low Profile/Slotted†
06	16	Jackscrew Assembly, High Profile/Slotted
07	17	Jackpost Assembly†

F
Wire Size
24, 25, 26, 28†, 30 AWG

G	
Wire Type	
B	PVC
C	Solid Copper (Uninsulated) QQ-W-343
E	Type "E" Teflon** per MIL-W-16878/4†
F	Type "ET" Teflon per MIL-W-16878/6
J	Type "E" 19 Strand
K	Type "ET" 19 Strand
M	Teflon per MIL-W-22759/11†
S	Teflon Insulated Solid Copper
Y	Tefzel** per MIL-W-22759/33

H	
Wire Color	
1	White†
2	Yellow
3	Tin-plated solid wire
4	Gold-plated solid wire
5	Color coded per MIL-STD-681C
6	Solid colors repeat/no stripes

I	
Wire Length (3 digits)	
	18.0 (inches)
	M46 (cm)

Modification Code
Modifications are available, contact factory

Substitute this section in place of "Size" section above to order Combo Coax or Power

Example††

MR	2C	13	P	05
	A	B		C

A	
No. (1 to 10) and Whether Coax or Power Required	
C	Coax Contacts (RG196/U is Standard) if RG178/U required, insert C (178)
P	Power Contacts, Size No. 16 (Solder Cup)

B
No. of Micro Contacts
Coax or Power Contacts replace 6 Micro Contacts

C
Hardware

* Solder Cups are supplied without wire for customer termination, 26 AWG max.

† Indicates preferred standard

‡ Ryton is a registered trademark of Phillips Petroleum Company

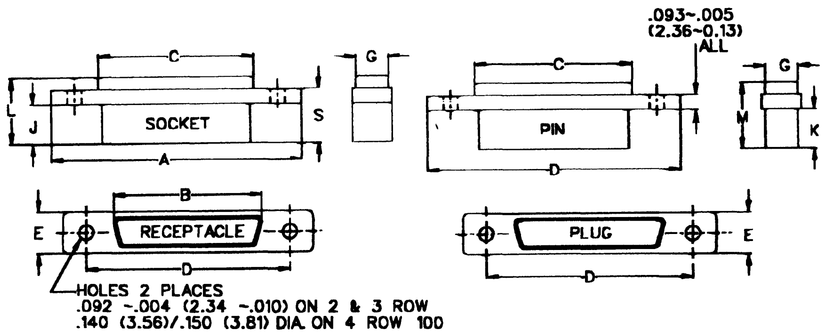
§ Vectra is a registered trademark of Hoechst Celanese Corporation

** Teflon and Tefzel are registered trademarks of E.I. Du Pont de Nemours and Company

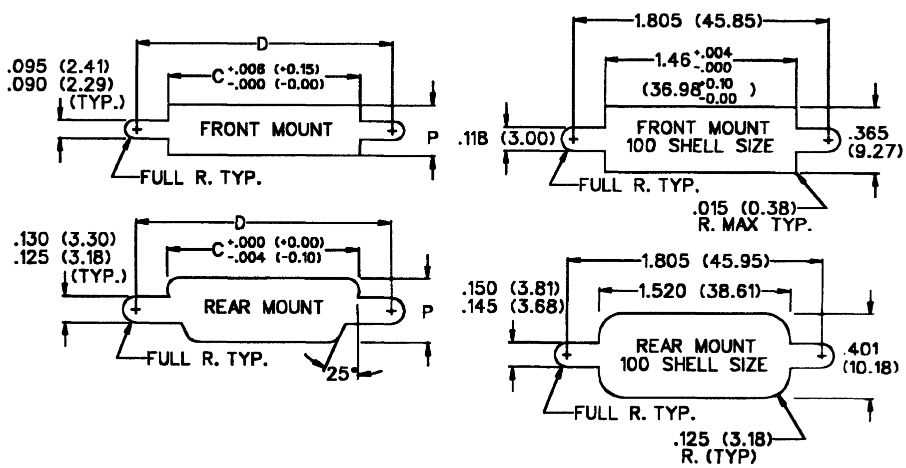
†† Example would have 2 coax and 13 micro contacts in a size 25 contact micro connector and low profile slotted jackscrew

1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature

P Series Plastic Shell Qualified to MIL-C-83513
A Series Metal Shell
M Series Metal Shell Qualified to MIL-C-83513
B Series Plastic Shell



PANEL MOUNTING



P = 4.45 (.175) for A and P, 2-Row Front Mounting
P = 7.11 (.280) for M and B, 2-Row Front Mounting
P = 5.72 (.225) for A and P, 3-Row Front Mounting
P = 8.13 (.320) for M and B, 3-Row Front Mounting
P = 5.56 (.219) for A and P, 2-Row Rear Mounting
P = 6.73 (.265) for M and B, 2-Row Rear Mounting
P = 6.73 (.265) for A and P, 3-Row Rear Mounting
P = 7.75 (.305) for M and B, 3-Row Rear Mounting

ORDERING INFORMATION AND DIMENSIONS

No. of Rows	Size	Series and Dimension					
		All Series	A and P Series		M and B Series		All Series
		A	B	C	B	C	D
2	9	19.94 (.785)	9.55 (.376)	10.29 (.405)	10.21 (.402)	10.16 (.400)	14.35 (.565)
	15	23.75 (.935)	13.36 (.526)	14.10 (.555)	14.02 (.552)	13.97 (.550)	18.16 (.715)
	21	27.56 (1.085)	17.17 (.676)	17.91 (.705)	17.83 (.702)	17.78 (.700)	21.97 (.865)
	25	30.10 (1.185)	19.71 (.776)	20.45 (.805)	20.37 (.802)	20.32 (.800)	24.51 (.965)
	31	33.91 (1.335)	23.52 (.926)	24.26 (.955)	24.18 (.952)	24.13 (.950)	28.32 (1.115)
	37	37.72 (1.485)	27.33 (1.076)	28.07 (1.105)	28.00 (1.102)	27.94 (1.100)	32.13 (1.265)
3	51	36.45 (1.435)	26.06 (1.026)	26.62 (1.048)	26.72 (1.052)	26.67 (1.050)	30.86 (1.215)
4	100	54.99 (2.165)			38.23 (1.505)	36.63 (1.442)	45.72 (1.800)

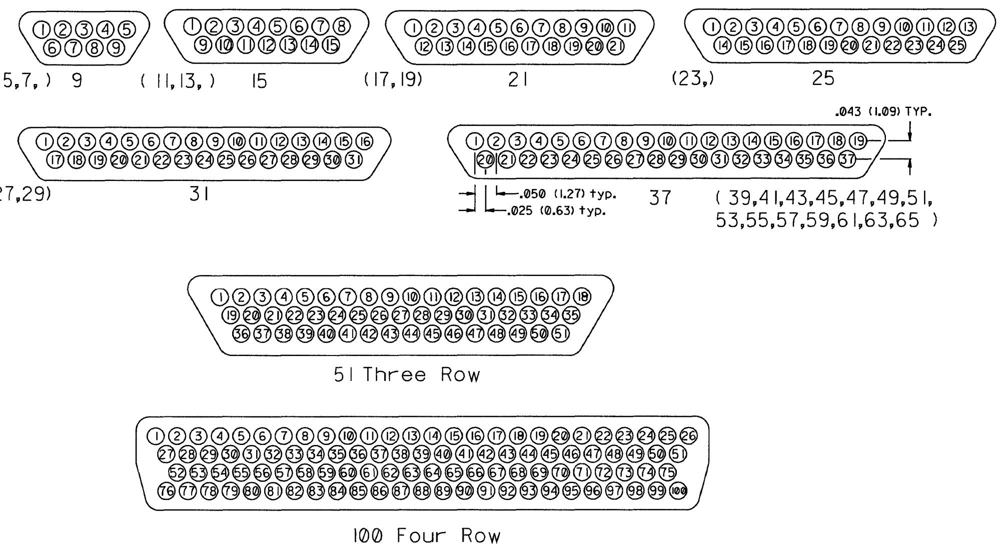
No. of Rows	Series	Mating Height					
		E	J Socket	K Pin	L Socket	M Pin	G
2	A and P	5.54 (.218)	4.65 (.183)	5.18 (.204)	9.53 (.375)	10.03 (.395)	4.39 (.173)
	M and B	7.82 (.308)	5.03 (.198)	4.72 (.186)	10.90 (.429)	10.57 (.416)	6.86 (.270)
3	A and P	6.60 (.260)	4.65 (.183)	5.18 (.204)	9.53 (.375)	10.03 (.395)	5.59 (.220)
	M and B	8.92 (.351)	5.03 (.198)	4.72 (.186)	10.90 (.429)	10.57 (.416)	7.87 (.310)
4	M and B	10.01 (.394)	5.03 (.198)	4.72 (.186)	10.90 (.429)	10.57 (.416)	9.14 (.360)

Note: Standard shell sizes, contact factory for more information

STANDARD PIN LAYOUTS

The layouts shown are standard, however, you may order any number of contacts from 5 to 65 in odd increments: 5, 7, 9, 11, 15, etc. up to 65, in the 2-row configurations. The other 2 standards are the 3-row 51 (51-3) and the 4-row 100. Socket sides of connector are a mirror image.

Note: Contact numbers are for reference only and do not appear on the insulator or connector body. Layouts are enlarged for clarity.

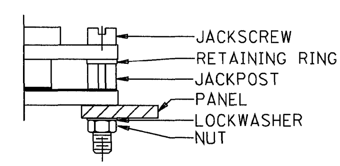


MOUNTING/COUPLING HARDWARE

Typical application includes jackscrews on plug connector and jackposts on receptacle. Standard jackposts are for front panel mounting. For rear panel mount, contact factory.

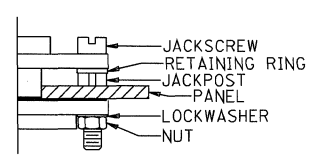
Order Code	No. of Rows	Description	Dimension A	Dimension B	Thread
02	2 and 3	Jackscrew Low Allen	9.17 (.361)	2.62 (.103)	2-56 UNC-2A
03	2 and 3	Jackscrew High Allen	22.05 (.868)	15.49 (.610)	2-56 UNC-2A
05	2 and 3	Jackscrew Low Slot	9.17 (.361)	2.62 (.103)	2-56 UNC-2A
06	2 and 3	Jackscrew High Slot	22.05 (.868)	15.49 (.610)	2-56 UNC-2A
07	2 and 3	Jackpost	12.70 (.500)	4.83 (.190)	2-56 UNC-2B
12	4 (100)	Jackscrew Low Allen	9.91 (.390)	2.62 (.103)	4-40 UNC-2A
13	4 (100)	Jackscrew High Allen	22.91 (.902)	15.49 (.610)	4-40 UNC-2A
15	4 (100)	Jackscrew Low Slot	9.91 (.390)	2.62 (.103)	4-40 UNC-2A
16	4 (100)	Jackscrew High Slot	22.91 (.902)	15.49 (.610)	4-40 UNC-2A
17	4 (100)	Jackpost	12.70 (.500)	4.70 (.185)	4-40 UNC-2B

Panel Mounting

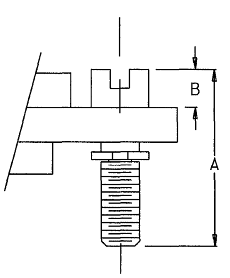


Front Mount

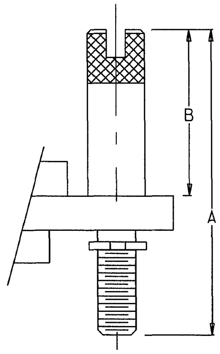
Panel Mounting



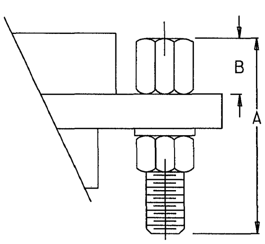
Rear Mount (Consult Factory)



Jackscrew Low Profile



Jackscrew High Profile



Jackpost

FEATURES AND SPECIFICATIONS

Ulti-Mate offers the widest variety of PCB mounted connectors, of which 5 styles are currently cataloged. All have mating interfaces per MIL-C-83513 and 24 AWG exit leads. Solder or Tin dip.

Interface Series

Styles 6 and 16 are available in the MIL spec "M" and the intermateable plastic "B" series. The other styles are available in the "M" and "B" and also the narrower MIL spec plastic "P" series and its intermateable metal shell "A" series. Styles 1, 4 and 5 are qualified to MIL-C-83513. Surface mount versions available in selected layouts. Please contact factory.

molex®

1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature

Circuit Series For Through-Hole PC Board Mounting

ORDERING INFORMATION AND DIMENSIONS

X	X	X	X	XX	X	XX	X
A	B	C	D	E	F	G	H

A	
Circuit Series	
C	

B	
Interface Connector Series	
P, A, M, B	

C	
	Style
1	Right-Angle Mount
6	Vertical Mount
8	Right-Angle Mount
11	Right-Angle Mount, Alternate of Style 1
16	Vertical Mount
18	Right-Angle Mount

D	
	Insulator Material
R	Ryton*, PPS, MIL-M-24519 GST 40F
L	LCP: Vectra† 130

E
Size
Number of Contacts: 9, 15, 21, 25, 31, 37, 51, 100

F	
	Contact Type
P	Pin
S	Socket

G	
	Mounting/Coupling Hardware
0	None
07	Jackpost
	Note: See Page U-8 for Details

H
Optional Threaded Insert
Modification, standard is Through Hole

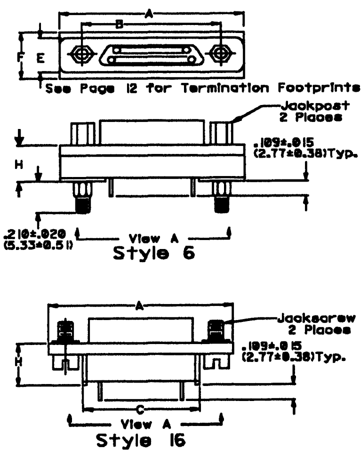
Modification Codes
Modifications are available, contact factory

* Ryton is a registered trademark of Phillips Petroleum Company
† Vectra is a registered trademark of Hoechst Celanese Corporation

1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature

Circuit Series Styles 6 and 16, Vertical

Style 6 is a vertical mount unit having jackposts. Style 16 is a vertical mount unit having jackscrews. Both of these connectors are recommended for new design over the older Style 4. Advantage: the termination footprint is contained within the envelope of the connector body, reducing space needed.



See termination footprints on page U-11

ORDERING INFORMATION AND DIMENSIONS

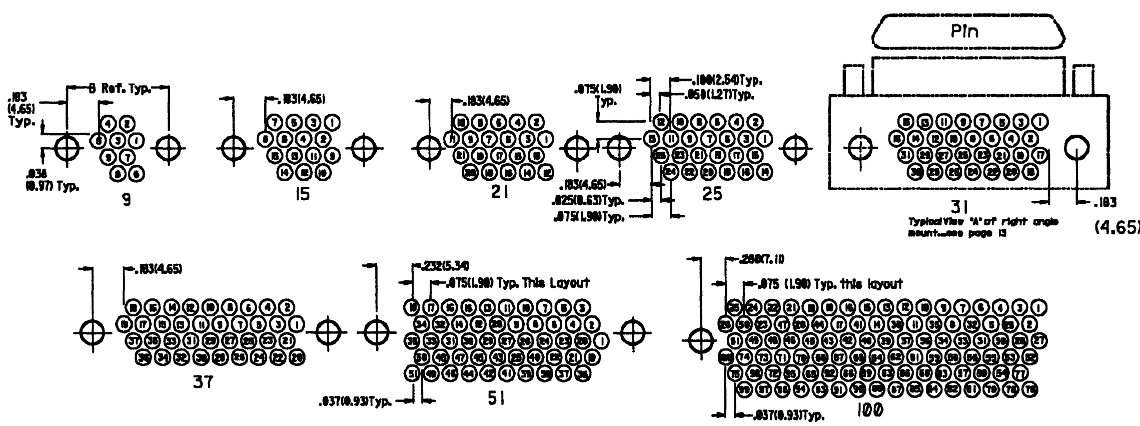
Size	Dimension					
	A	B	C	E	F	H
9	19.94 (.785)	14.35 (.565)	10.16 (.400)	7.82 (.308)	7.87 (.310)	8.38 (.330)
15	23.75 (.935)	18.16 (.715)	13.97 (.550)	7.82 (.308)	7.87 (.310)	8.38 (.330)
21	27.56 (1.085)	21.97 (.865)	17.78 (.700)	7.82 (.308)	7.87 (.310)	8.38 (.330)
25	30.10 (1.185)	24.51 (.965)	20.32 (.800)	7.82 (.308)	7.87 (.310)	8.38 (.330)
31	33.91 (1.335)	28.32 (1.115)	24.13 (.950)	7.82 (.308)	7.87 (.310)	8.38 (.330)
37	37.72 (1.485)	32.13 (1.265)	27.94 (1.100)	7.82 (.308)	7.87 (.310)	8.38 (.330)
51	36.45 (1.435)	30.86 (1.215)	26.54 (1.045)	8.92 (.351)	10.16 (.400)	8.76 (.345)
100	55.12 (2.170)	45.72 (1.800)	39.37 (1.550)	10.01 (.394)	12.95 (.510)	10.16 (.400)

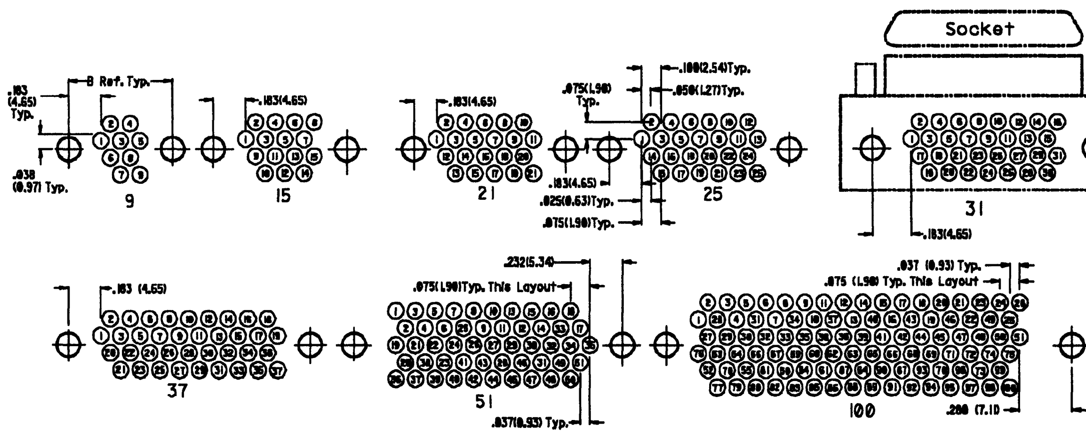
1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature

Circuit Series Styles 6 and 16 Footprint Terminations

Spacing between rows is 1.90mm (.075") on all layouts; spacing between contacts in any one row is 2.54mm (.100") on the 9 through 37 layouts and 1.90mm (.075") on the 51 and 100 layouts.

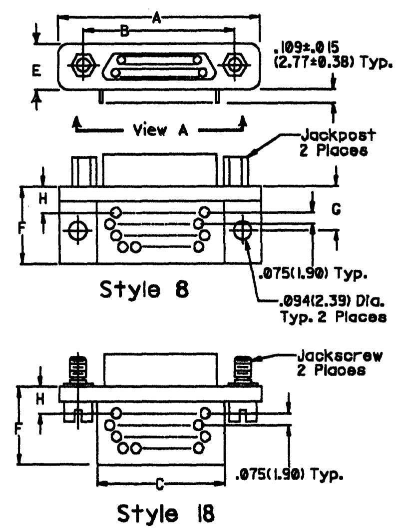
Termination Footprints (Pin Side) viewing connector, not circuit





Circuit Series
Styles 8 and 18, Right Angle

Style 8 is right-angle mount unit with jackposts. Style 18 is a right-angle mount unit with jackscrews. Recommended for new design over Styles 1 and 5. Advantage: termination footprints are contained within the envelope of the connector body for space savings.



See termination footprints on page U-13

ORDERING INFORMATION AND DIMENSIONS

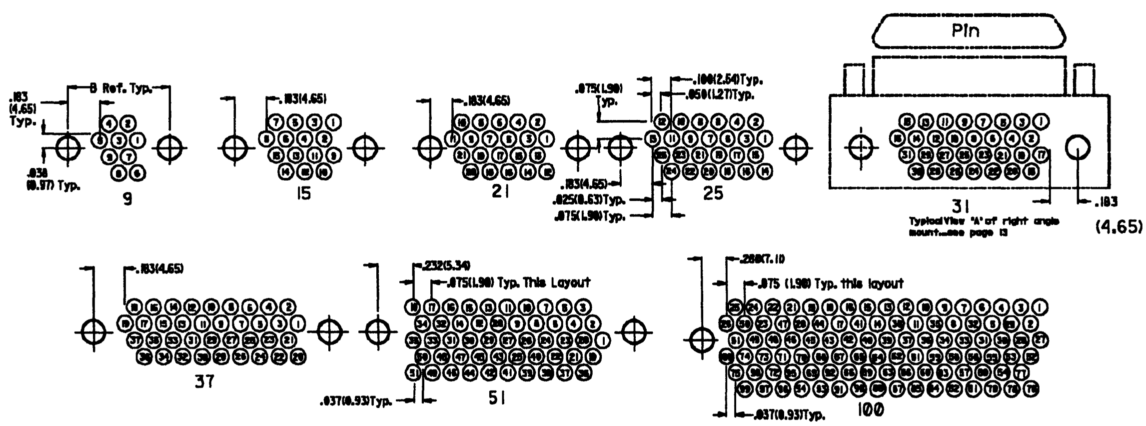
Style 8				
Size	Dimension			
	A	B	C	E (A and P)
9	19.94 (.785)	14.35 (.565)	10.16 (.400)	5.34 (.218)
15	23.75 (.935)	18.16 (.715)	13.97 (.550)	5.34 (.218)
21	27.56 (1.085)	21.97 (.865)	17.78 (.700)	5.34 (.218)
25	30.10 (1.185)	24.51 (.965)	20.32 (.800)	5.34 (.218)
31	33.91 (1.335)	28.32 (1.115)	24.13 (.950)	5.34 (.218)
37	37.72 (1.485)	32.13 (1.265)	27.94 (1.100)	5.34 (.218)
51	36.45 (1.435)	30.86 (1.215)	26.54 (1.045)	6.60 (.260)
100	55.12 (2.170)	45.72 (1.800)	39.37 (1.550)	

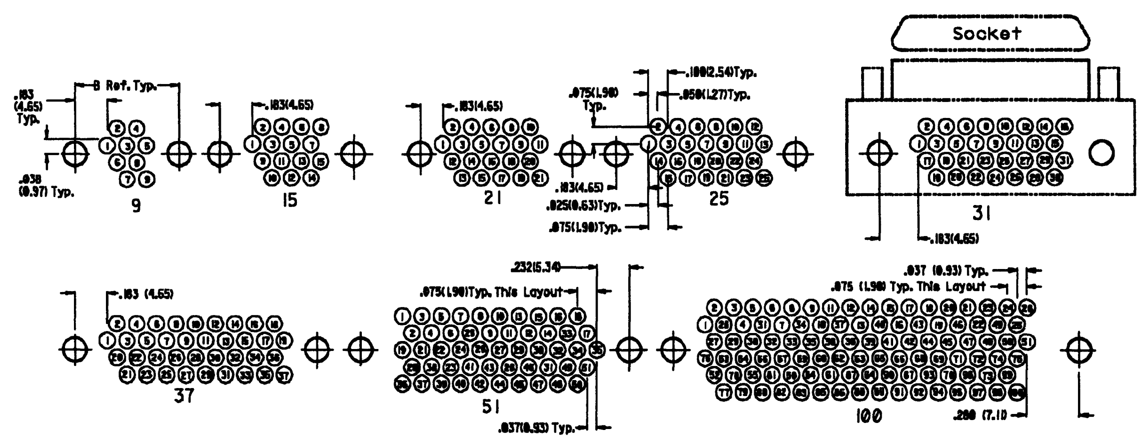
Style 18				
Size	Dimension			
	E (M and B)	F	G	H
9	7.82 (.308)	10.41 (.410)	6.35 (.250)	3.50 (.138)
15	7.82 (.308)	10.41 (.410)	6.35 (.250)	3.50 (.138)
21	7.82 (.308)	10.41 (.410)	6.35 (.250)	3.50 (.138)
25	7.82 (.308)	10.41 (.410)	6.35 (.250)	3.50 (.138)
31	7.82 (.308)	10.41 (.410)	6.35 (.250)	3.50 (.138)
37	7.82 (.308)	10.41 (.410)	6.35 (.250)	3.50 (.138)
51	8.92 (.351)	12.70 (.500)	7.49 (.295)	3.68 (.145)
100	10.01 (.394)	15.62 (.615)	8.89 (.350)	4.14 (.163)

1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature

Circuit Series Styles 8 and 18 Termination Footprints

Spacing between rows is 1.90mm (.075") on all layouts; spacing between contacts in any one row is 2.54mm (.100") on the 9 through 37 layouts and 1.90mm (.075") on the 51 and 100 layouts.



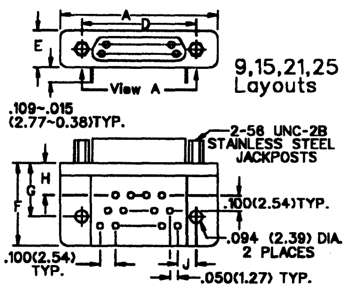


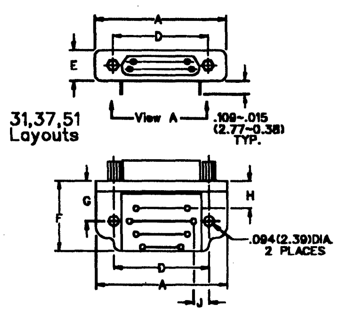
Circuit Series
Styles 1 and 11, Right Angle

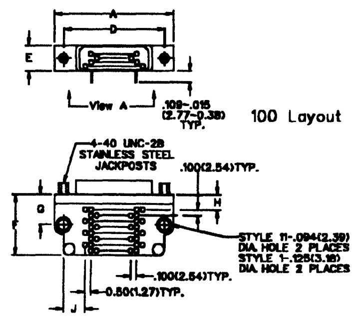
FEATURES AND SPECIFICATIONS

Style 1 (CBR) is the original right-angle mount PC board connector having 90° termination exit leads on a 2.54 (.100) x 2.54mm (.100") grid. Mounting through-holes are provided. Jackposts to receive jackscrews are optional. Style 11 is an industry alternate for Style 1. It is identical except for the setback of the footprints from the metal shell. All dimensions are the same except F, G and H. Style 1 is qualified to slash 10 through slash 15 of MIL-C-83513. Style 11 is an industry alternate to Style 1, but is not qualified to MIL-C-83513.

For new applications, we suggest you consider Style 8 or 18.







See termination footprints on page U-15

ORDERING INFORMATION AND DIMENSIONS

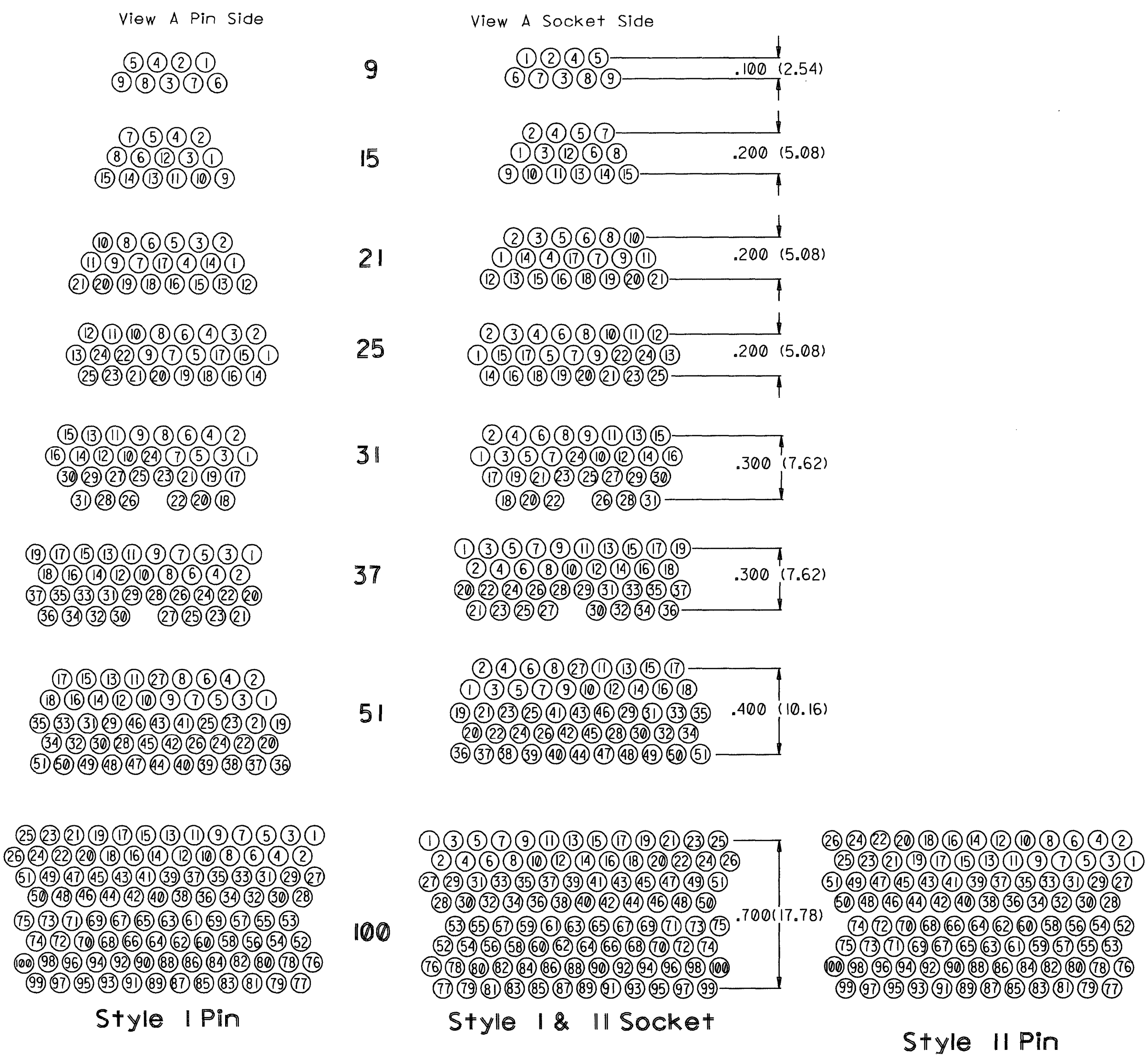
Style 1								
Size	Dimension							
	A	D	E (A and P)	E (M and B)	F	G	H	J
9	19.94 (.785)	14.35 (.565)	5.54 (.218)	7.82 (.308)	10.67 (.420)	6.35 (.250)	5.84 (.230)	2.11 (.083)
15	23.75 (.935)	18.16 (.715)	5.54 (.218)	7.82 (.308)	10.67 (.420)	6.35 (.250)	3.30 (.130)	2.74 (.108)
21	27.56 (1.085)	21.97 (.865)	5.54 (.218)	7.82 (.308)	10.67 (.420)	6.35 (.250)	3.30 (.130)	2.11 (.083)
25	30.10 (1.185)	24.51 (.965)	5.54 (.218)	7.82 (.308)	10.67 (.420)	6.35 (.250)	3.30 (.130)	2.11 (.083)
31	33.91 (1.335)	28.32 (1.115)	5.54 (.218)	7.82 (.308)	13.21 (.520)	6.35 (.250)	3.30 (.130)	4.70 (.158)
37	37.72 (1.485)	32.13 (1.265)	5.54 (.218)	7.82 (.308)	13.21 (.520)	6.35 (.250)	3.30 (.130)	4.65 (.183)
51	36.45 (1.435)	30.86 (1.215)	6.62 (.260)	8.92 (.351)	16.51 (.650)	7.62 (.300)	3.81 (.150)	2.74 (.108)
100	54.99 (2.165)	45.72 (1.800)		10.01 (.394)	25.40 (1.000)	10.16 (.400)	5.08 (.200)	6.98 (.275)

Style 11			
Size	Dimension		
	F	G	H
9	10.16 (.400)	5.84 (.230)	5.33 (.210)
15	12.19 (.480)	8.38 (.330)	5.33 (.210)
21	12.19 (.480)	8.38 (.330)	5.33 (.210)
25	12.19 (.480)	8.38 (.330)	5.33 (.210)
31	15.24 (.600)	8.38 (.330)	5.33 (.210)
37	15.24 (.600)	8.38 (.330)	5.33 (.210)
51	18.03 (.710)	9.14 (.360)	5.33 (.210)
100	25.65 (1.010)	10.67 (.420)	5.33 (.210)

Note: All connectors have a recessed "washout" area of 0.38mm (.015") min.

1.27mm (.050") Pitch Ulti-Mate™ Micro-D Subminiature

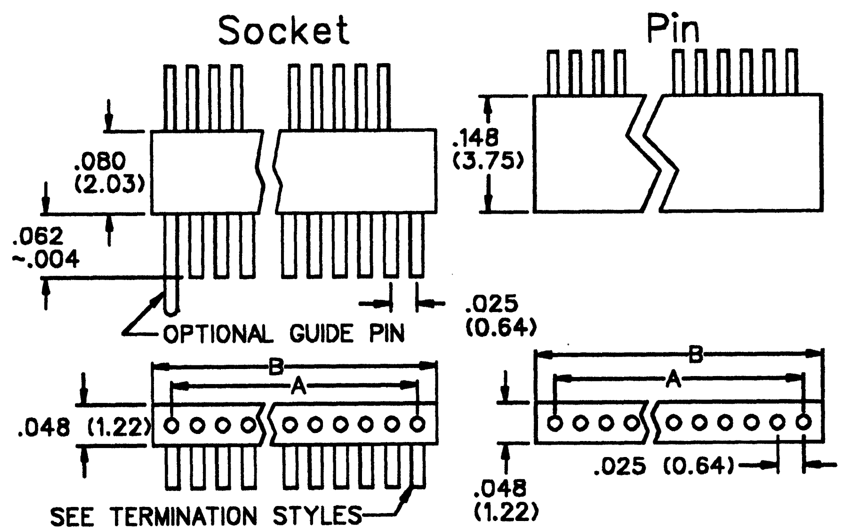
Circuit Series Styles 1 and 11 Termination Footprints



0.64mm (.025") Pitch Ulti-Mate™ N Series Nano Connector

NS Basic Nano Strip

A truly remarkable series of connectors with contacts on .025" pitch. This means that you could have contact densities of 1600 per square inch. The size 30 Mite-Y-Pin™ contacts have engagement forces of only 1 oz and operate effectively under the shock and vibration requirements as established for MIL-C-83513. The NS Nano Series is currently available in strip form with single row contacts up to 40 positions.



Dimensional Formula
A = (No. of positions -1) x 0.63mm (.025") first to last contact
B = A + 1.27mm (.050") overall

Optional Circuit Terminations
Socket Terminations are self-lead (1 piece) 0.36mm (.014") diameter.

Pin Terminations are solid 30 AWG, 0.25mm (.010") diameter. Both are solder or Tin dip.

ORDERING INFORMATION AND DIMENSIONS

XX X - XX X X - XX X X - XX
A B C D E F G H I

A	
Series	
NS	Nano strip

B	
Insulator Material	
R*	Ryton† per MIL-M-24519 GST 40F
L	LCP

C
Size
Total number of contacts. 40 positions max.

D	
Contact Type	
P	Pin
S	Socket

E	
Mounting/Coupling (combine as required)	
0	None
1	Located in end contact. 1 guide pin (socket side) and 1 hole (pin side).
2	Located on both ends. Other locations available, contact factory. 2 guide pins (socket side) and 2 holes (pin side).

F
Wire Size
30, 32*, 34, 36 AWG
OR
Circuit Termination (replaces all of above)
L01, L03, L05, L06 (not available on NH Series)

G	
Wire Type	
B	PVC 7 strand B
C	Solid Copper
E*	TFE 7 strand E
F	TFE 7 strand ET

H	
Wire Color/Finish	
1*	White
2	Yellow
3	Tin plated
4	Gold plated
5	Color coded per MIL-STD-681C

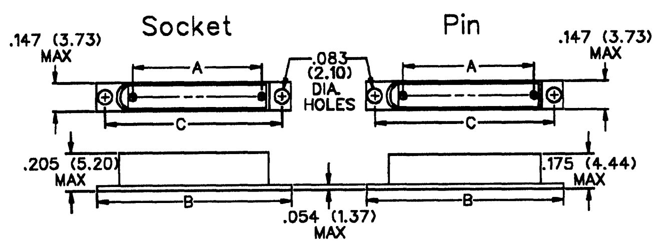
I	
Wire Length (3 digits)	
	18.0 (inches)
	M46 (cm)

* Indicates preferred standard
† Ryton is a registered trademark of Phillips Petroleum Company

0.64mm (.025") Pitch Ulti-Mate™ N Series Nano Connector

NSM Metal Shell with Mounting Ears

The size 30 Mite-Y-Pin™ contacts have engagement forces of only 1 oz and operate effectively under the shock and vibration requirements as established for MIL-C-83513. The NSM Nano Series is currently available in strip form with single row contacts up to 40 positions and metal shell strips for added strength. Inquiries for other configurations are invited.



Dimensional Formula
A = (No. of positions -1) x 0.63mm (.025") first to last contact
B = A + 1.32mm (.052") overall
C = A + 9.27mm (.365") center to center of mounting holes

Optional Circuit Terminations
Socket Terminations are self-lead (1 piece) 0.36mm (.014") diameter.

Pin Terminations are solid 30 AWG, 0.25mm (.010") diameter. Both are solder or Tin dip.

ORDERING INFORMATION AND DIMENSIONS

XX	X	-	XX	X	X	-	XX	X	X	-	XXX
A	B		C	D	E		F	G	H		I

A	
Series	
NSM	Complete metal shell

B	
Insulator Material	
R*	Ryton† per MIL-M-24519 GST 40F
L	LCP

C
Size
Total number of contacts. 40 positions max.

D	
Contact Type	
P	Pin
S	Socket

E	
Mounting/Coupling (combine as required)	
0	None
1	Located in end contact. 1 guide pin (socket side) and 1 hole (pin side).
2	Located on both ends. Other locations available, contact factory. 2 guide pins (socket side) and 2 holes (pin side).

F
Wire Size
30, 32*, 34, 36 AWG
OR
Circuit Termination (replaces all of above)
L01, L03, L05, L06 (not available on NH Series)

G	
Wire Type	
B	PVC 7 strand B
C	Solid Copper
E*	TFE 7 strand E
F	TFE 7 strand ET

H	
Wire Color/Finish	
1*	White
2	Yellow
3	Tin plated
4	Gold plated
5	Color coded per MIL-STD-681C

I	
Wire Length (3 digits)	
	18.0 (inches)
	M46 (cm)

* Indicates preferred standard

† Ryton is a registered trademark of Phillips Petroleum Company

0.64mm (.025") Pitch Ulti-Mate™ N Series Nano Connector

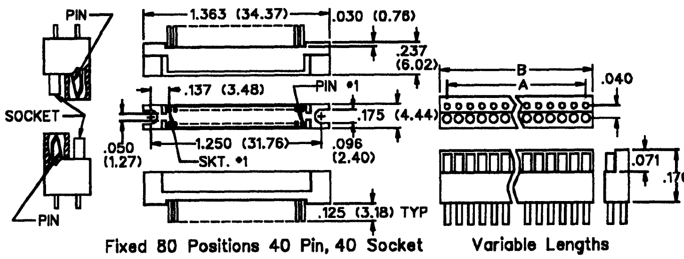
NH Hermaphroditic

Hermaphroditic style of connector includes 1 row each of pin and socket contacts. This feature provides excellent alignment while offering the customer common connectors for both the plug and receptacle.

Dimensional Formula/Variable Lengths
A = (No. of positions -1) x 0.63mm (.025") first to last contact
B = A + 1.27mm (.050") overall

Optional Circuit Terminations
Socket Terminations are self-lead (1 piece) 0.36mm (.014") diameter.

Pin Terminations are solid 30 AWG, 0.25mm (.010") diameter. Both are solder or Tin dip.



Fixed 80 Positions 40 Pin, 40 Socket   Variable Lengths

ORDERING INFORMATION AND DIMENSIONS

XX	X	-	XX	X	X	-	XX	X	X	-	XXX
A	B		C	D	E		F	G	H		I

A	
Series	
NH	Hermaphroditic

B	
Insulator Material	
R*	Ryton† per MIL-M-24519 GST 40F
L	LCP

C
Size
Total number of contacts. 80 positions max.

D	
Contact Type	
H	Pin and Socket

E	
Mounting/Coupling (combine as required)	
0	None
1	Located in end contact. 1 guide pin (socket side) and 1 hole (pin side).
2	Located on both ends. Other locations available, contact factory. 2 guide pins (socket side) and 2 holes (pin side). 80 position connector is a fully shrouded connector.

F
Wire Size
30, 32*, 34, 36 AWG
OR
Circuit Termination (replaces all of above)
L01, L03, L05, L06 (not available on NH Series)

G	
Wire Type	
B	PVC 7 strand B
C	Solid Copper
E*	TFE 7 strand E
F	TFE 7 strand ET

H	
Wire Color/Finish	
1*	White
2	Yellow
3	Tin plated
4	Gold plated
5	Color coded per MIL-STD-681C

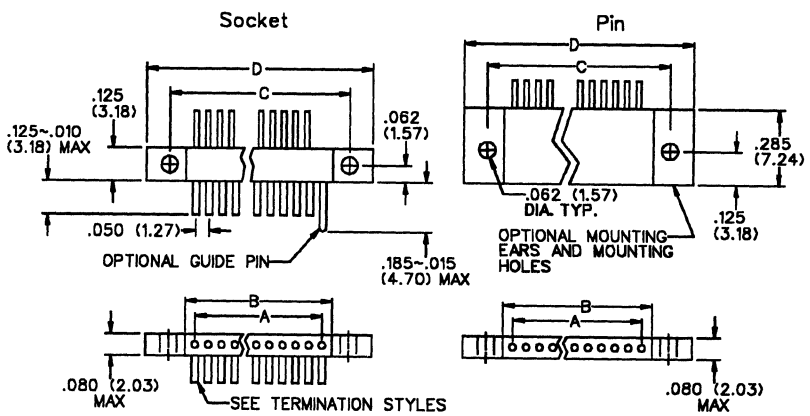
I	
Wire Length (3 digits)	
	18.0 (inches)
	M46 (cm)

* Indicates preferred standard
† Ryton is a registered trademark of Phillips Petroleum Company

1.27mm (.050") Pitch Ulti-Mate™ S Series Strip Connector

S Basic Strip

The plastic molded body of the 50 mil strip is made to accommodate up to 120 micro contacts, however, you select the number of contacts you need up to 120. There are many options to choose from: guide pins, jackscrews, mounting holes, 6 circuit termination styles and metal shells.



Dimensional Formula
A = (No. of positions -1) x .1.27mm (.050") first to last contact
B = A + 1.90mm (.075") overall without ears
C = A + 5.08mm (.200") center to center of mounting holes
D = A + 9.52mm (.375") overall with ears

Ordering Notes
Each guide pin will replace a contact cavity thereby increasing the overall length. The overall length will also increase for one or two cross mounting holes or for jackscrews. Use 3 positions for each cross mounting hole or jackscrew.

Optional Circuit Terminations
Terminations are solid 24 AWG—solid or Tin dip.

ORDERING INFORMATION AND DIMENSIONS

XX	X	XX	X	X	-	XX	X	X	-	XX
A	B	C	D	E		F	G	H		I

A	
Series	
S	Strip
S1	2.54mm (.100") contact pitch

B	
Insulator Material	
R*	Ryton† per MIL-M-24519 GST 40F
L	LCP

C
Size
Total number of contacts. 120 positions max.

D	
Contact Type	
P	Pin crimp
S	Socket crimp
N	Pin solder cup
T	Socket solder cup

E	
Hardware (combine as required)	
0	None
1	1 guide pin (socket side) and 1 hole (pin side)
2	2 guide pins (socket side) and 2 holes (pin side)
3	1 center jackscrew (socket side) and 1 threaded hole (pin side)
4	Mounting holes at each end
5	Jackscrews at each end

F
Wire Size
24, 26*, 28, 30 AWG
OR
Circuit Termination (replaces all of above)
L01, L02, L03, L04, L05, L06

G	
Wire Type	
B	PVC
C	Solid Copper per QQ-W-343
E	Type "E" Teflon‡ per MIL-W-16878/4
F	Type "ET" Teflon per MIL-W-16878/6
G	Ribbon cable per MIL-C-49055
J	Type "E" 19 strand
K	Type "ET" 19 strand
M	Teflon per MIL-W-22759/11
S	Teflon-insulated solid Copper

H	
Wire Color/Finish	
1	White
2	Yellow
3	Tin plated—solid
4	Gold plated—solid
5	Color coded per MIL-STD-681C

I	
Wire Length (3 digits)	
	18.0 (inches)
	M46 (cm)

* Indicates preferred standard
† Ryton is a registered trademark of Phillips Petroleum Company
‡ Teflon is a registered trademark of E.I. DuPont de Nemours and Company

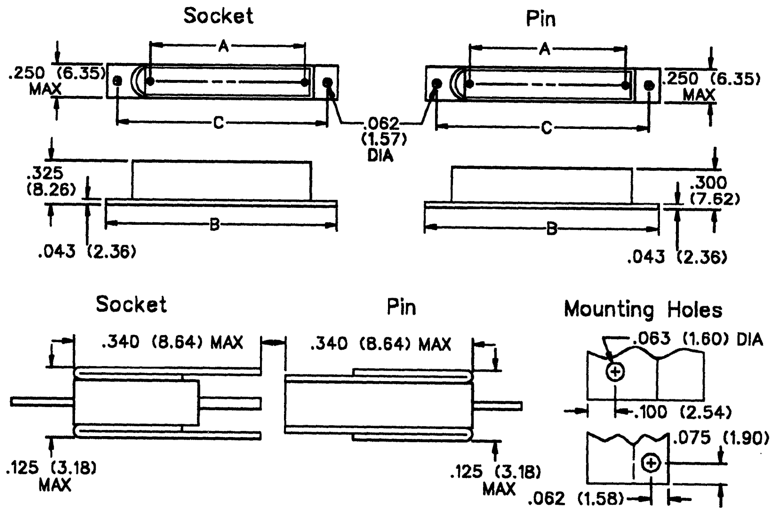
Micro/Nano Interconnections

U

1.27mm (.050") Pitch Ulti-Mate™ S Series Strip Connector

SMR Metal Shells
SSR Metal Sides

The plastic molded body of the 50 mil strip is made to accommodate up to 120 micro contacts, however, you select the number of contacts you need up to 120. There are many options to choose from: guide pins, jackscrews, mounting holes, 6 circuit termination styles and metal shells.



SMR
Complete metal shells with mounting ears.

SSR
Metal side added for shielding and strength, insulators are basic strips.

Dimensional Formula
A = (No. of positions -1) x 1.27mm (.050")
B = A + 1.32mm (.052") overall
C = A + 9.27mm (.365") center to center of mounting holes

Optional Circuit Terminations
Terminations are solid 24 AWG—solder or Tin dip.

ORDERING INFORMATION AND DIMENSIONS

XX	X	XX	X	X -	XX	X	X -	XX
A	B	C	D	E	F	G	H	I

A	
Series	
SS	Metal sides
SM	Complete metal shell

B	
Insulator Material	
R*	Ryton† per MIL-M-24519 GST 40F
L	LCP

C
Size
Total number of contacts. 120 positions max.

D	
Contact Type	
P	Pin crimp
S	Socket crimp
N	Pin solder cup
T	Socket solder cup

E	
Hardware (combine as required)	
0	None
1	1 guide pin (socket side) and 1 hole (pin side)
2	2 guide pins (socket side) and 2 holes (pin side)
3	1 center jackscrew (socket side) and 1 threaded hole (pin side)
4	Mounting holes at each end
5	Jackscrews at each end

F
Wire Size
24, 26*, 28, 30 AWG
OR
Circuit Termination (replaces all of above)
L01, L02, L03, L04, L05, L06

G	
Wire Type	
B	PVC
C	Solid Copper per QQ-W-343
E	Type "E" Teflon‡ per MIL-W-16878/4
F	Type "ET" Teflon per MIL-W-16878/6
G	Ribbon cable per MIL-C-49055
J	Type "E" 19 strand
K	Type "ET" 19 strand
M	Teflon per MIL-W-22759/11
S	Teflon-insulated solid Copper

H	
Wire Color/Finish	
1	White
2	Yellow
3	Tin plated—solid
4	Gold plated—solid
5	Color coded per MIL-STD-681C

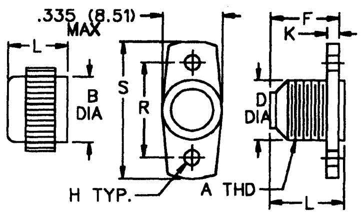
I	
Wire Length (3 digits)	
	18.0 (inches)
	M46 (cm)

* Indicates preferred standard
† Ryton is a registered trademark of Phillips Petroleum Company
‡ Teflon is a registered trademark of E.I. DuPont de Nemours and Company

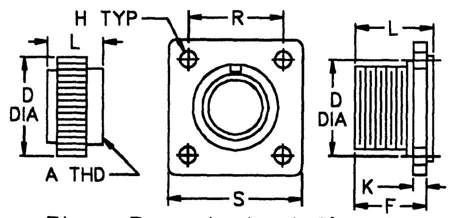
1.27mm (.050") Pitch Ulti-Mate™ RT Series Circular Connectors

Threaded Coupling

The RT Series is a precision line of circular connectors, including a size 1 with 7 micro contacts, a size 1 with 19 contacts, a size 4 with 55 contacts and a size 5 with 85 contacts. All connectors have precision-machined metal shells. Environmental sealing is also available. This family provides all the advantages of circular connectors: ease of coupling, round cable bundle form, ease of panel mounting and space efficiency.

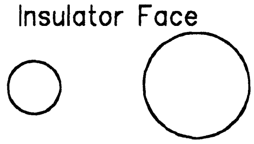


Plug Receptacle / Size 1

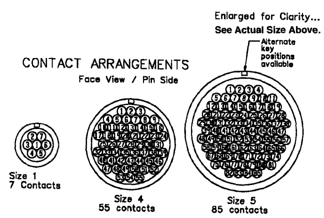


Plug Receptacle / Size 4 & 5

Insulator Face



Size 1 Size 5



ORDERING INFORMATION AND DIMENSIONS

Plug			
Shell Size	Dimension		
	A (Thread)	D	L
1	5/16 24 UNF-2B	9.52 (.375)	8.00 (.315)
4	5/8 24 UNEF-2B	19.18 (.755)	11.18 (.440)
5	11/16 24 UNEF-2B	21.97 (.865)	11.81 (.465)

Receptacle								
Shell Size	Dimension							
	A (Thread)	D	F	H	K	L	R	S
1	5/16 24 UNF-2A	8.26 (.325)	9.02 (.355)	1.98 (.078)	1.57 (.062)	10.16 (.400)	11.68 (.460)	16.00 (.630)
4	5/8 24 UNEF-2A	15.88 (.625)	11.18 (.440)	2.31 (.091)	1.57 (.062)	12.45 (.490)	14.73 (.580)	19.30 (.760)
5	11/16 24 UNEF-2A	18.92 (.745)	11.18 (.440)	2.31 (.091)	1.57 (.062)	14.60 (.575)	17.12 (.674)	21.59 (.850)

X X X X X X - XX X

A B C D E F G I

A	
R	Circular Series

B	
Connector Type	
T	Threaded

C	
Shell Type	
P	Plug
R	Receptacle

D	
Mounting Style	
0	Plug
1	Front
3	Wall

E	
Material	
B	Brass
S	Stainless Steel

F	
Shell Size	
1	7 or 19
4	55
5	85

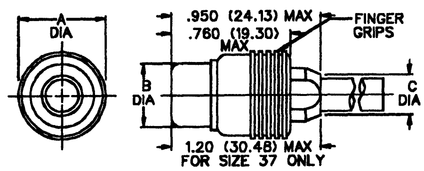
G
Contact Layout
7, 19, 55, 85

H	
Contact Type	
P	Pin
S	Socket

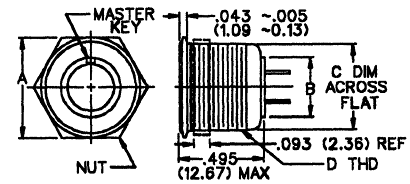
1.27mm (.050") Pitch Ulti-Mate™ RQ Series Circular Connectors

Quick Disconnect

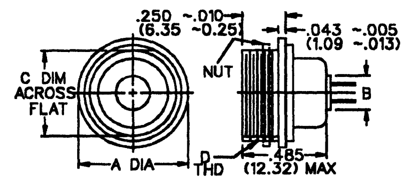
The Ulti-Mate RQ Series is a high-density quick-release push/pull connector series. It is also available with a lanyard release. All connectors have metal shells and are available in the sizes 1, 2 and 3 layouts. Environmental sealing is available. This family provides all the advantages of circular connectors: ease of coupling, round cable bundle form, ease of panel mounting and space efficiency.



Plug

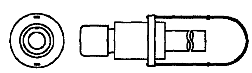


Receptacle / Front Panel Mt.

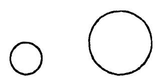


Receptacle / Back Panel Mt.

Lanyard / Quick Disconnect
Consult factory for detailed information



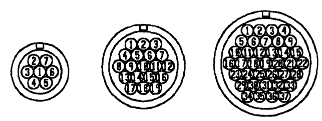
Actual Size of Insulator Face



Size 1 Size 5
(Layouts Shown Below)

CONTACT ARRANGEMENTS
Face View / Pin Side

Enlarged for Clarity. See Actual Size Above



Size 1 7 Contacts
Size 2 19 Contacts
Size 3 37 Contacts

ORDERING INFORMATION AND DIMENSIONS

Plug

Shell Size	Dimension A	Dimension B	Dimension C	No. of Contacts
1	9.78 (.385)	7.75 (.305)	4.57 (.180)	7 or 19
2	13.08 (.515)	10.29 (.405)	6.60 (.260)	19
3	19.30 (.760)	16.13 (.635)	8.89 (.350)	37

Receptacle/Back Panel Mount

Shell Size	Dimension A	Dimension B	Dimension C	Dimension D (Thread)
1	14.48 (.570)	6.22 (.245)	10.67 (.420)	7/16 28 UNEF-2A
2	16.13 (.635)	8.76 (.345)	13.46 (.530)	9/16 24 UNEF-2A
3	23.24 (.915)	13.21 (.520)	18.42 (.725)	3/4 20 UNEF-2A

Panel Cut-Outs

Front Panel Mount Shell Size	Dimension A	Dimension B	Back Panel Mount Shell Size	Dimension A	Dimension B
1	9.25 (.364)	9.91 (.390)	1	10.80 (.425)	11.18 (.440)
2	12.06 (.475)	13.08 (.515)	2	13.59 (.535)	14.33 (.564)
3	18.52 (.729)	19.18 (.755)	3	18.52 (.729)	19.43 (.755)

Receptacle/Front Panel Mount

Shell Size	Dimension A	Dimension B	Dimension C	Dimension D (Thread)
1	12.95 (.510)	6.22 (.245)	9.12 (.359)	3/8 32 UNEF-2A
2	14.60 (.575)	8.76 (.345)	11.94 (.470)	1/2 28 UNEF-2A
3	21.72 (.855)	13.21 (.520)	18.80 (.740)	3/4 20 UNEF-2A

X	X	X	X	X	X	-	XX	X
A	B	C	D	E	F		G	I

A	
R	Circular Series

B Connector Type	
Q	Quick Disconnect
L	Lanyard

C Shell Style	
P	Plug
R	Receptacle

D Mounting Style	
0	Plug
1	Front
2	Rear

E Material	
B	Brass
S	Stainless Steel

F Shell Size	
1	7 or 19
2	19
3	37

G Contact Layout
7, 19, 37

H Contact Type	
P	Pin
S	Socket

Industrial Connectors

Industrial Interfaces™ Connectors Overview

Modular Design for Maximum Flexibility

Industrial Interfaces Connectors are packaged and sold in modules so that users may select the exact components to suit their requirements.

To properly select those components, the following questions must be answered:

1) What is the wire size to be connected?

2) How many wires are there to connect?

3) What is the voltage requirement?

4) If a cable is involved, what is the cable diameter?

5) If a conduit is involved, what type of conduit and trade size?

6) For stationary receptacles, what mounting arrangement is required?

7) Are any accessories or special application considerations involved?

With above information it is possible to rapidly specify the Industrial Interfaces Connector configuration exactly suited to your needs.

There are a few things to keep in mind when specifying and ordering the modular components comprising Industrial Interfaces Connectors.

1) The inserts are capable of accepting different types and sizes of terminals. To give users maximum flexibility, the terminals are ordered separately for the Spectre and Advantage Connectors. See the information in the insert selection guide and the terminal selection guide in the specification section.

2) Except for the Direct Flange Mount Front Shells, a back shell is always required to complete a connector half.

3) Angle adapters are available.

4) We are system problem solvers! If you do not see the solution to your problem in the catalog, give us a call. We would be delighted to work with you. Our products exist because of your needs.

5) Unlike most connector vendors, we deliver PROMPTLY. Delivery is designed into our products and supported by an in-depth inventory stock policy monitored by MRP computer software. We do appreciate knowing your requirements early and will gladly deliver your shipment to your JIT delivery date.

CATALOG NUMBER SELECTION

Having determined the insert and terminal requirements:

The insert selected defines the shell size required and all connector components will begin with the same first 2 digits.

1) Select the catalog number from the proper front shell page that describes the shell and insert type required.

2) Select the catalog number from the proper back shell page that describes the size and type required.

3) Repeat these steps for the other side of the connector.

4) Select dust caps as required.

5) From the guide section, select the appropriate terminals.

6) Select the necessary insertion and removal tools and the proper crimp tools and locators from the tool selection guide.

Industrial Interfaces™ Spirit™ Connectors Technical Specifications

Agency Approvals
National Electric Code: Spirit connectors conform to the NEC if applied within the constraints of the code
Underwriters Laboratories: Spirit series connectors are recognized under the Underwriters Laboratories Component Recognition Program. File No.: E81982 (N).
Canadian Standards Association: Spirit series connectors are certified by CSA under File No.: LR56804-1,-2, -3
Spirit conforms to the JIC and Machine Tool Standard NFPA79
Spirit meets NEMA 4X, enclosure requirements
Spirit 600V inserts meet the spacing requirements of VDE (3mm through air, 4mm over surface)

Mechanical
Cord Strain Relief: 35 lb min. throughout range per UL 514. Spirit values exceed 100 lb on most applications (50 lb with sleeve glands).
Liquid-Tight Conduit Strain Relief: 150 lb min. per UL 514 for Type M
Termination Crimp Strengths: Spirit values exceed UL 486 for all wire gauges specified
Mating Cycles: 1000 mate/unmate cycles without excessive wear
Shock: 50 G min., all planes. Coupling nut is spring suspended to resist impact damage.
Vibration: Complies with MIL STD 202F, Test Method 204, Test Condition B. Coupling nut is spring loaded to resist loosening under vibration.

Electrical
Voltage: Each insert is stated as AC/DC values
Current: Determined by the bulk temperature rise, including ambient, not exceeding the insert temperature rating which is 90°C. In general, the connectors are capable of carrying the currents of the SO Cable they are designed to accommodate. The NEC Tables on Current Ratings of Wires in Conduit also may be used as a reference to allowable currents.

Current Ratings Min. (Amperes)—All Circuits

Circuits	Terminal Size						
	8	10	12	14	16	18	20
2	40	30	25	18	13	10	7
3	40	25	20	15	10	7	5
4-6	35	20	16	12	8	6	4
7-24		17.5	14	10.5	7	5	3.5
25-42		15	12	9	6	4	3
43+		12.5	10	7.5	5	3.5	2.5

In specific applications larger currents may be adequately handled by a few circuits without difficulty, but in no instance should more than the following maximums be applied to the terminals:

Terminal No.	Absolute Max. Current
8	50A
10 or 12	35A
14 or 16	15A
18 or 20	10A

Contact the factory for advice if the application is questionable. In no instance should the bulk temperature exceed 90°C including ambient when maximum current is applied.

All ratings apply to applications where the connector is not disengaged under load.
Dielectric Withstanding Voltage: Conforms to UL 498. Tested at 1000V plus twice rated voltage for 1 minute between terminals and terminals to the shell.
Insulation Resistance: 5000 MΩ typical at 25°C, 40 to 60% relative humidity
Millivolt Drop: Voltage probes located 1/4" away from crimp barrel

Terminal No.	Wire AWG	Current (Amperes)	mV Drop
16 Tin	16	1.0	1.5
20 Gold	20	1.0	3.1

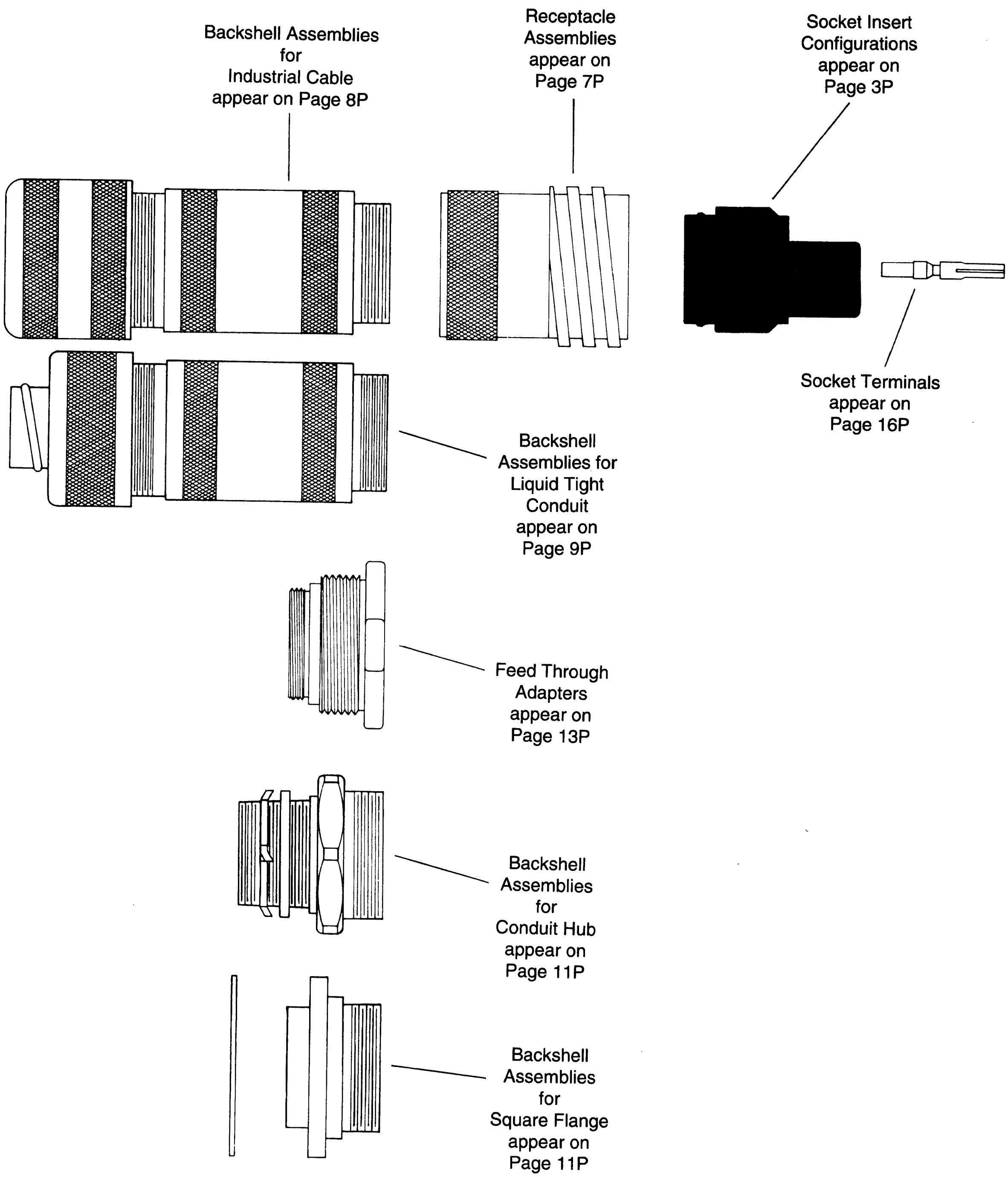
Environmental
Temperature: -40 to +194°F
Humidity: 100 MΩ min. insulation resistance after 96 hours of 95 to 100% relative humidity at 100°C (MIL STD 202F Test Method 103B Condition B)
Moisture Seals: No water enters electrical chamber when subjected to water jet spray per UL 514. Applies to mated or unmated connectors without dust caps. Dust caps afford additional seal protection as well as preventing entry of mud, chips and other debris.
Corrosion: No exposure of base metal evident after 500 hours in salt spray per MIL STD 1344. Shells are inert to most caustics. Hard-coat finish is approved for offshore marine duty.
Chemical Resistance: Inserts impervious to most oils, alcohols, fuels, glycols, salts, soaps and mild alkalis. Contact factory for specific applications.

FEATURES

- To determine length of total assembled connector, total "L" dimensions of selected components
- To determine length of mated pair of total assembled connectors, subtract 5/8" from total of all "L" dimensions

molex Spirit™ Connector System

The Modular Environmental Connector System



HOW TO ORDER SPIRIT

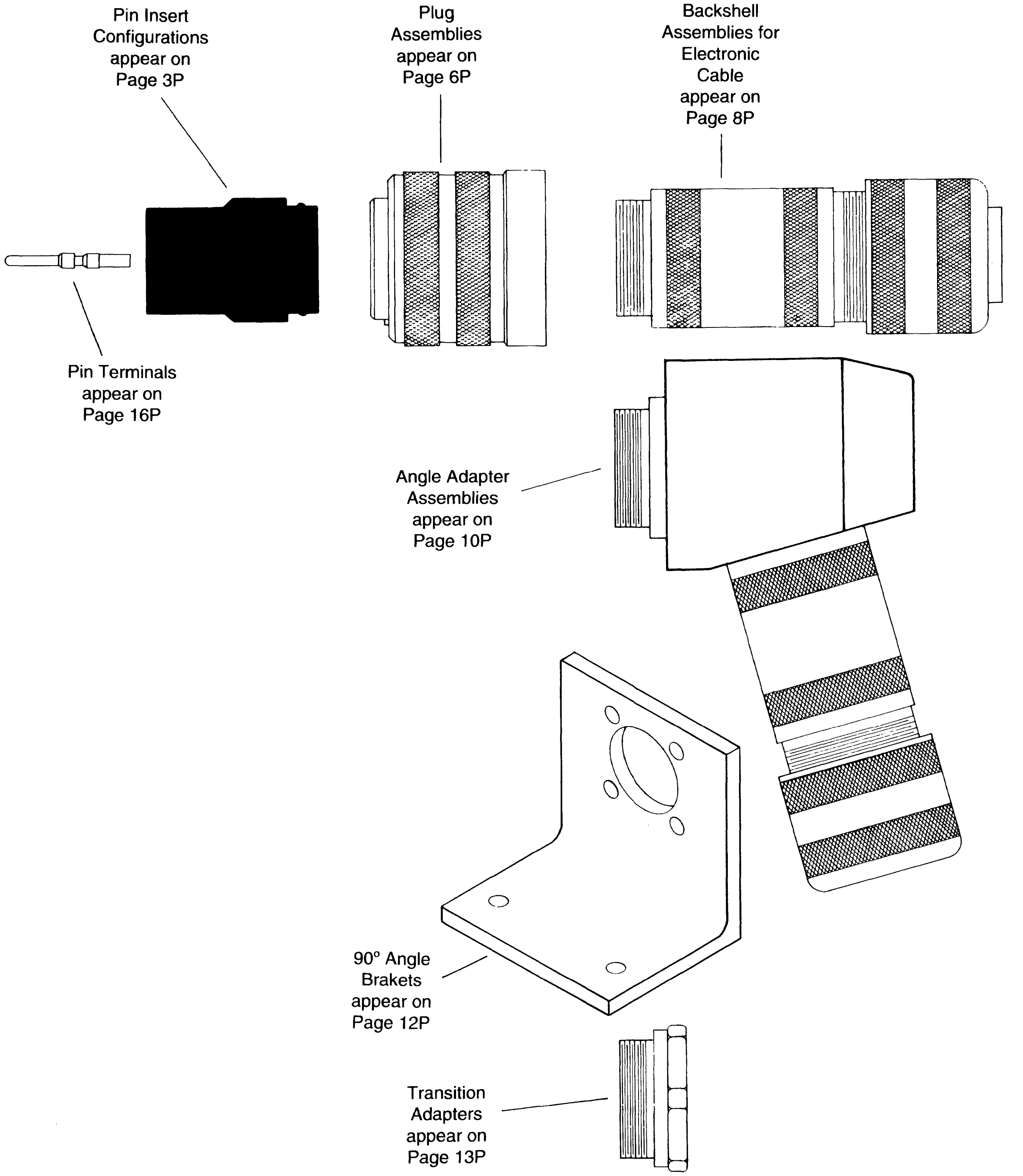
1) Determine Spirit size, number of circuits and wire gauge.
Example: Spirit 30/19 Circuit/16 AWG

2) Select catalog number of appropriate front shell assembly.
Example: Spirit 30/Plug/Pin Insert—30101M03

3) Select catalog number of appropriate back shell assembly.
Example: Spirit 30/Cable Back Shell/Jacket Outside Diameter .750"/Long—30003M03

4) Repeat procedure to order mating assembly.

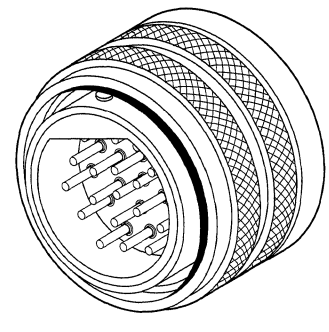
Note: Spirit mated pair consists of 4 catalog numbers

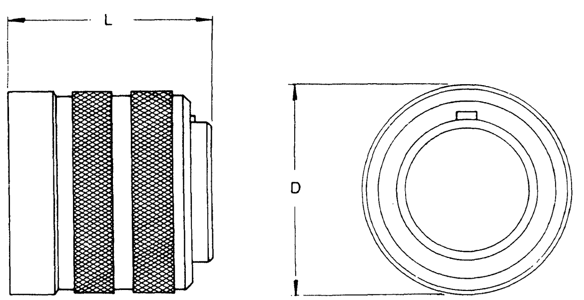


FEATURES

- ACME coupling ensures easy mating even if covered in mud
- The modular design provides flexibility to use various insulator keying options and panel mounting
- Double shrouding seals and hard plastic, chemically resistant insulator make this a robust assembly

Industrial Interfaces™ Spirit™ Front Shell Assembly Plug Assembly





ORDERING INFORMATION AND DIMENSIONS

Max. No. of Circuits	Order No. With Pin Insert	Order No. With Socket Insert	Wire Range AWG	Shell Size	Terminal Finish	Voltage Rating
5	17201M03	17203M03	14-18	17	Tin	600
5	17101M03	17103M03	16-20	17	Tin	600
8	17205M03	17207M03	14-18	17	Tin	250
8	17105M03	17107M03	16-20	17	Tin	250
11	17309M03	17311M03	18-22	17	Tin	250
11	17109M03	17111M03	20-24	17	Gold	250
(4) 12 (5) (3)	30151M03	30153M03	8-10 12-16 16-20	30	Tin	600
(4) 12* (5) (3)	30951M03	30953M03	8-10 10-16 14-20	30	Tin Tin Tin	600
19	30201M03	30203M03	14-18	30	Tin	600

* Indicates assembly without terminals

Unless otherwise indicated, assemblies include prepackaged front shell, insert, terminals and instruction sheet. Terminal package includes 10% spares. All front shells require a back shell to complete the connector half.

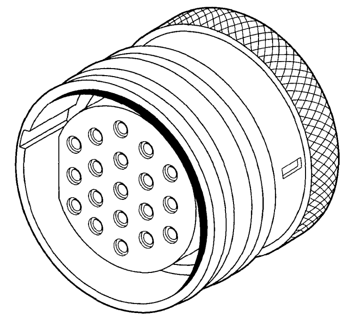
Max. No. of Circuits	Order No. With Pin Insert	Order No. With Socket Insert	Wire Range AWG	Shell Size	Terminal Finish	Voltage Rating
19	30101M03	30103M03	16-20	30	Tin	600
35	30309M03	30311M03	18-22	30	Tin	250
35	30109M03	30111M03	20-24	30	Gold	250
20	36205M03	36207M03	10-14	36	Tin	600
20	36105M03	36107M03	12-16	36	Tin	600
37	36201M03	36203M03	14-18	36	Tin	600
37	36101M03	36103M03	16-20	36	Tin	600
50	36309M03	36311M03	18-22	36	Tin	250
50	36109M03	36111M03	20-24	36	Gold	250

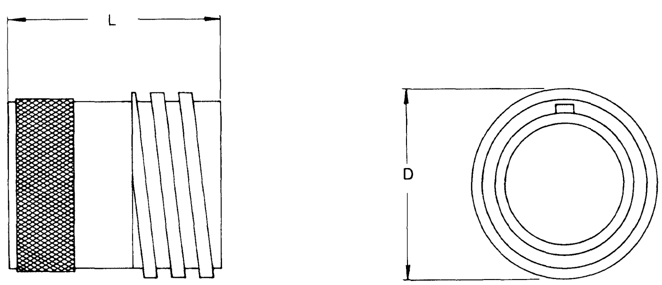
Shell Size	Dimension L	Dimension D
17	32.38 (1.275)	33.32 (1.312)
30	32.38 (1.275)	50.16 (1.975)
36	32.38 (1.275)	57.15 (2.250)

FEATURES

- ACME coupling ensures easy mating even if covered in mud
- The modular design provides flexibility to use various insulator keying options and panel mounting
- Double shrouding seals and hard plastic, chemically resistant insulator make this a robust assembly

Industrial Interfaces™ Spirit™ Front Shell Assembly Receptacle Assembly





ORDERING INFORMATION AND DIMENSIONS

Max. No. of Circuits	Order No. With Pin Insert	Order No. With Socket Insert	Wire Range AWG	Shell Size	Terminal Finish	Voltage Rating
5	17202M03	17204M03	14-18	17	Tin	600
5	17102M03	17104M03	16-20	17	Tin	600
8	17206M03	17208M03	14-18	17	Tin	250
8	17106M03	17108M03	16-20	17	Tin	250
11	17310M03	17312M03	18-22	17	Tin	250
11	17110M03	17112M03	20-24	17	Gold	250
(4) 12 (5) (3)	30152M03	30154M03	8-10 12-16 16-20	30	Tin	600
(4) 12* (5) (3)	30952M03	30954M03	8-10 10-16 14-20	30	Tin Tin Tin	600
19	30202M03	30204M03	14-18	30	Tin	600
19	30102M03	30104M03	16-20	30	Tin	600
35	30310M03	30312M03	18-22	30	Tin	250
35	30110M03	30112M03	20-24	30	Gold	250
20	36206M03	36208M03	10-14	36	Tin	600
20	36106M03	36108M03	12-16	36	Tin	600
37	36202M03	36204M03	14-18	36	Tin	600
37	36102M03	36104M03	16-20	36	Tin	600
50	36310M03	36312M03	18-22	36	Tin	250
50	36110M03	36112M03	20-24	36	Gold	250

* Indicates assembly without terminals

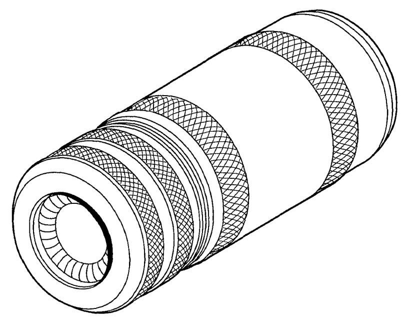
Unless otherwise indicated, assemblies include prepackaged front shell, insert, terminals and instruction sheet. Terminal package includes 10% spares. All front shells require a back shell to complete the connector half.

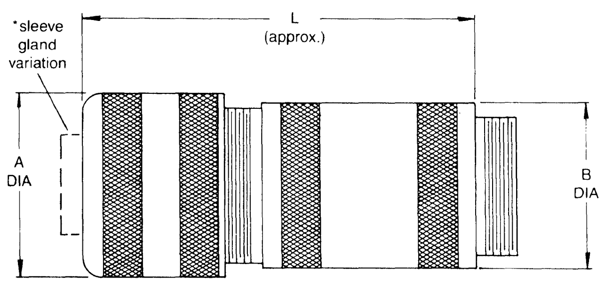
Shell Size	Dimension L	Dimension D
17	34.92 (1.375)	30.14 (1.187)
30	34.92 (1.375)	44.45 (1.750)
36	34.92 (1.375)	50.80 (2.000)

FEATURES

- The expandable elastomer diaphragm has NEMA 4X sealing and adapts to a wide range of cable diameters
- The Stainless Steel strain relief spring has an extraordinary strain relief without the use of tools or hardware

molex® Industrial Interfaces™ Spirit™ Back Shell Assembly Cable Back Shell





ORDERING INFORMATION AND DIMENSIONS

Shell Size	Order No.		Cable Range (in.)	Dimension			
	Long Back Shell	Short Back Shell		A	B	L (Long)	L (Short)
17	17037M03	17038M03	.250*-.350	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
17	17003M03	17004M03	.350-.500	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
17	17009M03	17010M03	.500-.650	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
30	30037M03	30038M03	.500*-.700	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
30	30003M03	30004M03	.700-.950	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
30	30053M03	30054M03	.950-1.150	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
36	36037M03	36038M03	.700*-.900	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)
36	36003M03	36004M03	.900-1.150	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)
36	36053M03	36054M03	1.150-1.350	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)
36	36067M03	36068M03	1.350-1.425	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)

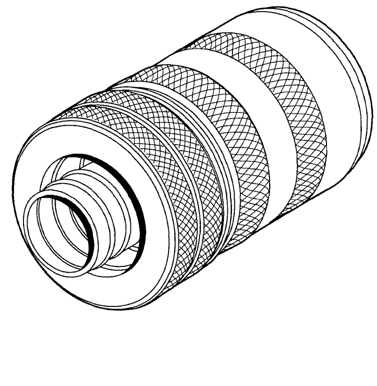
* Sleeve gland variation

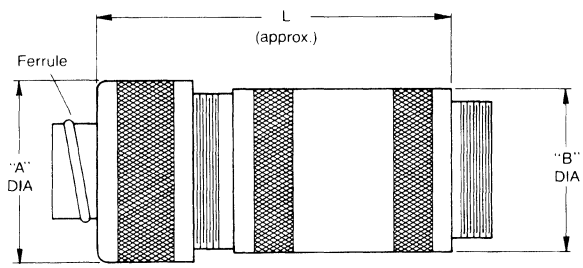
Assembly includes prepackaged back shell, cable seal, strain relief spring and compression nut, fully assembled

FEATURES

- Direct attachment eliminates transition adapters
- Available for several metallic and nonmetallic-liquid tight conduits. This provides flexibility in industrial applications to meet UL and NEC requirements.

Industrial Interfaces™ Spirit™ Back Shell Assemblies Liquid-Tight Conduit Back Shells





ORDERING INFORMATION AND DIMENSIONS

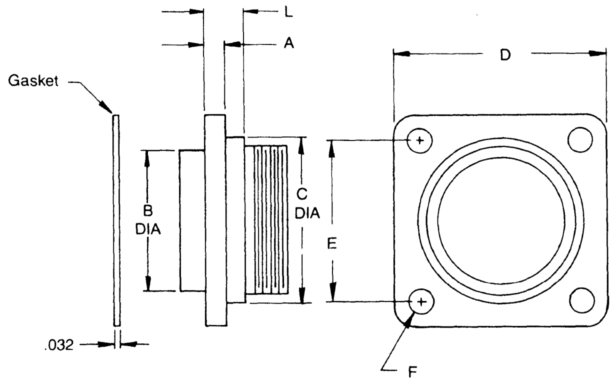
Shell Size	Order No.		Conduit Trade Size	Back Shell Style	Dimension			
	Long Back Shell	Short Back Shell			A	B	L (Long)	L (Short)
17	17007M03	17006M03	3/8	M	29.36 (1.156)	26.67 (1.050)	50.80 (2.000)	34.92 (1.375)
17	17012M03	17011M03	1/2	M	29.36 (1.156)	26.67 (1.050)	50.80 (2.000)	34.92 (1.375)
30	30064M03	30063M03	1/2	M	44.45 (1.750)	41.27 (1.625)	92.07 (3.625)	63.50 (2.500)
30	30007M03	30006M03	3/4	M	44.45 (1.750)	41.27 (1.625)	92.07 (3.625)	63.50 (2.500)
30	30012M03	30011M03	1	M	44.45 (1.750)	41.27 (1.625)	92.07 (3.625)	63.50 (2.500)
36	36007M03	36006M03	3/4	M	50.80 (2.000)	47.62 (1.875)	123.82 (4.875)	73.02 (2.875)
36	36012M03	36011M03	1	M	50.80 (2.000)	47.62 (1.875)	123.82 (4.875)	73.02 (2.875)
17	17062M03	17061M03	3/8	R	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
17	17057M03	N/A	1/2	R	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
30	30057M03	30056M03	1/2	R	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
30	30062M03	30061M03	3/4	R	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
36	36057M03	36056M03	3/4	R	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)
36	36062M03	36061M03	1	R	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)
36	N/A	36046M93	1-1/4	R	61.46 (2.420)	47.62 (1.875)	N/A	63.50 (2.500)
17	17062M13	17061M13	3/8	T	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
17	17057M13	17056M13	1/2	T	29.36 (1.156)	26.67 (1.050)	57.15 (2.250)	41.27 (1.625)
30	30057M13	30056M13	1/2	T	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
30	30062M13	30061M13	3/4	T	44.45 (1.750)	41.27 (1.625)	101.60 (4.000)	73.02 (2.875)
36	36057M13	36056M13	3/4	T	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)
36	36062M13	36061M13	1	T	50.80 (2.000)	47.62 (1.875)	133.35 (5.250)	82.55 (3.250)

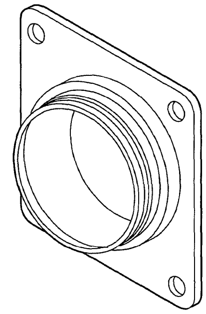
Conduit Composition	Description	Back Shell Style	Conduit Types
Metallic	Plastic Over Metal	M	ALT, AT, CSA, EF, EFL, HC, HEX, LA, LOR, LT, OR, UXTL, UA, ZHN
Nonmetallic	Heavy Wall Plastic	M	Polytuff I, Xtra Flex Type 2
Nonmetallic	Nylon-Reinforced Rubber	R	CN-P, LMN-P
Nonmetallic	Thin Corrugated Plastic	T	Polytuff II, Xtra Flex Type 1

Assembly includes prepackaged back shell, plastic seal, liquid-tight conduit ferrule, tie wrap and compression nut, fully assembled

Industrial Interfaces™
Spirit™
Back Shell Assembly
Square Flange Back Shell

Spirit square flange adapters are threaded to front shell assemblies. Hand tightening the adapter pressurizes the insert to the front shell and achieves maximum holding force. No wrenching required.
Square flange adapters are designed to MS mounting dimensions to eliminate the need for changing drawings when connector systems are upgraded.





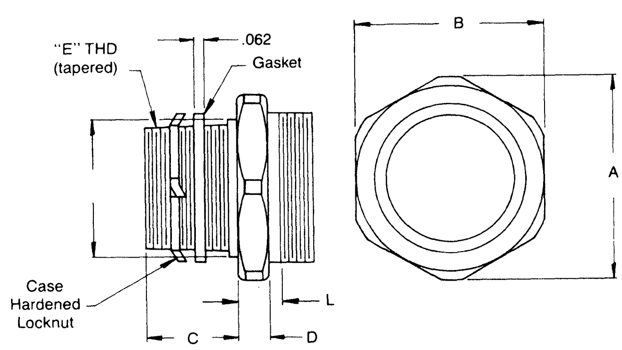
Shell Size	Order No.	Dimension							Panel Mount Hole Diameter	Panel Mount Screw Size	MIL Spec Ref
		A	B	C	D	E	F	L			
17	17014M03	3.17 (.125)	21.59 (.850)	25.40 (1.000)	32.53 (1.281)	24.61 (.969)	3.81 (.150)	7.92 (.312)	26.16 (1.030)	No. 6	MS 16
30	30014M03	3.17 (.125)	38.10 (1.500)	41.40 (1.630)	50.80 (2.000)	39.67 (1.562)	4.49 (.177)	7.92 (.312)	45.21 (1.780)	No. 8	MS 28
36	36014M03	3.17 (.125)	43.68 (1.720)	46.22 (1.820)	57.15 (2.250)	44.45 (1.750)	5.30 (.209)	7.92 (.312)	51.56 (2.030)	No. 10	MS 32

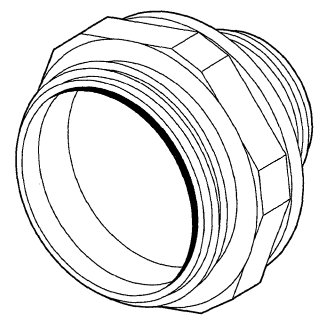
Assembly includes flange back shell and neoprene gasket

To mount flange on inside of panel place gasket on other side and assemble front shell after flange is mounted.
Maximum panel thickness for this application is .125".

Conduit Hub Back Shell

Spirit conduit hub adapters allow for a variety of connector mounting methods. The freedom to select wire way or panel mount through use of a knockout punch; hub or pendant mount; or 90 or 45° angle conduit coupling attachment are but a few of the possibilities.
Shell material is 6061-T6 machined aluminum dark hard coated with Teflon* seal coat for maximum corrosion protection with built-in thread lubrication.





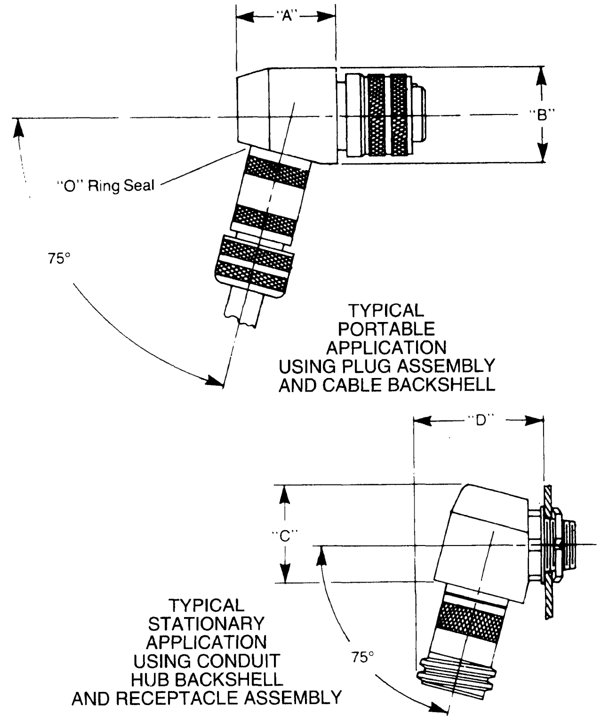
Shell Size	Order No.	Trade Size	Dimension					E Thread	Panel Mount Hole Diameter
			A	B	C	D	L		
17	17018M03	1/2	31.75 (1.250)	28.57 (1.125)	14.12 (.556)	5.38 (.212)	7.92 (.312)	1/2 to 14 NPT	22.22 (.875)
30	30018M03	3/4	49.60 (1.953)	44.45 (1.750)	15.24 (.600)	6.98 (.275)	9.52 (.375)	3/4 to 14 NPT	28.16 (1.109)
30	30019M03	1	49.60 (1.953)	44.45 (1.750)	16.51 (.650)	6.98 (.275)	9.52 (.375)	1 to 11-1/2 NPT	34.92 (1.375)
36	36018M03	1	55.14 (2.171)	50.80 (2.000)	16.51 (.650)	10.05 (.396)	12.59 (.496)	1 to 11-1/2 NPT	34.92 (1.375)
36	36019M03	1-1/4	55.14 (2.171)	50.80 (2.000)	17.78 (.700)	10.05 (.396)	12.59 (.496)	1-1/4 to 11-1/2 NPT	44.04 (1.734)

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company

Note: Do not use with 30151M03 or 30951M03. Improper spacings of power conductors can result.

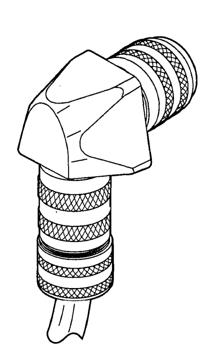
Assembly includes prepackaged back shell, neoprene gasket and locknut

75° Angle Adapter



Spirit angle adapters are designed to be threaded to a variety of front shell and back shell combinations. The same adapter can be assembled to the portable or stationary half of the connector. A hub adapter must be used as a stationary mount to enable adjustment of the take out angle.

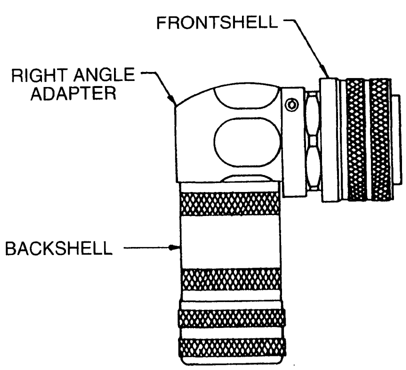
Shell material is 6061-T6 machined aluminum dark hard coated with Teflon* seal coat for maximum corrosion protection with built-in thread lubrication.

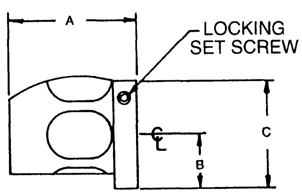


Shell Size	Order No.	Dimension			
		A	B	C	D
17	17055M03	44.45 (1.750)	38.10 (1.500)	47.62 (1.875)	47.62 (1.875)
30	30055M03	53.97 (2.125)	50.80 (2.000)	56.74 (2.234)	60.32 (2.375)
36	36055M03	60.32 (2.375)	57.15 (2.250)	62.89 (2.476)	69.85 (2.750)

Assembly includes angle shell, O-ring seal and instruction sheet
Note: Front shell and back shell sold separately

Right Angle Adapter for Portable Front Shells



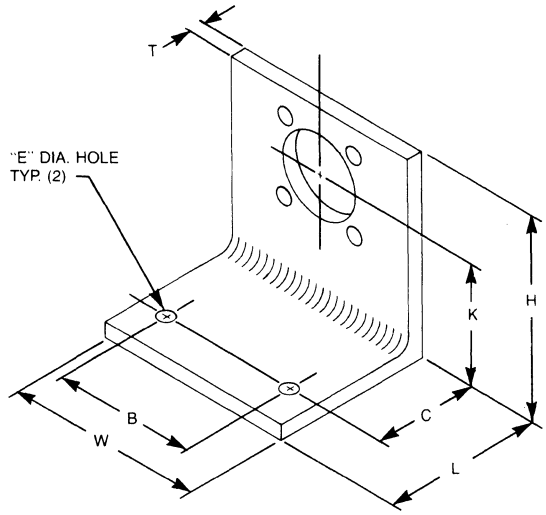


Shell Size	Order No.	Shell Material	Dimension		
			A	B	C
36	36075M03	Aluminum	68.07 (2.680)	57.15 (2.250)	28.44 (1.120)

* Teflon is a registered trademark of E.I. DuPont de Nemours and Company

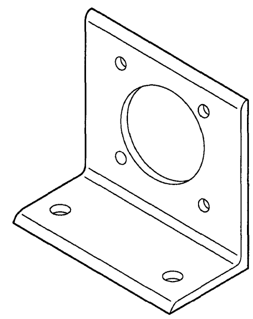
Spirit™ Accessories
90° Angle Brackets

Flange Mount



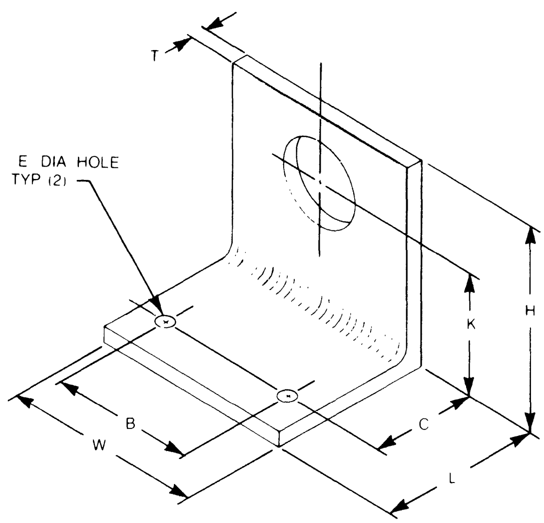
Angle brackets are available for either flange-mount applications or for feed-through adapter mountings. The flange mount would be used where seal on the mounted side is not required. The feed-through adapter mounting would be used where seal is required on both sides of the bracket. An example would be an in-line cable connection on the external frame of a machine.

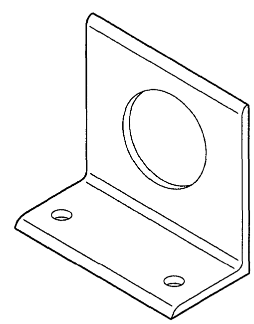
Material is aluminum angle stock black anodized.



Shell Size	Order No.	Description	Dimension							
			T	W	L	K	H	E	C	B
17	98201M01	Flange Bracket	4.74 (.187)	63.50 (2.500)	76.20 (3.000)	38.10 (1.500)	63.50 (2.500)	6.98 (.275)	38.10 (1.500)	44.45 (1.750)
30	98202M01	Flange Bracket	6.35 (.250)	88.90 (3.500)	63.50 (2.500)	50.80 (2.000)	88.90 (3.500)	6.98 (.275)	44.45 (1.750)	63.50 (2.500)
36	98203M01	Flange Bracket	6.35 (.250)	88.90 (3.500)	63.50 (2.500)	50.80 (2.000)	88.90 (3.500)	6.98 (.275)	44.45 (1.750)	63.50 (2.500)

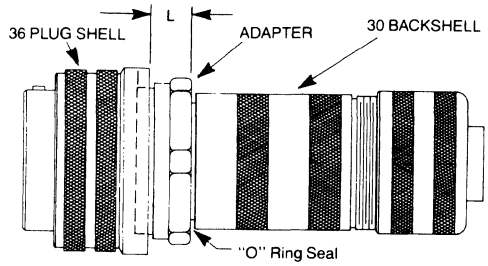
Feed-Through Adapter Mount





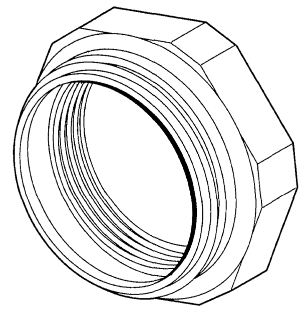
Shell Size	Order No.	Description	Knockout Trade Size	Dimension							
				T	W	L	K	H	E	C	B
30	98204M01	Feed-Through Bracket	1-1/2"	6.35 (.250)	88.90 (3.500)	63.50 (2.500)	50.80 (2.000)	88.90 (3.500)	6.98 (.275)	44.45 (1.750)	63.50 (2.500)
36	98205M01	Feed-Through Bracket	2"	6.35 (.250)	88.90 (3.500)	63.50 (2.500)	50.80 (2.000)	88.90 (3.500)	6.98 (.275)	44.45 (1.750)	63.50 (2.500)

Transition Adapter



Spirit transition adapters permit the use of different front shell and back shell sizes allowing increased cable and conduit ranges. This adapter assembles between front shell and back shell.

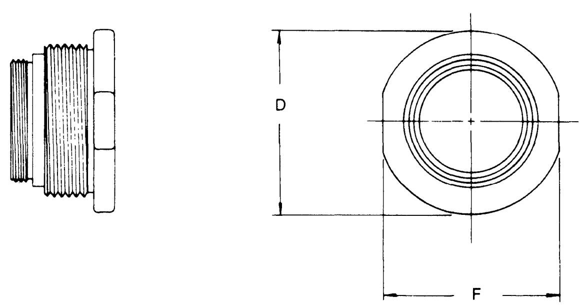
Shell material is 6061-T6 machined Aluminum dark hard coated with Teflon* seal coat for maximum corrosion protection with built-in thread lubrication.



Order No.	Description	Front Shell Size	Back Shell Size	Dimension L
30087M03	Expansion Adapter	30	36	12.70 (.500)
36045M03	Reducing Adapter	36	30	11.43 (.450)

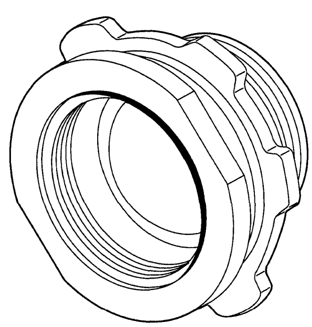
Assemblies include O-ring seal and instructions

Feed-Through Mounting Adapter



To allow preassembled connectors using receptacle front shells and cable or liquid-tight conduit back shells to be mounted on frames, bulkheads or NEMA enclosures without disturbing connector assembly.

Spirit 30 and 36 now offer advantages when installing prefabricated cable assemblies or when connecting "in the open" with seals required on both sides.

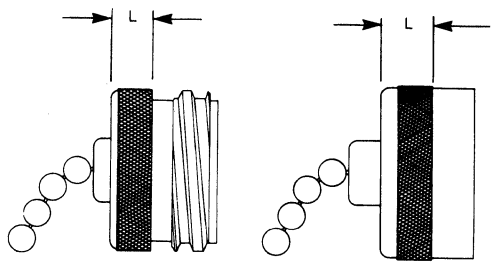


Shell Size	Order No.	Knockout Trade Size (in.)	Mounting Hole Diameter	Dimension D	Dimension F
30	30069M03	1-1/2"	49.19 (1.937)	57.15 (2.250)	53.97 (2.125)
36	36069M03	2"	61.11 (2.406)	66.67 (2.625)	63.50 (2.500)

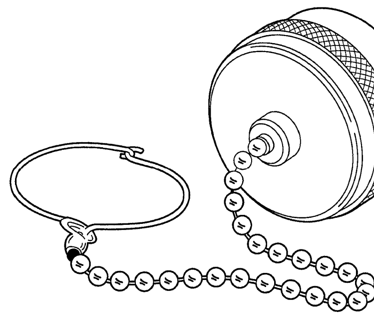
* Teflon is a registered trademark of E.I. DuPont de Nemours and Company
Assembly includes locknut and O-ring

Industrial Interfaces™ Spirit™ Accessories

Metal-Threaded Dust Covers



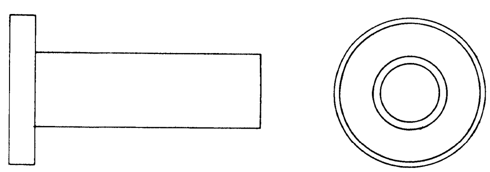
Spirit dust covers are available in all shell sizes and assure environmental integrity when connectors are in an unmated condition. Material is machined 6061-T6 dark hard-coated aluminum. 6" Stainless Steel chain and mounting loop for attachment to front shell assemblies is permanently attached.



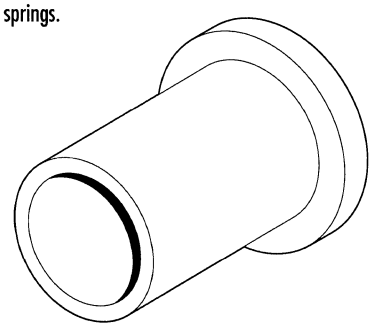
Shell Size	Order No.		Dimension L Additional Length to Connector
	Plug Dust Cap	Receptacle Dust Cap	
17	17043M03	17044M03	9.52 (.375)
30	30043M03	30044M03	9.52 (.375)
36	36043M03	36044M03	9.52 (.375)

Assembly includes dust cover, seals and stainless steel chain with mounting loop and instruction sheet

Small Diameter Sleeve Glands



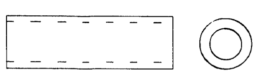
The small diameter sleeve gland replaces flat diaphram glands to accommodate the smaller wire diameters or discrete wire bundles. Sleeve glands cannot be used on extra large diameter back shells (30053M03, 30054M03, 36053M03 and 36054M03) due to the utilization of larger plungers and springs.



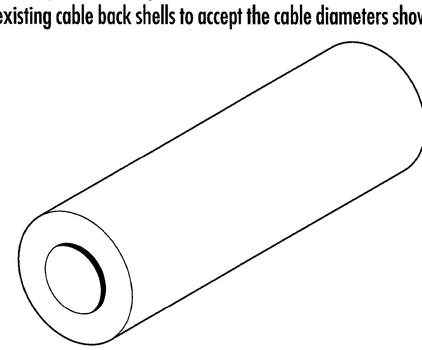
Shell Size	Gland Order No.	Cable Range (in.)	For Use with the Following Back Shells
17	17031M01	.250-.350	17003M03, 17004M03
30	30031M01	.450-.700	30003M03, 30004M03
36	36031M01	.650-.900	36003M03, 36004M03

See pages V-25 to V-26 for cable types, etc.

Cable Range Reducers



Cable range reducers allow the use of very small diameter electronic cable in the Spirit cable back shields. The Norprene thermoplastic bushing accessories are available to retrofit existing cable back shells to accept the cable diameters shown.



Order No.	Description	Cable Range (in.)	Use With	
			Long Back Shells	Short Back Shells
98130M01	Bushing—5 Pack	.130-.180	17037M03	17038M03
98131M01	Bushing—5 Pack	.180-.250	17003M03	17004M03
98132M01	Bushing—5 Pack	.200-.250	30037M03	30038M03
98133M01	Bushing—5 Pack	.250-.310	30037M03	30038M03
98134M01	Bushing—5 Pack	.310-.370	30037M03	30038M03
98135M01	Bushing—5 Pack	.370-.44C	30037M03	30038M03
98136M01	Bushing—5 Pack	.520-.620	36037M03	36038M03

Industrial Interfaces™ Advantage™ Technical Specifications

Agency Approvals

National Electric Code: Connectors conform to the NEC if applied within the constraints of the code

Canadian Standards Association: Advantage series meets the design requirements of CSA

Advantage conforms to the JIC and Machine Tool Standard NFPA79

Advantage 600V inserts meet the spacing requirements of VDE (3mm through air, 4mm over surface)

Mechanical

Cord Strain Relief: 35 lb min. throughout range per UL 514. Values exceed 100 lb on most applications

Liquid-Tight Conduit Strain Relief: 150 lb min. per UL 514 on type "M" conduit

Terminal Crimp Strengths: Values exceed UL 486 for all wire gauges specified

Mating Cycles: 200 mate/unmate cycles without excessive wear

Shock: 50 G min., all planes

Vibration: Complies with MIL STD 202F, Test Method 204, Test Condition B

Electrical

Voltage: Each insert is stated as AC/DC values

Current: Determined by the bulk temperature rise, including ambient, not exceeding the insert temperature rating, which is 90°C. In general, the connectors are capable of carrying the currents of the SO cable they are designed to accommodate. The NEC tables on current ratings of wires in conduit also may be used as reference to allowable currents.

Current Ratings Min. (Amperes)—All Circuits							
Circuits	Terminal Size						
	8	10	12	14	16	18	20
2	40	30	25	18	13	10	7
3	40	25	20	15	10	7	5
4-6	35	20	16	12	8	6	4
7-24		17.5	14	10.5	7	5	3.5
25-42		15	12	9	6	4	3
43+		12.5	10	7.5	5	3.5	2.5

In specific applications larger currents may be adequately handled by a few circuits without difficulty.

Terminal No.	Max. Current (Amperes)
8	50
10 or 12	35
14 or 16	15
18 or 20	10

Contact the factory for advice if the application is questionable. The bulk temperature should not exceed 90°C including ambient when maximum current is applied.

All ratings apply to applications where the connector is not disengaged under load. Consult the factory for advice if the application requires disconnecting under load.

Dielectric Withstanding Voltage: Conforms to UL 498. Tested at 1000V plus twice rated voltage for 1 minute between terminals and terminals to the shell.

Insulation Resistance: 5000 MΩ typical at 25°C, 40 to 60% relative humidity

Millivolt Drop: Voltage probes located 1/4" away from crimp barrel

Terminal No.	Wire AWG	Current (Amperes)	mV Drop
16 Tin	16	1	1.5
16 Tin	16	10	17.0
20 Gold	20	1	3.1
20 Gold	20	5	16.0

Environmental

Temperature: -40 to +90°C

Humidity: 100 MΩ min. insulation resistance after 96 hours of 95 to 100% relative humidity at 100°C (MIL STD 202F Test Method 103B Condition B)

Corrosion: No exposure of base metal evident after 24 hours in salt spray per MIL STD 202 Method 101

Chemical Resistance: Inserts impervious to most oils, alcohols, fuels, glycols, salts, soaps and mild alkalis. Contact factory for specific applications.

FEATURES AND SPECIFICATIONS

Features and Benefits

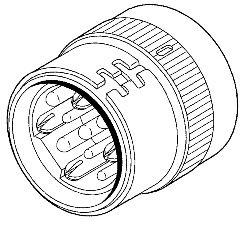
- Advantage 51 and 53 feature a spring release coupling system on the portable plug. A squeeze and pull motion quickly disengages the connector.
- The positive lock prevents accidental unmating and resists vibration.
- Shells are blind mating and do not require visual orientation. Shell and insert keying prevent terminals from mating unless properly aligned.
- A shroud is formed by the insert, as well as the shell. Double shrouding enhances the seal and affords mechanical protection of the pins.

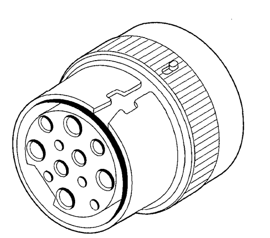
Materials/Construction

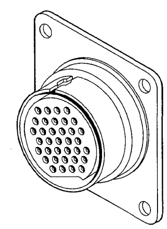
- All assemblies come with shells and inserts. Terminals must be purchased separately.
- Shells are screw machined Brass. Flanges are steel. All shell hardware is Zinc plated with a clear Chromate finish. Contact factory for other finishes available by special order.
- The release spring is made from spring stock stainless steel for long life and positive action.
- Inserts are a thermoplastic elastomer and will not crack or chip.

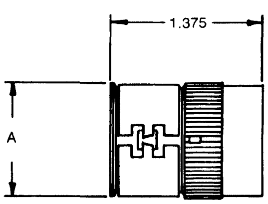
Application Notes

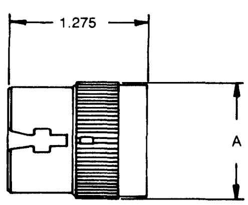
- Portable plugs and in-line receptacles require a back shell to complete the connector half.
- Portable plugs and in-line receptacles are assembled to a back shell by hand turning the joining threads until fully seated.
- Direct mount assemblies do not require a back shell and fasten directly to a panel. A gasket is included.
- The 4-hole direct mounts come with a backup plate to allow mounting to either the front or back side of a panel.
- An insertion hand tool is necessary to prepare the insert and to load the terminals. Refer to section on hand tools for details.
- Terminals may be soldered or crimped to the wires.
- Many options exist as to what terminal sizes, types and finishes may be used. Refer to terminal specification page for details.
- In general, socket terminals should be specified for the electrically alive or source side of the connector.
- Ratings are based on not breaking under load. Contact factory for other requirements.

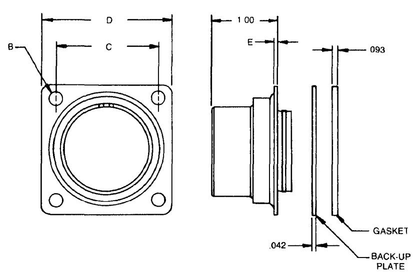

Portable Plug Assembly


In-Line Receptacle Assembly


Direct Mount Receptacle Assembly 4-Hole







ORDERING INFORMATION AND DIMENSIONS

Charted Dimensions					
Shell Size	Dimension				
	A	B	C	D	E
51	26.92 (1.060)	3.81 (.150)	24.61 (.969)	32.51 (1.280)	1.06 (.042)
53	41.91 (1.650)	4.49 (.177)	39.67 (1.562)	50.80 (2.000)	1.24 (.049)

Panel Mounting Hole Dimensions—4 Hole				
Shell Size	MS Size	Center Hole (Diameter)*	Screw Hole (4)	Screw Size No.
51	16	1.030/1.080	.150	6
53	28	1.780/1.780	.177	8

Ordering Information										
Max. No. of Circuits	Portable Plugs		In-Line Receptacles		Direct Mount Receptacles (4 Hole)		Wire Range AWG	Shell Size	Accepts Terminal Sizes	Voltage Rating
	Standard Service with Pin Insert	Reverse Service with Socket Insert	Standard Service with Socket Insert	Reverse Service with Pin Insert	Standard Service with Socket Insert	Reverse Service with Pin Insert				
5	51901M04	51903M04	51904M04	51902M04	51904M34	51902M34	14-20	51	14, 16	600
8	51905M04	51907M04	51908M04	51906M04	51908M34	51906M34	14-20	51	14, 16	250
11 (10)	51909M04	51911M04	51912M04	51910M04	51912M34	51910M34	18-24	51	18, 20	250
(1)							14-20		14, 16	
12 (4)	53951M04	53953M04	53954M04	53952M04	53954M34	53952M34	8-10	53	8	600
(5)							10-16		10, 12	
(3)							14-20		14, 16	
19	53901M04	53903M04	53904M04	53902M04	53904M34	53902M34	14-20	53	14, 16	600
35 (33)	53909M04	53911M04	53912M04	53910M04	53912M34	53910M34	18-24	53	18, 20	250
(2)							14-20		14, 16	

* First dimension is MIL Spec dimension for front mount. Second dimension allows mounting from rear.

FEATURES AND SPECIFICATIONS

Industrial Interfaces™ Advantage™ Front Shells 54

Features and Benefits

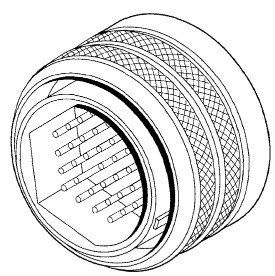
Mating on the Advantage 54 is accomplished by an Acme coupling ring on the portable plug. The mechanical advantage afforded by the course ACME allows easy and rapid mating of large circuit sizes. Less than 2-1/2 turns are required for engagement.

Materials/Construction

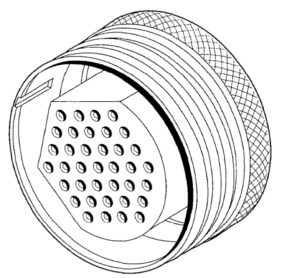
- All assemblies come with shells and inserts. Terminals must be purchased separately.
- Shells are machined Aluminum. Flanges are steel. All shell hardware is bright clear anodized. Contact factory for other finishes.
- Inserts are a thermoplastic elastomer and will not crack or chip.

Application Notes

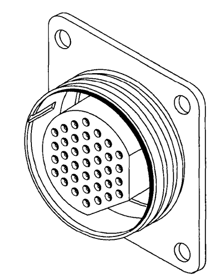
- Portable plugs and in-line receptacles require a back shell to complete the connector half.
- Portable plugs and in-line receptacles are assembled to a back shell by hand turning the joining threads until fully seated.
- Direct mount assemblies do not require a back shell and fasten directly to a panel. A gasket is included.
- The 4-hole direct mounts come with a backup plate to allow mounting to either the front or back side of a panel.
- An insertion hand tool is necessary to prepare the insert and to load the terminals. Refer to section on hand tools for details.
- Terminals may be soldered or crimped to the wires.
- Many options exist as to what terminal sizes, types and finishes may be used. Refer to terminal specification page for details.
- In general, socket terminals should be specified for the electrically alive or source side of the connector.
- Ratings are based on not breaking under load. Contact factory for other requirements.



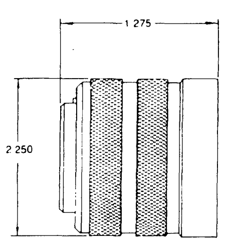
Portable Plug Assembly In-Line Receptacle Assembly

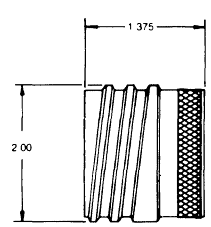


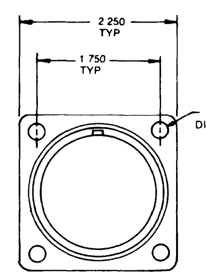
In-Line Receptacle Assembly

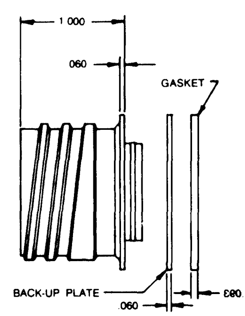


Direct Mount Receptacle Assembly









ORDERING INFORMATION AND DIMENSIONS

Ordering Information										
Max. No. of Circuits	Portable Plugs		*In-Line Receptacles*		*Direct Mount Receptacles (4 Hole)*		Wire Range AWG	Shell Size	Accepts Terminal Sizes	Voltage Rating
	Standard Service with Pin Insert	Reverse Service with Socket Insert	Standard Service with Socket Insert	Reverse Service with Pin Insert	Standard Service with Socket Insert	Reverse Service with Pin Insert				
20	54905M04	54907M04	54908M04	54906M04	54908M34	54906M34	10-16	54	10, 12	600
37	54901M04	54903M04	54904M04	54902M04	54904M34	54902M34	14-20	54	14, 16	600
50	54909M04	54911M04	54912M04	54910M04	54912M34	54910M34	18-24	54	18, 20	250

Dimensions				
Shell Size	MS Size	Center Hole (Diameter)	Screw Hole (4)	Screw Size No.
54	32	2.030	.177	8

May be mounted from front or rear of panel

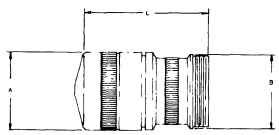
FEATURES

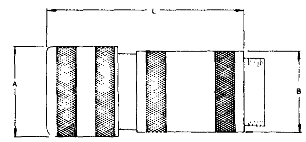
Industrial Interfaces™ Advantage™ Back Shells 51, 53 and 54

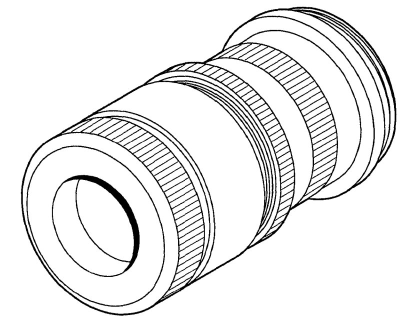
Cable Back Shells

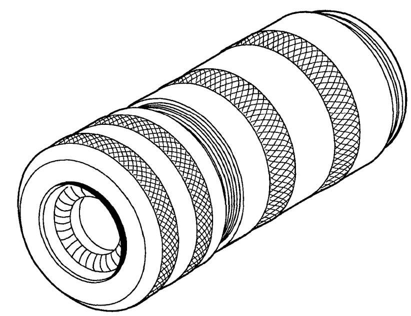
Features and Benefits

- The expandable elastomer diaphragm has NEMA 4 sealing and adapts to a wide range of cable diameters
- The Stainless Steel strain relief spring has an extraordinary strain relief without the use of tools or hardware







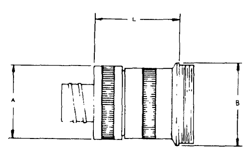


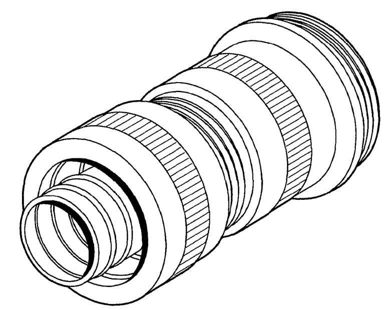
Shell Size	Order No.	Cable Range (Diameter) (in.)	Style	Shell Material	Dimension		
					A	B	L
	51003M04	.300 x .500			29.21 (1.150)	25.65 (1.010)	43.18 (1.700)
51	51004M04	.225 x .350	E	Brass	22.86 (.900)	25.65 (1.010)	50.03 (1.970)
	51005M04	.500 x .650			29.21 (1.150)	25.65 (1.010)	43.18 (1.700)
	53003M04	.500 x .750			35.30 (1.390)	39.87 (1.570)	60.96 (2.400)
53	53004M04	.300 x .500	E	Brass	29.21 (1.150)	39.87 (1.570)	55.88 (2.200)
	53005M04	.700 x .950			41.40 (1.630)	39.87 (1.570)	60.19 (2.370)
	54003M04	.700 x .950	E	Brass	41.40 (1.630)	39.87 (1.570)	60.19 (2.370)
54	54004M04	.500 x .750	E	Brass	35.30 (1.390)	39.87 (1.570)	60.96 (2.400)
	54005M04	.900 x 1.150	I	Aluminum	49.78 (1.960)	47.75 (1.880)	88.90 (3.500)

Liquid-Tight Conduit Back Shells

Features and Benefits

- Direct attachment eliminates transition adapters
- Available for several metallic and nonmetallic liquid-tight conduits. This provides flexibility in industrial applications to meet UL and NEC requirements.





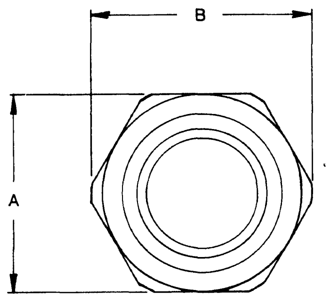
Shell Size	Order No.	Trade Size	Style	Shell Material	Dimension		
					A	B	L
51	51006M04	3/8	M	Brass	29.97 (1.180)	25.40 (1.000)	28.44 (1.120)
	51006M24		R				
51	51011M04	1/2	M	Brass	29.97 (1.180)	25.40 (1.000)	28.44 (1.120)
	51011M24		R				
53	53063M04	1/2	M	Brass	37.33 (1.470)	39.87 (1.570)	49.53 (1.950)
	53063M24		R				
53	53006M04	3/4	M	Brass	37.33 (1.470)	39.87 (1.570)	49.53 (1.950)
	53006M24		R				
54	54006M04	3/4	M	Brass	37.33 (1.470)	47.75 (1.880)	52.07 (2.050)
	54006M24		R				
54	54011M04	1	M	Contact Factory	Contact Factory		
	54011M24		R				

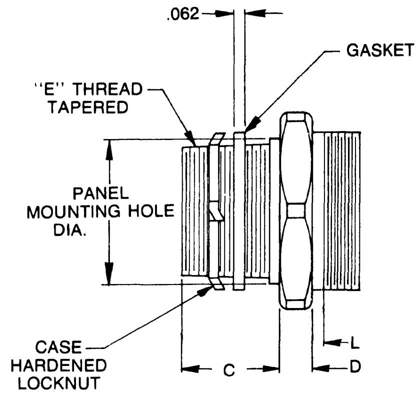
Conduit Composition	Description	Back Shell Style	Conduit Types
Metallic	Plastic Over Metal	M	ALT, AT, CSA EF, EFL, HC, HEX, LA, LOR, LT, OR, UXTL, UA, ZHN
Nonmetallic	Heavy Wall Plastic	M	Polytuff I, Xtra Flex Type 2
Nonmetallic	Nylon-Reinforced Rubber	R	CN-P, LMN-P

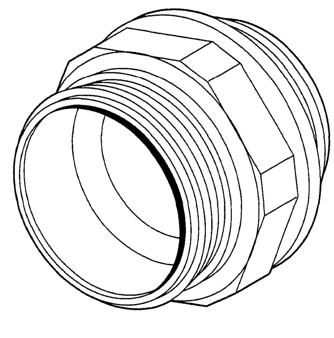
Industrial Interfaces™ Advantage™ Back Shells 51, 53 and 54

Conduit Hub Back Shells

Conduit hub adapters allow for a variety of connector mounting methods. The freedom to select wire way or panel mount through use of a knockout punch; hub or pendant mount; or 90 or 45° angle conduit coupling attachment are but a few of the possibilities. Shells made from Aluminum are bright clear anodized. Shells made from Brass are Zinc plated with a clear Chromate finish. Maximum panel thickness is 1/8".





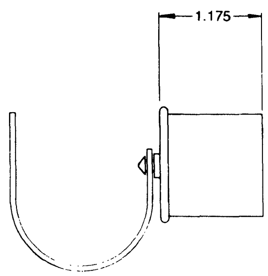


Shell Size	Order No.	Trade Size	Shell Material	Dimension						Panel Mounting Hole (Diameter)
				A	B	C	D	L	E Thread	
51	51018M04	1/2	Brass	31.75 (1.250)	28.57 (1.125)	14.22 (.560)	4.31 (.170)	4.31 (.170)	1/2 to 14 NPT	22.22 (.875)
53	53019M04	1	Brass	44.45 (1.750)	41.27 (1.625)	16.51 (.650)	7.11 (.280)	9.65 (.380)	1 to 11-1/2 NPT	34.92 (1.375)
54	54018M04	1	Aluminum	55.14 (2.171)	50.80 (2.000)	16.51 (.650)	10.16 (.400)	12.70 (.500)	1 to 11-1/2 NPT	34.92 (1.375)

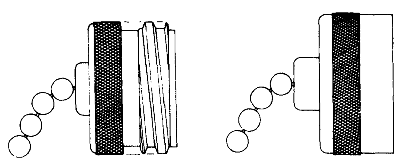
Includes gasket and locknut

Dust Cap

Dust caps for Advantage 51 and 53 are molded of rubber and offer protection from dirt and grime entering the contact area when the connectors are unmated. A rubber strap secures the cap to the shell when not in use. The design is universal and slides onto either the plug or receptacle shell to provide splash-proof protection. Securement is by the frictional fit onto the front shell. Dust caps for Advantage 54 are anodized Aluminum with rubber seals. A bead chain secures the cap to the back shell or panel. A unique cap is available for the plug or receptacle with threads that match the front shell. Assembles between the portable front shell and any back shell to allow a 90° takeoff of the conduit or cable. Features a fully adjustable (360°) clocking angle.



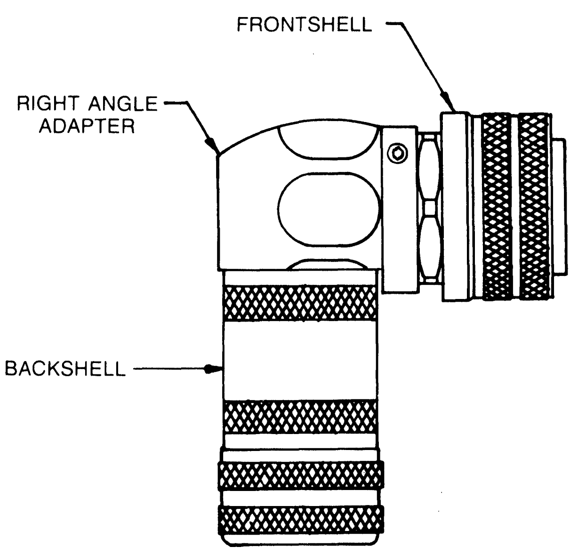
ADVANTAGE(TM) 51 & 53

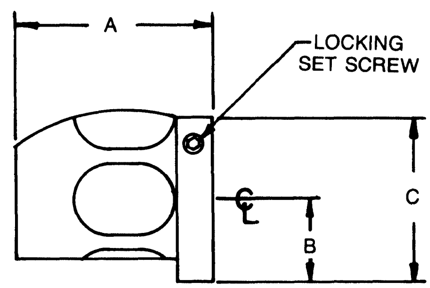


ADVANTAGE(TM) 54

Front Shell Size	Order No.	Type
51	51043M04	Plug or Receptacle
53	53043M04	Plug or Receptacle
54	54043M04	Plug
54	54044M04	Receptacle

Right Angle Adapter for Advantage 54 Portable Front Shells





Shell Size	Order No.	Shell Material	Dimension A	Dimension B	Dimension C
54	54075M04	Aluminum	68.07 (2.680)	57.15 (2.250)	28.44 (1.120)

Shells made from Aluminum are bright anodized

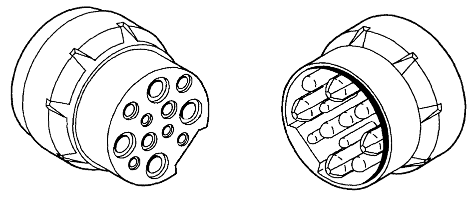
FEATURES AND SPECIFICATIONS

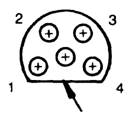
Industrial Interfaces™ Spirit™ and Advantage™ Insert Selection Guide

Inserts — Flexibility — Simplicity

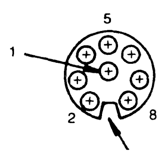
The design and material of the inserts offer the user distinctive benefits:

- The UL recognized thermoplastic elastomer combines the low-durometer sealing characteristics of rubber with the long-term aging properties of plastic. The result is a simplified design that is easy to use and understand.
- The multipurpose insert material supports the terminals and provides a seal and will not crack or chip, as frequently occurs with rigid plastic.
- The inserts are reversible between shells, making reverse service an assembly procedure using the same parts.
- Since the inserts may be assembled into the shells in 8 different clocking positions, applications requiring several identifying key distinctions are satisfied with the same parts—assembled differently.
- The inserts are capable of accepting several different terminal sizes and finishes—in the same circuit position! This industry first gives the user the flexibility to exactly meet his requirements—with a few standard parts.
- Each circuit position in the insert has a closed diaphragm that is not broken until preparation for terminal insertion. Thus, circuit positions not required immediately remain sealed and ready for use at a later date. No dummy terminals are required.
- Unlike conventional designs, the pin insert possesses a shroud that surrounds the socket insert when mated. The double shrouding by both the inserts and the shells provides increased sealing and pin terminal protection.
- A make-first-and-break-last condition, insuring a safe ground, is forever present without the use of longer ground pins.

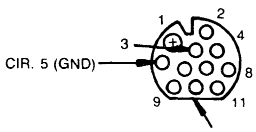




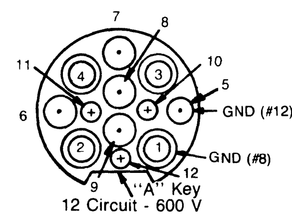
"A" Key
5 Circuit - 600 V
#14 to #20 AWG



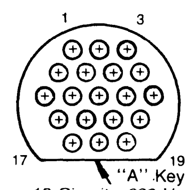
"A" Key
8 Circuit - 250 V
#14 to #20 AWG



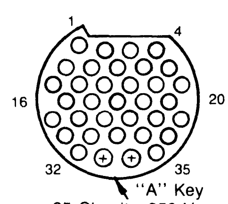
"A" Key
11 Circuit - 250 V
10#18 to #24 AWG
1#14 to #20 AWG



12 Circuit - 600 V
4#8 to #10 AWG 5#10 to #16 AWG
3#14 to #20 AWG

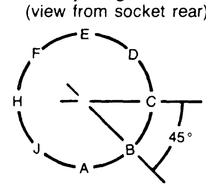


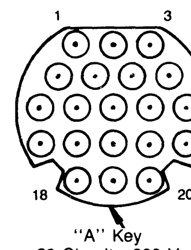
"A" Key
19 Circuit - 600 V
#14 to #20 AWG



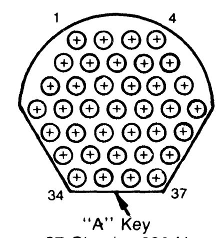
"A" Key
35 Circuit - 250 V
33#18 to #24 AWG 2#14 to #20 AWG

Key Progression
(view from socket rear)

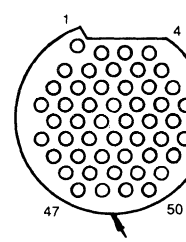




"A" Key
20 Circuit - 600 V
#10 to #16 AWG



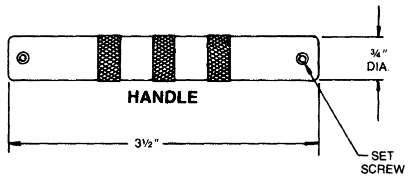
"A" Key
37 Circuit - 600 V
#14 to #20 AWG

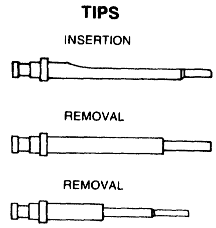


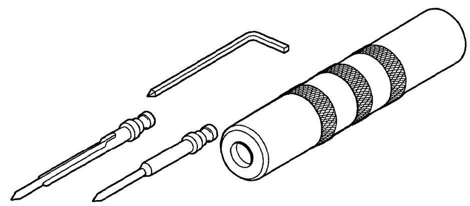
"A" Key
50 Circuit - 250 V
#18 to #24 AWG

Insertion and Removal Tools

Insertion kits must be used in assembling the front shells.



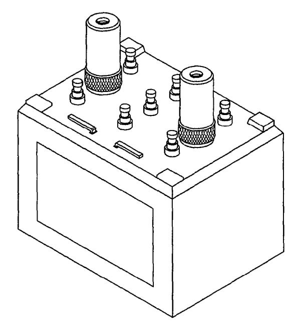




Terminal Size No.	Color Code	Kits		Tips Only			
				Insertion Tips		Removal Tips	
		Insertion	Removal	Piercing	Insertion	Pin	Socket
8	Red	81043M01	81044M01	81144M01	81143M01	81145M01	81144M01
10, 12	Yellow	81014M01	81008M01	81117M01	81114M01	81112M01	81108M01
14, 16	Blue	81003M01	81001M01	81115M01	81103M01	81102M01	81101M01
18, 20	Red	81020M01	81018M01	81115M01	81120M01	81119M01	81118M01

Above kits include 1 handle and 1 each of 2 tips required. Terminal size is the maximum wire size the terminal will accommodate. Removal kits are recommended when large numbers of assemblies are involved and rework is anticipated.

Master Tool Kit



Terminal Size No.	Order No.	Includes
14, 16, 18, 20	81002M01	2 handles and 7 tips in tool caddy
8, 10, 12	81017M01	2 handles and 7 tips in tool caddy

These kits include all required insertion and removal tools required to work with terminal sizes shown

Industrial Interfaces™ Spirit™ and Advantage™ Tool Selection Guide

The terminals are designed to crimp properly with standard commercially available four star indent crimp tools with full cycle action. The standard indent settings are used for the wire being crimped.

Locators must be used to position terminals at the right depth for proper crimping. The locators accommodate both pins and sockets.

Terminal locators are mounted on the tool in the same manner as MIL Spec locators and include set screws.

Locators are available for the most common crimp tools utilized in industry. Contact the factory if the crimp tool you plan to use is not shown.

Crimp tools may be purchased from Molex Industrial Interfaces.

ORDERING INFORMATION

Hand Crimp Tools				Pneumatic Crimp Tools		
Terminal Size No.	Econo Crimp Tool For No. 16 Wire Only	Daniels PN: AF8 MIL Spec: M22520/1-01 Color Code: Blue	M309 Modified Red	WA27F M22520/29	WA27-309EP Modified	Locator Order No.
8			81027M01		81041M01	81028M01
10			81027M01		81041M01	81010M01
12		81011M01	81027M01	81040M01	81041M01	81010M01
14, 16	81216M01	81011M01	81027M01	81040M01	81041M01	81022M01
18, 20		81011M01	81027M01	81040M01	81041M01	81022M01

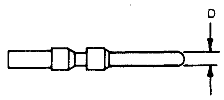
Above tools crimp all wire sizes accommodated by terminals listed

Locators fit all crimp tools listed. Locators are required to properly position terminal.

Pneumatic Crimp Tool Accessories		
Description	Order No.	Daniels PN
Bench Mount	81038M01	WA27BUV
Foot Switch	81039M01	WA10

Spectre™ and Advantage™ Terminal Selection Guide

Screw Machined Terminals



Front shells do not come with terminals. Users may customize the terminal selection from a variety of sizes, types and finishes to exactly meet their requirements.

To order terminals follow these steps:

1) Select the insert that satisfies your requirement above.

2) Choose the largest terminal size with the required plating that will accept your wire size and fit the insert you selected.

3) Multiply the number of terminals per connector times the number of connectors.

4) Order the package sizes and quantities from the terminal chart to meet your requirement plus provide some spares.

If you are going to mix terminal sizes in the same insert, remember that only terminal sizes with the same pin diameter will mate together. Also note very carefully the allowed terminal types and sizes for each of the cores in the insert you selected. A core for a No. 12 terminal, for instance, will not accept a No. 16 terminal. The pages on front shell selection clearly state the allowed terminals for each insert configuration.

Screw machined terminals may be crimped or soldered. Only crimp tools specified should be used. An insertion tool is required for proper assembly of terminals. Refer to hand tool section for crimp and hand tool specification.

Terminal Size No.	Crimp Range AWG	Quantity	Pin Terminal		Socket Terminal		Dimension D Diameter
			Tin	Gold	Tin	Gold	
8	8-10	5	90010M00		90011M00		4.00 (.175)
		10	90010M01		90011M01		
		100	90010M02		90011M02		
		1000	90010B01		90011B01		
10	10-14	5	90014M00		90015M00		3.00 (.118)
		10	90014M01		90015M01		
		100	90014M02		90015M02		
		1000	90014B01		90015B01		
12	12-16	5	90004M00		90005M00		3.00 (.118)
		10	90004M01		90005M01		
		100	90004M02		90005M02		
		1000	90004B01		90005B01		
14	14-18	5	90008M00		90009M00		2.00 (.078)
		10	90008M01		90009M01		
		100	90008M02		90009M02		
		1000	90008B01		90009B01		
16	16-20	5	90006M00	90006MG0	90007M00	90007MG0	2.00 (.078)
		10	90006M01	90006MG1	90007M01	90007MG1	
		100	90006M02	90006MG2	90007M02	90007MG2	
		1000	90006B01	90006BG1	90007B01	90007BG1	
18	18-22	5	90016M00	90016MG0	90017M00	90017MG0	1.50 (.060)
		10	90016M01	90016MG1	90017M01	90017MG1	
		100	90016M02	90016MG2	90017M02	90017MG2	
		1000	90016B01	90016BG1	90017B01	90017BG1	
20	20-24	5		90012MG0		90013MG0	1.50 (.060)
		10		90012MG1		90013MG1	
		100		90012MG2		90013MG2	
		1000		90012BG1		90013BG1	

Terminals are screw machined from high-performance Copper alloys. Terminals are lubricated for increased mating life and protection from fret corrosion. Pins and sockets of different sizes with the same D diameter will mate in the same connector. Shaded blocks are standards which are in stock at all times.

Thermocouple Terminals

Thermocouple terminals give you the ability to create the 4 combination types shown in the table below.

K Chromel/Alumel
J Iron/Constantan
T Copper/Constantan
E Chromel/Constantan

	Wire Gauge No.	Chromel	Iron	Copper	Alumel	Constantan
Sockets	16	84690-0021	84690-0035	84690-0023	84690-0024	84690-0025
	20 (.060 Pin)	84690-0016	84690-0034	84690-0018	84690-0019	84690-0020
	20 (.078 Pin)	84690-0001	84690-0031	84690-0003	84690-0004	84690-0005
Pins	16	84690-0026	84690-0036	84690-0028	84690-0029	84690-0030
	20 (.060 Pin)	84690-0011	84690-0033	84690-0013	84690-0014	84690-0015
	20 (.078 Pin)	84690-0006	84690-0032	84690-0008	84690-0009	84690-0010

Industrial Interfaces™ Spirit™ and Advantage™ Estimated Cable Diameters and Specifications

Cable Diameters Estimated Ranges (in.)				
Wire Size = >10 AWG				
Circuits	SO	SDN	SDT	Control
Outer Jacket Inner Jacket Volts	NEO NEO 600	NEO PE/NYL 600	PVC PVC/NYL 600	PVC PE/PVC 600
2	.610/.670	.410/.470	.410/.470	.460/.520
3	.650/.720	.430/.490	.430/.490	.540/.600
4	.700/.770	.480/.540	.480/.540	.600/.660
5	.780/.840	.560/.620	.560/.620	.670/.730
6	.820/.900	.610/.670	.610/.670	.720/.780
7	.900/1.000	.610/.670	.610/.670	.720/.780
8	.920/1.060	.670/.730	.670/.730	.780/.840
9	1.060/1.160	.750/.810	.750/.810	.890/.950
10	1.080/1.180	.760/.820	.760/.820	.950/1.050
11				.950/1.050
12	1.120/1.200	.800/.860	.800/.860	.980/1.080
13				1.020/1.120
14	1.190/1.270	.890/.950	.890/.950	1.020/1.120
15			.290/.990	1.100/1.200
16	1.260/1.360	.950/1.050	.950/1.060	1.100/1.200
17				1.150/1.250
18				1.150/1.250
19			.980/1.050	1.150/1.250
20	1.390/1.500			

Cable Diameters Estimated Ranges (in.)						
Wire Size = >12 AWG						
Circuits	SO	SDN	SDT	Control	Electronic Cable	
Outer Jacket Inner Jacket Volts	NEO NEO 600	NEO PE/NYL 600	PVC PVC/NYL 600	PVC PE/PVC 600	PVC PVC 600	PVC PVC 300
2	.565/.625			.350/.410		
3	.590/.655	.340/.400	.340/.400	.400/.460		
4	.640/.710	.390/.450	.390/.450	.440/.500		
5	.700/.770	.425/.485	.425/.485	.530/.600	.520/.590	.430/.490
6	.740/.810	.450/.510	.480/.540	.550/.620	.550/.620	.470/.540
7	.750/.820	.450/.510	.480/.540	.570/.640	.570/.640	
8	.800/.870	.570/.640	.550/.620	.620/.690		
9	.960/1.040	.610/.680	.580/.640	.670/.750		
10	.960/1.040	.610/.680	.620/.690	.690/.770		
11	.990/1.070	.640/.710	.640/.710			
12	.990/1.070	.640/.710	.640/.710	.740/.820	.740/.820	.650/.730
13	1.060/1.140	.670/.740	.680/.750			
14	1.060/1.140	.670/.740	.680/.750	.850/.940		
15	1.100/1.190	.700/.780	.710/.800	.860/.950		
16	1.100/1.190	.700/.780	.710/.800	.870/.960		
17	1.170/1.260	.740/.820		.920/1.020		
18	1.170/1.260	.740/.820		.920/1.020		
19	1.190/1.280	.740/.820	.760/.840	.920/1.020	.900/1.000	.720/.800
20	1.210/1.350	.820/.900	.840/.920	.960/1.060		
21		.850/.930				
22	1.320/1.430					
24	1.370/1.480	.880/.970	.900/1.000	1.050/1.150		
25				1.070/1.170		
26	1.390/1.500					
28	1.420/1.540					
30	1.450/1.600	.950/1.040	.960/1.060	1.150/1.250		
35				1.190/1.300		
36	1.560/1.690					
37	1.560/1.690	1.030/1.150	1.050/1.170	1.230/1.340		

Cable Diameters Estimated Ranges (in.)					
Wire Size = >14 AWG					
Circuits	SO	SDN	SDT	Control	Electronic Cable
Outer Jacket Inner Jacket Volts	NEO NEO 600	NEO PE/NYL 600	PVC PVC/NYL 600	PVC PE/PVC 600	PVC PVC 600
2	.495/550	.290/.340	.290/.340	.330/.390	
3	.520/.580	.310/.360	.310/.360	.360/.420	
4	.560/.620	.340/.390	.340/.390	.390/.450	.400/.490
5	.630/.705	.380/.440	.370/.430	.430/.500	.470/.560
6	.670/.740	.400/.460	.410/.470	.450/.520	
7	.690/.760	.400/.460	.410/.470	.470/.540	.510/.600
8	.740/.810	.460/.520	.450/.510	.570/.630	
9	.810/.890	.510/.570	.490/.550	.610/.690	.620/.710
10	.850/.930	.530/.590	.550/.610	.630/.710	
11	.870/.950	.560/.620	.570/.630		
12	.870/.950	.560/.620	.560/.630	.680/.750	.640/.730
14	.950/1.030	.580/.650	.590/.660	.710/.780	
15	.980/1.060	.610/.680	.610/.680	.730/.800	.700/.800
16	.990/1.070	.610/.690	.620/.690	.750/.820	
18	1.050/1.140	.640/.720	.670/.740	.790/.860	
19	1.060/1.150	.640/.720	.670/.740	.810/.890	.780/.880
20	1.080/1.170	.680/.760	.690/.770	.840/.920	.830/.910
21		.730/.810			
22	1.150/1.250				
24	1.230/1.330		.780/.850	.960/1.050	
25				.960/1.050	
26	1.250/1.360				
27					.920/1.020
30	1.320/1.420	.830/.910	.860/.950	1.030/1.130	
35				1.030/1.130	
36	1.440/1.540				
37	1.440/1.540	.900/.990	.920/1.020	1.040/1.170	

Spirit™ and Advantage™ Estimated Cable Diameters and Specifications

Cable Diameters Estimated Ranges (in.)						
Wire Size = >16 AWG						
Circuits	SO	SDN	SDT	Control	Electronic Cable	
Outer Jacket Inner Jacket Volts	NEO NEO 600	NEO PE/NYL 600	PVC PVC/NYL 600	PVC PE/PVC 600	PVC PVC 600	PVC PVC 300
2	.365/.410	.280/.330	.280/.330	.290/.340		.220/.290
3	.385/.430	.290/.340	.290/.340	.310/.360		.240/.300
4	.410/.460	.320/.370	.320/.370	.340/.390	.350/.410	.290/.350
5	.490/.550	.330/.390	.340/.400	.380/.430	.380/.440	.320/.380
6	.510/.570	.360/.430	.380/.440	.390/.450		.330/.390
7	.530/.590		.380/.440	.410/.470	.430/.510	.370/.430
8	.570/.640	.420/.490	.410/.470	.450/.520		.400/.470
9	.650/.710	.450/.530	.430/.500	.500/.570	.550/.630	.410/.490
10	.670/.740	.450/.530	.450/.540	.550/.630	.570/.660	.430/.520
11	.700/.770	.460/.540	.460/.550	.570/.650		
12	.700/.770	.460/.540	.480/.570	.570/.660	.580/.670	.510/.590
13	.755/.825	.530/.620	.530/.620			
14	.755/.825	.530/.620	.530/.620	.600/.690		
15		.550/.640	.550/.640	.610/.700	.660/.750	.500/.580
16	.780/.870	.550/.640	.550/.640	.630/.720		
17						
18	.780/.870	.570/.660	.570/.660	.650/.740		
19	.850/.940	.580/.670	.580/.670	.660/.750	.700/.790	.570/.660
20	.850/.940		.600/.690	.670/.760		.590/.680
21		.650/.720				
22	.850/.940					
24	.940/1.040	.680/.760	.650/.740	.750/.840		
25	.940/1.040	.690/.770	.660/.750	.760/.850		.670/.760
26	.940/1.040	.690/.770		.810/.900		
27	.950/1.050	.700/.780		.830/.920	.820/.910	
28	1.000/1.120	.700/.800		.840/.930		
30	1.000/1.120	.720/.820		.860/.950		.710/.800
32	1.020/1.150	.720/.820		.890/.980		
34	1.050/1.180	.740/.840				
36	1.050/1.180	.740/.840		.900/1.000	.900/1.200	
37	1.050/1.180	.760/.860		.900/1.000	.900/1.200	

Cable Diameters Estimated Ranges (in.)					
Wire Size = >18 AWG					
Circuits	SO	SDN	SDT	Electronic Cable	
Outer Jacket Inner Jacket Volts	NEO NEO 600	NEO PVC/NYL 600	PVC PVC/NYL 600	PVC PVC 600	PVC PVC 300
2	.340/.385	.250/.300	.260/.310		.180/.240
3	.360/.400	.265/.315	.275/.325		.190/.250
4	.385/.430	.280/.340	.300/.350		.220/.280
5	.460/.510	.320/.370	.320/.380		.240/.310
6	.490/.550	.360/.400	.350/.420		.270/.340
7	.510/.590	.360/.400	.350/.420	.400/.480	.270/.340
8	.550/.630	.400/.470	.400/.480		.290/.360
9	.570/.650	.420/.490	.400/.490		.310/.380
10	.600/.670	.420/.490	.430/.500		.340/.410
11		.440/.510	.450/.520		.360/.430
12	.640/.710	.440/.510	.450/.520	.500/.580	.360/.430
13		.470/.540			
14	.680/.750	.470/.540			
15		.500/.570	.500/.570		.410/.470
16	.710/.790	.500/.570			
17		.560/.630			
18	.740/.820	.560/.630			
19	.770/.850	.560/.630	.560/.630	.610/.690	.430/.500
20	.790/.860				.440/.510
21		.610/.690			
22	.830/.910				
24	.870/.950	.640/.720			
26	.870/.960				
27	.880/.970			.710/.790	
28	.930/1.050				
30	.930/1.050	.660/.740			.570/.640
32	.960/1.080				
34	1.000/1.120				
36	1.000/1.120				
37	1.000/1.120	.720/.800		.820/.910	

Conduit Wire Capacity				
Trade Size	Inside Diameter (in.)	Conduit Area (sq in.)	40% Wire Area (sq in.)	50% Wire Area (sq in.)
3/8	.490	.190	.075	.094
1/2	.622	.300	.120	.150
3/4	.824	.530	.210	.260
1	1.049	.860	.340	.430

Number of Wires Allowed in Conduit Size										
Wire Size No.	Insulation Thickness (in.)	Nominal Outside Diameter (in.)	40% Fill (NEC)				50% Fill (NFPA 79)			
			3/8	1/2	3/4	1	3/8	1/2	3/4	1
20	.009	.057	29	47	82	133	37	59	103	166
	.016 1/64	.071	19	30	53	86	23	38	66	107
	.032 2/64	.100	9	15	26	43	12	19	33	54
18	.009	.072	18	29	51	83	23	37	64	104
	.016 1/64	.081	14	23	40	66	18	29	51	82
	.032 2/64	.112	7	12	21	34	9	15	26	43
16	.009	.084	13	21	38	61	17	27	47	76
	.016 1/64	.092	11	18	31	51	14	22	39	64
	.032 2/64	.126	6	9	17	27	7	12	21	34
14	.016 1/64	.106	8	13	24	38	10	17	30	48
	.032 2/64	.138	5	8	14	22	6	10	17	28
	.048 3/64	.174	3	5	9	14	4	6	11	18
12	.016 1/64	.135	5	8	14	23	6	10	18	29
	.032 2/64	.158	4	6	10	17	5	7	13	21
	.048 3/64	.190	2	4	7	12	3	5	9	15
10	.016 1/64	.154	4	6	11	18	5	8	14	23
	.032 2/64	.184	3	4	8	12	3	5	10	16
	.048 3/64	.214	2	3	6	9	2	4	7	11

FEATURES AND SPECIFICATIONS

Features and Benefits

- Interfacial terminal seals complying with ANSI B93 are augmented by a secondary ring seal, eliminating contamination to the interconnect system.
- Machined contacts with insulation support protect against wire damage caused by repeated cord flex or severe angle bends.
- Positive mating is visually assured by a green line, clearly viewable during inspection when the Mini-C connector is properly installed.
- A unique spring coupling ring system maintains insert pressure and vibration resistance during long mating periods. The system compensates for the material's compression set and maintains seal integrity for the life of the users' products.
- The Mini-C connector's longer coupling ring provides a larger gripping area while adding support to the plug body.

Reference Information

UL File No.: E81982
CSA File No.: LR 56804

Mechanical Specifications

Plug

Coupling Nut: Anodized Aluminum (standard)
Stainless Steel, nylon (optional)
Contacts: Brass, Tin-plated (standard)
Gold
Molded Head: PVC

Cable

16 AWG (Standard): PVC insulated, fine stranded Copper conductors, yellow PVC jacket, 600V STO, 105°C, UL recognized, CSA certified
18 AWG (Optional): PVC insulated, fine stranded Copper conductors with foam polypropylene fillers, yellow PVC jacket, 300V SJTO, 105°C, UL recognized, CSA certified

Receptacle

Shell: Anodized Aluminum (standard)
Stainless Steel, nylon (optional)
Contacts: Brass, Tin-plated (standard)
Gold
Inserts: PVC
Wire: 16 AWG with PVC insulation, 600V (standard)
18 AWG with PVC insulation, 300V (optional)

Electrical Specifications

Voltage: 16 AWG, 600V AC/DC (standard)
18 AWG, 300V AC/DC (optional)
Current: Central guidelines, contact factory if your application exceeds these values:

Wire Size (AWG)	All Circuits
No. 16 (Standard)	13.0A
No. 18 (Optional)	9.0A

Environmental Specifications

Temperature Rating: -40 to +90°C
Rainproof: Meets rainproof requirements of UL rain test as specified in UL STD 514
Corrosion: Anodize finish provides 300 hours salt spray protection per MIL STD 202 Method 101
Vibration: Complies with MIL STD 202F, Test Method 204, Test Condition B

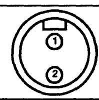
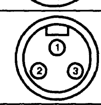
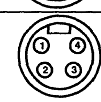
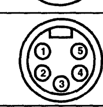
Additional Specifications

MINI-C meets NEMA 6P, enclosure requirements
Automotive Mass Production Equipment: Specification E11.1.1 (3)
Meets Watertight Performance Rating Of: IP68
Contact factory for availability on optional specifications

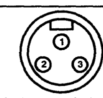
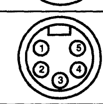
ORDERING INFORMATION

XXXXX	XXX	X	X
A	B	C	D

A — Plug/Receptacle (Series/Poles/Length)

No. of Poles	Order No. Plug	Order No. Receptacle	Order No. Dust Caps	Face View of Male	Wiring Code	Cable Length (ft)
2	14241 14242 14243 14244 14245	6" Leads 15211 12" Leads 15212	Plug 14043M01 Receptacle 14044M01		1 White 2 Black	3 6 9 12 20
3	14341 14342 14343 14344 14345	6" Leads 15311 12" Leads 15312	Plug 14043M01 Receptacle 14044M01		1 Green 2 Black 3 White	3 6 9 12 20
4	14441 14442 14443 14444 14445	6" Leads 15411 12" Leads 15412	Plug 14043M01 Receptacle 14044M01		1 Black 2 White 3 Red 4 Green	3 6 9 12 20
5	14541 14542 14543 14544 14545	6" Leads 15511 12" Leads 15512	Plug 14043M01 Receptacle 14044M01		1 White 2 Red 3 Green 4 Orange 5 Black	3 6 9 12 20

Connectors Specifically Designed to Meet Automotive Standards

No. of Poles	Order No. Plug	Order No. Receptacle	Order No. Dust Caps	Face View of Male	Wiring Code	Cable Length (ft)
3	14361 14362 14363 14364 14365	6" Leads 15361 12" Leads 15362	Plug 14043M01 Receptacle 14044M01		1 Green 2 Red 3 Red	3 6 9 12 20
5	14561 14562 14563 14564 14565	6" Leads 15561 12" Leads 15562	Plug 14043M01 Receptacle 14044M01		1 Red 2 Red 3 Green 4 Red 5 Red	3 6 9 12 20

Note: Color code of female is mirror image of male

B — Configuration/Gender

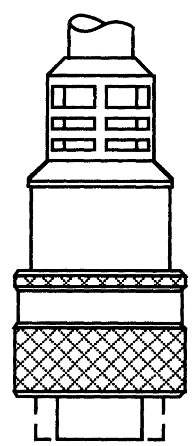
See page (next)

C — Hardware Variations

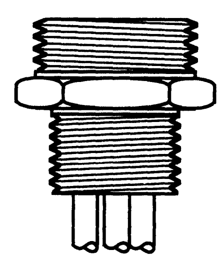
S	Stainless Steel Hardware
N	Nylon Hardware

D — Contact Plating Variations

G	Gold-Plated Contacts



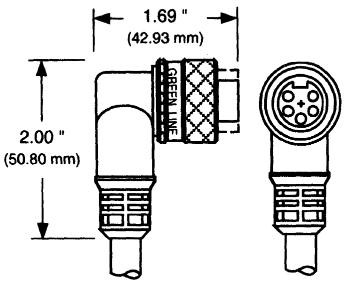
PLUG



RECEPTACLE

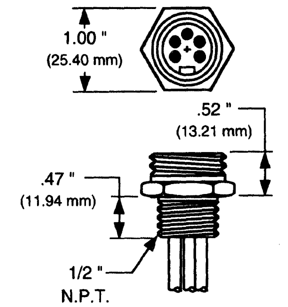
PLUG — 90 DEGREE

FEMALE	MALE
K01 - 16 AWG	K11 - 16 AWG
K21 - 18 AWG	K31 - 18 AWG



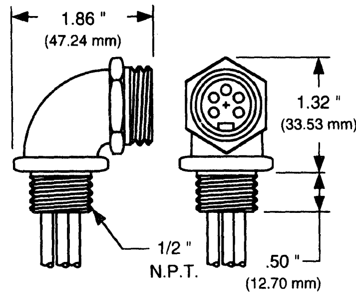
RECEPTACLE — STATIONARY

FEMALE	MALE
M11 - 16 AWG	M21 - 16 AWG
M31 - 18 AWG	M41 - 18 AWG



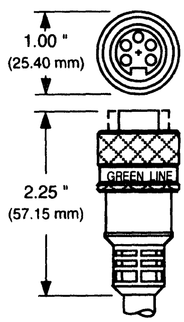
RECEPTACLE — STATIONARY 90 DEGREE

FEMALE	MALE
K11 - 16 AWG	K21 - 16 AWG
K31 - 18 AWG	K41 - 18 AWG

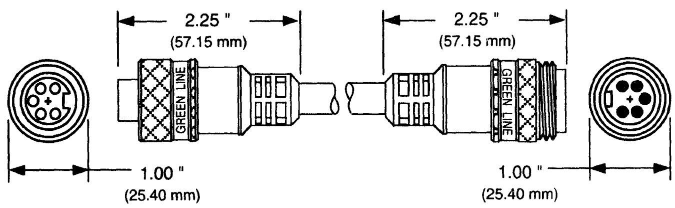


PLUG — STRAIGHT

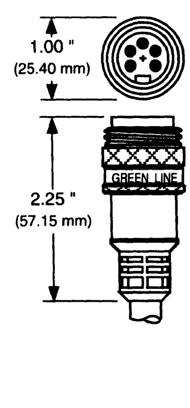
FEMALE	MALE
M01 - 16 AWG	M11 - 16 AWG
M21 - 18 AWG	M31 - 18 AWG



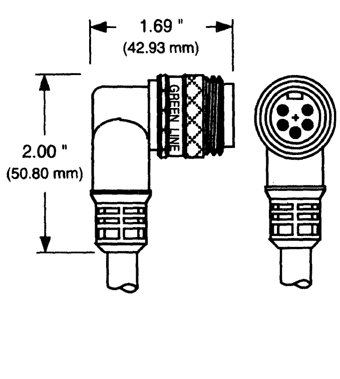
EXTENSION
FEMALE PLUG / MALE IN-LINE RECEPTACLE
E01 - 16 AWG
E31 - 18 AWG



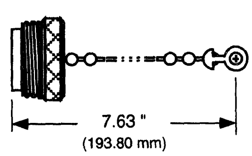
IN-LINE RECEPTACLE
MALE
Y01 - 16 AWG
Y21 - 18 AWG



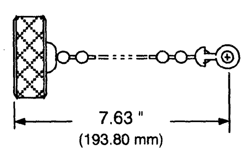
IN-LINE RECEPTACLE — 90 DEGREE
MALE
K51 - 16 AWG
K61 - 18 AWG



DUST CAP — PLUG
14043M01



DUST CAP — RECEPTACLE
14044M01



molex® Industrial Interfaces™ Mini-Lite

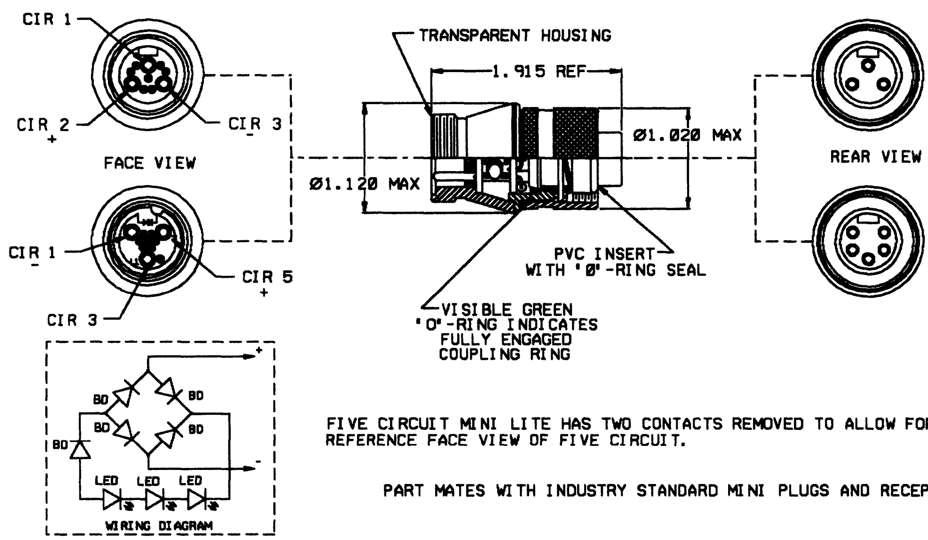
Features and Benefits
- LED-illuminated power indicator for mini-type sensor and valve connection allows for easy and immediate diagnostic power indication
- A retrofit adapter that can be used with existing sensors and cord connectors, no rewiring involved

Electrical
Voltage: 24V
Current: 13.0A

Mechanical
Coupling Nut: Anodized Aluminum (standard) Stainless Steel, nylon (optional)
Contacts: Brass, Tin-plated (standard), Gold-plated (optional)
Molded Head: PVC

Environmental
Temperature: -40 to +90°C
Rainproof: Meets rainproof requirements of UL rain test as specified in UL STD 514
Corrosion: Anodize finish provides 300 hours salt spray protection per MIL STD 202 Method 101
Vibration: Complies with MIL STD 202F, Test Method 204, Test Condition B

Additional Specifications
Mini-Lite meets NEMA 6P, enclosure requirements
Automotive Mass Production Equipment: Specification E11.1.1 (3)
Meets Watertight Performance Rating Of: IP68
Tested to GM specification EHS-325 where applicable

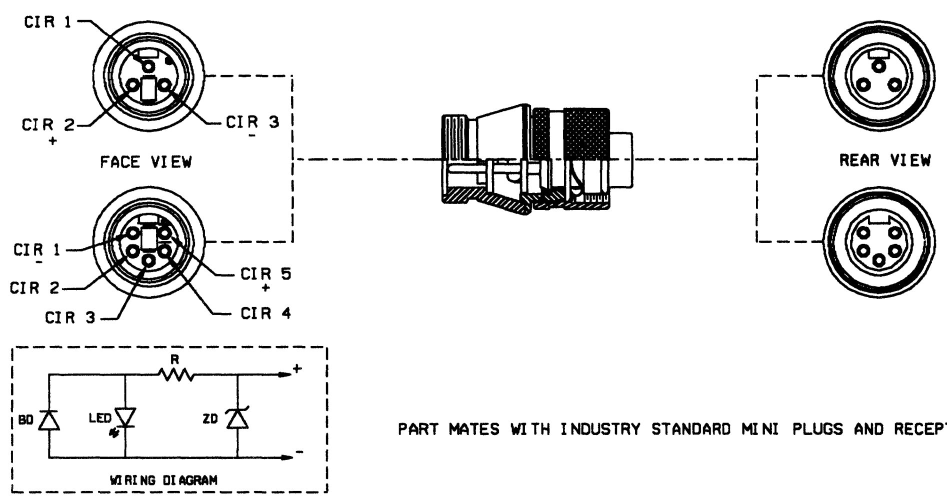


3 Circuit Proximity SW. & Valve Version
#84516-0003

5 Circuit Proximity SW. & Valve Version
#84516-0002

FIVE CIRCUIT MINI LITE HAS TWO CONTACTS REMOVED TO ALLOW FOR ELECTRONIC PACKAGE, REFERENCE FACE VIEW OF FIVE CIRCUIT.

PART MATES WITH INDUSTRY STANDARD MINI PLUGS AND RECEPTACLES



3 Circuit Valve Version
#84516-0001

5 Circuit Valve Version
#84516-0004

PART MATES WITH INDUSTRY STANDARD MINI PLUGS AND RECEPTACLES

SPECIFICATIONS

Mechanical

Back shell and compression nut material: Brass Alloy with corrosion protective finish

Seals: Polychloroprene (cable) or Polyproplene (liquid tight conduit)

Cable Securement

Each cable back shell when assembled with the smallest diameter cable in the specified range will be capable of surviving a dead weight pull of 35 lb for 1 minute per UL STD 514.

Each cable back shell when assembled with midpoint of the range cable will be capable of a dead weight pull of 50 lb for 1 minute per UL STD 514.

Liquid-Tight Conduit Securement

The metallic assembly will survive a 100-lb pull test per UL 514

Environmental

Temperature Rating: -40 to +90 °C

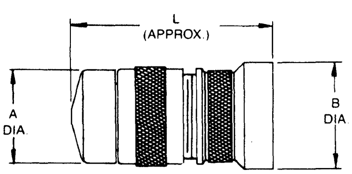
Rain Tight: The back shell when assembled with the proper cable or liquid-tight conduit and military connector will meet the rain test requirement defined in UL STD 514

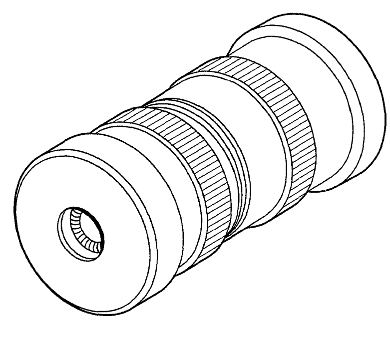
Salt Spray: 2 variations are available

1) 48-hour salt spray per MIL STD 202 Method 101
2) 500-hour salt spray per MIL STD 1344 Method 1001

Cable Back Shell

MIL-C cable back shells achieve extraordinary sealing and strain relief through the independent action of expandable elastomer and spring pressure loading. The stainless steel strain relief spring closes around the cable as the compression nut is threaded downward. High but controlled pressure is applied to the cable yielding superior holding power without damage to the cable.





Thread Size	Order No.	Cable Range (in.)	Order No.	Cable Range (in.)	Order No.	Cable Range (in.)	Dimension Approx.
5/8 24 UNEF	70010M04	.225-.350					2.000
11/16 24 UNEF	70011M04	.225-.350					2.000
3/4 20 UNEF	70012M04	.225-.350					2.000
13/16 20 UNEF	70013M04	.225-.350					2.000
7/8 20 UNEF	70014M04	.225-.350					2.250
15/16 20 UNEF	70015M04	.225-.350					2.000
1 20 UNEF	70016M04	.300-.500	70116M04	.500-.650			2.375
1-1/16 18 UNEF	70017M04	.300-.500	70117M04	.500-.650			2.375
1-1/8 18 UNEF	70018M04	.300-.500	70118M04	.500-.650			2.375
1-3/16 18 UNEF	70019M04	.300-.500	70119M04	.500-.650			2.375
1-1/4 18 UNEF	70020M04	.300-.500	70120M04	.500-.650			2.375
1-5/16 18 UNEF	70021M04	.300-.500	70121M04	.500-.750	70221M04	.700-.950	2.375
1-3/8 18 UNEF	70022M04	.300-.500	70122M04	.500-.750	70222M04	.700-.950	2.375
1-7/16 18 UNEF	70223M04	.300-.500	70023M04	.500-.750	70123M04	.700-.950	2.375
1-1/2 18 UNEF	70224M04	.300-.500	70024M04	.500-.750	70124M04	.700-.950	2.375
1-5/8 18 UNEF	70226M04	.300-.500	70026M04	.500-.750	70126M04	.700-.950	3.000
1-3/4 18 UNS	70128M04	.300-.500	70028M04	.500-.750	70228M04	.700-.950	3.125

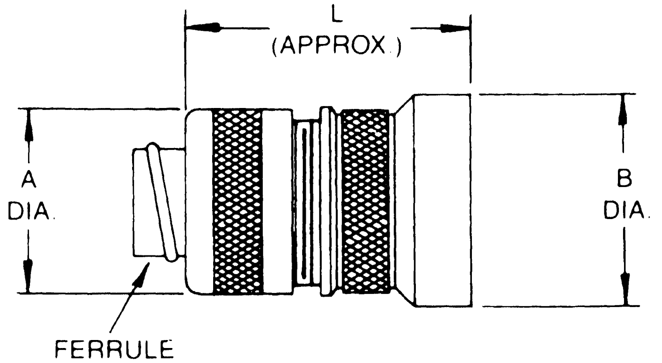
Several other ranges and sizes can be made on special order, contact factory with your specific requirement

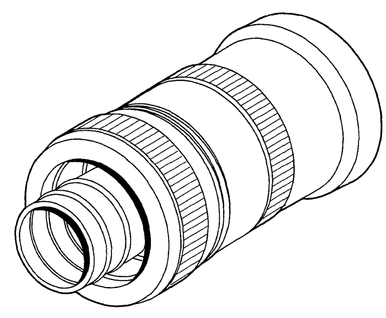
Suffix	Description	Salt Spray Rating (Hours)
M00	Raw Brass	
M02	Olive Drab Cadmium over Nickel	500
M03	Clear Nickel	500
M04	Clear Chromate over Zinc	48
M06	Olive Drab over Zinc	48

The order numbers above indicate a clear Chromate over Nickel plating system rated at 48 hour salt spray. Other finishes are available, contact factory.

MIL-C Liquid-Tight Conduit Back Shells

MIL-C liquid-tight conduit back shells will accept direct attachment of various types of liquid-tight conduit. Please contact factory for specific conduit type.





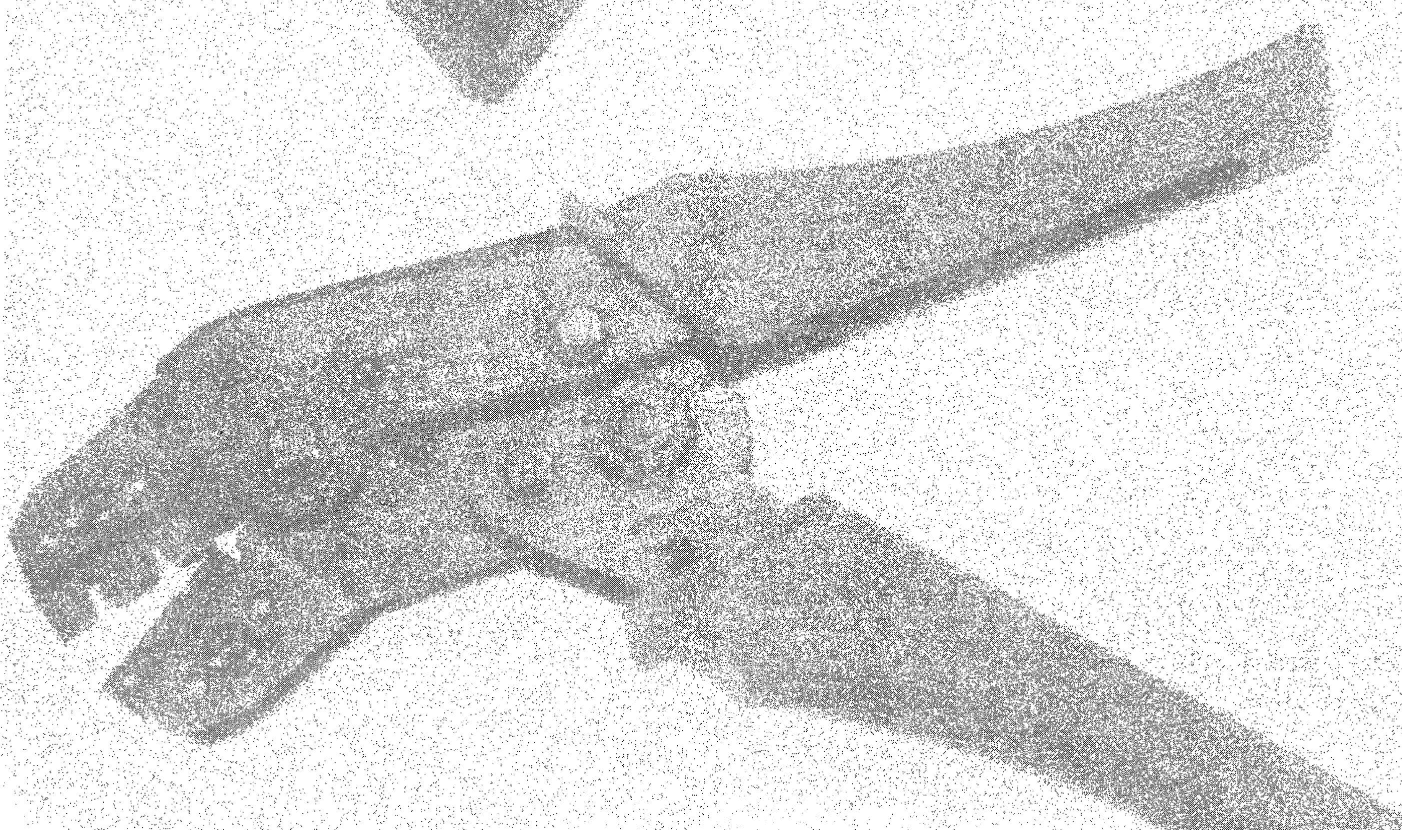
Thread Size	Order No.	Size	Order No.	Size	Order No.	Size	Dimension L Approx.
1 20 UNEF	71016M04	3/8 LT	71116M04	1/2 LT			1.875
1-1/16 18 UNEF	71017M04	3/8 LT	71117M04	1/2 LT			1.875
1-1/8 18 UNEF	71018M04	3/8 LT	71118M04	1/2 LT			1.875
1-3/16 18 UNEF	71019M04	3/8 LT	71119M04	1/2 LT			1.875
1-1/4 18 UNEF	71120M04	3/8 LT	71020M04	1/2 LT	71220M04		1.875
1-5/16 18 UNEF	71221M04	3/8 LT	71021M04	1/2 LT	71121M04	3/4 LT	1.875
1-3/8 18 UNEF	71222M04	3/8 LT	71022M04	1/2 LT	71122M04	3/4 LT	1.875
1-7/16 18 UNEF	71223M04	3/8 LT	71023M04	1/2 LT	71123M04	3/4 LT	1.875
1-1/2 18 UNEF	71224M04	3/8 LT	71024M04	1/2 LT	71124M04	3/4 LT	1.875
1-5/8 18 UNEF	71226M04	3/8 LT	71026M04	1/2 LT	71126M04	3/4 LT	2.500
1-3/4 18 UNS	71228M04	3/8 LT	71028M04	1/2 LT	71128M04	3/4 LT	2.625

Liquid-tight conduit back shells are also available for other types of nonmetallic conduit, contact factory with your application

Suffix	Description	Salt Spray Rating (Hours)
M00	Raw Brass	
M02	Olive Drab Cadmium over Nickel	500
M03	Clear Nickel	500
M04	Clear Chromate over Zinc	48
M06	Olive Drab over Zinc	48

The order numbers above indicate a clear Chromate over Zinc plating system rated at a 48 hour salt spray

Application Tooling



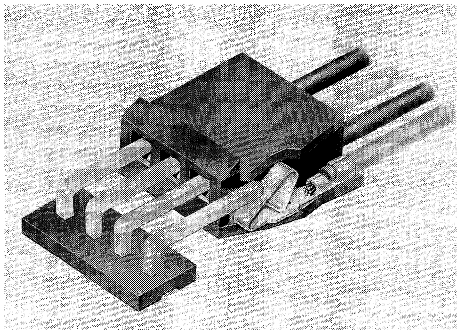
W

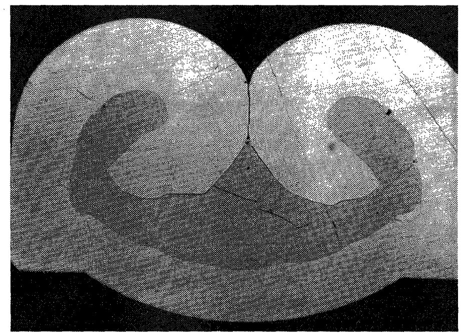
Crimp Application Tooling Introduction

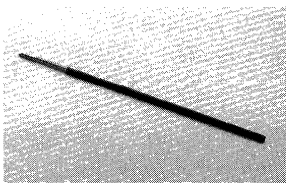
Crimping is the metallurgical compression of a terminal around the conductor of a wire, which creates a common electrical path of low resistance and high current carrying capabilities. A secondary crimp around the insulation of the wire provides wire support for insertion into a housing and allows the terminal to withstand shock and vibration.

The technology of crimping was developed to provide a high quality connection between a terminal and a wire at a relatively low applied cost. This technology was developed as a substitute to soldering and the problems associated with that technology. Crimp terminations can be applied with a basic hand tool, a press and die set, a stripper crimper or a fully automatic wire processing system.

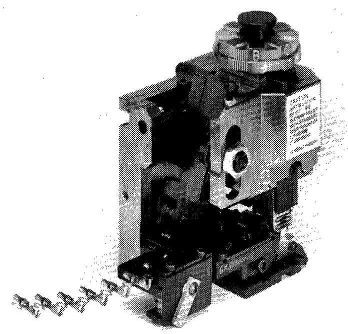
Molex offers a full range of application tooling. Each tool is developed to supply a reliable termination and meet the volume requirements of a customer's application.



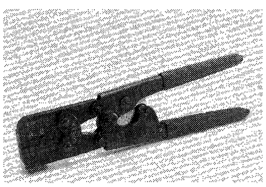




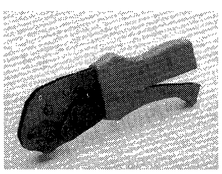
Insertion and Extraction Tools



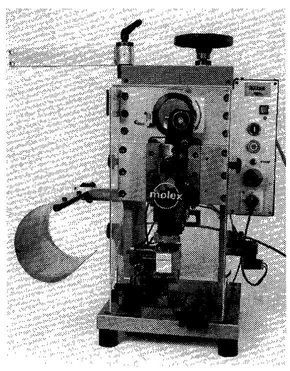
Mini-Mac Applicator



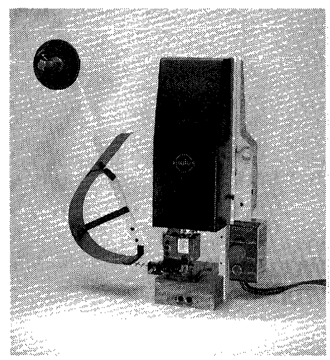
Hand Crimper



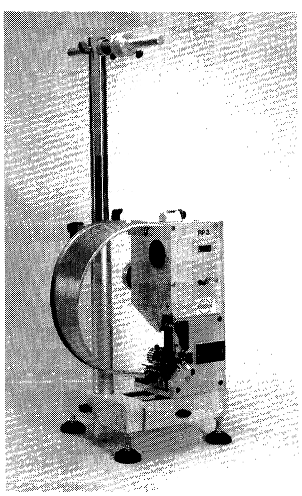
Hand Crimper



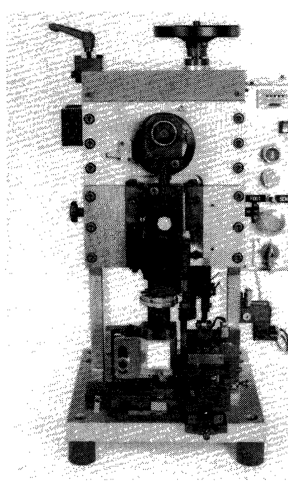
TM-44 Stripper Crimper



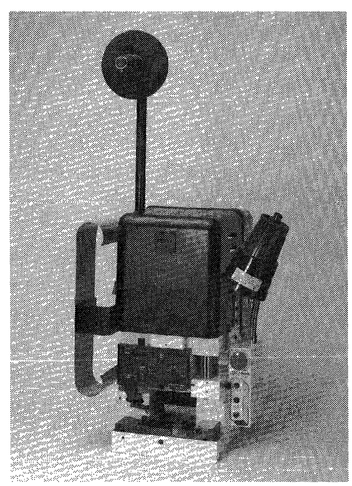
TM-7 Crimping Press



TM-80 Stripper Crimper



TM-144 Stripper Crimper



TM-42 Press

Hand Tools

Hand crimping tools are available for almost all terminals to support low volume production, prototype or repair requirements. These tools utilize loose piece terminals and although operator intensive will still produce 200 to 300 terminations per hour.* Terminal insertion and extraction tools are also available for most terminals.

TM-42 Press with Interchangeable Terminator Dies

The TM-42 Press (an improved version of our popular TM-40 Press) is intended for medium volume bench terminating applications and can produce up to 2500 crimps per hour.* The TM-42 Press has easy adjustments for crimp height and terminal feed stroke. Inexpensive terminator dies are available for most terminals and are compatible with all TM-40 and TM-42 Presses. The "base unit" allows the same TM-40/42 Terminator Dies to be used in existing Molex 3BF Presses with all the same adjustability.

Mini-Mac Quick Change Applicators

The Mini-Mac applicator is intended for both medium volume bench and high volume automatic applications requiring quick change over time. The Mini-Mac comes factory preset for the Molex TM-7 and TM-44 Presses, as well as a wide variety of other industry standard presses and wire processing machines.

TM-144 and TM-80 Stripper Crimpers

For customers with multi-conductor jacketed cable or preformed harness applications, Molex offers the TM-80 and TM-144 Stripper Crimpers. The TM-144 is a mechanical 2-1/2 ton system that is ideal for applications above 24 AWG. The TM-80 is a smaller pneumatic system ideal for applications of 24 AWG or smaller. Stripper crimpers eliminate the need for prestripped wires. The TM-144 and TM-80 will strip and terminate up to 1500 wires per hour.*

Wire Processing Systems

For high volume customers, Molex tooling and terminals are compatible with most popular fully automatic wire processing systems. These systems allow for the high speed cutting, stripping and crimping of one or both conductor ends. These systems can be setup with Molex presses and termination tooling and can produce up to 3800 wires per hour.

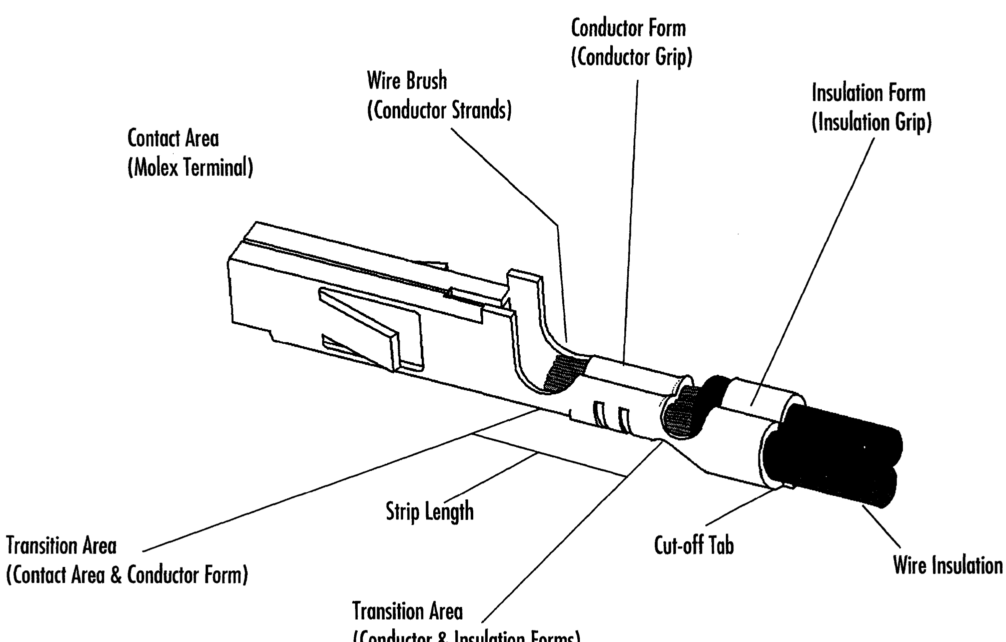
Accessories

Molex also offers a wide range of accessories to improve a company's crimping operation. The Molex Crimp Process Monitor will make a judgment of quality on every termination. Molex offers a shut height gage to confirm that all presses are set up the same, and carrier strip cutter, paper take-up or terminal strip oiler help to produce a high-efficiency operation.

Quality

Molex application tooling is designed to offer high-quality termination. Many pull force specifications exceed UL minimums. Crimp heights are set to optimize mechanical strength and electrical reliability. Proper wire brush, bellmouth, cut-off tab and terminal straightness are maintained in the tools. The insulation strain relief is designed to offer acceptable wire support. All these attributes interact in a crimping process to create a high quality termination. If one or more attributes are not maintained, the quality of the crimp termination will be reduced.

Molex offers application tooling worldwide. Additional tooling is available throughout Europe and the Far East. Contact your local Molex service representative to discuss the best tooling for your individual application.



* All rates are dependent on operator skill and the application

Application Tooling

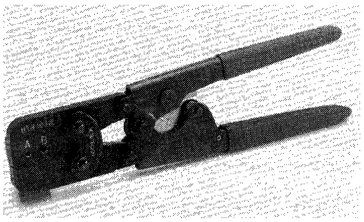
W

FEATURES

- Ideal for prototype work, small production volumes and field repair
- Ratchet release action determines correct crimp height repeatability*
- Adjustable eccentric to allow for crimp pressure adjustment
- Wire stop and terminal locator on most tools*
- Forms both conductor and insulation crimps in one action*
- Competitively priced

Crimp Application Tooling Hand Crimpers Cross Reference

US Hand Tools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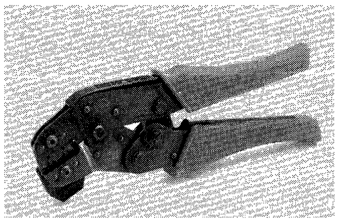
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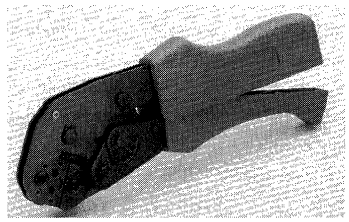
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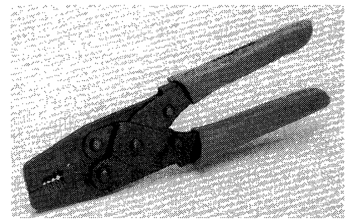
D

ORDERING INFORMATION

Preferred Version in the US

Terminal Series No.	Hand Tool Order No.	Reference Picture	Order No.		Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length	Profile A	Profile B
			Extraction Tool	Insertion Tool					
1190/1189	11-01-0084	A	11-03-0006	11-02-0003	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)		14-20
1190/1189	11-01-0014	D	11-03-0006	11-02-0003	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)	Insul.	Cond.
1219	11-01-0202	C	11-03-0021		12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)	12-14	
1220	11-01-0202	C	11-03-0021		12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)	12-14	
1380/1381	11-01-0084	A	11-03-0006	11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	18
1380/1381	11-01-0014	D	11-03-0006	11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	Insul.	Cond.
1434/1433	11-01-0006	A	11-03-0006	11-02-0003	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)	24-30	
1434/1433	11-01-0015	D	11-03-0006	11-02-0003	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)	Insul.	Cond.
1450/1451	11-01-0084	A	11-03-0006	11-02-0003	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.53 (.156-.218)		14-20
1457-1	11-01-0084	A		11-02-0007	18-22 (0.80-0.35)	2.60 (.102) max.	3.96-5.53 (.156-.218)	20-22	18
1457-2	11-01-0084	A		11-02-0007	14-16 (2.00-1.30)	3.56 (.140) max.	3.96-5.53 (.156-.218)		14-16
1508-9	11-01-0101	A	11-03-0016		14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)	18	14-16
1560/1561	11-01-0008	A	11-03-0002	11-02-0001	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)	20-24	18
1560/1561	11-01-0015	D	11-03-0002	11-02-0001	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)	Insul.	Cond.
1786/1787	11-01-0008	A	11-03-0002	11-02-0001	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)	20-24	18
1797	11-01-0203	B	11-03-0002	11-02-0001	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)	18-24	
1799	11-01-0008	A	11-03-0003		18-24 (0.80-0.20)	3.05 (.125) max.	3.17-4.74 (.125-.187)	20-24	18
1854/1855	11-01-0185	B	11-03-0002	11-02-0001	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	24	26-30
1854/1855	11-01-0015	D	11-03-0002	11-02-0001	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	Insul.	Cond.
1881-2	11-01-0084	A			16-24 (1.30-0.20)	3.50 (.138) max.	3.96-5.53 (.156-.218)	20-24	16-18
1881-3	11-01-0006	A			24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)	24-30	
1900/1901	11-01-0202	C	11-03-0008		10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.53 (.156-.218)	12	10
1917	• 11-01-0008	A	• 11-03-0003		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)	20-24	18
1929	11-01-0088	A			18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)		18-24
1943	• 11-01-0008	A	• 11-03-0010		18-24 (0.80-0.20)	2.80 (.110) max.	3.17-4.74 (.125-.187)	20-24	18
1973	• 11-01-0084	A	11-03-0017	• 11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	18
1973-2	• 11-01-0084	A	11-03-0017	• 11-02-0003	14-18 (2.00-0.80)	1.50-3.56 (.065-.140)	3.96-5.53 (.156-.218)		16-18
2012	• 11-01-0008	A	• 11-03-0003		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)	20-24	18
2014	• 11-01-0006	A	• 11-03-0003		24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	24-30	
2046/2047	• 11-01-0084	A	11-03-0008		16-18 (1.30-0.80)	3.05 (.120) max.	3.96-5.53 (.156-.218)		16-18
2107	11-01-0088	A			18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)		18-24
2107	11-01-0088	A			24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.17-3.96 (.125-.156)	24-30	
2151/2152	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	18
2176	11-01-0101	A	11-03-0016		14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)	18-22	14-16
2189/2190	• 11-01-0185	B	• 11-03-0002	• 11-02-0001	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	24	26-30
2192	• 11-01-0006	A	• 11-03-0006	• 11-02-0003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)	24-30	
2236/2237	• 11-01-0084	A	11-03-0008	• 11-02-0003	20-22 (0.50-0.35)	1.52 (.060) max.	3.96-5.53 (.156-.218)	20-22	

• US Standard Product, available through Molex franchised distributors

* A, B and C style tools only

When ordering hand crimp tools, please include terminal number to be crimped, wire size, insulation diameter, and send a 3' or 1m wire sample to Molex with order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling
Hand Crimpers
Cross Reference

US Hand Tools

Terminal Series No.	Hand Tool Order No.	Reference Picture	Order No. Extraction Tool	Order No. Insertion Tool	Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length	Profile A	Profile B
2269	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)		14-20
2273	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	18
2282/2283	• 11-01-0084	A	11-03-0008	• 11-02-0003	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)		14-18
2328	11-01-0101	A	• 11-03-0016		14-22 (2.00-0.35)	3.18 (.125) max.	3.55-4.74 (.140-.187)	18-22	14-16
2477/2478	• 11-01-0026	A	• 11-03-0016		18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)	18-24	
2576	11-01-0101	A	• 11-03-0016		14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)	18-22	14-16
2578	• 11-01-0026	A	• 11-03-0016		22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)		22-26
2697-1	11-01-0011	A	11-03-0001		12-20 (3.30-0.50)	4.78 (.188) max.	3.17-3.96 (.125-.156)	12-20	
2697-2	• 11-01-1026	A			12-20 (3.30-0.50)	5.84 (.230) max.	3.17-3.96 (.125-.156)	12-20	
2698	11-01-0101	A	• 11-03-0016		14-22 (2.00-0.35)	3.18 (.125) max.	3.96-5.53 (.156-.218)	18-22	14-16
2699	11-01-0011	A	11-03-0001		12-20 (3.30-0.50)	4.78 (.188) max.	3.96-5.53 (.156-.218)	12-20	
2759	• 11-01-0185	B	• 11-03-0022	11-02-0004	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	22-24	26-30
2776	11-01-0019	A	• 11-03-0016		14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)	14-20	
2799	• 11-01-0006	A	• 11-03-0016		24-28 (0.20-0.08)	1.77 (.070) max.	3.96-5.53 (.156-.218)	24-28	
2870/2871	11-01-0097	A	• 11-03-0006	• 11-02-0003	22-24 (0.35-0.20)	1.27-1.78 (.050-.070)	3.96-5.53 (.156-.218)	22-24	
2878	• 11-01-0026	A	• 11-03-0016		18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)	18-24	
4272	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	14-18
4295	• 11-01-0008	A	• 11-03-0003		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)	20-24	18
4296	• 11-01-0084	A	11-03-0025		16-22 (1.30-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	16-18
4366	11-01-0203	B	• 11-03-0003		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)	18-24	
4499	• 11-01-0008	A	• 11-03-0003		18-24 (0.80-0.20)	3.05 (.125) max.	3.17-4.74 (.125-.187)	20-24	18
4529	• 11-01-0008	A	• 11-03-0002	• 11-02-0001	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)	20-24	18
4549/4550	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)		14-20
4559	• 11-01-0185	B	• 11-03-0002	• 11-02-0001	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	24	26-30
4573	• 11-01-0203	B	• 11-03-0003		24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)		24-30
4706-P.1	11-01-0065	A			16-18 (1.30-0.80)	3.00 (.118) max.	5.94-6.30 (.234-.250)	18-22	
4706-3	11-01-0068	A			18-24 (0.80-0.20)	3.00 (.118) max.	5.94-6.30 (.234-.250)	18-22	
4787	11-01-0112	A			16-20 (1.30-0.50)	3.05 (.120) max.	3.96-4.74 (.156-.187)		
4787-2	11-01-0112	A			20-24 (0.50-0.20)	1.77 (.070) max.	3.96-4.74 (.156-.187)		
4809	• 11-01-0185	B	• 11-03-0022	11-02-0004	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	24	26-30
4811	11-01-0086	A			22-24 (0.35-0.20)	2.54 (.100) max.	5.94-6.30 (.234-.250)	22-24	
4811-1	11-01-0085	A			22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.30 (.234-.250)	22-26	
4838	• 11-01-0026	A	• 11-03-0016		20-22 (0.50-0.35)	2.41 (.095) max.	2.54-3.17 (.100-.125)	20-22	
5005/5006	• 11-01-0008	A			18-24 (0.80-0.20)	3.00 (.118) max.	2.54-3.17 (.100-.125)	20-24	18
5103	11-01-0189	B			22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)	22-24	26-28
5139	• 11-01-0185	B			24-30 (0.20-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	24	26-30
5167	• 11-01-0026	A	• 11-03-0016		18-24 (0.80-0.20)	2.50 (.098) max.	2.54-3.17 (.100-.125)		
5168	• 11-01-0026	A		11-26-0059	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)		
5194	11-01-0193	B		11-26-0100	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)	18	20-24
5205/5206	11-01-0114	A			14-18 (2.00-0.80)	3.40 (.134) max.	2.54-3.17 (.100-.125)	14-16	(2)20
5225	11-26-0089	A			22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	3.00-3.50 (.118-.138)		
5230	11-01-0195	B			22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)	22-24	26-30
5263	11-01-0194	B			22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)	22-24	26-28
5294	11-26-0101	A			24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)		
5378T/T2	57050-5000	A			24-28 (0.20-0.80)	1.52 (.060) max.	1.78-2.29 (.070-.090)		
5394T	11-26-0119	A			22-28 (0.35-0.08)	1.90 (.075) max.	2.10-2.70 (.083-.106)		
5479T	57005-5000	A	57005-6000		22-28 (0.35-0.08)	1.77 (.070) max.	2.54-3.17 (.100-.125)		
5479T2	57035-6000	A	57005-6000		30-32 (0.05-0.03)	1.20 (.047) max.	1.20-2.54 (.047-.100)		
5558/5556	11-01-0197	B	11-03-0044		18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)	18	20-24
5556T3/5558T3	11-01-0198	B	11-03-0044		22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)	22-24	26-28
5556T2/5558T2	11-01-0199	F	11-03-0044		16 (1.30)	1.00-3.10 (.071-.122)	3.00-3.50 (.118-.138)	16	
5659	11-26-0110	A			22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)		
6043	• 11-01-0006	A	• 11-03-0003		24-30 (0.20-0.05)	1.77 (.070) max.	3.17-3.96 (.125-.156)	24-30	
6271	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	20-22	18
6308	• 11-01-0006	A	• 11-03-0006	• 11-02-0003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)	24-30	
6310	• 11-01-0084	A	• 11-03-0006		14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)		14-20
6361/6362	• 11-01-0008	A			18-22 (0.80-0.35)	3.05 (.120) max.	2.54-3.17 (.100-.125)	20-22	18
6438	• 11-01-0026	A	• 11-03-0016		18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)	20-22	
6459	• 11-01-0185	B	11-03-0022		22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)		
6770/6772	• 11-01-0008	A	11-03-0002	• 11-02-0001	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)	20-24	18

• US Standard Product, available through Molex franchised distributors

When ordering hand crimp tools, please include terminal number to be crimped, wire size, insulation diameter, and send a 3' or 1m wire sample to Molex with order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

molex® Crimp Application Tooling Hand Crimpers Cross Reference

US Hand Tools

Terminal Series No.	Hand Tool Order No.	Reference Picture	Order No.		Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length	Profile A	Profile B
			Extraction Tool	Insertion Tool					
6838	• 11-01-0026	A	• 11-03-0016		18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)	18-24	
6893/6894	• 11-01-0006	A	• 11-03-0006	• 11-02-0003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)	24-30	
7238/7239	• 11-01-0084	A	• 11-03-0006	• 11-02-0003	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)		14-18
7242	• 11-01-0026	A	• 11-03-0016		22-30 (0.35-0.05)	1.52 (.060) max.	3.17-3.96 (.125-.156)	22	24-30
7258	• 11-01-0026	A	• 11-03-0016		22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)		22-26
7291	• 11-01-0008	A	11-03-0002	• 11-02-0001	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)	20-24	18
7499	• 11-01-0006	A			22-24 (0.35-0.20)	1.27 (.050) max.	3.17-3.96 (.125-.156)	24-30	
7676	11-01-0101	A	• 11-03-0016		14-22 (2.00-0.35)	3.55 (.140) max.	3.55-4.74 (.140-.187)	18-23	14-18
7879	• 11-01-0185	B			22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	22-24	26-30
8058	• 11-01-0084	A			18-22 (0.80-0.35)	3.55 (.140) max.	3.96-5.53 (.156-.218)	18-22	
8818/8819	• 11-01-0026	A	• 11-03-0016		18-22 (0.80-0.35)	2.40 (.095) max.	2.54-3.17 (.100-.125)	18-22	
8960	• 11-01-0008	A			18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)	20-24	18
8980 1-3C	11-01-0206	B	11-03-0037		14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)	14-20	
8980 1-3C1	11-01-0206	B	11-03-0037		18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)		18-22
8980 4C	11-01-0206	B	11-03-0037		14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)	14-20	
8980 4C1	11-01-0206	B	11-03-0037		18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)		18-22
8993	• 11-01-0026	A	• 11-03-0016		18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)		
35021	11-01-0205	B			24-30 (0.20-0.05)	1.00-1.52 (.040-.060)	1.80-2.20 (.071-.086)	24-26	28-30
40144	• 11-01-0103	A			32-36 (0.03-0.01)	0.64 (.025) max.	3.17-3.96 (.125-.156)	36	
40445	• 11-01-0185	B	11-03-0022	11-02-0004	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	22-24	26-30
40682	11-01-0110	A			22-26 (0.35-0.12)	1.52 (.060) max.	2.80-3.55 (.110-.140)	22-26	
41051	11-01-0177	A			18-22 (0.80-0.35)	2.30-3.55 (.090-.140)	3.17-3.96 (.125-.156)	18-22	
41422	11-01-0181	C			14-18 (2.00-0.80)	3.53 (.139) max.	5.08-5.84 (.200-.230)	16-18	14
41422	11-01-0180	C			10-12 (5.00-3.30)	4.83 (.190) max.	5.08-5.84 (.200-.230)	12	10
41483	11-01-0149	A	• 11-03-0006		14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)	16-18	14
41572	11-01-0185	B	11-03-0022	11-02-0004	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	22-24	26-30
41817	• 11-01-0085	A			22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.35 (.234-.250)		
42023/42024	11-01-0167	A	11-01-0168		14-20 (2.00-0.50)	1.20-3.30 (.060-.130)	3.96-5.53 (.156-.218)	16-20	14
42138	11-01-0149	A	• 11-03-0006		14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)	16-18	14
42478/42477	11-01-0207	C	• 11-03-0006		14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)		
42546/42547	11-01-0202	C	11-03-0008		10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.54 (.156-.218)	12	10
43030	11-01-0200	B	11-03-0043		26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)		26-30
43030	11-01-0200	B	11-03-0043		20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)	20-24	
43031	11-01-0201	B	11-03-0043		26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)		26-30
43031	11-01-0201	B	11-03-0043		20-24 (0.50-.020)	1.65 (.065) max.	2.54-2.92 (.100-.115)	20-24	
50011	57032-5000	A	57105-6000		24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)		
50012/50013	57046-5000	A			24-28 (0.20-0.08)	1.15 (.045) max.	1.70-2.30 (.067-.091)		
50031	57075-5000	A	57105-6000		30-34 (0.05-0.02)	0.90 (.035) max.			
50034	57056-5000	A	57057-6000		26-30 (0.12-0.05)	1.40 (.055) max.	1.40-1.90 (.055-.075)		
50038/50039	57085-5000	A			22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)		
50038/50039	57086-5000	A			22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)		
50058	63811-0200	B	57072-6000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)		28-32
50061	63811-0200	B	57072-6000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)	28-32	
50079	63811-0300	B	57072-6000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)		26-28
50080	63811-0300	B	57072-6000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)	26-28	
50097	• 57118-5000	A			20-24 (0.50-0.20)	1.40-1.90 (.055-.075)	2.50-3.00 (.098-.118)		
50125	63811-0300	B	57072-6000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)	26-28	
50133	63811-0200	B	57072-6000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)	28-32	
50212	57176-5000	A	57105-6000		24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)		
50394	11-01-0204	B			24-30 (0.20-0.05)	0.80-1.40 (.031-.055)	1.30-1.80 (.051-.071)		
70021	11-01-0209	B	11-03-0036	11-02-0022	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)	24	26-30
70021	11-01-0208	B	11-03-0036	11-02-0022	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)	22-24	
70021	11-01-0208	B	11-03-0036	11-02-0022	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)		32-36
70058	11-01-0209	B	11-03-0036	11-02-0022	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)	24	26-30
70058	11-01-0208	B	11-03-0036	11-02-0022	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)	22-24	
70058	11-01-0208	B	11-03-0036	11-02-0022	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)		32-36
71851	11-01-0209	B	11-03-0036	11-02-0022	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)	24	26-30
71851	11-01-0208	B	11-03-0036	11-02-0022	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)	22-24	
71851	11-01-0208	B	11-03-0036	11-02-0022	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)		32-36
94506-02	11-01-0182	C			14-18 (2.00-0.80)	3.70 (.145) max.	6.10-6.86 (.240-.270)	16-18	14

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See crimp specifications at the end of the crimp section

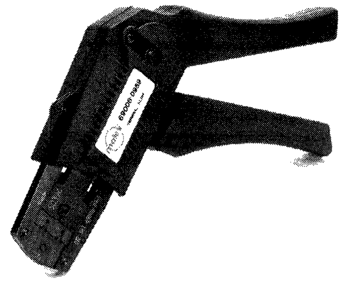
For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

FEATURES

- Ideal for prototype work, small production volumes and field repair
- Ratchet release action determines correct crimp height repeatability
- Adjustable eccentric to allow for crimp pressure adjustment
- Wire stop and terminal locator on most tools
- Forms both conductor and insulation crimps in one action
- Competitively priced

Crimp Application Tooling
Hand Crimpers
Cross Reference

European Hand Tools



ORDERING INFORMATION

Preferred Version in Europe—Not Available in the US

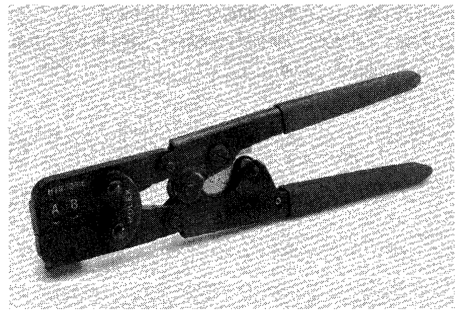
Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Hand Tool	Extraction Tool	Insertion Tool			
1189/1190	69008-0950					
1380/1381	69008-0951	11-03-0006	11-02-0003	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1560/1561	69008-0952	11-03-0002	11-02-0001	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)
1854/1855	69008-0958	11-03-0002	11-02-0001	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2477-2478	69008-0953	11-03-0016		18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2578	69008-0954	11-03-0016		22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
2759	69008-0955	11-03-0022	11-02-0004	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
4809	69008-0956	11-03-0022	11-02-0004	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
5103	69008-0957			22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5241	69008-0980			22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	
5556/5558	69008-0724	11-03-0044		16-28 (1.30-0.08)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)
43030/43031	69008-0982			20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)
43030/43031	69008-0983			26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
50394	69008-0959			24-30 (0.20-0.05)	0.80-1.40 (.031-.055)	1.30-1.80 (.051-.071)

Hand Crimpers Cross Reference

FEATURES

- Ideal for prototype work, small production volumes and field repair
- Ratchet release action determines correct crimp height repeatability
- Adjustable eccentric to allow for crimp pressure adjustment
- Wire stop and terminal locator on most tools
- Forms both conductor and insulation crimps in one action
- Competitively priced

Molex Japan Hand Tools



ORDERING INFORMATION

Preferred Version in Japan—Not Available in the US

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Hand Tool	Extraction Tool	Insertion Tool			
1189/1190	JHTR1031C	J5800-003		14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1380/1381	JHTR1031C	J5800-003		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1433/1434	JHTR2262	J5800-003		24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1560/1561	JHTR1719C	J5800-002		18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)
1854/1855	JHTR2262A* JHTR2262J†	J5800-002		24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2151/2152	JHTR1031C	J5800-003		18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2477/2478	JHTR2455A			18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2578	JHTR2455A			22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
2759	JHTR2262A* JHTR2262J†			22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
5005/5006	JHTR1719C	J5800-002	J5800-001	18-24 (0.80-0.20)	3.00 (.118) max.	
5008/5009	JHTR2262A‡ JHTR2262J†	J5800-002	J5800-001	24-28 (0.20-0.08)	2.39 (.094) max.	
5103	JHTR5907			22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5139	JHTR2262A* JHTR2262J†	J5800-004		24-30 (0.20-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
5159	JHTR2262A* JHTR2262J†	J5800-004		22-28 (0.35-0.08)	1.20-1.70 (.047-.067)	2.80-3.40 (.110-.133)
5167	JHTR2445A	J5800-004§ 57092-6000**		18-24 (0.80-0.20)	2.50 (.098) max.	2.54-3.17 (.100-.125)
5168	JHTR2445A	J5800-004§ 57092-6000**		22-28 (0.35-0.08)	1.70 (.067) max.	
5175	JHTR1031C			16-22 (1.30-0.35)	3.40 (.134) max.	3.70-4.30 (.147-.169)
5194	JHTR5904	J5800-009		18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)
5205/5206	JHTR5902	J5800-002		14-18 (2.00-0.80)	3.40 (.134) max.	2.54-3.17 (.100-.125)
5225	JHTR5906	J5800-009		22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	
5230	JHTR5905	J5800-008		22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
5241	JHTR2262A* JHTR2262J†	J5800-005		22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	
5259	JHTR2262A* JHTR2262J†	J5800-004				
5263	JHTR5974			22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5266	JHTR5908†† JHTR5971‡‡					
5294	JHTR5911	J5800-009		24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)
5378	57050-5000					
5394T	JHTR5973			22-28 (0.35-0.08)	1.90 (.075) max.	1.98-2.77 (.078-.109)
5394T2	57029-5000			20-22 (0.50-0.35)		
5400	JHTR5975					
5479PBT	57005-5000	57005-6000	57005-6000	22-28 (0.35-0.08)	1.77 (.070) max.	2.54-3.17 (.100-.125)
5479PBT2	57035-5000	57005-6000	57005-6000	30-32 (0.05-0.03)	1.20 (.047) max.	1.20-2.54 (.047-.100)
5556/5558	57026-5000§§ 57027-5000***	57031-6000		18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)

* 22-26 AWG insulation diameter 1.30-1.70mm
† 22-28 AWG insulation diameter 0.80-1.30mm
‡ 24-26 AWG insulation diameter 1.30-1.70mm
§ Applies except for no. 51011 housing
** Applies only for no. 51011 housing
†† 22-28 AWG insulation diameter 1.10-1.70mm (UL 1007)
‡‡ 22-28 AWG insulation diameter 2.00-2.50mm (UL 1015)
§§ 18-24 AWG insulation diameter 1.50-2.20mm (UL 1007)
*** 18-24 AWG insulation diameter 2.30-3.10mm (UL 1015)

Crimp Application Tooling
Hand Crimpers
Cross Reference

Molex Japan Hand Tools

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Hand Tool	Extraction Tool	Insertion Tool			
5556T2/5558T2	57064-5000	57031-6000		22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5659	JHTR5972			22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
50011	57032-5000	57105-6000		24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)
50012/50013	57046-5000			24-28 (0.20-0.08)	1.15 (.045) max.	1.70-2.30 (.067-.091)
50031	57075-5000	57105-6000		30-34 (0.05-0.02)	0.90 (.035) max.	
50034	57056-5000	57057-6000		26-30 (0.12-0.05)	1.40 (.055) max.	
50038/50039	57085-5000††† 57086-5000‡‡‡			22 (0.35)	1.50-1.90 (.060-.075)	2.00-2.50 (.078-.098)
50051	57053-5000					
50058	57068-5000	57072-6000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50061	57070-5000	57072-6000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50065		57094-6000				
50079	57177-5000	57072-6000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50080		57072-6000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50083	57036-5000§§§ 57037-5000****	57033-6000†††† 57093-6000‡‡‡‡	57033-6000			
50084	57036-5000§§§§	57033-6000†††† 57093-6000‡‡‡‡	57033-6000			
50087	57036-5000§§§ 57037-5000****	57033-6000	57033-6000			
50088	57036-5000§§§§	57033-6000	57033-6000			
50089		57094-6000				
50095/50096	57097-5000***** 57114-5000†††††	57120-6000				
50097	57118-5000	57115-6000		20-24 (0.50-0.20)	1.40-1.90 (.055-.075)	2.50-3.00 (.098-.118)
50098	57119-5000	57115-6000		18-22 (0.80-0.35)	1.80-2.60 (.071-.102)	1.50-2.75 (.060-.108)
50099		57072-6000				
50100		57072-6000				
50105/50106	57106-5000‡‡‡‡‡ 57127-5000§§§§§	57120-6000				
50118/50119	57085-5000††† 57086-5000‡‡‡					
50125	57140-5000	57072-6000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
57127/57128	57125-5000	57120-6000				
50133	57139-5000	57072-6000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50146	57168-5000					
50147/50148	57132-5000					
50156	57135-5000					
50200		57105-6000				
50207	57187-5000					
50212	57176-5000			24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50217	57189-5000§§ 57190-5000***					
70021-0004 70021-0006	57036-5000§§§ 57037-5000****	57033-6000	57033-6000			
70021-0021 70021-0023	57036-5000§§§§	57033-6000	57033-6000			
70058-0004 70058-0006	57036-5000†††† 57037-5000‡‡‡‡	57033-6000†††† 57093-6000‡‡‡‡	57033-6000			
70058-0022 70058-0024	57036-5000§§§§	57033-6000†††† 57093-6000‡‡‡‡	57033-6000			
87115-XX0X 87116-XX0X	57205-5000					
87115-XX1X 87116-XX1X	57206-5000					

§§ 18-24 AWG insulation diameter 1.50-2.20mm (UL 1007)
*** 18-24 AWG insulation diameter 2.30-3.10mm (UL 1015)
††† AVS 0.3
‡‡‡ CAVS 0.5
§§§ 24-26 AWG insulation diameter 1.60mm max.
**** 24-30 AWG insulation diameter 1.60mm max.
†††† Applies except for no. 51008 housing
‡‡‡‡ Applies only for no. 51008 housing
§§§§ 22-24 AWG insulation diameter 1.60mm max.
***** 16 AWG insulation diameter 3.10-3.40mm
††††† 18 AWG insulation diameter 2.80-3.00mm
‡‡‡‡‡ 22-24 AWG insulation diameter 2.20-2.50mm (UL 1015)
§§§§§ 18-20 AWG insulation diameter 1.70-3.00mm (UL 1007, 1015)

Crimp Application Tooling
TM-42 Crimp Terminating Machines Cross Reference

US Press and Die Tooling

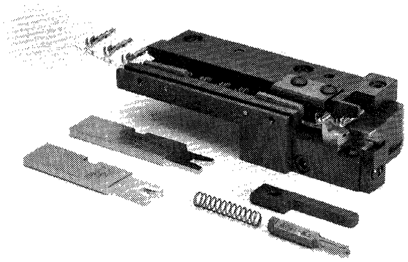
FEATURES AND SPECIFICATIONS

Features

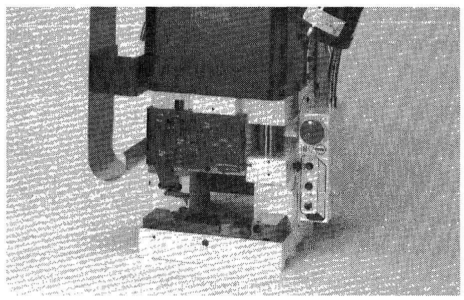
- Utilizes all Molex TM-40/42 Terminator Dies
- Independent conductor and insulation adjustments with position indicators
- Quick release tooling for fast, simple changeover; ability to remove upper tooling without removing lower die; no ram adjustment required
- Universal feed adjustable to all Molex terminals
- Flexible external work light
- Resettable counter for accurate batch counting
- Accepts Molex Crimp Process Monitor for quality crimp contacts (adapter kit required)
- Meets OSHA safety and noise standards
- ISO metric

Specifications

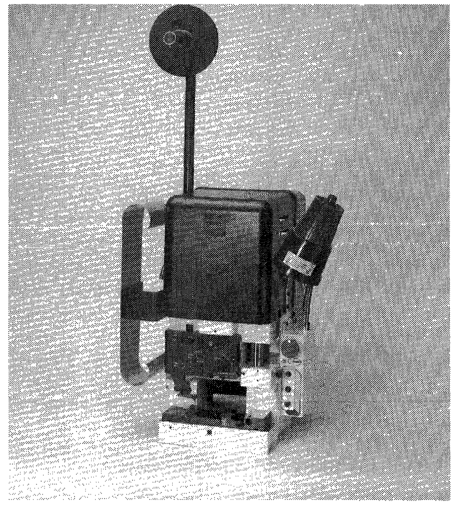
Size without Reel Arm: Width—330mm (13")
Depth—330mm (13")
Height—914mm (36")
Size with Reel Arm and Reel: Width—540mm (21.2")
Depth—330mm (13")
Height—1150mm (45")
Weight: 100kg (220 lb)
Electrical: Voltage—110V AC, 60 Hz or 220V AC, 1 phase, 50 Hz
Current—5.8A
Tonnage: 8.9kN (1 tons) 12 AWG
Stroke Length: 38.10mm (1.500")
Rate: Up to 2500 terminations per hour, dependent on operator speed and wire length



Terminator Die



Tooling Adjustments



TM-42

ORDERING INFORMATION

Preferred Version in the US

Presses	
Description	**Order No.**
New TM-42 Press (110V)	69002-5001
Rebuilt TM-42 (110V)*	69002-5081
Rebuilt TM-40 (110V)*	11-05-0021

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	TM-40/42 Press and Die	Terminator Die Only	Spare Tooling Kit			
1189/1190	11-04-0197	11-40-2001	11-40-3001	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1219	11-04-0640	11-40-2165	11-40-3157	12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)
1220	11-04-0641	11-40-2166	11-40-3158	12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)
1380/1381	11-04-0199	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1433/1434	11-04-0201	11-40-2003	11-40-3003	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1450/1451	11-04-0197	11-40-2001	11-40-3001	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1457-1	11-04-0213	11-40-2009	11-40-3009	18-22 (0.80-0.35)	2.60 (.102) max.	3.96-5.53 (.156-.218)
1457-2	11-04-0215	11-40-2010	11-40-3010	14-16 (2.00-1.30)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508-9	11-04-0586	11-40-2117	11-40-3115	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508-09	11-04-0588	11-40-2118	11-40-3116	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1560/1561	11-04-0203	11-40-2004	11-40-3004	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)
1786/1787	11-04-0203	11-40-2004	11-40-3004	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.156-.218)
1797	11-04-0205	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1854/1855	11-04-0207	11-40-2006	11-40-3006	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
1881-2	11-04-0396	11-40-2083	11-40-3083	16-24 (1.30-0.20)	3.50 (.138) max.	3.96-5.53 (.156-.218)
1881-3	11-04-0398	11-40-2084	11-40-3084	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1900/1901	11-04-0626	11-40-2163	11-40-3155	10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.53 (.156-.218)
1917	11-04-0205	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1929	11-04-0223	11-40-2014	11-40-3014	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
1943	11-04-0356	11-40-2035	11-40-3035	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-4.74 (.125-.187)
1973	11-04-0737	11-40-2214	11-40-3216	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2012	11-04-0205	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
2014	11-04-0217	11-40-2011	11-40-3011	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2046/2047	11-04-0639	11-40-2164	11-40-3156	16-18 (1.30-0.80)	3.05 (.120) max.	3.96-5.53 (.156-.218)
2107	11-04-0223	11-40-2014	11-40-3014	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
2107	11-04-0221	11-40-2013	11-40-3013	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.17-3.96 (.125-.156)

* Rebuilt TM-42 and TM-40 Presses are subject to availability

When ordering crimp dies, machines or hand crimp tools, please include terminal number to be crimped, wire size, insulation, and send a 3' or 1m sample to Molex with the order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling TM-42 Crimp Terminating Machines Cross Reference

US Press and Die Tooling

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	TM-40/42 Press and Die	Terminator Die Only	Spare Tooling Kit			
2151/2152	11-04-0199	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2176	11-04-0226	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)
2189/2190	11-04-0207	11-40-2006	11-40-3006	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2192	11-04-0201	11-40-2003	11-40-3003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2236/2237	11-04-0199	11-40-2002	11-40-3002	20-22 (0.50-0.35)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2269	11-04-0197	11-40-2001	11-40-3001	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2273	11-04-0199	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2282/2283	11-04-0598	11-40-2121	11-40-3119	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2328	11-04-0226	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.18 (.125) max.	3.55-4.74 (.140-.187)
2477/2478	11-04-0418	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2482	11-04-0709	11-40-2174	11-40-3239	12-14 (3.25-2.00)	4.20 (.165) max.	4.74-5.53 (.187-.218)
2576	11-04-0226	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)
2578	11-04-0420	11-40-2097	11-40-3097	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
2698	11-04-0226	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.18 (.125) max.	3.96-5.53 (.156-.218)
2759	11-04-0741	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
2776	11-04-0586	11-40-2117	11-40-3115	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2776	11-04-0588	11-40-2118	11-40-3116	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2799	11-04-0629	11-40-2215	11-40-3154	22-28 (0.35-0.80)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2870/2871	11-04-0237	11-40-2020	11-40-3020	22-24 (0.35-0.20)	1.27-1.78 (.050-.070)	3.96-5.53 (.156-.218)
2878	11-04-0418	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
4259	11-04-0428	11-40-2101	11-40-3101	22-30 (0.35-0.05)	2.54 (.100) max.	2.54-3.17 (.100-.125)
4272	11-04-0199	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
4295	11-04-0205	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4296	11-04-0310	11-40-2047	11-40-3047	16-22 (1.30-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
4366	11-04-0205	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4529	11-04-0749	11-40-2230	11-40-3231	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4549/4550	11-04-0197	11-40-2001	11-40-3001	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
4559	11-04-0207	11-40-2006	11-40-3006	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
4573	11-04-0217	11-40-2011	11-40-3011	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
4706-P.1	11-04-0293	11-40-2042	11-40-3042	16-18 (1.30-0.80)	2.92 (.115) max.	5.94-6.30 (.234-.250)
4706-P.1	11-04-0297	11-40-2044	11-40-3044	16-18 (1.30-0.80)	2.92 (.115) max.	5.94-6.30 (.234-.250)
4706-3	11-04-0295	11-40-2043	11-40-3043	18-24 (0.80-0.20)	3.05 (.120) max.	5.94-6.30 (.234-.250)
4706-3	11-04-0299	11-40-2045	11-40-3045	18-24 (0.80-0.20)	3.05 (.120) max.	5.94-6.30 (.234-.250)
4787	11-04-0306	11-40-2033	11-40-3033	16-20 (1.30-0.50)	3.05 (.120) max.	3.96-4.74 (.156-.187)
4787-2	11-04-0414	11-40-2094	11-40-3094	20-24 (0.50-0.20)	1.77 (.070) max.	3.96-4.74 (.156-.187)
4809	11-04-0430	11-40-2102	11-40-3102	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
4811	11-04-0277	11-40-2029	11-40-3029	22-24 (0.35-0.20)	2.54-2.29 (.100 -.090)	5.94-6.30 (.234-.250)
4811	11-04-0277	11-40-2029	11-40-3029	22-24 (0.35-0.20)	2.54 (.100) max.	5.94-6.30 (.234-.250)
4811	11-04-0283	11-40-2240	11-40-3243	22-24 (0.35-0.20)	2.54-2.29 (.100 -.090)	5.94-6.30 (.234-.250)
4811	11-04-0283	11-40-2240	11-40-3243	22-24 (0.35-0.20)	2.54 (.100) max.	5.94-6.30 (.234-.250)
4811-1	11-04-0279	11-40-2039	11-40-3039	22-24 (0.35-0.20)	1.52 (.060) max.	5.94-6.30 (.234-.250)
4811-1	11-04-0750	11-40-2241	11-40-3244	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.30 (.234-.250)
4838	11-04-0418	11-40-2096	11-40-3096	20-22 (0.50-0.35)	2.41 (.095) max.	2.54-3.17 (.100-.125)
5005/5006	11-04-0358	11-40-2064	11-40-3064	18-24 (0.80-0.20)	3.00 (.118) max.	2.54-3.17 (.100-.125)
5008/5009	11-01-0360	11-40-2065	11-40-3065	24-28 (0.20-0.08)	2.39 (.094) max.	2.54-3.17 (.100-.125)
5103	11-04-0316	11-40-2056	11-40-3056	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5139	11-04-0741	11-40-2265	11-40-3267	24-30 (0.20-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
5159	11-04-0741	11-40-2265	11-40-3267	22-28 (0.35-0.08)	1.20-1.70 (.047-.067)	2.80-3.40 (.110-.133)
5167	11-04-0667	11-40-2181	11-40-3183	18-24 (0.80-0.20)	2.50 (.098) max.	2.54-3.17 (.100-.125)
5168	11-04-0668	11-40-2191	11-40-3196	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
5175	11-04-0711	11-40-2217	11-40-3219	16-22 (1.30-0.35)	3.40 (.134) max.	3.70-4.30 (.147-.169)
5190	11-04-0279	11-40-2039	11-40-3039	22-26 (0.35-0.12)	1.52 (.060) max.	5.97-6.35 (.234-.250)
5190	11-04-0750	11-40-2241	11-40-3244	22-26 (0.35-0.12)	1.52 (.060) max.	5.97-6.35 (.234-.250)
5194	11-04-0376	11-40-2073	11-40-3073	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)
5205/5206	11-04-0362	11-40-2066	11-40-3066	14-18 (2.00-0.80)	3.40 (.134)	2.54-3.17 (.100-.125)

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling TM-42 Crimp Terminating Machines Cross Reference

US Press and Die Tooling

Terminal Series No.	Order No. TM-40/42 Press and Die	Order No. Terminator Die Only	Order No. Spare Tooling Kit	Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
5225	11-04-0378	11-40-2074	11-40-3074	22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	3.00-3.50 (.118-.138)
5230	11-04-0368	11-40-2069	11-40-3069	22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
5241	11-04-0354	11-40-2063	11-40-3063	22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	2.54-3.17 (.100-.125)
5263	11-04-0408	11-40-2089	11-40-3056	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5294	11-04-0370	11-40-2070	11-40-3070	24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)
5298	11-04-0745	11-40-2246	11-40-3249	18-24 (0.80-0.20)	3.05 (.120) max.	5.00-6.00 (.200-.240)
5378T/T2	11-04-0627	11-40-2149	11-40-3143	24-28 (0.20-0.08)	1.52 (.060) max.	1.78-2.29 (.070-.090)
5394T	11-04-0372	11-40-2071	11-40-3071	22-28 (0.35-0.08)	1.90 (.075) max.	2.10-2.70 (.083-.106)
5479T	11-04-0440	11-40-2107	11-40-3108	22-28 (0.35-0.08)	1.77 (.070) max.	2.54-3.17 (.100-.125)
5479T2	11-04-0751	11-40-2204	11-40-3206	30-32 (0.05-0.03)	1.20 (.047) max.	1.20-2.54 (.047-.100)
5556/5558	11-04-0594	11-40-2119	11-40-3117	18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)
5556T2/5558T2	11-04-0616	11-40-2137	11-40-3133	22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5556T3/5558T3	11-04-0660	11-40-2187	11-40-3189	16 (1.30)	1.00-3.10 (.071-.122)	3.00-3.50 (.118-.138)
5556 1/5558		11-40-2263	11-40-3266	26-30 (0.12-0.05)	.035-.070 (.035-.070)	3.00-3.50 (.118-.138)
5659	11-04-0412	11-40-2091	11-40-3091	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
6308	11-04-0201	11-40-2003	11-40-3003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
6310	11-04-0197	11-40-2001	11-40-3001	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
6361/6362	11-04-0732	11-40-2203	11-40-3204	18-22 (0.80-0.35)	3.05 (.120) max.	2.54-3.17 (.100-.125)
6438	11-04-0418	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
6459	11-04-0741	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
6482-1,2	11-04-0632	11-40-2151	11-40-3144	14-18 (2.00-0.80)	3.56 (.140) max.	3.81-4.32 (.150-.170)
6770/6772	11-04-0203	11-40-2004	11-40-3004	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
6838	11-04-0418	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
6893/6894	11-04-0201	11-40-2003	11-40-3003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
7238/7239	11-04-0608	11-40-2131	11-40-3128	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
7242	11-04-0380	11-40-2075	11-40-3075	22-30 (0.35-0.05)	1.52 (.060) max.	3.17-3.96 (.125-.156)
7258	11-04-0420	11-40-2097	11-40-3097	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
7291	11-04-0203	11-40-2004	11-40-3004	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
7499	11-04-0669	11-40-2172	11-40-3174	22-24 (0.35-0.20)	1.27 (.050) max.	3.17-3.96 (.125-.156)
7676	11-04-0226	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.55 (.140) max.	3.55-4.74 (.140-.187)
7879	11-04-0752	11-40-2251	11-40-3253	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
8058	11-04-0237	11-40-2020	11-40-3020	18-22 (0.80-0.35)	3.55 (.140) max.	3.96-5.53 (.156-.218)
8960	11-04-0269	11-40-2036	11-40-3036	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
8980 1-3C	11-04-0748	11-40-2282	11-40-3283	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)
8980 1-3C1	11-04-0759	11-40-2273	11-40-3275	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
8980 4C	11-04-0760	11-40-2274	11-40-3276	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)
8980 4C1	11-04-0761	11-40-2275	11-40-3277	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
8993	11-04-0418	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
30272	11-04-0714	11-40-2216	11-40-3217	16-18 (1.50-0.80)	2.00-2.40 (.078-.095)	3.18-3.96 (.125-.156)
30490	11-04-0762	11-40-2249	11-40-3252	18-24 (0.80-0.20)	3.00 (.118) max.	3.00-3.55 (.118-.138)
35021	11-04-0763	11-40-2272	11-40-3274	24-30 (0.20-0.05)	1.00-1.52 (.040-.060)	1.80-2.20 (.071-.086)
35727/35728	11-04-0764	11-40-2261	11-40-3264	14-20 (2.00-0.50)	3.40 (.134) max.	4.70-5.40 (.185-.212)
40144	11-04-0275	11-40-2038	11-40-3038	32-36 (0.03-0.01)	0.64 (.025) max.	3.17-3.96 (.125-.156)
40445	11-04-0741	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
40682	11-04-0382	11-40-2076	11-40-3076	22-26 (0.35-0.12)	1.52 (.060) max.	2.80-3.55 (.110-.140)
41050	11-04-0773	11-40-2250	11-40-3254	18 (0.80)	2.80 (.110) max.	3.17-3.96 (.125-.156)
41422-2	11-04-0677	11-40-2193	11-40-3194	14-18 (2.00-0.80)	3.53 (.139) max.	5.08-5.84 (.200-.230)
41422	11-04-0663	11-40-2192	11-40-3193	10-12 (5.00-3.30)	4.83 (.190) max.	5.08-5.84 (.200-.230)
41483	11-04-0702	11-40-2212	11-40-3214	14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)
41572	11-04-0741	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
41817	11-04-0595	11-40-2120	11-40-3118	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.35 (.234-.250)
42001	11-04-0679	11-40-2171	11-40-3173	22-26 (0.35-0.12)	1.52 (.060) max.	4.32-4.83 (.170-.190)
42023/42024	11-04-0681	11-40-2197	11-40-3199	14-20 (2.00-0.50)	'1.20-3.30 (.060-.130)	3.96-5.53 (.156-.218)
42023/42024	11-04-0680	11-40-2198	11-40-3198	14-20 (2.00-0.50)	1.20-3.30 (.060-.130)	3.96-5.53 (.156-.218)
42138	11-04-0702	11-40-2212	11-40-3214	14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling TM-42 Crimp Terminating Machines Cross Reference

US Press and Die Tooling

Terminal Series No.	Order No.			Wire Gauge AWG (mm^2)	Insulation Diameter	Strip Length
	TM-40/42 Press and Die	Terminator Die Only	Spare Tooling Kit			
42477/42478	11-04-0753	11-40-2270	11-40-3272	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
42546/42547	11-04-0626	11-40-2163	11-40-3155	10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.54 (.156-.218)
42554/42555	11-04-0704	11-40-2223	11-40-3225	16-18 (1.30-0.80)	4.57 (.180) max.	3.96-5.54 (.156-.218)
42824	11-04-0765	11-40-2257	11-40-3261	16-18 (1.30-0.80)	3.05 (.120) max.	4.57 (.180)
42825	11-04-0766	11-40-2285	11-40-3287	16-18 (1.30-0.80)	3.05 (.120) max.	4.57 (.180)
43030	11-04-0754	11-40-2258	11-40-3262	26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
43030	11-04-0755	11-40-2259	11-40-3263	20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)
43031	11-04-0754	11-40-2258	11-40-3262	26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
43031	11-04-0755	11-40-2259	11-40-3263	20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)
50011	11-04-0628	11-40-2136	11-40-3132	24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)
50012/50013	11-04-0630	11-40-2141	11-40-3135	24-28 (0.20-0.08)	1.15 (.045) max.	1.70-2.30 (.067-.091)
50034	11-04-0635	11-40-2156	11-40-3151	26-30 (0.12-0.05)	1.40 (.055) max.	1.40-1.90 (.055-.075)
50038/50039	11-04-0756	11-40-2248	11-40-3251	22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)
50058	11-04-0739	11-40-2245	11-40-3248	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50061	11-04-0744	11-40-2280	11-40-3281	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50079	11-04-0731	11-40-2245	11-40-3248	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50080	11-04-0744	11-40-2280	11-40-3281	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50097	11-04-0767	11-40-2289	11-40-3289	20-24 (0.50-0.20)	1.40-1.90 (.055-.075)	2.50-3.00 (.098-.118)
50098	11-04-0768	11-40-2271	11-40-3273	18-22 (0.80-0.35)	1.80-2.60 (.071-.102)	1.50-2.75 (.060-.108)
50125	11-04-0730	11-40-2244	11-40-3247	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50133	11-04-0730	11-40-2244	11-40-3247	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50212	11-04-0743	11-40-2255	11-40-3259	24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50351	11-04-0769	11-40-2287	11-40-3286	22-28 (0.35-0.08)	1.15-1.80 (.045-.071)	2.30-2.80 (.091-.110)
50372	11-04-0770	11-40-2284	11-40-5453	22-26 (0.35-0.12)	0.93-1.35 (.053-.037)	1.30-1.80 (.051-.071)
50394	11-04-0771	11-40-2278	11-40-3279	24-30 (0.20-0.05)	0.80-1.40 (.031-.055)	1.30-1.80 (.051-.071)
70021	11-04-0757	11-40-2288	11-40-3288	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70021	11-04-0404	11-40-2087	11-40-3087	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70021	11-04-0402	11-40-2086	11-40-3086	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
70058	11-04-0758	11-40-2283	11-40-3284	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70058	11-04-0410	11-40-2090	11-40-3090	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70058	11-04-0384	11-40-2077	11-40-3077	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
71851	11-04-0758	11-40-2283	11-40-3284	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
71851	11-04-0410	11-40-2090	11-40-3090	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
71851	11-04-0384	11-40-2077	11-40-3077	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
87048	11-04-0708	11-40-2236	11-40-3238	26-30 (0.12-0.05)	2.79 (.110) max.	5.00 (.197)
87421	11-04-0772	11-40-2286	11-40-3285	26 (0.12)	1.00-1.30 (.039-.051)	1.05-1.54 (.041-.061)
90020/90021-01		69001-1000	69001-2001	16-20 (1.50-0.50)	2.00-3.30 (.080-.130)	
90020/90021-02		69001-1005	69001-2002	16-20 (1.50-0.50)	1.00-2.30 (.055-.090)	
90020/90021-03		69001-1001	69001-2003	14-18 (2.50-1.00)	2.00-4.30 (.102-.142)	
90020/90021-04		69001-1006	69001-2004	14-18 (2.50-1.00)	1.00-2.90 (.040-.115)	
90022/90024-01		69001-1010	69001-2005	16-20 (1.50-0.50)	2.00-3.30 (.080-1.30)	
90022/90024-02		69001-1011	69001-2006	16-20 (1.50-0.50)	1.30-2.30 (.052-.090)	
90022/90024-03		69001-1012	69001-2007	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90022/90024-04		69001-1013	69001-2008	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90026/90027-01		69001-1014	69001-2009	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90026/90027-02		69001-1015	69001-2010	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90026/90027-03		69001-1016	69001-2011	12-14 (4.00-2.50)	3.00-4.50 (.130-.180)	
90026/90027-04		69001-1017	69001-2012	12-14 (4.00-2.50)	2.00-4.30 (.102-.142)	
90028-010X		69001-1002	69001-2013	16-20 (1.50-0.50)	2.00-3.30 (.080-1.30)	
90028-020X		69001-1007	69001-2014	16-20 (1.50-0.50)	1.30-2.30 (.052-.090)	
90028-030X		69001-1004	69001-2015	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90028-040X		69001-1008	69001-2016	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90028-050X		69001-1003	69001-2017	12-14 (4.00-2.50)	3.00-4.50 (.130-.180)	
90028-060X		69001-1009	69001-2018	12-14 (4.00-2.50)	2.00-4.30 (.102-.142)	
90198-010X	11-04-0687	11-40-2196	11-40-3197	22-26 (0.35-.012)	1.70 (.067) max.	3.00-3.50 (.118-.138)

For all 69001-XXXX order numbers, please refer to the TM-42 operating manual for shimming requirements

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

ORDERING INFORMATION

Press	
Description	**Order No.**
European TM-42 Press (220V)	69002-5000
Press Options	
Emergency Stop	69002-5070
Pneumatic Feed	69002-5621
Cable Trimmer	69002-5622
Band Cropper	69002-5623

Crimp Application Tooling TM-42 Crimp Terminating Machines Cross Reference

European Press and Die Tooling

Preferred Version in Europe—Not Available in the US

Terminal Series No.	Order No.		Wire Gauge AWG (mm^2)	Insulation Diameter	Strip Length
	Terminator Die Only	Spare Tooling Kit			
90020/90021-01XX	69001-1000	69001-2001	16-20 (1.50-0.50)	2.00-3.30 (.080-.130)	
90020/90021-02XX	69001-1005	69001-2002	16-20 (1.50-0.50)	1.00-2.30 (.055-.090)	
90020/90021-03XX	69001-1001	69001-2003	14-18 (2.50-1.00)	2.00-4.30 (.102-.142)	
90020/90021-04XX	69001-1006	69001-2004	14-18 (2.50-1.00)	1.00-2.90 (.040-.115)	
90022/90024-01XX	69001-1010	69001-2005	16-20 (1.50-0.50)	2.00-3.30 (.080-.130)	
90022/90024-02XX	69001-1011	69001-2006	16-20 (1.50-0.50)	1.30-2.30 (.052-.090)	
90022/90024-03XX	69001-1012	69001-2007	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90022/90024-04XX	69001-1013	69001-2008	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90026/90027-01XX	69001-1014	69001-2009	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90026/90027-02XX	69001-1015	69001-2010	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90026/90027-03XX	69001-1016	69001-2011	12-14 (4.00-2.50)	3.00-4.50 (.130-.180)	
90026/90027-04XX	69001-1017	69001-2012	12-14 (4.00-2.50)	2.00-4.30 (.102-.142)	
90028-01XX	69001-1002	69001-2013	16-20 (1.50-0.50)	2.00-3.30 (.080-1.30)	
90028-02XX	69001-1007	69001-2014	16-20 (1.50-0.50)	1.30-2.30 (.052-.090)	
90028-03XX	69001-1004	69001-2015	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90028-04XX	69001-1008	69001-2016	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90028-05XX	69001-1003	69001-2017	12-14 (4.00-2.50)	3.00-4.50 (.130-.180)	
90028-06XX	69001-1009	69001-2018	12-14 (4.00-2.50)	2.00-4.30 (.102-.142)	
90119-0109/-0110/-0111	69001-1042	69001-2020	22-24 (0.35-0.20)		
90119-0120/-0121/-0122	69001-1043	69001-2021	26-28 (0.12-0.08)		
90197-01XX	69001-1040	69001-2013			
90197-03XX	69001-1041	69001-2015			
90198-0001	69001-1024	69001-2025			
90212/90192	69001-1048	69001-2050			
90350/01XX	69001-1025	69001-2026			
90416/0111	69001-1027	69001-2028			

Note: No press and die combination number exists in Europe

For all 69001-XXXX order numbers, please refer to the TM-42 operating manual for shimming requirements

FEATURES AND SPECIFICATIONS

Crimp Application Tooling Mini-Mac Universal Crimp Applicator Cross Reference

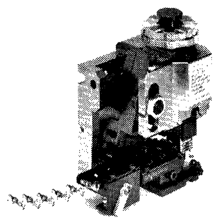
US Mini-Mac

Features

- Adapts to the Molex TM-7, TM-44 and TM-144 presses
- Directly adapts to most competitive and automatic wire processing machines
- Compatible with competitive and OEM presses (e.g. Artos, Megomat, Mecal, Osawa, Toyojamco and Shinmaywa); minor modifications may be required
- Quick set-up time; crimp height, track and feed adjustments can be preset in applicator
- Conductor and insulation rings allow for quick adjustment for wire AWG and insulation diameter change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Mini-Mac available for most Molex brand terminals

Specifications

Size: Width—132mm (5.2")
Depth—101mm (4")
Height—152mm (6")
Weight: 4.1kg (9 lb)



ORDERING INFORMATION

Preferred Version in the US

Terminal Series No.	Order No.		Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Mini-Mac	Tool Kit			
1189/1190	11-18-2143	11-18-3134	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1189/1190	11-18-2009	11-18-3009	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1219	11-18-2072	11-18-3068	12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)
1220	11-18-2071	11-18-3067	12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)
1380/1381	11-18-2158	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1380/1381	11-18-2007	11-18-3007	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1433/1434	11-18-2008	11-18-3008	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1450/1451	11-18-2143	11-18-3134	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1457-1	11-18-2056	11-18-3052	18-22 (0.80-0.35)	2.60 (.102) max.	3.96-5.53 (.156-.218)
1457-2	11-18-2057	11-18-3053	14-16 (2.00-1.30)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508-9	11-18-2200	11-18-3193	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508-9	11-18-2202	11-18-3195	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1560/1561	11-18-2017	11-18-3017	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1786/1787	11-18-2017	11-18-3017	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1797	11-18-2051	11-18-3051	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1799	11-18-2130	11-18-3121	18-24 (0.80-0.20)	3.05 (.125) max.	3.17-4.74 (.125-.187)
1854/1855	11-18-2024	11-18-3024	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
1881-2	11-18-2010	11-18-3010	16-24 (1.30-0.20)	3.50 (.138) max.	3.96-5.53 (.156-.218)
1881-3	11-18-2091	11-18-3086	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1900/1901	11-18-2147	11-18-3138	10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.53 (.156-.218)
1917	11-18-2051	11-18-3051	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1929	11-18-2097	11-18-3092	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
1943	11-18-2175	11-18-3166	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-4.74 (.125-.187)
1973	11-18-2011	11-18-3011	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2012	11-18-2051	11-18-3051	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
2046/2047	11-18-2146	11-18-3137	16-18 (1.30-0.80)	3.05 (.120) max.	3.96-5.53 (.156-.218)
2107	11-18-2097	11-18-3092	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
2107	11-18-2098	11-18-3093	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.17-3.96 (.125-.156)
2151/2152	11-18-2158	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2176	11-18-2040	11-18-3040	14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)
2189/2190	11-18-2024	11-18-3024	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2192	11-18-2008	11-18-3008	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2269	11-18-2143	11-18-3134	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2273	11-18-2158	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2328	11-18-2040	11-18-3040	14-22 (2.00-0.35)	3.18 (.125) max.	3.55-4.74 (.140-.187)
2477/2478	11-18-2210	11-18-3203	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2482	11-18-2058	11-18-3054	12-14 (3.25-2.00)	4.20 (.165) max.	4.74-5.53 (.187-.218)
2576	11-18-2040	11-18-3040	14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)
2578	11-18-2022	11-18-3021	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
2697-1	11-18-2195	11-18-3188	12-20 (3.30-0.50)	4.78 (.188) max.	3.17-3.96 (.125-.156)
2697-2	11-18-2096	11-18-3090	12-20 (3.30-0.50)	5.84 (.230) max.	3.17-3.96 (.125-.156)
2759	11-18-2171	11-18-3162	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
2776	11-18-2202	11-18-3046	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2799	11-18-2041	11-18-3041	22-28 (0.35-0.08)	1.73 (.068) max.	3.55-4.74 (.140-.187)
2870/2871	11-18-2012	11-18-3012	22-24 (0.35-0.20)	1.27-1.78 (.050-.070)	3.96-5.53 (.156-.218)
2878	11-18-2210	11-18-3203	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
4272	11-18-2158	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
4295	11-18-2051	11-18-3051	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4366	11-18-2051	11-18-3051	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)

Available on lease basis only

When ordering crimp dies, machines or hand crimp tools, please include terminal number to be crimped, wire size, insulation, and send a 3' or 1m sample to Molex with the order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling Mini-Mac Universal Crimp Applicator Cross Reference

US Mini-Mac

Terminal Series No.	Order No.		Wire Gauge AWG (mm^2)	Insulation Diameter	Strip Length
	Mini-Mac	Tool Kit			
4529	11-18-2167	11-18-3158	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4549/4550	11-18-2143	11-18-3134	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
4559	11-18-2024	11-18-3024	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
4706-P.1	11-18-2042	11-18-3042	16-18 (1.30-0.80)	3.00 (.118) max.	5.94-6.30 (.234-.250)
4706-3	11-18-2043	11-18-3043	18-24 (0.80-0.20)	3.00 (.118) max.	5.94-6.30 (.234-.250)
4809	11-18-2109	11-18-3103	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
4811	11-18-2048	11-18-3048	22-24 (0.35-0.20)	2.54 (.100) max.	5.94-6.30 (.234-.250)
4811-1	11-18-2049	11-18-3049	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.30 (.234-.250)
4838	11-18-2210	11-18-3203	20-22 (0.50-0.35)	2.41 (.095) max.	2.54-3.17 (.100-.125)
5005/5006	11-18-2114	11-18-3108	18-24 (0.80-0.20)	3.00 (.118) max.	2.54-3.17 (.100-.125)
5033-4T	11-18-2185	11-18-3178	18-24 (0.80-0.20)	2.20 (.087) max.	2.80-3.40 (.110-.134)
5103	11-18-2082	11-18-3077	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5139	11-18-2171	11-18-3162	24-30 (0.20-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
5159	11-18-2171	11-18-3162	22-28 (0.35-0.08)	1.20-1.70 (.047-.067)	2.80-3.40 (.110-.133)
5167	11-18-2084	11-18-3079	18-24 (0.80-0.20)	2.50 (.098) max.	2.54-3.17 (.100-.125)
5168	11-18-2117	11-18-3111	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
5175	11-18-2107	11-18-3101	16-22 (1.30-0.35)	3.40 (.134) max.	3.70-4.30 (.147-.169)
5190	11-18-2049	11-18-3049	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.30 (.234-.250)
5194	11-18-2044	11-18-3044	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)
5225	11-18-2045	11-18-3045	22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	3.00-3.50 (.118-.138)
5230	11-18-2085	11-18-3080	22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
5241	11-18-2083	11-18-3078	22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	2.54-3.17 (.100-.125)
5263	11-18-2062	11-18-3058	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5294	11-18-2076	11-18-3071	24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)
5298	11-18-2203	11-18-3196	18-24 (0.80-0.20)	3.05 (.120) max.	5.00-6.00 (.200-.240)
5378T/T2	11-18-2110	11-18-3104	24-28 (0.20-0.08)	1.52 (.060) max.	1.78-2.29 (.070-.090)
5394T	11-18-2070	11-18-3066	22-28 (0.35-0.08)	1.90 (.075) max.	2.10-2.70 (.083-.106)
5394T2	11-18-2118	11-18-3122	20-22 (0.50-0.35)	2.10 (.083) max.	2.10-2.70 (.083-.106)
5479T	11-18-2077	11-18-3072	22-28 (0.35-0.08)	1.77 (.070) max.	2.54-3.17 (.100-.125)
5556/5558	11-18-2002	11-18-3002	18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)
5556T2/5558T2	11-18-2003	11-18-3003	22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5556T3/5558T3	11-18-2069	11-18-3065	16 (1.30)	1.00-3.10 (.071-.122)	3.00-3.50 (.118-.138)
5659	11-18-2166	11-18-3157	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
6308	11-18-2008	11-18-3008	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
6310	11-18-2143	11-18-3134	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
6361/6362	11-18-2089	11-18-3084	18-22 (0.80-0.35)	3.05 (.120) max.	2.54-3.17 (.100-.125)
6438	11-18-2210	11-18-3203	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
6459	11-18-2171	11-18-3162	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
6482-,1,2	11-18-2036	11-18-3036	14-18 (2.00-0.80)	3.56 (.140) max.	3.81-4.32 (.150-.170)
6770/6772	11-18-2017	11-18-3017	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
6838	11-18-2210	11-18-3203	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
6893/6894	11-18-2008	11-18-3008	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
7238/7239	11-18-2013	11-18-3013	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
7258	11-18-2022	11-18-3021	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
7291	11-18-2017	11-18-3017	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
7499	11-18-2187	11-18-3180	22-24 (0.35-0.20)	1.27 (.050) max.	3.17-3.96 (.125-.156)
7676	11-18-2040	11-18-3040	14-22 (2.00-0.35)	3.55 (.140) max.	3.55-4.74 (.140-.187)
7676-1	11-18-2041	11-18-3041	22-28 (0.35-0.08)	1.73 (.068) max.	3.55-4.74 (.140-.187)
7821	11-18-2189	11-18-3182	18-20 (0.80-0.50)	2.80 (.110) max.	2.54-3.17 (.100-.125)
7879	11-18-2170	11-18-3161	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
8058	11-18-2012	11-18-3012	18-22 (0.80-0.35)	3.55 (.140) max.	3.96-5.53 (.156-.218)
8818/8819	11-18-2023	11-18-3022	18-22 (0.80-0.35)	2.40 (.095) max.	2.54-3.17 (.100-.125)
8980 1-3C	11-18-2186	11-18-3179	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)
8980 1-3C1	11-18-2188	11-18-3181	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
8993	11-18-2210	11-18-3203	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
30272	11-18-2164	11-18-3155	16-18 (1.30-0.80)	2.00-2.40 (.078-.095)	3.18-3.96 (.125-.156)
30407	11-18-2142	11-18-3133	18 (0.80)	3.00 (.118) max.	6.60-7.10 (.260-.280)
30490	11-18-2002	11-18-3002	18-24 (0.80-0.20)	3.00 (.118) max.	3.00-3.55 (.118-.138)
35727/35728	11-18-2174	11-18-3165	14-20 (2.00-0.50)	3.43 (.134) max.	4.70-5.38 (.185-.212)
40140	11-18-2210	11-18-3203	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)

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See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

molex

Crimp Application Tooling
Mini-Mac Universal Crimp Applicator Cross Reference

US Mini-Mac

Terminal Series No.	Order No.		Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Mini-Mac	Tool Kit			
41050	11-18-2093	11-18-3088	22-24 (0.35-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
41051	11-18-2115	11-18-3109	18-22 (0.80-0.35)	2.30-3.55 (.090-.140)	3.17-3.96 (.125-.156)
41422	11-18-2081	11-18-3076	14-18 (2.00-1.30)	3.53 (.139) max.	5.08-5.84 (.200-.230)
41422	11-18-2080	11-18-3075	10-12 (5.00-3.30)	4.83 (.190) max.	5.08-5.84 (.200-.230)
41483/42138	11-18-2191	11-18-3184	14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)
41483/42138	11-18-2192	11-18-3185	14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)
41483/42138	11-18-2193	11-18-3186	14-18 (2.00-0.80)	3.56 (.140) max.	4.32-4.95 (.170-.195)
41483/42138	11-18-2194	11-18-3187	14-18 (2.00-0.80)	2.79 (.110) max.	4.32-4.95 (.170-.195)
41572	11-18-2171	11-18-3162	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
41817	11-18-2049	11-18-3049	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.30 (.234-.250)
42001	11-18-2108	11-18-3102	22-26 (0.35-0.12)	1.52 (.060) max.	4.32-4.83 (.170-.190)
42023/42024	11-18-2087	11-18-3082	14-20 (2.00-0.50)	1.20-3.30 (.060-.130)	3.96-5.53 (.156-.218)
42172	11-18-2139	11-18-3130	14-18 (2.00-0.80)	3.56 (.140) max.	4.74-5.53 (.187-.218)
42251	11-18-2162	11-18-3153	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
42297	11-18-2152	11-18-3143	14-18 (2.00-0.80)	3.50 (.138) max.	3.96-5.53 (.156-.218)
42464	11-18-2180	11-18-3172	16-20 (1.30-0.50)	2.80 (.110) max.	3.96-5.54 (.156-.218)
42477/42478	11-18-2178	11-18-3170	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
42477/42478	11-18-2201	11-18-3194	14-18 (2.00-0.80)	4.06 (.160) max.	3.96-5.53 (.156-.218)
42546/42547	11-18-2147	11-18-3138	10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.54 (.156-.218)
42554/42555	11-18-2148	11-18-3139	16-18 (1.30-0.80)	4.57 (.180) max.	3.96-5.54 (.156-.218)
43030	11-18-2176	11-18-3167	26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
43030	11-18-2182	11-18-3174	20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)
43031	11-18-2176	11-18-3167	26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
43031	11-18-2182	11-18-3174	20-24 (0.50-.020)	1.65 (.065) max.	2.54-2.92 (.100-.115)
50011	11-18-2090	11-18-3085	24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)
50012/50013	11-18-2122	11-18-3115	24-28 (0.20-0.08)	1.15 (.045) max.	1.70-2.30 (.067-.091)
50038/50039	11-18-2163	11-18-3154	22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)
50058	11-18-2154	11-18-3145	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50061	11-18-2205	11-18-3197	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50079	11-18-2156	11-18-3147	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50080	11-18-2206	11-18-3198	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50097	11-18-2212	11-18-3206	20-24 (0.50-0.20)	1.40-1.90 (.055-.075)	2.50-3.00 (.098-.118)
50125	11-18-2155	11-18-3146	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50125	11-18-2155	11-18-3146	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50133	11-18-2153	11-18-3144	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50133	11-18-2153	11-18-3144	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50212	11-18-2169	11-18-3169	24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50212	11-18-2169	11-18-3169	24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50289	11-18-2160	11-18-3151	16-18 (1.30-0.80)	3.00 (.118) max.	4.00-4.50 (.157-.177)
50294	11-18-2161	11-18-3152	24-28 (0.20-0.08)	3.00 (.118) max.	4.00-4.50 (.157-.177)
50295	11-18-2159	11-18-3150	16-18 (1.30-0.80)	2.55 (.100) max.	4.00-4.50 (.157-.177)
50351	11-18-2209	11-18-3202	22-28 (0.35-0.08)	1.15-1.80 (.045-.071)	2.30-2.80 (.091-.110)
50372	11-18-2196	11-18-3189	22-26 (0.35-0.12)	0.93-1.35 (.053-.037)	1.30-1.80 (.051-.071)
50394	11-18-2197	11-18-3190	24-30 (0.20-0.05)	0.80-1.40 (.031-.055)	1.30-1.80 (.051-.071)
70021	11-18-2213	11-18-3205	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70021	11-18-2016	11-18-3016	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70021	11-18-2015	11-18-3015	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
70058	11-18-2211	11-18-3204	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70058	11-18-2019	11-18-3019	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70058	11-18-2020	11-18-3020	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
71851	11-18-2211	11-18-3204	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
71851	11-18-2019	11-18-3019	22-24 (0.35-0.05)	1.63 (.064) max.	2.54-3.17 (.100-.125)
71851	11-18-2020	11-18-3020	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
87048	11-18-2140	11-18-3131	26-30 (0.12-0.05)	2.79 (.110) max.	5.00 (.197)
87421	11-18-2208	11-18-3201	26 (0.12)	1.00-1.30 (.039-.051)	1.05-1.54 (.041-.061)
90100-0007	11-18-2079	11-18-3074	28,32 (0.08-0.03)	0.71-1.37 (.028-.054)	3.56-4.32 (.140-.170)
90100-0008	11-18-2074	11-18-3070	22-26 (0.35-0.12)	0.91-2.62 (.036-.103)	3.56-4.32 (.140-.170)
90100-0009	11-18-2078	11-18-3073	18-20 (0.80-0.50)	1.06-2.62 (.042-.103)	3.56-4.32 (.140-.170)
90100-0007	11-18-2135	11-18-3128	28,32 (0.08-0.03)	0.71-1.37 (.028-.054)	3.56-4.32 (.140-.170)
90100-0008	11-18-2136	11-18-3129	22-26 (0.35-0.12)	0.91-2.62 (.036-.103)	3.56-4.32 (.140-.170)
94506-01	11-18-2204	11-18-3197	18-22 (0.80-0.35)	2.60 (.100) max.	6.10-6.86 (.240-.270)
94506-02	11-18-2165	11-18-3156	14-18 (2.00-0.80)	3.70 (.145) max.	6.10-6.86 (.240-.270)

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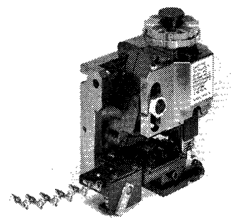
See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling Mini-Mac Universal Crimp Applicator Cross Reference

European Mini-Mac



Preferred Version in Europe—Not Available in the US

Terminal Series No.	Order No. Mini-Mac	Order No. Tool Kit	Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
1189/1190	69037-1100	69037-2100	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1380/1381	69037-1103	69037-2103	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1433/1434	69037-1105	69037-2105	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1450/1451	69037-1100	69037-2100	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1457-1	69037-1106	69037-2106	18-22 (0.80-0.35)	2.60 (.102) max.	3.96-5.53 (.156-.218)
1457-2	69037-1107	69037-2107	14-16 (2.00-1.30)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508	69037-1066	69037-2066	16-20 (1.30-0.50)		3.96-5.53 (.156-.218)
1560/1561	69037-1108	69037-2108	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1589/1590	69037-1103	69037-2103	18-22 (0.80-0.35)	3.05 (.120) max.	3.96-5.53 (.156-.218)
1786/1787	69037-1108	69037-2108	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1793	69037-1108	69037-2108	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
1854/1855	69037-1110	69037-2110	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
1881-2	69037-1111	69037-2111	16-24 (1.30-0.20)	3.50 (.138) max.	3.96-5.53 (.156-.218)
1917	69037-1109	69037-2109	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1943	69037-1007	69037-2007	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-4.74 (.125-.187)
1973	69037-1114	69037-2114	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2107	69037-1116	69037-2116	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.17-3.96 (.125-.156)
2125	69037-1116	69037-2116	24-30 (0.20-0.05)	1.77 (.070) max.	3.17-3.96 (.125-.156)
2151/2152	69037-1103	69037-2103	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2189/2190	69037-1110	69037-2110	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2192	69037-1105	69037-2105	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2269	69037-1100	69037-2100	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2273	69037-1103	69037-2103	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2477	69037-1008	69037-2008	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2478	69037-1008	69037-2008	18-20 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2578	69037-1010	69037-2010	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
2717	69037-1110	69037-2110			
2759	69037-1027	69037-2027	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
2878	69037-1008	69037-2008	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
4018	69037-1122	69037-2122	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
4268	69037-1100	69037-2100			
4272	69037-1103	69037-2103	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
4292	69037-1105	69037-2105			
4549/4550	69037-1100	69037-2100	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
4559	69037-1110	69037-2110	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
4578	69037-1008	69037-2008			
4706	69037-1124	69037-2124	16-18 (1.30-0.80)	3.00 (.118) max.	5.94-6.30 (.234-.250)
4706-3	69037-1009	69037-2009	18-24 (0.80-0.20)	3.00 (.118) max.	5.94-6.30 (.234-.250)
4809	69037-1002	69037-2002	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
4811-1	69037-1000	69037-2000	22-26 (0.35-0.12)	1.52 (.060) max.	5.74-6.30 (.234-.250)
4811-A4	69037-1001	69037-2001			
4838	69037-1008	69037-2008	20-22 (0.50-0.35)	2.41 (.095) max.	2.54-3.17 (.100-.125)
5005/5006	69037-1085	69037-2085	18-24 (0.80-0.20)	3.00 (.118) max.	
5103	69037-1011	69037-2011	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5159	69037-1027	69037-2027	22-28 (0.35-0.08)	1.20-1.70 (.047-.067)	2.80-3.40 (.110-.133)
5167	69037-1125	69037-2125	18-24 (0.80-0.20)	2.50 (.098) max.	2.54-3.17 (.100-.125)
5175	69037-1090	69037-2090	16-22 (1.30-0.35)	3.40 (.134) max.	3.70-4.30 (.147-.169)
5190	69037-1164	69037-2164	22-26 (0.35-0.12)	1.52 (.060) max.	
5194	69037-1013	69037-2013	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)
5205/5206	69037-1095	69037-2095	14-18 (2.00-0.80)	3.40 (.134) max.	2.54-3.17 (.100-.125)
5225	69037-1126	69037-2126	22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	
5230	69037-1127	69037-2127	22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
5241	69037-1012	69037-2012	22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	
5263	69037-1058	69037-2058	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5266	69037-1043	69037-2043			

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Crimp Application Tooling Mini-Mac Universal Crimp Applicator Cross Reference

European Mini-Mac

Terminal Series No.	Order No. Mini-Mac	Order No. Tool Kit	Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
5294	69037-1128	69037-2128	24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)
5298	69037-1075	69037-2075	18-24 (0.80-0.20)	3.05 (.120) max.	
5378	69037-1050	69037-2050			
5394	69037-1003	69037-2003			
5479	69037-1130	69037-2130			
5556/5558	69037-1131	69037-2131	18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)
5556T2/5558T3	69037-1132	69037-2132	22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5556T3/5558T3	69037-1133	69037-2133	16 (1.30)	1.00-3.10 (.071-.122)	3.00-3.50 (.118-.138)
5659	69037-1005	69037-2005	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
6308	69037-1105	69037-2105	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
6310	69037-1100	69037-2100	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
6379	69037-1008	69037-2008			
6438	69037-1008	69037-2008	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
6770/6772	69037-1108	69037-2108	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
6796	69037-1110	69037-2110			
6838	69037-1008	69037-2008	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
6893/6894	69037-1105	69037-2105	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
7199	69037-1047	69037-2047			
7242	69037-1065	69037-2065	22-30 (0.35-0.05)	1.52 (.060) max.	3.17-3.96 (.125-.156)
7258	69037-1010	69037-2010	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
7293	69037-1105	69037-2105			
7499	69037-1044	69037-2044	22-24 (0.35-0.20)	1.27 (.050) max.	3.17-3.96 (.125-.156)
7676	69037-1160	69037-2160	14-22 (2.00-0.35)	3.55 (.140) max.	3.55-4.74 (.140-.187)
7879	69037-1136	69037-2136	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
8818/8819	69037-1122	69037-2122	18-22 (0.80-0.35)	2.40 (.095) max.	2.54-3.17 (.100-.125)
8960	69037-1076	69037-2076	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
8980-3C	69037-1079	69037-2079	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.00-5.54 (.118-.218)
8993	69037-1008	69037-2008	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
40140	69037-1008	69037-2008	18-24 (0.80-0.20)		
40229	69037-1010	69037-2010			
41050	69037-1068	69037-2068	22-24 (0.35-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
41051	69037-1088	69037-2088	18-22 (0.80-0.35)	2.30-3.55 (.090-.140)	3.17-3.96 (.125-.156)
42023/42024	69037-1040	69037-2040	18-24 (0.80-0.20)	1.00-2.54 (.040-.100)	
50011	69037-1072	69037-2072	24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)
50013-8000	69037-1078	69037-2078			
50038/50039	69037-1048	69037-2048	22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)
50058/8000	69037-1091	69037-2091	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50079-8000	69037-1185	69037-2091	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50125-8000	69037-1186	69037-2186	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50212-8000	69037-1098	69037-2098	24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50394	69037-1163	69037-2163	24-30 (0.20-0.05)	0.80-1.40 (.031-.055)	1.30-1.80 (.051-.071)
52095-0005	69037-1046	69037-2046			
60071-1	69037-1161	69037-2161			
60072-1	69037-1162	69037-2162			
70021	69037-1149	69037-2149	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70021	69037-1150	69037-2150	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70058	69037-1146	69037-2146	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70058	69037-1148	69037-2148	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
71851	69037-1146	69037-2146	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
71851	69037-1148	69037-2148	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
82023	69037-1152	69037-2152	20-24 (0.50-0.20)		
82024	69037-1152	69037-2152	20-24 (0.50-0.20)		
87003-9000	69037-1042	69037-2042			
90020-04XX	69037-1054	69037-2054	28-32 (0.08-0.03)		
90100	69037-1155	69037-2155	22-26 (0.35-0.12)		
90103	69037-1155	69037-2155	22-26 (0.35-0.12)		
90119	69037-1017	69037-2017	22-24 (0.35-0.20)		
90119	69037-1018	69037-2018	26-28 (0.12-0.08)		
90198-0001	69037-1004	69037-2004			
90264	69037-1077	69037-2077	18-20 (0.80-0.50)		
90290	69037-1055	69037-2055	28-32 (0.08-0.03)		
90416	69037-1025	69037-2025			
90422	69037-1039	69037-2039			
90670	69037-1093	69037-2093	22-26 (0.35-0.12)		
90670	69037-1094	69037-2094	26-30 (0.12-0.05)		

Available on lease basis only

When ordering crimp dies, machines or hand crimp tools, please include terminal number to be crimped, wire size, insulation, and send a 3' or 1m sample to Molex with the order

FEATURES AND SPECIFICATIONS

Crimp Application Tooling 3BF Bench Press and Base Unit Terminators Cross Reference

US Base Unit Terminators and Dies for Use with 3BF Press

3BF Press

Features

- Utilizes Molex Base Unit and TM-40/42 Terminator Dies, crimping and notching dies
- Meets OSHA safety and noise requirements
- Includes external work lamp
- Minimum electrical and mechanical maintenance
- Used 3BF Presses can be purchased on a rebuild basis only and are subject to availability

Specifications

Size without Reel Arm: Width—711mm (28")
Depth—457mm (18")
Height—787mm (31")
Size with Reel Arm: Width—940mm (37")
Depth—457mm (18")
Height—1016mm (40")
Weight: 79.5kg (175 lb)
Electrical: Voltage—110V AC, 60 Hz
Current—5.5A
Tonnage: 26.7kN (3 tons) 10 AWG
Stroke Length: 41.28mm (1.750")
Shut Height: Adjustable
Rate: Up to 2500 terminations per hour, dependent on operator speed and application

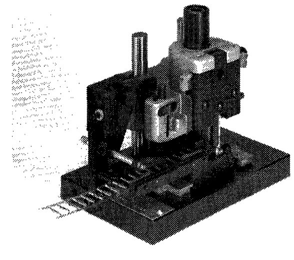
Base Unit Terminator

Features

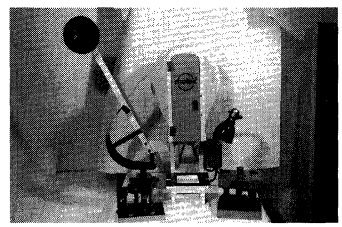
- Adapts to the Molex 3BF and TM-7 Presses to accommodate TM-40/42 Terminator Dies
- Low cost method of achieving flexibility in terminating various contact configurations in the same press
- Adjustable positive feed positioning
- Quick insulation and conductor crimp height adjustments
- No press ram adjustments after initial set-up
- Safety guard included with each unit

Specifications

Size: Width—190mm (7.5")
Depth—127mm (5")
Height—7.2mm (6.5")
Weight: 7.2kg (16 lb)
Adjustments: Conductor Crimp Height—0.025mm (.001")
Total Adjustments—0.625mm (.025")
Insulation Crimp Height—0.203mm (.008")
Total Adjustment—1.626mm (.064")



Base Unit



3BF Press

ORDERING INFORMATION

Preferred Version in the US

Presses	
Description	**Order No.**
3BF Press only*	11-05-0003
Base Unit only (no terminator)	11-19-3001

New presses are available from:
BenchMaster Products, Inc.
12981 E. 166th St.
Cerritos, CA 90701 (USA)
(310) 926-6906 or (800) 421-5225

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Base Unit and Terminator	Terminator Die Only	Spare Tooling Kit			
1189/1190	11-07-3001	11-40-2001	11-40-3001	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1219	11-07-3105	11-40-2165	11-40-3157	12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)
1220	11-07-3106	11-40-2166	11-40-3158	12-14 (3.30-2.00)	4.20 (.165) max.	4.34-5.15 (.171-.203)
1380/1381	11-07-3002	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1433/1434	11-07-3003	11-40-2003	11-40-3003	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1450/1451	11-07-3001	11-40-2001	11-40-3001	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1457-1	11-07-3009	11-40-2009	11-40-3009	18-22 (0.80-0.35)	2.60 (.102) max.	3.96-5.53 (.156-.218)
1457-2	11-07-3010	11-40-2010	11-40-3010	14-16 (2.00-1.30)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508-9	11-07-3086	11-40-2117	11-40-3115	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1508-09	11-07-3087	11-40-2118	11-40-3116	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
1560/1561	11-07-3004	11-40-2004	11-40-3004	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1786/1787	11-07-3004	11-40-2004	11-40-3004	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1797	11-07-3005	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1854/1855	11-07-3006	11-40-2006	11-40-3006	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
1881-2	11-07-3040	11-40-2083	11-40-3083	16-24 (1.30-0.20)	3.50 (.138) max.	3.96-5.53 (.156-.218)
1881-3	11-07-3041	11-40-2084	11-40-3084	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1990/1901	11-07-3172	11-40-2163	11-40-3155	10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.53 (.156-.218)
1917	11-07-3005	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1929	11-07-3014	11-40-2014	11-40-3014	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
1943	11-07-3035	11-40-2035	11-40-3035	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-4.74 (.125-.187)
1973	11-07-3043	11-40-2214	11-40-3216	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2012	11-07-3005	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
2014	11-07-3011	11-40-2011	11-40-3011	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2046/2047	11-07-3173	11-40-2164	11-40-3156	16-18 (1.30-0.80)	3.05 (.120) max.	3.96-5.53 (.156-.218)
2107	11-07-3014	11-40-2014	11-40-3014	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
2107	11-07-3013	11-40-2013	11-40-3013	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.17-3.96 (.125-.156)
2151/2152	11-07-3002	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2176	11-07-3015	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)

* Presses are rebuilt only and are subject to availability

When ordering crimp dies, machines or hand crimp tools, please include terminal number to be crimped, wire size, insulation, and send a 3' or 1m sample to Molex with the order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling 3BF Bench Press and Base Unit Terminators Cross Reference

US Base Unit Terminators and Dies for Use with 3BF Press

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Base Unit and Terminator	Terminator Die Only	Spare Tooling Kit			
2189/2190	11-07-3006	11-40-2006	11-40-3006	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2192	11-07-3003	11-40-2003	11-40-3003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2236/2237	11-07-3002	11-40-2002	11-40-3002	20-22 (0.50-0.35)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2269	11-07-3001	11-40-2001	11-40-3001	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2273	11-07-3002	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2282/2283	11-07-3090	11-40-2121	11-40-3119	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2328	11-07-3015	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.18 (.125) max.	3.55-4.74 (.140-.187)
2477/2478	11-07-3007	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
2482	11-07-3113	11-40-2174	11-40-3239	12-14 (3.25-2.00)	4.20 (.165) max.	4.74-5.53 (.187-.218)
2576	11-07-3015	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.43 (.135) max.	3.55-4.74 (.140-.187)
2578	11-07-3008	11-40-2097	11-40-3097	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
2698	11-07-3015	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.18 (.125) max.	3.96-5.53 (.156-.218)
2759	11-07-3170	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
2776	11-07-3086	11-40-2117	11-40-3115	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2776	11-07-3087	11-40-2118	11-40-3116	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
2799	11-07-3104	11-40-2215	11-40-3154	22-28 (0.35-0.80)	1.52 (.060) max.	3.96-5.53 (.156-.218)
2870/2871	11-07-3020	11-40-2020	11-40-3020	22-24 (0.35-0.20)	1.27-1.78 (.050-.070)	3.96-5.53 (.156-.218)
2878	11-07-3007	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
4259	11-07-3046	11-40-2101	11-40-3101	22-30 (0.35-0.05)	2.54 (.100) max.	2.54-3.17 (.100-.125)
4272	11-07-3002	11-40-2002	11-40-3002	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
4295	11-07-3005	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4296	11-07-3047	11-40-2047	11-40-3047	16-22 (1.30-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
4366	11-07-3005	11-40-2005	11-40-3005	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4529	11-07-3081	11-40-2230	11-40-3231	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
4549/4550	11-07-3001	11-40-2001	11-40-3001	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)
4559	11-07-3006	11-40-2006	11-40-3006	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
4573	11-07-3011	11-40-2011	11-40-3011	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
4706-P.1	11-07-3051	11-40-2042	11-40-3042	16-18 (1.30-0.80)	2.92 (.115) max.	5.94-6.30 (.234-.250)
4706-P.1	11-07-3174	11-40-2044	11-40-3044	16-18 (1.30-0.80)	2.92 (.115) max.	5.94-6.30 (.234-.250)
4706-3	11-07-3052	11-40-2043	11-40-3043	18-24 (0.80-0.20)	3.05 (.120) max.	5.94-6.30 (.234-.250)
4706-3	11-07-3083	11-40-2045	11-40-3045	18-24 (0.80-0.20)	3.05 (.120) max.	5.94-6.30 (.234-.250)
4787	11-07-3033	11-40-2033	11-40-3033	16-20 (1.30-0.50)	3.05 (.120) max.	3.96-4.74 (.156-.187)
4787-2	11-07-3053	11-40-2094	11-40-3094	20-24 (0.50-0.20)	1.77 (.070) max.	3.96-4.74 (.156-.187)
4809	11-07-3017	11-40-2102	11-40-3102	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
4811	11-07-3029	11-40-2029	11-40-3029	22-24 (0.35-0.20)	2.54 (.100) max.	5.94-6.30 (.234-.250)
4811	11-07-3175	11-40-2240	11-40-3243	22-24 (0.35-0.20)	2.54 (.100) max.	5.94-6.30 (.234-.250)
4811-1	11-07-3039	11-40-2039	11-40-3039	22-26 (0.35-0.20)	1.52 (.060) max.	5.94-6.30 (.234-.250)
4811-1	11-07-3176	11-40-2241	11-40-3244	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.30 (.234-.250)
4838	11-07-3007	11-40-2096	11-40-3096	20-22 (0.50-0.35)	2.41 (.095) max.	2.54-3.17 (.100-.125)
5005/5006	11-07-3054	11-40-2064	11-40-3064	18-24 (0.20-0.80)	3.00 (.118) max.	2.54-3.17 (.100-.125)
5008/5009	11-07-3055	11-40-2065	11-40-3065	24-28 (0.20-0.80)	2.39 (.094) max.	2.54-3.17 (.100-.125)
5103	11-07-3056	11-40-2056	11-40-3056	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5139	11-07-3170	11-40-2265	11-40-3267	24-30 (0.20-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
5159	11-07-3170	11-40-2265	11-40-3267	22-28 (0.35-0.08)	1.20-1.70 (.047-.067)	2.80-3.40 (.110-.133)
5167	11-07-3109	11-40-2181	11-40-3183	18-24 (0.80-0.20)	2.50 (.098) max.	2.54-3.17 (.100-.125)
5168	11-07-3110	11-40-2191	11-40-3196	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
5175	11-07-3160	11-40-2217	11-40-3219	16-22 (1.30-0.35)	3.40 (.134) max.	3.70-4.30 (.147-.169)
5190	11-07-3039	11-40-2039	11-40-3039	22-26 (0.35-0.12)	1.52 (.060) max.	5.97-6.35 (.234-.250)
5190	11-07-3176	11-40-2241	11-40-3244	22-26 (0.35-0.12)	1.52 (.060) max.	5.97-6.35 (.234-.250)
5194	11-07-3057	11-40-2073	11-40-3073	18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)
5205/5206	11-07-3058	11-40-2066	11-40-3066	14-18 (2.50-0.80)	3.40 (.134) max.	2.54-3.17 (.100-.125)
5225	11-07-3059	11-40-2074	11-40-3074	22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	3.00-3.50 (.118-.138)
5230	11-07-3060	11-40-2069	11-40-3069	22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)

When ordering crimp dies, machines or hand crimp tools, please include terminal number to be crimped, wire size, insulation, and send a 3' or 1m sample to Molex with the order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

Crimp Application Tooling 3BF Bench Press and Base Unit Terminators Cross Reference

US Base Unit Terminators and Dies for Use with 3BF Press

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Base Unit and Terminator	Terminator Die Only	Spare Tooling Kit			
5241	11-07-3061	11-40-2063	11-40-3063	22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	2.54-3.17 (.100-.125)
5263	11-07-3062	11-40-2089	11-40-3056	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5294	11-07-3063	11-40-2070	11-40-3070	24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)
5298	11-07-3190	11-40-2246	11-40-3249	18-24 (0.80-0.20)	3.05 (.120) max.	5.00-6.00 (.200-.240)
5378T/T2	11-07-3177	11-40-2149	11-40-3143	24-28 (0.20-0.08)	1.52 (.060) max.	1.78-2.29 (.070-.090)
5394T	11-07-3064	11-40-2071	11-40-3071	22-28 (0.35-0.08)	1.90 (.075) max.	2.10-2.70 (.083-.106)
5479T	11-07-3111	11-40-2107	11-40-3108	22-28 (0.35-0.08)	1.77 (.070) max.	2.54-3.17 (.100-.125)
5479T2	11-07-3178	11-40-2204	11-40-3206	30-32 (0.05-0.03)	1.20 (.047) max.	1.20-2.54 (.047-.100)
5556/5558	11-07-3088	11-40-2119	11-40-3117	18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)
5556T2/5558T2	11-07-3103	11-40-2137	11-40-3133	22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5556T3/5558T3	11-07-3112	11-40-2187	11-40-3189	16 (1.30)	1.00-3.10 (.071-.122)	3.00-3.50 (.118-.138)
555613/5558		11-40-2263	11-40-3266	26-30 (0.12-0.05)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5659	11-07-3091	11-40-2091	11-40-3091	22-28 (0.35-0.08)	1.70 (.067) max.	2.54-3.17 (.100-.125)
6308	11-07-3003	11-40-2003	11-40-3003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
6310	11-07-3001	11-40-2001	11-40-3001	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
6361/6362	11-07-3144	11-40-2203	11-40-3204	18-22 (0.80-0.35)	3.05 (.120) max.	2.54-3.17 (.100-.125)
6438	11-07-3007	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
6459	11-07-3170	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
6482-1,2	11-07-3113	11-40-2151	11-40-3144	14-18 (2.00-0.80)	3.56 (.140) max.	3.81-4.32 (.150-.170)
6770/6772	11-07-3004	11-40-2004	11-40-3004	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
6838	11-07-3007	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
6893/6894	11-07-3003	11-40-2003	11-40-3003	24-30 (0.20-0.05)	1.52 (.060) max.	3.96-5.53 (.156-.218)
7238/7239	11-07-3098	11-40-2131	11-40-3128	14-18 (2.00-0.80)	3.55 (.140) max.	3.96-5.53 (.156-.218)
7242	11-07-3050	11-40-2075	11-40-3075	22-30 (0.35-0.05)	1.52 (.060) max.	3.17-3.96 (.125-.156)
7258	11-07-3008	11-40-2097	11-40-3097	22-26 (0.35-0.12)	1.65 (.065) max.	2.54-3.17 (.100-.125)
7291	11-07-3004	11-40-2004	11-40-3004	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)
7499	11-07-3114	11-40-2172	11-40-3174	22-24 (0.35-0.20)	1.27 (.050) max.	3.17-3.96 (.125-.156)
7676	11-07-3015	11-40-2015	11-40-3015	14-22 (2.00-0.35)	3.55 (.140) max.	3.55-4.74 (.140-.187)
7879	11-07-3179	11-40-2251	11-40-3253	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
8058	11-07-3020	11-40-2020	11-40-3020	18-22 (0.80-0.35)	3.55 (.140) max.	3.96-5.53 (.156-.218)
8960	11-07-3036	11-40-2036	11-40-3036	18-24 (0.80-0.20)	2.40 (.095) max.	2.54-3.17 (.100-.125)
8980 1-3C	11-07-3180	11-40-2282	11-40-3283	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)
8980 1-3C1	11-07-3191	11-40-2273	11-40-3275	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
8980 4C	11-07-3192	11-40-2274	11-40-3276	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.54 (.156-.218)
8980 4C1	11-07-3193	11-40-2275	11-40-3277	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
8993	11-07-3007	11-40-2096	11-40-3096	18-24 (0.80-0.20)	2.80 (.110) max.	2.54-3.17 (.100-.125)
30272	11-07-3159	11-40-2216	11-40-3217	16-18 (1.30-0.80)	2.00-2.40 (.078-.095)	3.18-3.96 (.125-.156)
30490	11-07-3194	11-40-2249	11-40-3252	18-24 (0.80-0.20)	3.00 (.118) max.	3.00-3.55 (.118-.138)
35021	11-07-3195	11-40-2272	11-40-3274	24-30 (0.20-0.05)	1.00-1.52 (.040-.060)	1.80-2.20 (.071-.086)
35727/35728	11-07-3196	11-40-2261	11-40-3264	14-20 (2.00-0.05)	3.40 (.134) max.	4.70-5.40 (.185-.212)
40144	11-07-3038	11-40-2038	11-40-3038	32-36 (0.03-0.01)	0.64 (.025) max.	3.17-3.96 (.125-.156)
40445	11-07-3170	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
40682	11-07-3070	11-40-2076	11-40-3076	22-26 (0.35-0.12)	1.52 (.060) max.	2.80-3.55 (.110-.140)
41050	11-07-3197	11-40-2250	11-40-3254	18 (0.80)	2.80 (.110) max.	3.17-3.96 (.125-.156)
41422-2	11-07-3124	11-40-2193	11-40-3194	14-18 (2.00-0.80)	3.53 (.139) max.	5.08-5.84 (.200-.230)
41422	11-07-3123	11-40-2192	11-40-3193	10-12 (5.00-3.30)	4.83 (.190) max.	5.08-5.84 (.200-.230)
41483	11-07-3154	11-40-2212	11-40-3214	14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)
41572	11-07-3170	11-40-2265	11-40-3267	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
41817	11-07-3089	11-40-2120	11-40-3118	22-26 (0.35-0.12)	1.52 (.060) max.	5.94-6.35 (.234-.250)
42001	11-07-3129	11-40-2171	11-40-3173	22-26 (0.35-0.12)	1.52 (.060) max.	4.32-4.83 (.170-.190)
42023/42024	11-07-3131	11-40-2197	11-40-3199	14-20 (2.00-0.50)	1.20-3.30 (.060-.130)	3.96-5.53 (.156-.218)
42023/42024	11-07-3130	11-40-2198	11-40-3198	14-20 (2.00-0.50)	1.20-3.30 (.060-.130)	3.96-5.53 (.156-.218)
42138	11-07-3154	11-40-2212	11-40-3214	14-18 (2.00-0.80)	4.57 (.180) max.	4.32-4.95 (.170-.195)
42477/42478	11-07-3181	11-40-2270	11-40-3272	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)
42546/42547	11-07-3172	11-40-2163	11-40-3155	10-12 (5.00-3.30)	4.57 (.180) max.	3.96-5.54 (.156-.218)

When ordering crimp dies, machines or hand crimp tools, please include terminal number to be crimped, wire size, insulation, and send a 3' or 1m sample to Molex with the order

See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

ORDERING INFORMATION (CONTINUED)

molex® Crimp Application Tooling 3BF Bench Press and Base Unit Terminators Cross Reference

US Base Unit Terminators and Dies for Use with 3BF Press

Terminal Series No.	Order No.			Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Base Unit and Terminator	Terminator Die Only	Spare Tooling Kit			
42554/42555	11-07-3162	11-40-2223	11-40-3225	16-18 (1.30-0.80)	4.57 (.180) max.	3.96-5.54 (.156-.218)
42824	11-07-3198	11-40-2257	11-40-3261	16-18 (1.30-0.80)	3.05 (.120) max.	4.57 (.180)
42825	11-07-3199	11-40-2285	11-40-3287	16-18 (1.30-0.80)	3.05 (.120) max.	4.57 (.180)
43030	11-07-3182	11-40-2258	11-40-3262	26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
43030	11-07-3183	11-40-2259	11-40-3263	20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)
43031	11-07-3182	11-40-2258	11-40-3262	26-30 (0.12-0.05)	1.52 (.060) max.	2.54-2.92 (.100-.115)
43031	11-07-3183	11-40-2259	11-40-3263	20-24 (0.50-0.20)	1.65 (.065) max.	2.54-2.92 (.100-.115)
50011	11-07-3135	11-40-2136	11-40-3132	24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)
50012/50013	11-07-3136	11-40-2141	11-40-3135	24-28 (0.20-0.08)	1.15 (.045) max.	1.70-2.30 (.067-.091)
50034	11-07-3137	11-40-2156	11-40-3151	26-30 (0.12-0.05)	1.40 (.055) max.	1.40-1.90 (.055-.075)
50038/50039		11-40-2248	11-40-3251	22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)
50058	11-07-3169	11-40-2245	11-40-3248	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50061	11-07-3185	11-40-2280	11-40-3281	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50079	11-07-3169	11-40-2245	11-40-3248	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50080	11-07-3185	11-40-2280	11-40-3281	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50097	11-07-3200	11-40-2289	11-40-3289	20-24 (0.50-0.20)	1.40-1.90 (.055-.075)	2.50-3.00 (.098-.118)
50098	11-07-3201	11-40-2271	11-40-3273	18-22 (0.80-0.35)	1.80-2.60 (.071-.102)	1.50-2.75 (.060-.108)
50125	11-07-3189	11-40-2244	11-40-3247	26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50133	11-07-3189	11-40-2244	11-40-3247	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50212	11-07-3188	11-40-2255	11-40-3259	24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50351	11-07-3202	11-40-2287	11-40-3286	22-28 (0.35-0.08)	1.15-1.80 (.045-.071)	2.30-2.80 (.091-.110)
50372	11-07-3203	11-40-2284	11-40-3290	22-26 (0.35-0.12)	0.93-1.35 (.053-.037)	1.30-1.80 (.051-.071)
50394	11-07-3204	11-40-2278	11-40-3279	24-30 (0.20-0.05)	0.80-1.40 (.031-.055)	1.30-1.80 (.051-.071)
70021	11-07-3186	11-40-2288	11-40-3288	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70021	11-07-3072	11-40-2087	11-40-3087	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70021	11-07-3074	11-40-2086	11-40-3086	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
70058	11-07-3187	11-40-2283	11-40-3284	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70058	11-07-3078	11-40-2090	11-40-3090	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
70058	11-07-3080	11-40-2077	11-40-3077	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
71851	11-07-3187	11-40-2283	11-40-3284	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
71851	11-07-3078	11-40-2090	11-40-3090	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)
71851	11-07-3080	11-40-2077	11-40-3077	32-36 (0.03-0.01)	0.64 (.025) max.	2.54-3.17 (.100-.125)
87048	11-07-3166	11-40-2236	11-40-3238	26-30 (0.12-0.05)	2.79 (.110) max.	5.00 (.197)
87421	11-07-3205	11-40-2286	11-40-3285	26 (0.12)	1.00-1.30 (.039-.051)	1.05-1.54 (.041-.061)
90020/90021-01		69001-1000	69001-2001	16-20 (1.50-0.50)	2.00-3.30 (.080-.130)	
90020/90021-02		69001-1005	69001-2002	16-20 (1.50-0.50)	1.00-2.30 (.055-.090)	
90020/90021-03		69001-1001	69001-2003	14-18 (2.50-1.00)	2.00-4.30 (.102-.142)	
90020/90021-04		69001-1006	69001-2004	14-18 (2.50-1.00)	1.00-2.90 (.040-.115)	
90022/90024-01		69001-1010	69001-2005	16-20 (1.50-0.50)	2.00-3.30 (.080-1.30)	
90022/90024-02		69001-1011	69001-2006	16-20 (1.50-0.50)	1.30-2.30 (.052-.090)	
90022/90024-03		69001-1012	69001-2007	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90022/90024-04		69001-1013	69001-2008	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90026/90027-01		69001-1014	69001-2009	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90026/90027-02		69001-1015	69001-2010	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90026/90027-03		69001-1016	69001-2011	12-14 (4.00-2.50)	3.00-4.50 (.130-.180)	
90026/90027-04		69001-1017	69001-2012	12-14 (4.00-2.50)	2.00-4.30 (.102-.142)	
90028-010X		69001-1002	69001-2013	16-20 (1.50-0.50)	2.00-3.30 (.080-1.30)	
90028-020X		69001-1007	69001-2014	16-20 (1.50-0.50)	1.30-2.30 (.052-.090)	
90028-030X		69001-1004	69001-2015	14-18 (2.50-1.00)	2.00-3.70 (.095-.145)	
90028-040X		69001-1008	69001-2016	14-18 (2.50-1.00)	1.00-2.90 (.067-.115)	
90028-050X		69001-1003	69001-2017	12-14 (4.00-2.50)	3.00-4.50 (.130-.180)	
90028-060X		69001-1009	69001-2018	12-14 (4.00-2.50)	2.00-4.30 (.102-.142)	
90198-010X	11-07-3141	11-40-2196	11-40-3197	22-26 (0.35-.012)	1.70 (.067) max.	3.00-3.50 (.118-.138)

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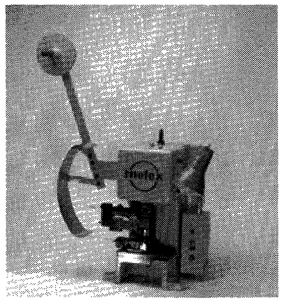
See crimp specifications at the end of the crimp section

For terminals with 2 ordering numbers, please refer to specifications section for notes on ordering

ORDERING INFORMATION

Description	Order No.	For Use With
M15 Crimp Press	M15	Crimp Die
M15A Crimp Press	M15A	Modular Crimp Die
Mini Crimp Press	57177-4000	Modular Crimp Die
Transformer from 110-240V to 110V	M15T-A	M15 and M15A Presses



M15 and M15A Crimp Press

Preferred Version in Japan—Not Available in the US

ORDERING INFORMATION

Preferred Version in Japan—Not Available in the US

Mini Crimp Press

Description	Order No.	For Use With
Mini Crimp Press	57117-4000	Modular Crimp Die

ORDERING INFORMATION

Preferred Version in Japan—Not Available in the US

Molex Japan Crimp Tooling Cross Reference

Terminal Series No.	Order No.		Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Modular Crimp Die	Crimp Die			
1189/1190	JM5866A	CDJ1487	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)
1380/1381	JM5866A	CDJ1487	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
1433/1434	JM5866A	CDJ1487	24-30 (0.20-0.05)	0.76-1.52 (.030-.060)	3.96-5.53 (.156-.218)
1560/1561	JM5687A	CDJ1739	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.17-3.96 (.125-.156)
1854/1855	JM5867A	CDJ1739	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
1881-2	JM5866A	CDJ1487			
2107-1B5N/1B6N		CDJ2061			
2151/2152	JM5866A	CDJ1487	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)
2273	JM5866A	CDJ1487			
2478/2578	JM5868A	CDJ2242			
2759	JM5858A	CDJ2810 CDJ5259	22-30 (0.35-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)
4706-3		CDJ4997			
4809C	57156-3000				
5005/5006	JM5861A	CDJ5850	18-24 (0.80-0.20)	3.00 (.118) max.	
5008/5009	JM5861A	CDJ5850	24-28 (0.20-0.80)	2.39 (.094) max.	
5017		CDJ2442			
5033-2/5033-4		CDJ5033			
5103	JM5857A	CDJ5851	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5139/5159	JM5858A	CDJ5259			
5167/5168	JM5868A	CDJ2242			
5175	JM5869A	CDJ5175	16-22 (1.30-0.35)	3.40 (.134) max.	3.70-4.30 (.147-.169)
5190-01	JM5865A	CDJ6164			
5194	JM5859A		18-24 (0.80-0.20)	1.30-3.20 (.052-.126)	3.00-3.50 (.118-.138)
5205/5206	JM5861A	CDJ5850	14-18 (2.00-0.80)	3.40 (.134) max.	2.54-3.17 (.100-.125)
5225	JM5859A		22-28 (0.35-0.08)	1.20-2.60 (.047-.100)	
5230	JM5864A		22-30 (0.35-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
5241	JM5860A		22-28 (0.35-0.08)	1.30-1.60 (.052-.063)	
5259	JM5858A	CDJ5259			
5263	JM5996A		22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5266	JM5868A	CDJ5175			
5294	JM5999A		24-28 (0.20-0.08)	1.50 (.060) max.	2.03-2.54 (.080-.100)
5298	JM5998A	CDJ4997			
5378	57007-3000				
5394	JM5997A		22-28 (0.35-0.08)	1.90 (.075) max.	1.98-2.77 (.078-.109)

Crimp Application Tooling
Molex Japan Crimp Tooling
Cross Reference

Terminal Series No.	Order No.		Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length
	Modular Crimp Die	Crimp Die			
5394T2	57025-3000		20-22 (0.50-0.35)		
5400	JM5995A				
5479PBT	JM5993A		22-28 (0.35-0.08)	1.77 (.070) max.	2.54-3.17 (.100-.125)
5479PBT2	57034-3000		30-32 (0.05-0.03)	1.20 (.047) max.	1.20-2.54 (.047-.100)
5556/5558	57022-3000		18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)
5556T2/5558	57038-3000		22-28 (0.35-0.08)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)
5659	JM5857A	CDJ5659			
8980-3C/8980-3C1	57102-3000				
8980-4C/8980-4C1	JM5866A				
40641	57153-3000				
41050	57009-3000				
41051	57010-3000				
50011	57030-3000		24-30 (0.20-0.05)	1.40 (.055) max.	1.60-2.10 (.063-.083)
50012/50013	57045-3000		24-28 (0.20-0.08)	1.15 (.045) max.	1.70-2.30 (.067-.091)
50031	57047-3000		30-34 (0.05-0.02)	0.90 (.035) max.	
50034	57055-3000		26-30 (0.12-0.05)	1.40 (.055) max.	
50038/50039	57084-3000		22 (0.35)	1.90-1.50 (.060-.075)	2.00-2.50 (.078-.098)
50051	57052-3000				
50058	57067-3000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50061	57069-3000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50065	57071-3000				
50079	57067-3000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50080	57069-3000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50083	57014-3000				
50084	57014-3000				
50087	57017-3000				
50088	57017-3000				
50089	57095-3000				
50095-50096	57096-3000				
50097	57107-3000		20-24 (0.50-0.20)	1.40-1.90 (.055-.075)	2.50-3.00 (.098-.118)
50098	57108-3000		18-22 (0.80-0.35)	1.80-2.60 (.071-.102)	1.50-2.75 (.060-.108)
50099	57067-3000				
50100	57069-3000				
50105/50106	57110-3000				
50118/50119	57084-3000				
50125	57138-3000		26-28 (0.12-0.08)	1.00 (.040) max.	1.40-1.90 (.055-.075)
57127/57128	57121-3000				
50133	57138-3000		28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
50146	57145-3000				
50147/50148	57144-3000				
50156	57122-3000				
50200	57030-3000				
50207	57182-3000				
50212	57175-3000		24-30 (0.20-0.05)	1.40 (.055) max.	1.30-1.80 (.051-.071)
50217	57183-3000				
50268	57203-3000				
70021-0004/70021-0006	57017-3000				
70021-0021/70021-0023	57017-3000				
70058-0004/70058-0006	57014-3000				
70058-0022/70058-0024	57014-3000				
87003	57090-3000				
87039	57091-3000				
87048-8001	57087-3000				
87050-90XX	57181-3000				
87115-XX0X/87116-XX0X	57151-3000				
87115-XX1X/87116-XX1X	57173-3000				
90019-0111	57198-3000				
90146	57113-3000				

FEATURES AND SPECIFICATIONS

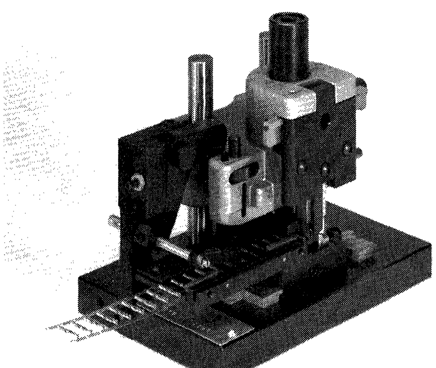
TM-7 Crimping Press

Features

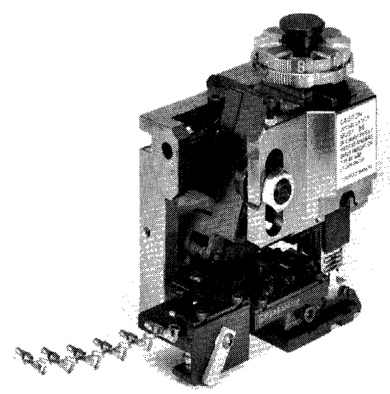
- Utilizes Molex Mini-Mac side and rear feed applicators or base unit with TM-40/42 Terminator Dies
- Applicator and terminator dies are easily mounted for quick changeover
- Can be bench mounted or adapted to OEM changeovers without press ram adjustments
- Electrically interlocked safety press guards for operator safety; applicator guard included on TM-7 used with Mini-Macs; base unit supplied with guard
- Includes shielded foot trip switch
- Accepts Molex Crimp Process Monitor for quality crimp contacts (adapter kit required)
- Resettable batch counter

Specifications

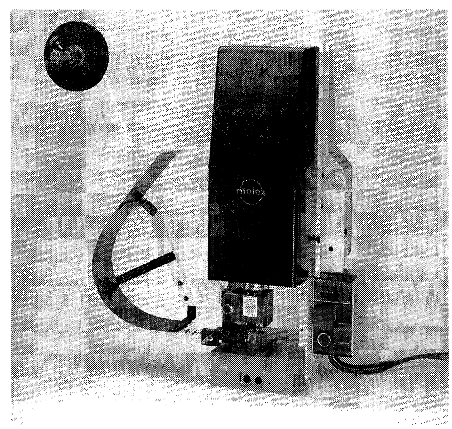
Size without Reel Arm: Width—660mm (26")
Depth—457mm (18")
Height—838mm (33")
Size with Reel Arm and Reel: Width—889mm (35")
Depth—457mm (18")
Height—1067mm (42")
Weight: 94kg (206 lb)
Electrical: Voltage—120V, 60 Hz or 220V, 50 Hz, single phase
Current—6.6A at 120V or 3.3A at 220V
Tonnage: 26.70kN (3 tons) 10 AWG
Stroke Length: 41.28mm (1.625")
Shut Height: 135.80mm (5.346") preset for all Molex applicators
Rate: Manual—Up to 2500 terminations per hour, dependent on operator speed and application
Automatic—Up to 3800 terminations per hour, dependent on wire processor



Base Unit



Mini-Mac Applicator



TM-7 Crimping Press

ORDERING INFORMATION

Description	Order No.	For Use With	Voltage/Hz
TM-7 Crimping Press	11-05-0043	Mini-Mac	110/60
TM-7 Crimping Press	11-05-0044	Base Unit	110/60
TM-7 Crimping Press	11-05-0045	Mini-Mac	220/50
TM-7 Crimping Press	Contact factory	Base Unit	220/50

TM-44 Universal Crimping Press

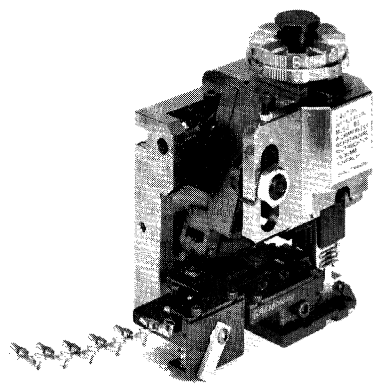
FEATURES AND SPECIFICATIONS

Features

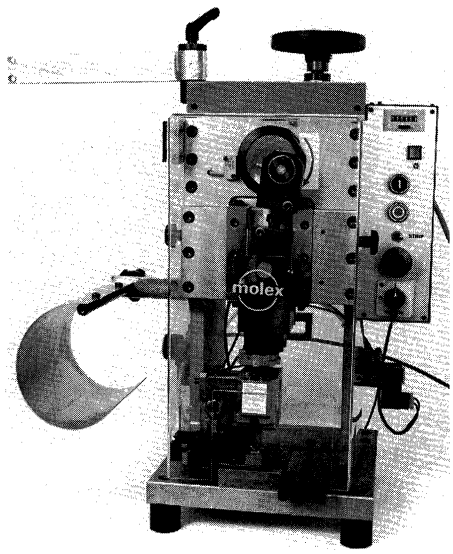
- Utilizes Molex Mini-Mac side and rear feed applicators
- 1 screw clamp lever for quick changeover
- Easy manual adjustment of tooling via hand wheel eliminates risks and improves set-up time
- Adapts to OEM wire processing machines
- Resettable counter
- Accepts Molex Crimp Process Monitor for quality crimp contacts (adapter kit required)
- Meets US and European safety and noise standards

Specifications

Size without Reel Arm: Width—508mm (20")
Depth—559mm (22")
Height—660mm (26")
Size with Reel Arm and Reel: Width—1016mm (40")
Depth—559mm (22")
Height—1400mm (55")
Weight: 50kg (110 lb)
Electrical: Voltage—220/240V AC single phase, 50/60 Hz
Current—4.0A
Tonnage: 22.24kN (2.5 tons) 10 AWG
Stroke Length: 40.00mm (1.580")
Shut Height: 135.80mm (5.346") for preset Molex applicators
Rate: Manual—Up to 2500 terminations per hour, dependent on operator speed and application
Automatic—Up to 3800 terminations per hour, dependent on wire processor



Mini-Mac Applicator



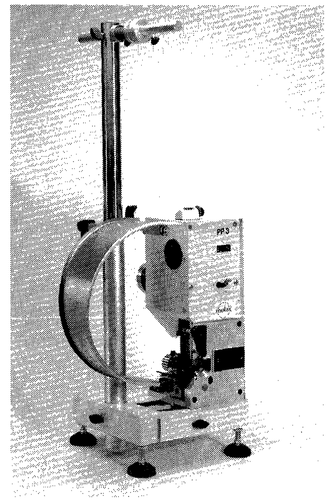
TM-44 Crimping Press

ORDERING INFORMATION

Description	Order No.
TM-44 Crimping Press	11-09-2074

Crimp Application Tooling
Stripper Crimpers

TM-80 (Preferred for 24 to 32 AWG)



FEATURES AND SPECIFICATIONS

Features

- A wire processing system consisting of a Kirsten PP3 Stripper Crimper and termination dies designed for a variety of Molex terminals
- Strips insulation and crimps terminal in 1 cycle
- Fine adjustment for both strip and crimp height specifications
- Unit is lightweight and portable
- Completely pneumatic, no electric required
- Resettable counter

Specifications

Size without Reel Arm: Width—254mm (10")
Depth—254mm (10")
Height—813mm (32")
Size with Reel Arm and Reel: Width—533mm (21")
Depth—254mm (10")
Height—1118mm (44")
Weight: 29kg (64 lb)
Pneumatics: Pressure—4.1 to 6.2 BAR (60 to 90psig)
Consumption—41L per minute (1.45 CFM)
Tonnage: 13.4kN (1.5 tons)
Stroke Length: 30.00mm (1.180")
Free Wire Length: 14.00mm + carrier strip width (.511")
Strip Length: 12.00mm (.470") max.
Rate: Up to 1500 terminations per hour, dependent on operator speed and application

ORDERING INFORMATION

Preferred Version in the US

Terminal Series No.	Order No.		Wire Gauge AWG (mm^2)	Insulation Diameter	Strip Length
	Stripper Crimper	Spare Tool Kit			
5263	11-09-2071	11-17-3945	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
8980 1-3CI	11-09-2056	11-17-3882	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
8980 4CI	11-09-2057	11-17-3914	18-22 (0.80-0.35)	1.52-2.30 (.060-.090)	3.96-5.54 (.156-.218)
50058	11-09-2065	11-17-3915	28-32 (0.08-0.03)	1.00 (.040) max.	1.40-1.90 (.055-.075)
70021	11-09-2072	11-17-3946	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
70058	11-09-2079	11-17-3943	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
71851	11-09-2079	11-17-3943	24-30 (0.20-0.05)	1.52 (.060) max.	2.54-3.17 (.100-.125)
90100-0007	11-09-2040	11-17-3458	28-32 (0.05-0.03)	0.71-1.37 (.028-.054)	3.56-4.32 (.140-.170)
90100-0008	11-09-2039	11-17-3459	22-26 (0.35-0.12)	0.91-2.62 (.036-.103)	3.56-4.32 (.140-.170)
90100-0009	11-09-2038	11-17-3460	18-20 (0.80-0.50)	1.06-2.62 (.042-.103)	3.56-4.32 (.140-.170)

ORDERING INFORMATION

Preferred Version in Europe—Not Available in the US

Terminal Series No.	Order No.		Wire Gauge AWG (mm^2)	Insulation Diameter	Strip Length
	Applicator	Spare Tool Kit			
1854/1855	69015-6060	69015-6061	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)
2477/2478	69015-7000	69015-7001	18-20 (0.80-0.50)	2.80 (.110) max.	2.54-3.17 (.100-.125)
5103	69015-6094	69015-6095	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
5263	69015-6070	69015-6071	22-28 (0.35-0.08)	1.90 (.075) max.	2.54-3.17 (.100-.125)
87115/87116	69015-6075	69015-6076	24-28 (0.20-0.08)		
87115/87116	69015-6080	69015-6081	28-32 (0.08-0.03)	0.90 (.035) max.	
90100/90103	69015-6000	69015-6005	28-32 (0.05-0.03)		
90100/90103	69015-6001	69015-6010	22-26 (0.35-0.12)		
90100/90103	69015-6002	69015-6015	18-20 (0.80-0.50)		
90119-01XX	69015-1020	69015-1025	22-24 (0.35-0.20)		
90119-01XX	69015-1021	69015-1030	26-28 (0.35-0.08)		
90212	69015-6027	69015-6040	18-20 (0.80-0.50)		
90290	69015-6026	69015-6035	22-26 (0.35-0.12)		
90290	69015-6025	69015-6030	28-32 (0.08-0.03)		
90290	69015-6065	69015-6066	26-28 (0.35-0.08)		

Note: Standard TM-80, Left Hand Feed, Untooled Order No. is 69015-0000

FEATURES AND SPECIFICATIONS

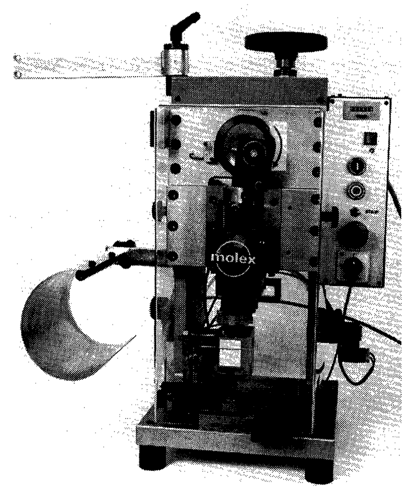
TM-144 Universal Stripper Crimper (Preferred for 10 to 24 AWG)

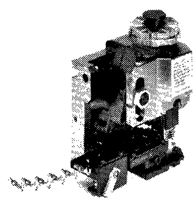
Features

- Modular wire processing system consisting of TM-44 Crimp Press, SC-144 Stripping Unit and Molex Mini-Mac Applicator
- Strips insulation and crimps terminal in 1 cycle
- Easy manual adjustment of tooling, via hand wheel, eliminates risks and allows for precise adjustment of strip length and cut depth
- Unit is nonapplicator dependent and works with all existing Mini-Mac tooling*
- Adjustable for 12 to 24 AWG with 2.99mm (.110") diameter insulation maximum
- Resettable counter
- Accepts Molex Crimp Process Monitor for quality crimp contacts (adapter kit required)
- Meets US and European safety and noise standards
- Switch for strip/crimp or just crimp operation

Specifications

Size without Reel Arm: Width—508mm (20")
Depth—559mm (22")
Height—660mm (26")
Size with Reel Arm and Reel: Width—1016mm (40")
Depth—559mm (22")
Height—1400mm (55")
Weight: 50kg (110 lb)
Pneumatics: Pressure—2.1 BAR (30psig)
Consumption—28.3L per minute (1 CFM)
Electrical: Voltage—220/240V AC single phase, 50/60 Hz
Current—4.0A
Tonnage: 22.24kN (2.5 tons)
Stroke Length: 40.00mm (1.580")
Shut Height: 135.80mm (5.346")
Free Wire Length: 44.50mm (1.750")
Strip Length: 2 to19mm (.080 to .075")
Rate: Up to 1500 terminations per hour, dependent on operator speed and application





ORDERING INFORMATION

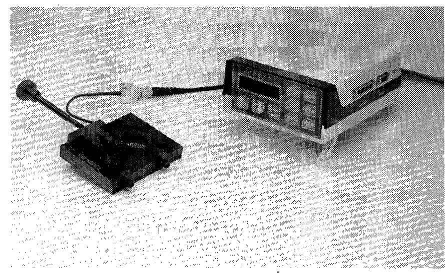
Description	Order No.
TM-144 Stripper Crimper	11-09-2073

Terminal Series No.	Order No. TM-144 Stripper Crimper	Order No. Spare Tooling	Wire Gauge AWG (mm²)	Insulation Diameter	Strip Length	Notes
1189/1190	11-09-2090 11-09-2091	11-18-3134 11-18-3009	14-20 (2.00-.050)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)	18 doubles
1380/1381	11-09-2093 11-09-2094	11-18-3149 11-18-3007	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	
1450/1451	11-09-2090	11-18-3134	14-20 (2.00-0.50)	3.56 (.140) max.	3.96-5.53 (.156-.218)	
1508-9	11-09-2098 11-09-2096	11-18-3193 11-18-3195	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)	16 and 18 doubles crimp
1560/1561	11-09-2081	11-18-3017	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	
1786/1787	11-09-2081	11-18-3017	18-24 (0.80-0.20)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	
1854/1855	11-09-2099	11-18-3024	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	
2151/2152	11-09-2093	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	
2189/2190	11-09-2099	11-18-3024	24-30 (0.20-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	
2269	11-09-2090	11-18-3134	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)	
2273	11-09-2093	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	
2477/2478	11-09-2082	11-18-3203	18-20 (0.80-0.50)	2.80 (.110) max.	2.54-3.17 (.100-.125)	
2698	11-09-2099	11-18-3024	14-22 (2.00-0.35)	3.18 (.125) max.	3.96-5.53 (.156-.218)	
2759	11-09-2083	11-18-3162	22-24 (0.35-0.20)	1.57 (.062) max.	2.54-3.17 (.100-.125)	
4272	11-09-2093	11-18-3149	18-22 (0.80-0.35)	1.20-3.05 (.060-.120)	3.96-5.53 (.156-.218)	
4549/4550	11-09-2090	11-18-3134	14-20 (2.00-0.50)	3.55 (.140) max.	3.96-5.53 (.156-.218)	
4559	11-09-2099	11-18-3024	24-30 (0.08-0.05)	1.00-2.30 (.040-.090)	3.17-3.96 (.125-.156)	
5103	Contact factory	11-18-3077	22-24 (0.35-0.20)	1.90 (.075) max.	2.54-3.17 (.100-.125)	
5139	11-09-2083	11-18-3162	24-30 (0.20-0.05)	1.57 (.062) max.	2.54-3.17 (.100-.125)	
5159	11-09-2083	11-18-3162	22-24 (0.35-0.20)	1.20-1.70 (.047-.067)	2.80-3.40 (.110-.133)	
5394T	11-09-2103	11-18-3066	22-24 (0.35-0.20)	1.90 (.075) max.	2.10-2.70 (.083-.106)	
5556/5558	11-09-2085	11-18-3002	18-24 (0.80-0.20)	1.30-3.10 (.051-.122)	3.00-3.50 (.118-.138)	
5556T2/5558/T2	11-09-2086	11-18-3003	22-24 (0.35-0.20)	0.90-1.80 (.035-.070)	3.00-3.50 (.118-.138)	
5556T3/5558T3	11-09-2087	11-18-3065	16 (1.30)	1.00-3.10 (.071-.122)	3.00-3.50 (.118-.138)	
6310	11-09-2090	11-18-3134	14-20 (2.00-0.50)	1.50-4.06 (.065-.160)	3.96-5.53 (.156-.218)	
6459	11-09-2084	11-18-3061	22-24 (0.35-0.20)	1.57 (.062) max.	2.54-3.17 (.100-.125)	
6770/6772	11-09-2081	11-18-3017	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)	
7291	11-09-2081	11-18-3017	18-24 (0.80-0.20)	2.80 (.110) max.	3.17-3.96 (.125-.156)	
40445	11-09-2083	11-18-3162	22-24 (0.35-0.20)	1.57 (.062) max.	2.54-3.17 (.100-.125)	
41572	11-09-2083	11-18-3162	22-24 (0.35-0.20)	1.57 (.062) max.	2.54-3.17 (.100-.125)	
42477/42478	11-09-2088	11-18-3170 11-18-3194	14-18 (2.00-0.80)	3.56 (.140) max.	3.96-5.53 (.156-.218)	Large insulation
70058	11-09-2102	11-18-3019	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)	
71851	11-09-2102	11-18-3019	22-24 (0.35-0.20)	1.63 (.064) max.	2.54-3.17 (.100-.125)	

* Some modifications may be required. Contact factory before attempting to mount existing Molex Mini-Mac applicators into the TM-144 system.

Crimp Application Tooling
Crimp Tooling Accessories

Crimp Process Monitor



FEATURES AND SPECIFICATIONS

Features
- 4 time over sampling of signal
- Graphical presentation of process
- Gain set by wire gauge for easy set-up
- Printout of force curves
- Continuous self-monitoring of force sensor
- Automatic calculation and setting of tolerances during set-up
- Evaluation mode to assist in capability study
- No modifications required to press, unit is able to be installed by customer
- Unit is nonapplicator dependent and works with all existing Molex Mini-Mac crimp tooling

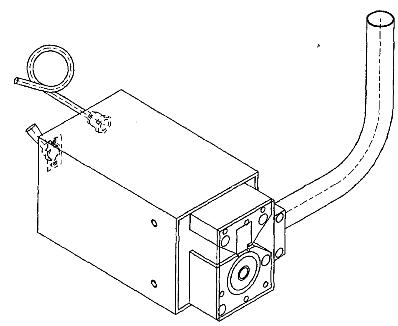
Specifications
Size: Width—147.3mm (5.8")
Depth—190.5mm (7.5")
Height—66mm (2.6")
Weight: 1.5kg (3.3 lb)
Electrical: 110 or 220V AC at 50 or 60 Hz, single phase
Force Capacity: 2273kg (5000 lb)
Fits Presses: Molex TM-40/42, TM-144, Artos TU-7 Press Megomat APE101, Mecal PE-4, 5, 7 and 9, Toyojamco

ORDERING INFORMATION

Description	Order No.	For Use With
Crimp Process Monitor*	11-32-6016	All press systems
Press Component Set†	11-39-0189	TM-40 Press
Press Component Set†	11-39-0080	TM-42 Press
Press Component Set†	11-39-0078	TM-144 Press
Press Component Set†	11-39-0072	TM-7/Artos TU-7 Presses
Press Component Set†	11-39-0074	Mecal Press
Press Component Set†	11-39-0076	Toyojamco Press

* Process monitor is on lease only basis
† Component sets are on purchase only basis

Crimp Strip Cutter



FEATURES AND SPECIFICATIONS

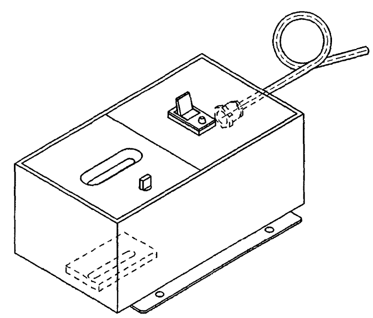
Features
- Cuts carrier strip in small pieces, which allows for easier disposal

Specifications
Size: Width—220mm (8.6")
Depth—95mm (3.7")
Height—95mm (3.7")
Weight: 2.7kg (6 lb)
Electrical: 24V DC at 1.0A

ORDERING INFORMATION

Description	Order No.
Carrier Strip Cutter	11-14-5022

Paper Take-Up



FEATURES AND SPECIFICATIONS

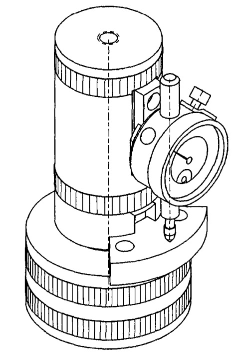
Features
- Reels in paper that is interwoven between the terminals for protection while on the reel
- Capstan slip drive
- Rotary action

Specifications
Size: Width—190mm (7.5")
Depth—120mm (4.7")
Height—90mm (3.5")
Weight: 1.6kg (3.5 lb)
Electrical: 110V AC at 1.0A

ORDERING INFORMATION

Description	Order No.
Paper Take-Up	11-14-5023

Shut Height Gage



FEATURES AND SPECIFICATIONS

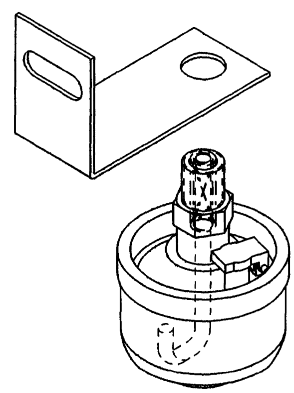
Features
- 135mm (5.346") shut height allows Molex Mini-Mac applicators to be moved from press to press without adjustment
- Direct acting, during hand cycling
- Shut height of the press is set under preloaded condition for accuracy

Specifications
Size: Height—100mm (3.9")
Diameter—75mm (2.9")
Weight: 4.5kg (10 lb)

ORDERING INFORMATION

Description	Order No.
Shut Height Gage	11-14-5024

Terminal Oiler



FEATURES AND SPECIFICATIONS

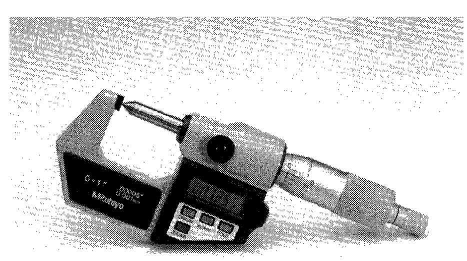
Features
- Applies a thin coating of oil to the terminals for proper feed and better release from the termination punches (primarily necessary with gold terminals)
- Wick action
- May be used with Mini-Mac applicators, terminators, base units, bench or automatic equipment

Specifications
Size: Height—150mm (5.9")
Diameter—50mm (1.9")
Weight: 0.4kg (0.88 lb)
Recommended Oil: Shell Tellus CEL C10 or Mobil VAC HLP9

ORDERING INFORMATION

Description	Order No.
Terminal Oiler	11-40-0237

Digital Crimp Micrometer



FEATURES AND SPECIFICATIONS

Features
- Special design series for measuring crimp terminations
- 6-place digital display for measurement accuracy (0.00000)
- English/metric conversion button
- Zero on absolute measurement mode
- Slip adjustment control for repeatable measurement force
- Auto shut off after 20 minutes

Specifications
Resolution: 0.001mm (.00005")
Measuring Force: 4 to 7N (.900 to 1.570")
Power: 1 Silver oxide battery

ORDERING INFORMATION

Description	Order No.
Digital Crimp Micrometer	63800-2800

HOW TO USE

1) Match tool order no., tool type and terminal series no.
2) Set tooling up to the appropriate wire size and crimp height*
3) Verify set-up with pull force testing†
4) Contact a Molex representative for a detailed tooling specification sheet*

* Hand tools with no listed crimp heights are qualified to pull force specification only. No tooling specification sheets are available.
† May be higher than UL pull force minimums

If minimum pull force levels are not achieved:
1) Check for cut of nicked strands during the stripping operation
2) Check for appropriate bellmouth or conductor brush
3) Confirm terminal/tool combination
4) Confirm crimp height to wire size (AWG)
5) Verify wire attributes (pull force of breaking the wire alone)
6) Adjust set-up and verify new set-up with pull force testing
7) Contact a Molex field service representative if minimum pull force levels are not achieved

Tool Type	
HT	Hand Tool
MAT	Mini-Mac Applicator
T4T	TM-40/42 Terminator
T8T	TM-80 Stripper Crimper

UL Minimums	
8 AWG	400.5N (90 lb)
10 AWG	356.0N (80 lb)
12 AWG	311.5N (70 lb)
14 AWG	222.5N (50 lb)
16 AWG	133.5N (30 lb)
18 AWG	89.0N (20 lb)

UL Minimums	
20 AWG	57.9N (13 lb)
22 AWG	35.6N (8 lb)
24 AWG	22.3N (5 lb)
26 AWG	13.4N (3 lb)
28 AWG	8.9N (2 lb)
30 AWG	6.7N (1.5 lb)

TERMINAL TO CRIMP SPECIFICATION CROSS REFERENCE

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.)					Pull Force per AWG (lb)					Notes
			Ch1	Ch2	Ch3	Ch4	Ch5	Pf1	Pf2	Pf3	Pf4	Pf5	
11-01-0006	HT	1433/1434						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	1881-3						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	2014						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	2192						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	2799						24 (8.0)	26 (6.0)	28 (4.0)			
11-01-0006	HT	6043						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	6308						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	6893/6894						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0006	HT	7499						22 (8.0)	24 (6.0)				
11-01-0008	HT	1560/1561						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0008	HT	1786/1787						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0008	HT	1799						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0008	HT	1917						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0008	HT	1943						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0008	HT	2012						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0008	HT	4295						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0008	HT	4499						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0008	HT	4529						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0008	HT	5005/5006						18 (20.0)	20 (13.2)	22 (8.8)	24 (6.6)		
11-01-0008	HT	6361/6362						18 (20.0)	20 (14.0)	22 (10.0)			
11-01-0008	HT	6770/6772						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0008	HT	7291						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0008	HT	8960						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0011	HT	2697-1						12 (70.0)	14 (58.0)	16 (45.0)	18 (35.0)	20 (18.0)	
11-01-0011	HT	2699						12 (70.0)	14 (58.0)	16 (45.0)	18 (35.0)	20 (18.0)	
11-01-0014	HT	1189/1190						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		
11-01-0014	HT	1380/1381						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0015	HT	1433/1434						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0015	HT	1560/1561						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0015	HT	1854/1855						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0019	HT	2776						14 (50.0)	16 (30.0)	18 (20.0)	20 (15.0)		
11-01-0026	HT	2477/2478						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0026	HT	2578						22 (10.0)	24 (8.0)	26 (6.0)			
11-01-0026	HT	2878						18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-01-0026	HT	4838						20 (15.0)	22 (12.0)				
11-01-0026	HT	5167						18 (20.0)	20 (13.2)	22 (8.8)	24 (6.6)		
11-01-0026	HT	5168						22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-01-0026	HT	6438						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0026	HT	6838						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0026	HT	7242						22 (12.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-01-0026	HT	7258						22 (12.0)	24 (8.0)	26 (6.0)			
11-01-0026	HT	8818/8819						18 (25.0)	20 (15.0)	22 (12.0)	24 (10.0)		
11-01-0026	HT	8993						18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0065	HT	4706-P,1						16 (3.0)	18 (3.0)				
11-01-0068	HT	4706-3						18 (3.0)	20 (3.0)	22 (3.0)	24 (3.0)		
11-01-0084	HT	1189/1190						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		
11-01-0084	HT	1380/1381						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0084	HT	1450/1451						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.
Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.)					Pull Force per AWG (lb)					Notes
			Ch1	Ch2	Ch3	Ch4	Ch5	Pf1	Pf2	Pf3	Pf4	Pf5	
11-01-0084	HT	1457-1						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0084	HT	1457-2						14 (40.0)	16 (35.0)				
11-01-0084	HT	1881-2						14 (40.0)	16 (35.0)	18 (25.0)	22 (15.0)	24 (12.0)	
11-01-0084	HT	1973						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0084	HT	1973-2						14 (40.0)	16 (35.0)	18 (25.0)			
11-01-0084	HT	2046/2047						16 (45.0)	18 (35.0)				
11-01-0084	HT	2151/2152						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0084	HT	2236/2237						20 (15.0)	22 (12.0)				
11-01-0084	HT	2269						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		
11-01-0084	HT	2273						18 (20.0)	20 (14.0)	22 (10.0)			
11-01-0084	HT	2282/2283						14 (40.0)	16 (35.0)	18 (25.0)			
11-01-0084	HT	4272						18 (20.0)	20 (14.0)	22 (10.0)			
11-01-0084	HT	4296						16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)		
11-01-0084	HT	4549/4550						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		
11-01-0084	HT	6271						18 (20.0)	20 (14.0)	22 (10.0)			
11-01-0084	HT	6310						14 (40.0)	16 (35.0)	18 (20.0)	20 (14.0)		
11-01-0084	HT	7238/7239						14 (40.0)	16 (35.0)	18 (25.0)			
11-01-0084	HT	8058						18 (35.0)	20 (18.0)	22 (12.0)			
11-01-0085	HT	4811-1						22 (3.0)	24 (3.0)				
11-01-0085	HT	41817						22 (3.0)	24 (3.0)	26 (3.0)			
11-01-0086	HT	4811						22 (3.0)	24 (3.0)				
11-01-0088	HT	1929						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0088	HT	2107						18 (20.0)	20 (14.0)	22 (10.0)	24 (8.0)		
11-01-0088	HT	2107						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0097	HT	2870/2871						22 (12.0)	24 (8.0)				
11-01-0101	HT	1508-9						14 (40.0)	16 (35.0)	18 (25.0)			
11-01-0101	HT	2176						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-01-0101	HT	2328						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-01-0101	HT	2576						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-01-0101	HT	2698						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-01-0101	HT	7676						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-01-0103	HT	40144						36 (0.40)					
11-01-0110	HT	40682						22 (10.0)	24 (8.0)	26 (6.0)			
11-01-0112	HT	4787						16 (35.0)	18 (25.0)	20 (15.0)			
11-01-0112	HT	4787-2						20 (15.0)	22 (12.0)	24 (8.0)			
11-01-0114	HT	5205/5206						14 (33.0)	16 (28.6)	18 (20.0)			
11-01-0149	HT	41483	14 (.068/.064)	16 (.060/.056)	18 (.057/.053)			14 (40.0)	16 (35.0)	18 (30.0)			
11-01-0149	HT	42138	14 (.068/.064)	16 (.060/.056)	18 (.057/.053)			14 (40.0)	16 (35.0)	18 (30.0)			
11-01-0167	HT	42023/42024						14 (50.0)	16 (45.0)	18 (30.0)	20 (14.0)		
11-01-0177	HT	41051						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0180	HT	41422						10 (80.0)	12 (70.0)				
11-01-0181	HT	41422						14 (58.0)	16 (45.0)	18 (35.0)			
11-01-0182	HT	94506-02						14 (58.0)	16 (45.0)	18 (35.0)			
11-01-0185	HT	1854/1855	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-01-0185	HT	2189/2190	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-01-0185	HT	2759	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0185	HT	4559	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-01-0185	HT	4809	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0185	HT	5139	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-01-0185	HT	5159	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)		
11-01-0185	HT	6459	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0185	HT	7879	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0185	HT	40445	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0185	HT	41572	22 (.0335/.0295)	24 (.0327/.0287)	26 (.0319/.0280)	28 (.0315/.0276)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0189	HT	5103	22 (.0303/.0264)	24 (.030/.026)	26 (.030/.026)	28 (.0295/.0255)		22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)		
11-01-0193	HT	5194	18 (.0496/.0456)	20 (.043/.039)	22 (.0426/.0386)	24 (.0414/.0374)		18 (20.0)	20 (13.2)	22 (8.8)	24 (6.6)		
11-01-0194	HT	5263	22 (.0323/.0283)	24 (.0315/.0276)	26 (.0291/.0252)	28 (.0283/.0244)		22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)		
11-01-0195	HT	5230	22 (.0354/.0315)	24 (.0346/.0307)	26 (.0319/.0280)	28 (.0311/.0272)	30 (.0307/.0268)	22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)	
11-01-0197	HT	5556/5558	18 (.048/.044)	20 (.035/.031)	22 (.035/.031)	24 (.035/.031)		18 (20.0)	20 (16.0)	22 (10.0)	24 (6.5)		
11-01-0198	HT	5556 2/5558	22 (.034/.030)	24 (.031/.027)	26 (.029/.027)	28 (.028/.024)		22 (10.0)	24 (6.5)	26 (4.0)	28 (2.5)		
11-01-0199	HT	5556 3/5558	16 (.054/.050)					16 (20.0)					
11-01-0200	HT	43030	26 (.031/.027)	28 (.0305/.0265)	30 (.030/.026)			26 (4.0)	28 (2.5)	30 (1.6)			
11-01-0200	HT	43030	20 (.035/.031)	22 (.0345/.0305)	24 (.034/.030)			20 (16.0)	22 (10.0)	24 (6.4)			
11-01-0201	HT	43031	26 (.031/.027)	28 (.0305/.0265)	30 (.030/.026)			26 (4.0)	28 (2.5)	30 (1.6)			
11-01-0201	HT	43031	20 (.035/.031)	22 (.0345/.0305)	24 (.034/.030)			20 (16.0)	22 (10.0)	24 (6.4)			
11-01-0202	HT	1219	12 (.086/.082)	14 (.082/.078)				12 (70.0)	14 (58.0)				
11-01-0202	HT	1220	12 (.086/.082)	14 (.082/.078)				12 (70.0)	14 (58.0)				
11-01-0202	HT	1900/1901	10 (.092/.088)	12 (.086/.082)				10 (80.0)	12 (70.0)				

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.)					Pull Force per AWG (lb)					Notes
			Ch1	Ch2	Ch3	Ch4	Ch5	Pf1	Pf2	Pf3	Pf4	Pf5	
11-01-0202	HT	42546/42547	10 (.092/.088)	12 (.086/.082)				10 (80.0)	12 (70.0)				
11-01-0203	HT	1797	18 (.040/.036)	20 (.039/.035)	22 (.039/.035)	24 (.038/.034)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0203	HT	4366	18 (.040/.036)	20 (.039/.035)	22 (.039/.035)	24 (.038/.034)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-01-0203	HT	4573	24 (.037/.033)	26 (.035/.031)	28 (.034/.030)	30 (.034/.030)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-01-0204	HT	50394	24 (.0255/.0215)	26 (.025/.021)	28(.0245/.0205)	30 (.024/.020)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-01-0205	HT	35021	24 (.026/.022)	26 (.026/.022)	28 (.022/.018)	30 (.022/.018)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-01-0206	HT	8980 1-3C						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		
11-01-0206	HT	8980 1-3C1						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0206	HT	8980 4C						14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)		
11-01-0206	HT	8980 4C1						18 (25.0)	20 (15.0)	22 (12.0)			
11-01-0207	HT	42477/42478	14 (.077/.073)	16 (.067/.063)	18(.0615/.0575)			14 (60.0)	16 (30.0)	18 (20.0)			
11-01-0208	HT	70021	22 (.032/.028)	24 (.032/.028)				22 (10.0)	24 (6.5)				
11-01-0208	HT	70021	32 (.027/.023)	34 (.027/.023)	36 (.027/.023)			32 (1.0)	34 (0.6)	36 (0.4)			
11-01-0208	HT	70058	22 (.032/.028)	24 (.032/.028)				22 (10.0)	24 (6.5)				
11-01-0208	HT	70058	32 (.027/.023)	34 (.027/.023)	36 (.027/.023)			32 (1.0)	34 (0.6)	36 (0.4)			
11-01-0208	HT	71851	22 (.032/.028)	24 (.032/.028)				22 (10.0)	24 (6.5)				
11-01-0208	HT	71851	32 (.027/.023)	34 (.027/.023)	36 (.027/.023)			32 (1.0)	34 (0.6)	36 (0.4)			
11-01-0209	HT	70021	24 (.030/.026)	26 (.026/.022)	28 (.026/.022)	30 (.026/.022)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-01-0209	HT	70058	24 (.030/.026)	26 (.026/.022)	28 (.026/.022)	30 (.026/.022)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-01-0209	HT	71851	24 (.030/.026)	26 (.026/.022)	28 (.026/.022)	30 (.026/.022)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-01-1026	HT	2697-2						12 (70.0)	14 (58.0)	16 (45.0)	18 (35.0)	20 (18.0)	Contact factory
11-09-2056	T8T	8980 1-3C1	Contact Factory					18 (35.0)	20 (18.0)	22 (10.0)			Contact factory
11-09-2057	T8T	8980 4C1						18 (35.0)	20 (18.0)	22 (10.0)			Contact factory
11-09-2065	T8T	50058						28 (2.2)	30 (1.1)	32 (0.66)			Contact factory
11-09-2071	T8T	5263						22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		Contact factory
11-09-2072	T8T	70021											Contact factory
11-09-2078	T8T	50012/50013						24 (6.6)	26 (4.4)	28 (2.2)			Contact factory
11-09-2079	T8T	70058						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		Contact factory
11-09-2079	T8T	71851						24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		Contact factory
11-09-2101	T8T	70058											Contact factory
11-09-2101	T8T	71851											Contact factory
11-18-2002	MAT	5556/5558	18 (.048/.044)	20 (.041/.037)	22 (.037/.033)	24 (.034/.031)		18 (20.0)	20 (13.0)	22 (9.0)	24 (7.0)		
11-18-2002	MAT	30490	18 (.048/.044)	20 (.041/.037)	22 (.037/.033)	24 (.034/.031)		18 (20.0)	20 (13.0)	22 (9.0)	24 (7.0)		
11-18-2003	MAT	5556 2/5558	22 (.033/.030)	24 (.030/.028)	26 (.028/.026)	28 (.027/.025)		22 (9.0)	24 (7.0)	26 (5.0)	28 (3.0)		
11-18-2008	MAT	1433/1434	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2008	MAT	2192	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2008	MAT	6308	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2008	MAT	6893/6894	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2009	MAT	1189/1190	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)	(2)18 (.058/.056)	14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)	(2)18 (30.0)	
11-18-2010	MAT	1881-2	16 (.058/.056)	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)	24 (.051/.049)	16 (35.0)	18 (30.0)	20 (18.0)	22 (14.0)	24 (9.0)	
11-18-2011	MAT	1973	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)			18 (30.0)	20 (18.0)	22 (14.0)			
11-18-2012	MAT	2870/2871	22 (.038/.036)	24 (.036/.034)				22 (14.0)	24 (8.0)				
11-18-2012	MAT	8058	18	20	22 (.038/.036)			18	20	22 (14.0)			
11-18-2013	MAT	7238/7239	14 (.069/.067)	16 (.062/.060)	18 (.060/.058)			14 (40.0)	16 (35.0)	18 (30.0)			
11-18-2015	MAT	70021	32 (.027/.026)	34 (.027/.026)	36 (.027/.026)			32 (1.0)	34 (1.0)	36 (1.0)			
11-18-2016	MAT	70021	22 (.035/.033)	24 (.032/.030)				22 (10.0)	24 (8.0)				
11-18-2017	MAT	1560/1561	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2017	MAT	1786/1787	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2017	MAT	6770/6772	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2017	MAT	7291	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2019	MAT	70058	22 (.035/.033)	24 (.032/.030)				22 (10.0)	24 (8.0)				
11-18-2019	MAT	71851	22 (.035/.033)	24 (.032/.030)				22 (10.0)	24 (8.0)				
11-18-2020	MAT	70058	32 (.026/.025)	34 (.025/.024)	36 (.025/.024)			32 (1.0)	34 (0.6)	36 (0.4)			
11-18-2020	MAT	71851	32 (.026/.025)	34 (.025/.024)	36 (.025/.024)			32 (1.0)	34 (0.6)	36 (0.4)			
11-18-2021	MAT	40140	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.036/.034)		18 (25.0)	20 (15.0)	22 (10.0)	24 (6.0)		
11-18-2022	MAT	2578	22 (.040/.038)	24 (.038/.036)	26 (.036/.034)			22 (10.0)	24 (8.0)	26 (6.0)			
11-18-2022	MAT	7258	22 (.040/.038)	24 (.038/.036)	26 (.036/.034)			22 (10.0)	24 (8.0)	26 (6.0)			
11-18-2023	MAT	8818/8819	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (10.0)		
11-18-2024	MAT	1854/1855	24 (.033/.031)	26 (.031/.029)	28 (.030/.027)	30 (.027/.025)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2024	MAT	2189/2190	24 (.033/.031)	26 (.031/.029)	28 (.030/.027)	30 (.027/.025)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2024	MAT	4559	24 (.027/.025)	26 (.024/.022)	28 (.023/.021)	30 (.022/.020)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2036	MAT	6482-1,2	14 (.078/.076)	16 (.068/.066)	18 (.066/.064)			14 (58.0)	16 (45.0)	18 (35.0)			
11-18-2040	MAT	2176	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-18-2040	MAT	2328	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-18-2040	MAT	2576	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-18-2040	MAT	7676	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-18-2041	MAT	2799	22 (.039/.037)	24 (.037/.035)	26 (.035/.033)	28 (.034/.032)		22 (12.0)	24 (8.0)	26 (6.0)	28 (4.0)		

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.) Ch1	Ch2	Ch3	Ch4	Ch5	Pull Force per AWG (lb) Pf1	Pf2	Pf3	Pf4	Pf5	Notes
11-18-2041	MAT	7676-1	22 (.039/.037)	24 (.037/.035)	26 (.035/.033)	28 (.034/.032)		22 (12.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-18-2042	MAT	4706-P,1	16 (.070/.068)	18 (.070/.068)				16 (3.0)	18 (3.0)				Barrel crimp
11-18-2043	MAT	4706-3	18 (.070/.068)	20 (.070/.068)	22 (.070/.068)	24 (.070/.068)		18 (3.0)	20 (3.0)	22 (3.0)	24 (3.0)		Barrel crimp
11-18-2044	MAT	5194	18 (.052/.048)	20 (.046/.042)	22 (.042/.038)	24 (.039/.035)		18 (20.0)	20 (13.2)	22 (8.8)	24 (6.6)		
11-18-2045	MAT	5225	22 (.038/.036)	24 (.035/.033)	26 (.033/.031)	28 (.032/.030)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-18-2202	MAT	2776	14 (.062/.058)	16 (.054/.050)	(2)16 (.066/.062)	(2)18 (.058/.054)		14 (43.0)	16 (43.0)	18 (40.0)	20 (30.0)		
11-18-2048	MAT	4811	22 (.049/.047)	22 (.049/.047)				22 (3.0)	24 (3.0)				Barrel crimp
11-18-2049	MAT	4811-1	22 (.049/.047)	24 (.049/.047)	26 (.049/.047)			22 (3.0)	24 (3.0)	26 (3.0)			Barrel crimp
11-18-2049	MAT	5190	22 (.046/.044)	24 (.046/.044)	26 (.046/.044)			22 (3.0)	24 (3.0)	26 (3.0)			Barrel crimp
11-18-2049	MAT	41817	22 (.049/.047)	24 (.049/.047)	26 (.049/.047)			22 (3.0)	24 (3.0)	26 (3.0)			Barrel crimp
11-18-2051	MAT	1797	18 (.045/.043)	20 (.043/.041)	22 (.038/.040)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2051	MAT	1917	18 (.045/.043)	20 (.043/.041)	22 (.038/.040)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2051	MAT	2012	18 (.045/.043)	20 (.043/.041)	22 (.038/.040)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2051	MAT	4295	18 (.045/.043)	20 (.043/.041)	22 (.038/.040)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2051	MAT	4366	18 (.045/.043)	20 (.043/.041)	22 (.038/.040)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2056	MAT	1457-1	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)			18 (30.0)	20 (18.0)	22 (14.0)			
11-18-2057	MAT	1457-2	14 (.075/.073)	16 (.068/.070)				14 (40.0)	16 (35.0)				
11-18-2058	MAT	2482	12 (.095/.093)	14 (.092/.090)				12 (70.0)	14 (60.0)				
11-18-2062	MAT	5263	22 (.030/.027)	24 (.028/.025)	26 (.026/.023)	28 (.025/.022)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-18-2065	MAT	6459	22	24	26 (.036/.034)	28 (.035/.033)	30 (.033/.031)			26 (6.0)	28 (4.0)	30 (3.0)	
11-18-2069	MAT	5556 3/5558	16 (.054/.050)	(2)20 (.046/.044)				16 (20.0)	(2)20 (14.0)				
11-18-2070	MAT	5394T	22 (.029/.027)	24 (.026/.024)	26 (.023/.021)	28 (.022/.020)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-18-2072	MAT	1219	12 (.095/.093)					12 (70.0)					
11-18-2072	MAT	1220	12 (.095/.093)					12 (70.0)					
11-18-2074	MAT	90100-0008	22 (.034/.032)	24 (.034/.032)	26 (.034/.032)			22 (9.0)	24 (7.0)	26 (4.0)			
11-18-2076	MAT	5294	24 (.032/.030)	26 (.029/.027)	28 (.028/.026)			24 (10.0)	26 (6.0)	28 (3.0)			
11-18-2077	MAT	5479T	22 (.033/.030)	24 (.031/.028)	26 (.028/.026)	28 (.027/.025)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-18-2078	MAT	90100-0009	18 (.044/.042)	20 (.044/.042)				18 (20.0)	20 (15.0)				
11-18-2079	MAT	90100-0007	28 (.028/.026)	32 (.027/.025)				28 (3.0)	32 (2.0)				
11-18-2080	MAT	41422	10 (.104/.102)	12 (.095/.093)				10 (80.0)	12 (70.0)				
11-18-2081	MAT	41422	14 (.069/.067)	16 (.065/.063)	18 (.061/.059)			14 (60.0)	16 (30.0)	18 (20.0)			
11-18-2082	MAT	5103	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-18-2083	MAT	5241	22 (.039/.037)	24 (.035/.033)	26 (.032/.030)	28 (.031/.029)		22 (10.0)	24 (8.0)	26 (4.0)	28 (2.5)		
11-18-2084	MAT	5167	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2085	MAT	5230	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)	30 (.027/.025)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-18-2087	MAT	42023/42024	14 (.071/.067)	16 (.061/.057)	18 (.054/.050)	20 (.049/.045)		14 (50.0)	16 (45.0)	18 (30.0)	20 (14.0)		
11-18-2090	MAT	50011	24 (.026/.024)	26 (.025/.023)	28 (.024/.022)	30 (.023/.021)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-18-2091	MAT	1881-3	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2093	MAT	41050	22 (.039/.037)	24 (.037/.035)				22 (10.0)	24 (8.0)				
11-18-2095	MAT	2697-1	12 (.070/.068)	14 (.066/.064)	16 (.064/.062)	18 (.062/.060)	20 (.058/.056)	12 (70.0)	14 (58.0)	16 (45.0)	18 (35.0)	20 (18.0)	
11-18-2096	MAT	2697-2	12 (.074/.072)	14 (.070/.068)	16 (.066/.064)	18 (.062/.060)		12 (70.0)	14 (58.0)	16 (45.0)	18 (35.0)	20 (18.0)	Large insulation
11-18-2097	MAT	1929	18 (.042/.040)	20 (.039/.037)	22 (.038/.036)	24 (.037/.035)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2097	MAT	2107	18 (.042/.040)	20 (.039/.037)	22 (.038/.036)	24 (.037/.035)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2098	MAT	2107	24 (.031/.029)	26 (.029/.027)	28 (.027/.025)	30 (.025/.023)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2107	MAT	5175	16 (.053/.051)	18 (.046/.044)	20 (.043/.041)	22 (.040/.038)		16 (22.0)	18 (22.0)	20 (15.0)	22 (12.0)		
11-18-2108	MAT	42001	24 (.047/.035)	26 (.047/.035)	28 (.047/.035)			22 (3.0)	24 (3.0)	26 (3.0)			Barrel crimp
11-18-2109	MAT	4809	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)	30 (.027/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-18-2110	MAT	5378T/T2	24 (.026/.024)	26 (.024/.022)	28 (.023/.021)			24 (6.6)	26 (4.4)	28 (2.2)			
11-18-2114	MAT	5005/5006	18 (.047/.043)	20 (.044/.040)	22 (.038/.036)	24 (.035/.033)		18 (22.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2115	MAT	41051	18 (.048/.044)	20 (.041/.037)	22 (.037/.033)			18 (20.0)	20 (13.0)	22 (9.0)			
11-18-2117	MAT	5168	22	24 (.038/.036)	26 (.036/.034)	28 (.034/.032)		22	24 (8.0)	26 (6.0)	28 (4.0)		
11-18-2118	MAT	5394T2	20 (.031/.028)	22 (.027/.025)				20 (13.2)	22 (8.8)				
11-18-2122	MAT	50012/50013	24 (.026/.028)	26 (.025/.023)	28 (.023/.025)			24 (6.6)	26 (4.4)	28 (2.2)			
11-18-2130	MAT	1799	18 (.046/.042)	20 (.044/.040)	22 (.041/.037)	24 (.039/.035)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2135	MAT	90100-0007	28 (.028/.026)	32 (.027/.025)				28 (3.0)	32 (2.0)				Cut-off insulation
11-18-2136	MAT	90100-0008	22 (.034/.032)	24 (.034/.032)	26 (.034/.032)			22 (9.0)	24 (7.0)	26 (4.0)			Cut-off insulation
11-18-2139	MAT	42172	14 (.087/.085)	16 (.072/.070)	18 (.065/.063)	(2)16 (.089/.087)	(2)18 (.075/.073)	14 (90.0)	16 (60.0)	18 (35.0)	(2)16 (60.0)	(2)18 (35.0)	
11-18-2140	MAT	87048	26 (.022/.020)	28 (.020/.018)	30 (.018/.017)			26 (4.4)	28 (2.2)	30 (1.1)			
11-18-2142	MAT	30407	18 (.052/.049)					18 (20.0)					
11-18-2143	MAT	1189/1190	14 (.061/.057)	16 (.057/.053)	18 (.053/.050)	20 (.052/.048)		14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)		
11-18-2143	MAT	1450/1451	14 (.061/.057)	16 (.057/.053)	18 (.053/.050)	20 (.052/.048)		14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)		
11-18-2143	MAT	2269	14 (.061/.057)	16 (.057/.053)	18 (.053/.050)	20 (.052/.048)		14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)		
11-18-2143	MAT	4549/4550	14 (.061/.057)	16 (.057/.053)	18 (.053/.050)	20 (.052/.048)		14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)		
11-18-2143	MAT	6310	14 (.061/.057)	16 (.057/.053)	18 (.053/.050)	20 (.052/.048)		14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)		
11-18-2146	MAT	2046/2047	16 (.066/.062)	18 (.063/.060)				16 (40.0)	18 (26.0)				
11-18-2147	MAT	1900/1901	10 (.085/.080)	12 (.082/.077)	14 (.075/.071)	12/18 (.085/.080)		10 (80.0)	12 (70.0)	14 (60.0)	12/18 (30.0)		

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.) Ch1	Ch2	Ch3	Ch4	Ch5	Pull Force per AWG (lb) Pf1	Pf2	Pf3	Pf4	Pf5	Notes
11-18-2147	MAT	42546/42547	10 (.085/.080)	12 (.082/.077)	14 (.075/.071)	12/18(.085/.080)		10 (80.0)	12 (70.0)	14 (60.0)	12/18 (30.0)		
11-18-2148	MAT	42554/42555	16 (.066/.062)	18 (.063/.060)				16 (40.0)	18 (26.0)				
11-18-2152	MAT	42297	14 (.069/.065)	16 (.061/.057)	18 (.056/.053)	(2)16 (.069/.065)	(2)18 (.061/.057)	14 (43.0)	16 (43.0)	18 (27.0)	(2)16 (40.0)	(2)18 (30.0)	
11-18-2153	MAT	50133	28 (.021/.019)	30 (.020/.018)	32 (.019/.017)			28 (2.2)	30 (1.1)	32 (0.66)			
11-18-2154	MAT	50058	28 (.022/.020)	30 (.021/.019)	32 (.020/.018)			28 (2.2)	30 (1.1)	32 (0.66)			
11-18-2155	MAT	50125	26 (.025/.023)	28 (.0235/.0215)				26 (2.2)	28 (2.2)				
11-18-2156	MAT	50079	26 (.0255/.0235)	28 (.024/.022)				26 (2.2)	28 (2.2)				
11-18-2158	MAT	1380/1381	18 (.058/.055)	20 (.054/.051)	22 (.052/.048)			18 (30.0)	20 (18.0)	22 (14.0)			
11-18-2007	MAT	1380/1381	18 (.057/.055)	20 (.0535/.0515)	22 (.0525/.0505)			18 (30.0)	20 (18.0)	22 (14.0)			Tight insulation
11-18-2158	MAT	2151/2152	18 (.058/.055)	20 (.054/.051)	22 (.052/.048)			18 (30.0)	20 (18.0)	22 (14.0)			
11-18-2158	MAT	2273	18 (.058/.055)	20 (.054/.051)	22 (.052/.048)			18 (30.0)	20 (18.0)	22 (14.0)			
11-18-2158	MAT	4272	18 (.058/.055)	20 (.054/.051)	22 (.052/.048)			18 (30.0)	20 (18.0)	22 (14.0)			
11-18-2159	MAT	50295	16 (.060/.056)	18 (.052/.048)				16 (29)	18 (24)				
11-18-2160	MAT	50289	16 (.060/.056)	18 (.052/.048)				16 (29)	18 (24)				
11-18-2161	MAT	50294	24 (.034/.031)	26 (.032/.029)	28 (.031/.028)			24 (6.6)	26 (4.4)	28 (2.2)			
11-18-2162	MAT	42251	18 (.042/.040)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2163	MAT	50038/50039	22 (.039/.037)					22 (11.0)					
11-18-2164	MAT	30272	16 (.051/.047)	18 (.045/.043)				16 (35.0)	18 (25.0)				
11-18-2165	MAT	94506-02	14 (.083/.079)	16 (.077/.073)	18 (.071/.067)			14 (60.0)	16 (30.0)	18 (20.0)			
11-18-2166	MAT	5659	22 (.033/.030)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-18-2167	MAT	4529	18 (.040/.038)	20 (.035/.033)	22 (.031/.029)			18 (20.0)	20 (15.0)	22 (10.0)			
11-18-2168	MAT	41050	18 (.048/.045)					18 (24.0)					
11-18-2169	MAT	50212	24 (.026/.024)	26 (.025/.023)	28 (.024/.022)	30 (.023/.021)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-18-2170	MAT	7879	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (4.0)	28 (3.0)	30 (2.0)	
11-18-2171	MAT	2759	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.030)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-18-2171	MAT	5139	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.027)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2171	MAT	5159	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.030)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-18-2171	MAT	40445	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-18-2171	MAT	41572	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-18-2174	MAT	35727/35728	14 (.069/.065)	16 (.060/.056)	18 (.0525/.0495)	20 (.0495/.0465)		14 (40.0)	16 (36.0)	18 (24.0)	20 (16.0)		
11-18-2175	MAT	1943	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-18-2176	MAT	43030	26 (.031/.029)	28 (.030/.028)	30 (.029/.027)			26 (4.0)	28 (2.5)	30 (1.6)			
11-18-2176	MAT	43031	26 (.031/.029)	28 (.030/.028)	30 (.029/.027)			26 (4.0)	28 (2.5)	30 (1.6)			
11-18-2178	MAT	42477/42478	14 (.077/.073)	16 (.067/.063)	18 (.061/.058)			14 (50.0)	16 (40.0)	18 (26.0)			
11-18-2180	MAT	42464	16 (.048/.046)	18 (.046/.044)	20 (.043/.041)			16 (30.0)	18 (25.0)	20 (15.0)			
11-18-2181	MAT	1508-7	14 (.067/.063)	16 (.059/.055)	18 (.054/.051)			14 (60.0)	16 (30.0)	18 (20.0)			
11-18-2182	MAT	43030	20 (.039/.036)	22 (.036/.033)	24 (.033/.031)			20 (16.0)	22 (10.0)	24 (6.4)			
11-18-2182	MAT	43031	20 (.039/.036)	22 (.036/.033)	24 (.033/.031)			20 (16.0)	22 (10.0)	24 (6.4)			
11-18-2183	MAT	43178-0	14 (.089/.085)	16 (.082/.078)	18 (.076/.073)			14 (60.0)	16 (30.0)	18 (20.0)			
11-18-2185	MAT	5033-4T	18 (.042/.040)	20 (.037/.035)	22 (.033/.031)	24 (.031/.029)		18 (20.0)	20 (16.0)	22 (10.0)	24 (6.0)		
11-18-2186	MAT	8980 1-3C	14 (.068/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)		14 (60.0)	16 (30.0)	18 (20.0)	20 (16.0)		
11-18-2187	MAT	7499	22	24 (.040/.038)					24 (6.5)				
11-18-2188	MAT	8980 1-3C1	18 (.050/.047)	20 (.044/.041)	22 (.040/.037)			18 (24.0)	20 (16.0)	22 (12.0)			
11-18-2189	MAT	7821	18 (.042/.040)	20 (.040/.038)				18 (25.0)	20 (15.0)				
11-18-2191	MAT	41483/42138	14 (.070/.066)	16 (.064/.060)	18 (.060/.057)			14 (40.0)	16 (35.0)	18 (30.0)			
11-18-2192	MAT	41483/42138	14 (.070/.066)	16 (.064/.060)	18 (.060/.057)			14 (40.0)	16 (35.0)	18 (30.0)			Soft insulation
11-18-2193	MAT	41483/42138	14 (.070/.066)	16 (.064/.060)	18 (.060/.057)			14 (40.0)	16 (35.0)	18 (30.0)			Narrow insulation
11-18-2194	MAT	41483/42138	14 (.070/.066)	16 (.064/.060)	18 (.060/.057)			14 (40.0)	16 (35.0)	18 (30.0)			Overlap insulation
11-18-2196	MAT	50372	22 (.030/.028)	24 (.026/.024)	26 (.024/.022)			22 (8.8)	24 (6.6)	26 (4.4)			
11-18-2197	MAT	50394	24 (.026/.024)	26 (.025/.023)	28 (.024/.022)	30 (.022/.021)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-18-2198	MAT	1507-7	14 (.067/.063)	16 (.059/.055)	18 (.054/.051)			14 (60.0)	16 (30.0)	18 (20.0)			Large insulation
11-18-2200	MAT	1508-9	14 (.067/.063)	16 (.061/.058)	18 (.057/.054)			14 (43.0)	16 (27.0)	18 (20.0)			
11-18-2201	MAT	42477/42478	14 (.077/.073)	16 (.067/.063)	18 (.0610/.0580)			14 (50.0)	16 (40.0)	18 (26.0)			Large insulation
11-18-2202	MAT	1508-9	14 (.062/.058)	16 (.054/.050)	(2)16 (.066/.062)	(2)18 (.058/.054)		14 (43.0)	16 (43.0)	(2)16 (40.0)	(2)18 (30.0)		
11-18-2203	MAT	5298	18 (.070/.061)	20 (.070/.067)	22 (.070/.067)	24 (.070/.067)		18 (3.0)	20 (3.0)	22 (3.0)	24 (3.0)		Barrel crimp
11-18-2204	MAT	94506-01	18 (.061/.058)	20 (.057/.054)	22 (.054/.051)			18 (35.0)	20 (26.0)	22 (18.0)			
11-18-2205	MAT	50061	28 (.021/.019)	30 (.020/.018)	32 (.019/.017)			28 (2.2)	30 (1.1)	32 (0.66)			
11-18-2206	MAT	50080	26 (.023/.025)	28 (.0235/.0215)				26 (2.2)	28 (2.2)				
11-18-2208	MAT	87421	22 (.035/.033)	24 (.032/.030)	26 (.030/.028)	28 (.028/.026)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-18-2209	MAT	50351	22 (.035/.033)	24 (.032/.030)	26 (.030/.028)	28 (.028/.026)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-18-2210	MAT	2477/2478	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2210	MAT	2878	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2210	MAT	4838	20 (.043/.040)	22 (.040/.038)				20 (15.0)	22 (10.0)				
11-18-2210	MAT	6438	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2210	MAT	6838	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-18-2210	MAT	8993	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.)					Pull Force per AWG (lb)					Notes
			Ch1	Ch2	Ch3	Ch4	Ch5	Pf1	Pf2	Pf3	Pf4	Pf5	
11-18-2211	MAT	70058	24 (.035/.033)	26 (.033/.031)	28 (.032/.030)	30 (.029/.027)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2211	MAT	71851	24 (.035/.033)	26 (.033/.031)	28 (.032/.030)	30 (.029/.027)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-18-2212	MAT	50097	20 (.040/.036)	22 (.035/.030)	24 (.032/.030)			20 (16.0)	22 (10.0)	24 (6.5)			
11-18-2212	MAT	70021	24 (.035/.033)	26 (.033/.031)	28 (.032/.030)	30 (.029/.027)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-26-0089	HT	5225						22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-26-0101	HT	5294						24 (6.6)	26 (4.4)	28 (2.2)			
11-26-0110	HT	5659						22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-26-0119	HT	5394T						22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-40-2001	T4T	1189/1190	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)	(2)18 (.058/.056)	14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)	(2)18 (30.0)	
11-40-2001	T4T	1450/1451	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)	(2)18 (.058/.056)	14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)	(2)18 (30.0)	
11-40-2001	T4T	2269	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)	(2)18 (.058/.056)	14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)	(2)18 (30.0)	
11-40-2001	T4T	4549/4550	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)	(2)18 (.058/.056)	14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)	(2)18 (30.0)	
11-40-2001	T4T	6310	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)	(2)18 (.058/.056)	14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)	(2)18 (30.0)	
11-40-2002	T4T	1380/1381	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)	(2)22 (.057/.055)		18 (30.0)	20 (18.0)	22 (14.0)	(2)22 (14.0)		
11-40-2002	T4T	2151/2152	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)	(2)22 (.057/.055)		18 (30.0)	20 (18.0)	22 (14.0)	(2)22 (14.0)		
11-40-2002	T4T	2236/2237	20 (.054/.052)	22 (.053/.051)	(2)22 (.057/.055)			20 (18.0)	22 (14.0)	(2)22 (14.0)			
11-40-2002	T4T	2273	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)	(2)22 (.057/.055)		18 (30.0)	20 (18.0)	22 (14.0)	(2)22 (14.0)		
11-40-2002	T4T	4272	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)	(2)22 (.057/.055)		18 (30.0)	20 (18.0)	22 (14.0)	(2)22 (14.0)		
11-40-2003	T4T	1433/1434	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2003	T4T	2192	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2003	T4T	6308	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2003	T4T	6893/6894	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2004	T4T	1560/1561	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2004	T4T	1786/1787	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2004	T4T	6770/6772	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2004	T4T	7291	18 (.042/.041)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2005	T4T	1797	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2005	T4T	1917	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2005	T4T	2012	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2005	T4T	4295	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2005	T4T	4366	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2006	T4T	1854/1855	24 (.033/.031)	26 (.031/.029)	28 (.030/.027)	30 (.027/.025)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2006	T4T	2189/2190	24 (.033/.031)	26 (.031/.029)	28 (.030/.027)	30 (.027/.025)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2006	T4T	4559	24 (.033/.031)	26 (.031/.029)	28 (.030/.027)	30 (.027/.025)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2009	T4T	1457-1	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)			18 (30.0)	20 (18.0)	22 (14.0)			
11-40-2010	T4T	1457-2	14 (.075/.073)	16 (.070/.068)				14 (40.0)	16 (35.0)				
11-40-2011	T4T	2014	24 (.033/.031)	26 (.031/.029)	28 (.030/.028)	30 (.027/.026)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2011	T4T	4573	24 (.033/.031)	26 (.031/.029)	28 (.030/.028)	30 (.027/.026)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2013	T4T	2107	24 (.031/.029)	26 (.029/.027)	28 (.027/.025)	30 (.025/.023)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2014	T4T	1929	18 (.042/.040)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2014	T4T	2107	18 (.042/.040)	20 (.040/.038)	22 (.038/.036)	24 (.036/.034)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2015	T4T	2176	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-40-2015	T4T	2328	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-40-2015	T4T	2576	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-40-2015	T4T	2698	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-40-2015	T4T	7676	14 (.062/.060)	16 (.058/.056)	18 (.052/.050)	20 (.050/.048)	22 (.048/.046)	14 (40.0)	16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)	
11-40-2020	T4T	2870/2871	22 (.044/.042)	24 (.042/.040)				22 (14.0)	24 (8.0)				
11-40-2020	T4T	8058	18	20	22 (.044/.042)			18	20	22 (14.0)			
11-40-2029	T4T	4811	22 (.049/.047)					22 (3.0)					Barrel crimp
11-40-2029	T4T	4811	22 (.049/.047)					22 (3.0)					Barrel crimp
11-40-2240	T4T	4811	24 (.049/.047)					24 (3.0)					Barrel crimp
11-40-2033	T4T	4787	16 (.060/.058)	18 (.056/.054)	20 (.054/.052)			16 (35.0)	18 (25.0)	20 (15.0)			
11-40-2035	T4T	1943	18 (.045/.043)	20 (.043/.041)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2036	T4T	8960	18 (.048/.046)	20 (.045/.043)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (7.0)		
11-40-2038	T4T	40144	32 (.026/.025)					32 (1.0)					
11-40-2039	T4T	4811-1	22 (.049/.047)					22 (3.0)					Barrel crimp
11-40-2039	T4T	5190	22 (.049/.047)					22 (3.0)		26			Barrel crimp
11-40-2241	T4T	4811-1	24 (.049/.047)	26 (.049/.047)				24 (3.0)	26 (3.0)				Barrel crimp
11-40-2241	T4T	5190	24 (.049/.047)	26 (.049/.047)				24 (3.0)	26 (3.0)				Barrel crimp
11-40-2042	T4T	4706-P, 1	16 (.094/.090)	18 (.094/.090)				16 (3.0)	18 (3.0)				Barrel crimp
11-40-2043	T4T	4706-3	18 (.068/.070)	20 (.068/.070)	22 (.068/.070)	24 (.068/.070)		18 (3.0)	20 (3.0)	22 (3.0)	24 (3.0)		Barrel crimp
11-40-2044	T4T	4706-P, 1	16 (.094/.090)	18 (.094/.090)				16 (3.0)	18 (3.0)				Barrel crimp overlap insulation
11-40-2045	T4T	4706-3	18 (.068/.070)	22 (.068/.070)	22 (.068/.070)	24 (.068/.070)		18 (3.0)	20 (3.0)	22 (3.0)	24 (3.0)		Barrel crimp overlap insulation
11-40-2047	T4T	4296	16 (.058/.056)	18 (.056/.054)	20 (.054/.052)	22 (.052/.050)		16 (35.0)	18 (25.0)	20 (15.0)	22 (12.0)		
11-40-2056	T4T	5103	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.)					Pull Force per AWG (lb)					Notes
			Ch1	Ch2	Ch3	Ch4	Ch5	Pf1	Pf2	Pf3	Pf4	Pf5	
11-40-2063	T4T	5241	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-40-2064	T4T	5005/5006	18 (.047/.043)	20 (.044/.040)	22 (.038/.036)	24 (.035/.033)		18 (22.0)	20 (15.0)	22 (12.0)	24 (8.0)		
11-40-2065	T4T	5008/5009	24 (.032/.030)	26 (.029/.027)	28 (.026/.024)			24 (10.0)	26 (6.0)	28 (3.0)			
11-40-2066	T4T	5205/5206	14 (.061/.059)	16 (.052/.050)	(2)20 (.048/.046)			14 (22.0)	16 (22.0)	18 (15.0)			
11-40-2069	T4T	5230	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)	30 (.027/.025)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-40-2070	T4T	5294	24 (.030/.032)	26 (.029/.027)	28 (.028/.026)			24 (10.0)	26 (6.0)	28 (3.0)			
11-40-2071	T4T	5394T	22 (.029/.027)	24 (.026/.024)	26 (.024/.022)	28 (.023/.021)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-40-2073	T4T	5194	18 (.052/.048)	20 (.046/.042)	22 (.042/.038)	24 (.039/.035)		18 (20.0)	20 (13.2)	22 (8.8)	24 (6.6)		
11-40-2074	T4T	5225	22 (.038/.036)	24 (.035/.033)	26 (.033/.031)	28 (.032/.030)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-40-2075	T4T	7242	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)	30 (.027/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-40-2076	T4T	40682	22 (.037/.035)	24 (.035/.033)	26 (.033/.031)			22 (10.0)	24 (8.0)	26 (6.0)			
11-40-2077	T4T	70058	32 (.026/.025)	34 (.025/.024)	36 (.025/.024)			32 (1.0)	34 (0.6)	36 (0.4)			
11-40-2077	T4T	71851	32 (.026/.025)	34 (.025/.024)	36 (.025/.024)			32 (1.0)	34 (0.6)	36 (0.4)			
11-40-2083	T4T	1881-2	16 (.058/.056)	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)	24 (.051/.049)	16 (35.0)	18 (30.0)	20 (18.0)	22 (14.0)	24 (9.0)	
11-40-2084	T4T	1881-3	24 (.036/.034)	26 (.031/.029)	28 (.030/.028)	30 (.030/.028)		24 (10.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2086	T4T	70021	32 (.027/.026)	34 (.027/.026)	36 (.027/.026)			32 (1.0)	34 (0.6)	36 (0.4)			
11-40-2087	T4T	70021	22 (.035/.033)	24 (.032/.030)				22 (10.0)	24 (8.0)				
11-40-2089	T4T	5263	22 (.030/.027)	24 (.028/.025)	26 (.026/.023)	28 (.025/.022)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-40-2090	T4T	70058	22 (.035/.033)	24 (.032/.030)				22 (10.0)	24 (8.0)				
11-40-2090	T4T	71851	22 (.035/.033)	24 (.032/.030)				22 (10.0)	24 (8.0)				
11-40-2091	T4T	5659	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-40-2096	T4T	2477/2478	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2096	T4T	2878	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2096	T4T	4838	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		20 (15.0)	22 (10.0)				
11-40-2096	T4T	6438	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2096	T4T	6838	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2096	T4T	8993	18 (.045/.043)	20 (.043/.040)	22 (.040/.038)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2097	T4T	2578	22 (.040/.038)	24 (.038/.036)	26 (.036/.034)			22 (10.0)	24 (8.0)	26 (6.0)			
11-40-2097	T4T	7258	22 (.040/.038)	24 (.038/.036)	26 (.036/.034)			22 (10.0)	24 (8.0)	26 (6.0)			
11-40-2101	T4T	4259	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)	30 (.027/.026)	20 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-40-2102	T4T	4809	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)	30 (.027/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-40-2107	T4T	5479T	22 (.033/.031)	24 (.031/.029)	26 (.029/.027)	28 (.028/.026)		22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-40-2117	T4T	1508-09	14 (.062/.058)	16 (.054/.050)	18 (.051/.047)	(2)16 (.066/.062)	(2)18 (.054/.054)	14 (43.0)	16 (27.0)	18 (27.0)	(2)16 (40.0)	(2)18 (30.0)	
11-40-2117	T4T	2776	14 (.062/.058)	16 (.054/.050)	18 (.051/.047)	(2)16 (.066/.062)	(2)18 (.054/.054)	14 (43.0)	16 (27.0)	18 (27.0)	(2)16 (40.0)	(2)18 (30.0)	
11-40-2118	T4T	1508-09	16 (.066/.062)	18 (.062/.058)	20 (.058/.054)			16 (43.0)	18 (27.0)	20 (20.0)			
11-40-2118	T4T	2776	16 (.066/.062)	18 (.062/.058)	20 (.058/.054)			16 (43.0)	18 (27.0)	20 (20.0)			
11-40-2119	T4T	5556/5558	18 (.048/.044)	20 (.041/.037)	22 (.037/.033)	24 (.034/.031)		18 (20.0)	20 (13.0)	22 (9.0)	24 (7.0)		
11-40-2120	T4T	41817	22 (.049/.047)	24 (.049/.047)	26 (.049/.047)			24 (3.0)	26 (3.0)	28 (3.0)			
11-40-2121	T4T	2282/2283	14 (.063/.061)	16 (.059/.057)	18 (.059/.057)			14 (40.0)	16 (30.0)	18 (25.0)			
11-40-2131	T4T	7238/7239	14 (.069/.067)	16 (.062/.060)	18 (.060/.058)			14 (40.0)	16 (35.0)	18 (30.0)			
11-40-2136	T4T	50011	24 (.026/.024)	26 (.025/.023)	28 (.024/.022)	30 (.023/.021)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-40-2137	T4T	5556 2/5558	22 (.033/.030)	24 (.030/.028)	26 (.028/.026)	28 (.027/.025)		22 (9.0)	24 (7.0)	26 (5.0)	28 (3.0)		
11-40-2141	T4T	50012/50013	24 (.028/.026)	26 (.026/.024)	28 (.025/.023)			24 (6.6)	26 (4.4)	28 (2.2)			
11-40-2149	T4T	5378T/T2	24 (.026/.024)	26 (.024/.022)	28 (.023/.021)			24 (6.6)	26 (4.4)	28 (2.2)			
11-40-2151	T4T	6482-1,2	14 (.076/.074)	16 (.068/.066)	18 (.066/.064)			14 (58.0)	16 (45.0)	18 (35.0)			
11-40-2156	T4T	50034	26 (.024/.022)	28 (.024/.022)	30 (.023/.021)			26 (4.4)	28 (2.2)	30 (1.1)			
11-40-2163	T4T	1900/1901	10 (.085/.080)	12 (.082/.077)	12/18 (.075/.071)			10 (80.0)	12 (70.0)	12/18 (60.0)			
11-40-2163	T4T	42546/42547	10 (.085/.080)	12 (.082/.077)	12/18 (.075/.071)			10 (80.0)	12 (70.0)	12/18 (60.0)			
11-40-2164	T4T	2046/2047	16 (.065/.063)	18 (.063/.060)				16 (50.0)	18 (35.0)				
11-40-2165	T4T	1219	12 (.095/.093)					12 (70.0)					
11-40-2166	T4T	1220	12 (.095/.093)					12 (70.0)					
11-40-2171	T4T	42001	22 (.047 max.)	24 (.047 max.)	26 (.047 max.)			22 (3.0)	24 (3.0)	26 (3.0)			Barrel crimp
11-40-2172	T4T	7499		24 (.040/.038)					24 (6.0)				
11-40-2174	T4T	2482	12 (.095/.093)	14 (.092/.090)				12 (70.0)	14 (60.0)				
11-40-2181	T4T	5167	18 (.045/.043)	20 (.043/.040)	22 (.038/.040)	24 (.038/.036)		18 (25.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2187	T4T	5556 3/5558	16 (.054/.050)					16 (20.0)					
11-40-2191	T4T	5168		24 (.038/.036)	26 (.036/.034)	28 (.034/.032)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-40-2192	T4T	41422	10 (.104/.102)	12 (.095/.093)				10 (80.0)	12 (70.0)				
11-40-2193	T4T	41422-2	14 (.069/.067)	16 (.065/.063)	18 (.061/.059)			14 (60.0)	16 (30.0)	18 (20.0)			
11-40-2196	T4T	90198-010X	22 (.043 max.)	24 (.043 max.)	26 (.043 max.)			22 (10.0)	24 (8.0)	26 (6.0)			Barrel crimp
11-40-2197	T4T	42023/42024	14 (.071/.067)	16 (.061/.057)				14 (50.0)	16 (45.0)				
11-40-2198	T4T	42023/42024	16 (.061/.057)	18 (.054/.050)	20 (.049/.045)			16 (45.0)	18 (30.0)	20 (14.0)			
11-40-2203	T4T	6361/6362	18 (.046/.044)	20 (.043/.041)				18 (25.0)	20 (15.0)				
11-40-2204	T4T	5479T2	30 (.021/.020)	32 (.020/.019)				30 (1.1)	32 (0.66)				
11-40-2212	T4T	41483	14 (.069/.067)	16 (.062/.060)	18 (.060/.058)			14 (40.0)	16 (35.0)	18 (30.0)			

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

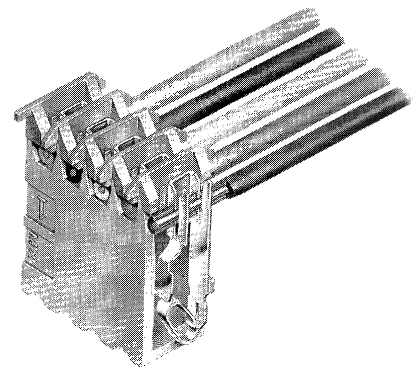
Hand tools with no listed crimp heights are qualified to pull force specifications only

Tool Order No.	Tool Type	Terminal Series No.	Crimp Height per AWG (in.) Ch1	Ch2	Ch3	Ch4	Ch5	Pull Force per AWG (lb) Pf1	Pf2	Pf3	Pf4	Pf5	Notes
11-40-2212	T4T	42138	14 (.069/.067)	16 (.062/.060)	18 (.060/.058)			14 (40.0)	16 (35.0)	18 (30.0)			
11-40-2214	T4T	1973	18 (.056/.054)	20 (.054/.052)	22 (.053/.051)			18 (30.0)	20 (18.0)	22 (14.0)			
11-40-2215	T4T	2799	22 (.039/.037)	24 (.037/.035)	26 (.035/.033)	28 (.034/.032)		22 (12.0)	24 (8.0)	26 (6.0)	28 (4.0)		
11-40-2216	T4T	30272	16 (.051/.047)	18 (.045/.043)				16 (35.0)	18 (25.0)				
11-40-2217	T4T	5175	16 (.053/.051)	18 (.046/.044)	20 (.043/.041)	22 (.040/.038)		16 (22.0)	18 (22.0)	20 (15.0)	22 (12.0)		
11-40-2223	T4T	42554/42555	16 (.065/.063)	18 (.063/.060)				16 (50.0)	18 (35.0)				
11-40-2230	T4T	4529	18 (.040/.038)	20 (.035/.033)	22 (.031/.029)	24 (.030/.028)		18 (20.0)	20 (15.0)	22 (10.0)	24 (8.0)		
11-40-2236	T4T	87048	26 (.022/.020)	28 (.020/.018)	30 (.018/.016)			26 (4.4)	28 (2.2)	30 (1.1)			
11-40-2240	T4T	4811	24 (.049/.047)					24 (3.0)					Barrel crimp
11-40-2244	T4T	50125	26 (.025/.023)	28(.0235/.0215)				26 (2.2)	28 (2.2)				
11-40-2244	T4T	50133	28 (.021/.019)	30 (.020/.018)	32 (.019/.017)			28 (2.2)	30 (1.1)	32 (0.66)			
11-40-2245	T4T	50058	28 (.022/.020)	30 (.021/.019)	32 (.020/.018)			28 (2.2)	30 (1.1)	32 (0.66)			
11-40-2245	T4T	50079	26(.0255/.0235)	28 (.024/.022)				26 (2.2)	28 (2.2)				
11-40-2246	T4T	5298	18 (.070/.067)	20 (.070/.067)	22 (.070/.067)	24 (.070/.067)		18 (3.0)	20 (3.0)	22 (3.0)	24 (3.0)		Barrel crimp
11-40-2248	T4T	50038/50039	22 (.039/.037)					22 (11.0)					
11-40-2249	T4T	30490	18 (.048/.044)	20 (.041/.037)	22 (.037/.033)	24 (.034/.031)		18 (20.0)	20 (13.0)	22 (8.8)	24 (6.6)		
11-40-2250	T4T	41050	18 (.048/.045)					18 (27.0)					
11-40-2251	T4T	7879	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (4.0)	28 (3.0)	30 (2.0)	
11-40-2255	T4T	50212	24 (.026/.024)	26 (.025/.023)	28 (.024/.022)	30 (.023/.021)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-40-2257	T4T	42824	16 (.062/.059)	18 (.059/.056)				16 (35.0)	18 (30.0)				
11-40-2258	T4T	43030	26 (.031/.029)	28 (.030/.028)	30 (.029/.027)			26 (4.0)	28 (2.5)	30 (1.6)			
11-40-2258	T4T	43031	26 (.031/.029)	28 (.030/.028)	30 (.029/.027)			26 (4.0)	28 (2.5)	30 (1.6)			
11-40-2259	T4T	43030	20 (.039/.036)	22 (.036/.033)	24 (.033/.031)			20 (16.0)	22 (10.0)	24 (6.4)			
11-40-2259	T4T	43031	20 (.039/.036)	22 (.036/.033)	24 (.033/.031)			20 (16.0)	22 (10.0)	24 (6.4)			
11-40-2261	T4T	35727/35728	14 (.069/.065)	16 (.060/.056)	18 (.052/.049)	20 (.049/.046)		14 (40.0)	16 (36.0)	18 (24.0)	20 (16.0)		
11-40-2263	T4T	5558/5556 13	26 (.028/.026)	28 (.024/.022)	30 (.023/.021)			26 (4.0)	28 (2.5)	30 (1.6)			
11-40-2265	T4T	2759	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (4.0)	28 (3.0)	30 (2.0)	
11-40-2265	T4T	5139	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)		24 (8.0)	26 (4.0)	28 (3.0)	30 (2.0)		
11-40-2265	T4T	5159	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)		22 (10.0)	24 (8.0)	26 (4.0)	28 (3.0)		
11-40-2265	T4T	6459	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)	
11-40-2265	T4T	40445	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (4.0)	28 (3.0)	30 (2.0)	
11-40-2265	T4T	41572	22 (.033/.031)	24 (.031/.029)	26 (.030/.028)	28 (.029/.027)	30 (.028/.026)	22 (10.0)	24 (8.0)	26 (4.0)	28 (3.0)	30 (2.0)	
11-40-2270	T4T	42477/42478	14 (.074/.070)	16 (.065/.061)	18 (.059/.056)			14 (60.0)	16 (30.0)	18 (20.0)			
11-40-2271	T4T	50098	18 (.048/.044)	20 (.041/.037)	22 (.036/.034)			18 (20.0)	20 (16.0)	22 (10.0)			
11-40-2272	T4T	35021	14 (.028/.026)	26 (.026/.024)	28 (.024/.022)	30 (.022/.020)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-40-2273	T4T	8980 1-3C1	18 (.050/.047)	20 (.044/.041)	22 (.040/.037)			18 (24.0)	20 (16.0)	22 (12.0)			
11-40-2274	T4T	8980 4C	14 (.060/.056)	16 (.055/.051)	18(.0495/.0465)	20 (.045/.042)		14 (60.0)	16 (30.0)	18 (20.0)	20 (16.0)		
11-40-2275	T4T	8980 4C1	18 (.050/.047)	20 (.044/.041)	22(.0415/.0395)			18 (20.0)	20 (16.0)	22 (10.0)			
11-40-2278	T4T	50394	24 (.026/.024)	26 (.025/.023)	28 (.024/.022)	30 (.023/.021)		24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
11-40-2280	T4T	50061	28 (.021/.019)	30 (.020/.018)	32 (.019/.017)			28 (2.2)	30 (1.1)	32 (0.66)			
11-40-2280	T4T	50080	26 (.025/.023)	28(.0235/.0215)				26 (2.2)	28 (2.2)				
11-40-2282	T4T	8980 1-3C	14 (.060/.058)	16 (.056/.054)	18 (.053/.051)	20 (.050/.048)		14 (40.0)	16 (35.0)	18 (30.0)	20 (18.0)		
11-40-2283	T4T	70058	24 (.030/.028)	26 (.028/.026)	28 (.027/.025)	30 (.026/.024)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-40-2283	T4T	71851	24 (.030/.028)	26 (.028/.026)	28 (.027/.025)	30 (.026/.024)		24 (6.5)	26 (4.0)	28 (2.5)	30 (1.5)		
11-40-2284	T4T	50372	22 (.030/.028)	24 (.026/.024)	26 (.024/.022)			22 (8.8)	24 (6.6)	26 (4.4)			
11-40-2285	T4T	42825	16 (.062/.059)	18 (.059/.056)				16 (35.0)	18 (30.0)				
11-40-2286	T4T	87421	26 (.023/.021)					26 (4.0)					
11-40-2287	T4T	50351	22 (.035/.033)	24 (.032/.030)	26 (.030/.028)	28 (.028/.026)		22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
11-40-2288	T4T	70021	24 (.035/.033)	26 (.033/.031)	28 (.032/.030)	30 (.029/.027)		24 (8.0)	26 (6.0)	28 (4.0)	30 (3.0)		
11-40-2289	T4T	50097	20 (.040/.036)	22 (.035/.033)	24 (.032/.030)			20 (13.2)	22 (8.8)	24 (6.6)			
57005-5000	HT	5479T						22 (8.8)	24 (6.6)	26 (4.4)	28 (2.2)		
57032-5000	HT	50011						24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
57035-6000	HT	5479T2						30 (1.1)	32 (0.66)				
57046-5000	HT	50012/50013						24 (6.6)	26 (4.4)	28 (2.2)			
57050-5000	HT	5378T/T2						24 (6.6)	26 (4.4)	28 (2.2)			
57056-5000	HT	50034						26 (4.4)	28 (2.2)	30 (1.1)			
57075-5000	HT	50031						30 (1.1)	32 (0.66)	34 (0.40)			
57085-5000	HT	50038/50039						22 (8.8)					AVS (0.3)
57086-5000	HT	50038/50039						22 (8.8)					CAVS (0.5)
57118-5000	HT	50097						20 (13.2)	22 (8.8)	24 (6.6)			
57176-5000	HT	50212						24 (6.6)	26 (4.4)	28 (2.2)	30 (1.1)		
63811-0200	HT	50058	28 (.022/.020)	30 (.021/.019)	32 (.020/.018)			28 (2.2)	30 (1.1)	32 (0.66)			
63811-0200	HT	50061	28 (.021/.019)	30 (.020/.018)	32 (.019/.017)			28 (2.2)	30 (1.1)	32 (0.66)			
63811-0200	HT	50133	28 (.021/.019)	30 (.020/.018)	32 (.019/.017)			28 (2.2)	30 (1.1)	32 (0.66)			
63811-0300	HT	50079	26 (.0255/.0235)	28 (.024/.022)				26 (4.4)	28 (2.2)				
63811-0300	HT	50080	26 (.025/.023)	28(.0235/.0215)				26 (4.4)	28 (2.2)				
63811-0300	HT	50125	26 (.025/.023)	28(.0235/.0215)				26 (4.4)	28 (2.2)				

Crimp height values are only applicable to the specific tool/terminal combinations. Crimp heights may differ on other crimp tool types due to different crimp widths. Users must always verify tool order no. before using crimp height indicated on the above chart.

Hand tools with no listed crimp heights are qualified to pull force specifications only

Insulation Displacement Technology Tooling Introduction



Insulation Displacement Technology, IDT, is a wire termination technique in which an insulated wire is pressed into a terminal slot smaller than the conductor diameter, displacing the insulation and forming an electrical contact between the terminal and conductor.

Insulation displacement offers 3 major advantages over other termination techniques:

- Electrical connectors are supplied to the customer with the terminals loaded into their final positions. This feature results in customer labor savings as additional operations are not required to complete the assembly.
- Hourly production rates are maximized through the simultaneous mass insertion of wires into multiple connectors.
- IDT allows for multiple connectors to be placed along a harness assembly (daisy chain) without the need to double terminate circuits.

Molex offers a full line of IDT terminating equipment ranging from simple hand tools to fully automatic cable and discrete wire harness assembly machines. All tools are designed and manufactured using the latest technologies to ensure high quality in tool performance and in the product they produce.

Hand Tools

Low volume users can choose from a range of snap-on modules that mount to a common pistol or bench mounted holder. These modules can be easily changed to accommodate various connector styles. Typically, these tools yield production rates of approximately 300 terminations per hour.

Manual Press Tools

For medium production volumes, Molex offers a variety of manual press bench tools designed to process cable or discrete wire to further increase productivity. For tools in this category, production rates of up to 250 assemblies per hour for cable or 500 terminations per hour for discrete wire are not uncommon.

Semi-Automatic Bench Tools

For higher production volumes, Molex offers a variety of semi-automatic bench tools to increase the end users' productivity. For tools in this category, production rates of up to 900 assemblies per hour for cable or 1200 terminations per hour for discrete wire are normally realized. In addition to inserting wires into terminals, selected machine models are already equipped to:

- Automatically unload connectors from packaging such as extruded tubes, mylar film, adhesive tape, etc.
- Perform secondary operations, for example, carrier strip breakoff, terminal insertion, product marking, etc.

Fully Automatic Machines

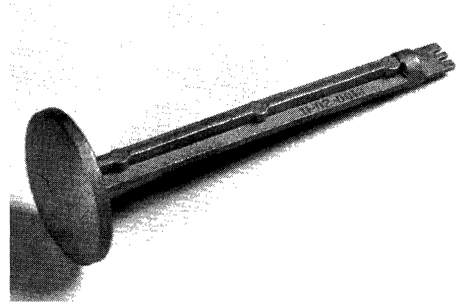
For large production requirements, Molex offers its customers fully automatic modular assembly machines. This modular concept allows machines to be designed and built to meet exact customer requirements. Additionally, this concept enables customers to add options at a future date as production needs change. In general, machines in this category produce 10,000 terminations per hour or better. All machines are designed with fully-integrated PLC controls that include "user friendly" self-diagnostic software features to minimize set-up time and maximize machine uptime and system utilization.

Special Machines

Molex can quote special machines upon request with optional features that parallel the Phoenix™/Eagle™ Series. In general, these machines differ by the manner in which connector termination and wire handling is accomplished. Additionally, daisy chain and different connector orientations can be accomplished.

Insulation Displacement Technology Tooling Hand Tools

"T" Handle Hand Tool for Discrete Wire



FEATURES

- For low volume, prototype and repair

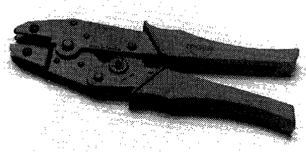
ORDERING INFORMATION

Description	Order No.	Connector
"T" Tool for 2.50mm (.098") and 2.54mm (.100") pitch connectors	11-02-0016	7720, 7720S, 7795, 8160, 40555
"T" Tool for 3.96mm (.156"), 5.00mm (.197") and 5.08mm (.200") pitch connectors	11-02-0015	7674, 7675

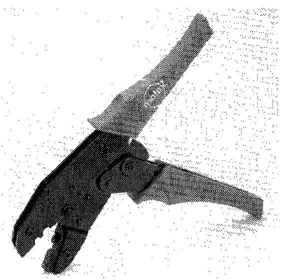
Ferrule and RF Connector Crimping

FEATURES

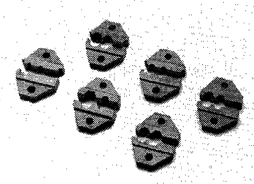
- For low volume or portable applications
- Common tool frame with interchangeable dies
- High quality, high leverage tool frame
- Eccentric adjustment for closing force
- Full cycle ratchet for complete crimp
- Ferrule crimp tools have 2 positions, 1 for large diameter and 1 for small diameter requiring 2 actuations to complete a ferrule crimp



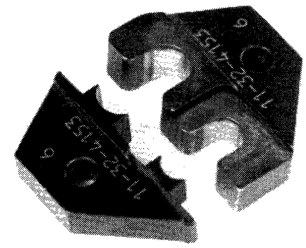
Handle



Complete Tool



RF Dies



Ferrule Crimp Die

ORDERING INFORMATION

Preferred Version in the US

Description	Order No. Complete Tool	Order No. Dies Only	Connector Series	Ferrule Part No.	Ferrule Size (OD)
Hand Tool Frame Only	11-31-6379				
Hand Tool for RF	Order dies and frame separately	11-31-9025	BNC, TNC, for RG/U 55, 58, 141A, 142B	RF Connector	
Hand Tool for RF	Order dies and frame separately	11-31-9026	BNC, TNC, for RG/U 59, 62	RF Connector	
Hand Tool for RF	Order dies and frame separately	11-31-9027	BNC for RG/U Cable 174, 188, 316	RF Connector	
Ferrule Crimp Hand Tool	Order dies and frame separately	11-32-4152	SEMCONN™ 4 circuit	89-00-3104	7.72/6.45 (.304/.254)
Ferrule Crimp Hand Tool	Order dies and frame separately	11-32-4153	SEMCONN 6 circuit	89-00-3106	8.36/7.09 (.329/.279)
Ferrule Crimp Hand Tool	Order dies and frame separately	11-32-4154	SEMCONN 8 circuit	89-00-3108	8.86/7.57 (.349/.298)
Ferrule Crimp Hand Tool	Order dies and frame separately	11-32-4155	SEMCONN 16 circuit	89-00-3116	10.47/9.19 (.412/.362)
Ferrule Crimp Hand Tool	62100-0100	62100-0101	LFH™	71256-0001	12.17/6.96 (.479/.274)
Ferrule Crimp Hand Tool	62100-0200	62100-0201	LFH	71256-0002	12.17/10.64 (.479/.419)

ORDERING INFORMATION

Preferred Version in Europe—Not Available in the US

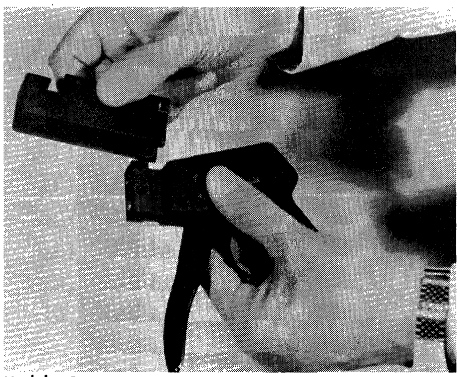
Description	Order No. Complete Tool	Order No. Dies Only	Connector Series	Ferrule Part No.	Ferrule Size (OD)
Hand Tool	69008-1030	69008-1032	RG58C/U, 59B/U	RF Connector	
Hand Tool	69008-1031	69008-1033	RG174A/U, Twinax	RF Connector	
Stripper	69008-1028	69008-1029	Cable	RF Connector	

FEATURES

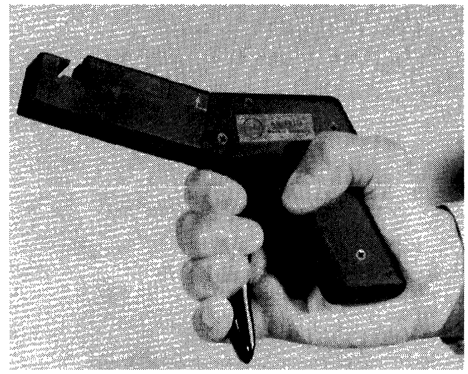
- Single tool handle with series of snap-on modules for a variety of connectors
- Most modules for discrete wire automatically index to the next position
- A complete tool requires that both a handle and a module be ordered
- Full cycle ratchet feature to assure complete terminations
- For low volume productions, prototyping and repair
- Pneumatic adapters available (see page W-44)

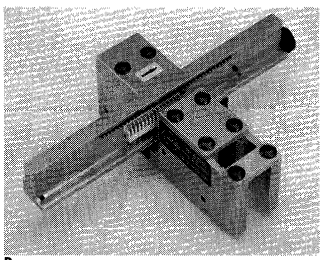
molex Insulation Displacement Technology Tooling

Modular Discrete Wire and Ribbon Cable Hand Tools


Modular System


A—Hand Tool Handle


Complete Tool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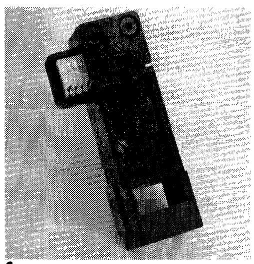
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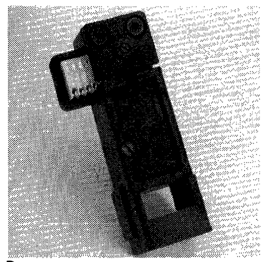
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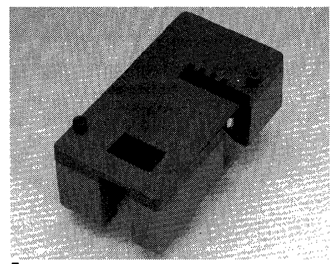
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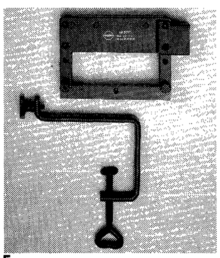
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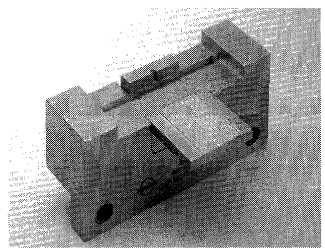
G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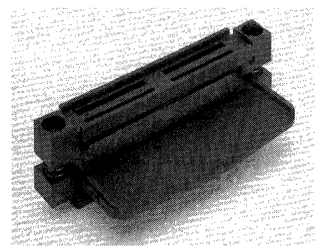

I

ORDERING INFORMATION

Preferred Version in the US

Description	Order No.	Type	Use With
Hand Tool Handle	11-21-5194	A	Required for all modules

Discrete Wire, Feed-To Only, Self-Indexing

Description	Order No.	Type	Use with Molex Connector
Module for 2.00mm	11-39-0273	B	30452
Module for 2.50mm SPOX™	11-31-8939	B	42219, 42254
Module for 2.50mm "User Friendly"	69008-0290	B	90650, 90652
Module for 2.50mm (.098") and 2.54mm (.100")	11-21-5197	C	7720, 7720S, 7745, 8951, 40555, 40775, 40798, 40922
Module for 2.54mm (.100")	11-21-8365	C	40555
Module for 3.96mm (.156")	11-21-5196	C	7674, 7675, 8633, 40119,40749, 40791, 40915, 41101
Module for 5.00mm (.197") and 5.08mm (.200")	69008-0270	C	7823, 7933, 7935
Module for 2.54mm (.100")	11-31-7597	B	70400, 70475, 90187
Module for 2.54mm (.100")	62100-0300	B	71178

Discrete Wire, Feed-To and Feed-Through, Self-Indexing

Description	Order No.	Type	Use with Molex Connector
Module for 4.19mm (.165")	11-39-0303	B	71690, 71694
Module for 3.96mm (.156")	62100-0400	D	7674, 7675

Discrete Wire, Mass Terminate, No Index

Description	Order No.	Type	Use with Molex Connector
Module for 5.08mm (.200")	11-21-9756	E	70156
Module for 5.08mm (.200")	11-32-6027	E	71156

Ribbon Cable, Mass Terminate, No Index

Description	Order No.	Type	Use with Molex Connector
Module Power Adapter and Table Clamp*	11-31-3337	F	Required for all ribbon cable modules
Module for 1.27mm (.050") MX50™/QF50™ Connectors	11-31-4652	G	5320, 70625, 71247
Module for 1.27mm (.050") MX50 Connectors	11-31-3339	G	70121, 71898
Module for 0.635mm (.025") Milli-Grid™ Connectors	11-32-5759	H	87259
Module, Cable Shear	11-31-3340	I	Cable Shear

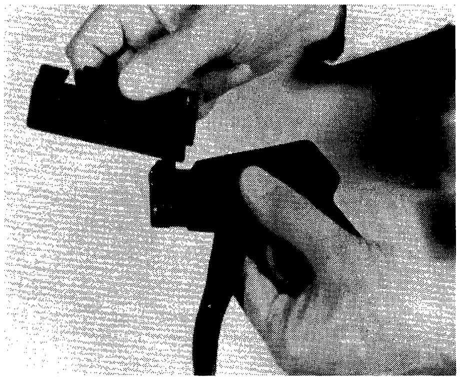
* Module power adapter includes 2 bottom bars to accommodate all ribbon cable modules

FEATURES AND SPECIFICATIONS

- For low volume, prototype and field repair
- Automatically indexes to the next position after previous wire termination

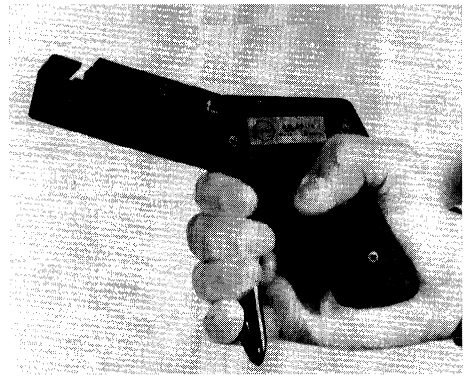
Insulation Displacement Technology Tooling

Discrete Wire and Ribbon Cable Hand Tools for Europe

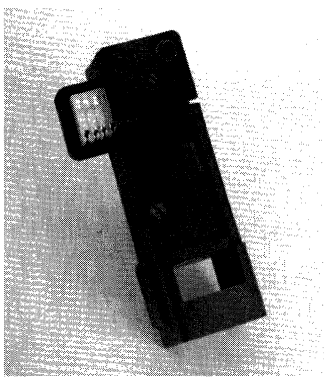


Modular System

A—Hand Tool Handle



Complete Tool



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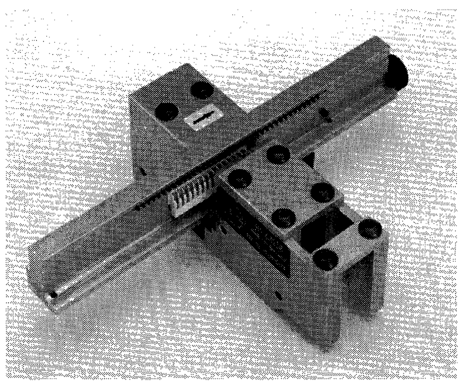

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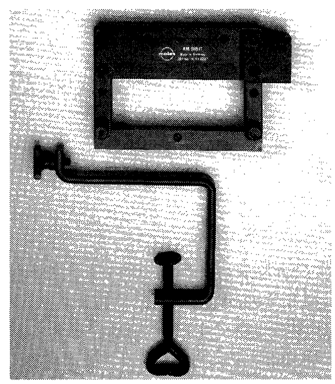

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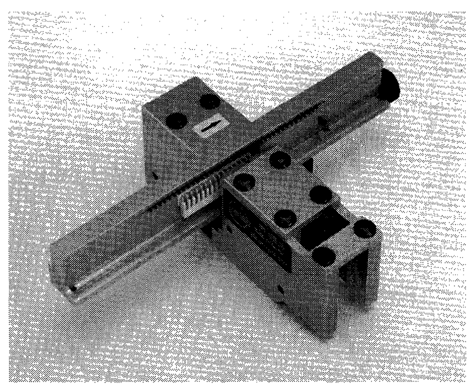


F

ORDERING INFORMATION

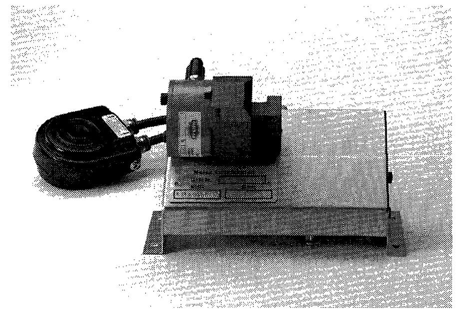
Preferred Version in Europe—Not Available in the US

Description	Order No.	Type	Use With
Pistol	69008-0210	A	Required for all modules and all connectors

Description	Order No.	Type	Use with Molex Connector
MX50™/QF50™ Connectors	69008-0250	E	5320, 5321, 40312
Module for 2.50mm (.098") and 2.54mm (.100") pitch connectors	69008-0225	B	7720, 7745, 8951, 40775, 40798, 40922
Module for 2.54mm (.100") pitch connectors	69008-0260	F	8676
"User Friendly"	69008-0290	C	90650, 90652
Module for 3.96mm (.156") pitch connectors	69008-0240	B	7674, 7675, 8633, 40119, 40749, 40791, 40915, 41101
Module for 5.00mm (.197") and 5.08mm (.200") pitch connectors	69008-0270	B	7823, 7933, 7935
C-Grid III™	69008-0500	D	90153, 90154, 90175

Insulation Displacement Technology Tooling Pneumatic Hand Tool Adapters

Low Force for Single Wire Feed-To Modules



FEATURES AND SPECIFICATIONS

Features

- For low volume users
- Utilizes modules from Molex hand tool
- Includes foot pedal and filter for air supply line

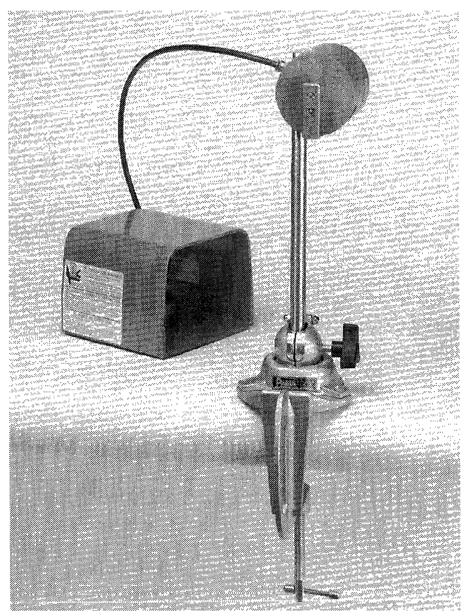
Specifications

Size: Width—180mm (7")
Depth—75mm (3")
Height—100mm (4")
Weight: 0.9kg (2 lb)
Pneumatics: Pressure—4 BAR (60psig)
Consumption—2.8L per minute (0.1 CFM)
Rate: Up to 750 cycles per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.		Use with Molex Connector
	Module	Adapter	
For 2.50mm (.098") and 2.54mm (.100") pitch connectors	11-21-5197	11-20-0739	7720, 7745, 7795, 8951, 40775, 40798, 40922
For 2.50mm (.098") pitch connectors	11-31-8939	11-20-0739	42219, 42254
For 2.54mm (.100") pitch connectors	11-21-8365	11-20-0739	40555
For 3.96mm (.156") pitch connectors	11-21-5196	11-20-0739	7674, 7675, 8633, 40119, 40749, 40791, 40915, 41101
For 5.00mm (.197") and 5.08mm (.200") pitch connectors	69008-0270	11-20-0739	7823, 7933, 7935

High Force for Ribbon Cable and Mass Terminating Modules



FEATURES AND SPECIFICATIONS

Features

- For low volume users
- Utilizes modules from Molex hand tool that require high force and/or feed-through terminations
- Allows user to position module in various orientations
- Clamps to workbench (up to 3" thick)

Specifications

Size: Width—130mm (5")
Depth—180mm (7")
Height—330mm (13")
Weight: 3.2kg (7 lb)
Pneumatics: Pressure—4 BAR (60psig)
Consumption—6L per minute (0.2 CFM)
Rate: Up to 750 cycles per hour, dependent on operator speed and application

ORDERING INFORMATION

Description	Order No.		Use with Molex Connector
	Module	Adapter	
For 2.54mm (.100") pitch connectors	11-31-7597	11-31-1570	70400, 70475, 90187
Module for 5.08mm (.200") pitch connector	11-21-9756	11-31-1570	70156
Module for 5.08mm (.200") pitch connector	11-32-6027	11-31-1570	71156
Module for Mini-Fit IDT	11-39-0303	11-31-1570	71694, 71690

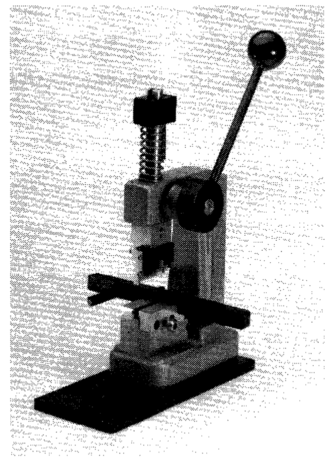
FEATURES AND SPECIFICATIONS

Features
- For medium volume users
- Feed-through or feed-to assembly
- Lightweight and portable

Specifications
Size: Width—152mm (6")
Depth—305mm (12")
Height—254mm (10")
Weight: 8.1kg (18 lb)

Insulation Displacement Technology Tooling Low Force Manual Presses

For Ribbon Cable



ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
.100" Pitch Manual Press	• 11-20-0179	7720, 40555
.156" Pitch Manual Press	• 11-20-0314	7674, 7675
.098" Pitch Manual Press*	11-20-0436	8160
.156" Pitch Manual Press	11-20-0815	7660/7664

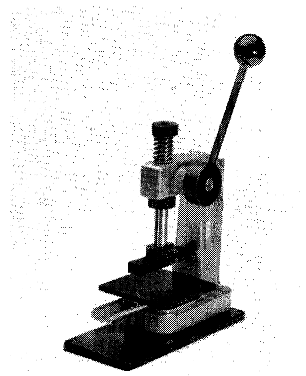
• US Standard Product, available through Molex franchised distributors

FEATURES AND SPECIFICATIONS

Features
- For medium volume users
- Feed-through or feed-to assembly
- Lightweight and portable
- Cable shearing capabilities
- Interchangeable tooling that is compatible with most competitive presses

Specifications
Size: Width—203mm (8")
Depth—305mm (12")
Height—360mm (14")
Weight: 6.9kg (15 lb)

For MX50™/QF50™



ORDERING INFORMATION

Description	Order No.	Tool Change Kit Order No.	Use with Molex Connector
Manual Press (Press Only)	• 11-21-0679		All .050" pitch Molex connectors
Universal Adapter Plate†	11-31-2176	11-31-2181	70121, 70625, 71247, 71891
Universal Adapter Plate†	11-31-2176	11-31-2187	5360 Qik Flecs™
Universal Adapter Plate†	11-31-2176	11-31-2335	5320 Qik Flecs

Accessories	
Description	**Order No.**
Cable Shear Module	• 11-10-0081
Replacement Blade for Cable Shear	11-21-1102
Replacement Cutting Plate for Cable Shear	• 11-21-1103

• US Standard Product, available through Molex franchised distributors

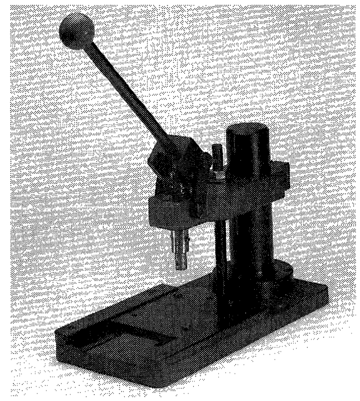
* For use with connector 8160—up to 20 circuits (terminates feed-to only)

† If customer already has Universal Adapter Plate Assembly, all that is required for each above connector is the appropriate tool change kit

Customer Application Note: If application requires terminating the 71007, 70121, 40312 or 5320 connector above 60 circuits, the customer is advised to check the manual press platen length. All new manual presses are shipped with extended platens measuring 3.75". However, if the customer already has a manual press, it is possible the platen length is 3.25". The platen is a black aluminum "T" shaped piece located at the bottom end of the manual press ram. If the customer expects to terminate 64 circuit connectors, the extended platen (3.75") may be ordered using Order No. 11-10-1055.

Insulation Displacement Technology Tooling Low Force Manual Presses

Modular Euro Manual Press for MX50™ and QF50™



FEATURES AND SPECIFICATIONS

Features
- For medium volume users
- Feed-through or feed-to assembly
- Lightweight and portable

Specifications
Size: Width—152mm (6")
Depth—305mm (12")
Height—457mm (18")
Weight: 7.8kg (17.2 lb)

ORDERING INFORMATION

Preferred Version in Europe—Not Available in the US

Description	Order No.	Use with Molex Connector
Manual Press	69020-0660	All equipment listed below
Cable Shear Module	69020-0900	To shear ribbon cable of all sizes
Assembly Module	69020-0680	5320, 5321, 5323, 7789, 40312, 47000
Assembly Module	69020-0710	5350, 5360, 5370, 5380 QF50
Assembly Module	69020-0200	90061, 90062
Assembly Module	69020-0001	6874

Modular Euro Manual Press for Ribbon Cable

ORDERING INFORMATION

Preferred Version in Europe—Not Available in the US

Description	Order No.	Use with Molex Connector
Manual Press	69020-0660	All equipment listed below
Cable Shear Module	69020-0900	To shear ribbon cable of all sizes
Assembly Module	69020-0200	90061, 90062
Assembly Module	69020-0001	6874 Series
Termination Fixture	69008-0320	7720, 7720S
Termination Fixture	69008-0770	7660, 7664, 7674, 7675
Termination Fixture	69008-0785	7790

J5930 Press and Cutter for QF50™

FEATURES AND SPECIFICATIONS

Preferred Version for Molex Japan—Not Available in the US

Features
- For medium volume users
- Feed-through or feed-to assembly
- Lightweight and portable
- Cable shearing capabilities

ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Manual Press	11-26-0075	All equipment listed below
Base Assembly	11-26-0081	All equipment listed below
Cable Cutter Module	11-26-0078	To cut ribbon cable of all sizes
Assembly Module	11-26-0082	5320 (QF50)
Assembly Module	11-26-0083	5360 (QF50)

Insulation Displacement Technology Tooling High Force Manual and Electric Presses

High Force Manual Press

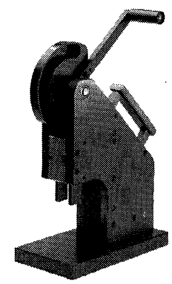
FEATURES AND SPECIFICATIONS

Features

- For medium volume users
- Low handle force to reduce operator fatigue
- Portable
- Accepts a large number of connector-type tool kits
- Full cycle ratchet
- Quick tooling changeover
- Termination height fine adjustment with lock screw

Specifications

Size: Width—152mm (6")
Depth—533mm (10.5")
Height—267mm (21")
Weight: 23kg (50 lb)
Maximum Force: 13.3kN (3000 lb)
Shut Height: 42.00mm (1.650")
Stroke Length: 43.00mm (1.690")



ORDERING INFORMATION

Description	Order No.
Manual Press Only (No Tooling)	11-31-6356

High Force Electric Press

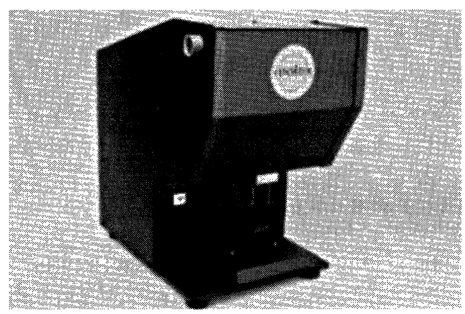
FEATURES AND SPECIFICATIONS

Features

- For medium volume users
- OSHA safe guarding
- Quick tooling changeover
- Accepts a large number of Molex connector tool kits
- Termination height fine adjustment with lock screw
- Motor drive eliminates operator fatigue and allows 2-hand operation for increased productivity over manual press

Specifications

Size: Width—311mm (12-1/2")
Depth—448mm (17-5/8")
Height—429mm (16-7/8")
Weight: 27kg (60 lb)
Maximum Force: 13.3kN (3000 lb)
Shut Height: 42.00mm (1.650")
Stroke Length: 43.00mm (1.690")
Electrical: Voltage—115V AC, 60 Hz or 220V AC, 50/60 Hz
Current—2.0A at 115V AC or 1.0A at 220V AC



ORDERING INFORMATION

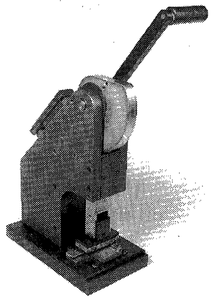
Description	Order No.	
	110V	220V
Electric Press (Palm Button Operated)*	11-31-9639	11-31-9243
Electric Press (Foot Switch Operated)†	11-32-1089	11-32-1088

*For all manual press tooling except SEMCONN™
† For SEMCONN tooling only

Insulation Displacement Technology Tooling Tooling Kits for Manual and Electric Presses

ORDERING INFORMATION

Single Termination, Discrete Wire



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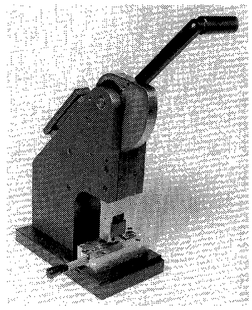
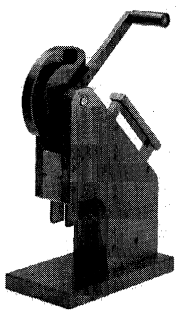


B

Connector	Description	Order No.				Figure
		Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Tool Kit	
30452—2.00mm	Feed-To Only, Manual Index	11-20-1298				A
2.50mm—SPOX™	Feed-To Only, Manual Index	11-20-1278			11-39-0001	B
2.50mm—"User Friendly"	Feed-To Only, Manual Index	11-21-9963			11-21-9998	B

ORDERING INFORMATION

Mass Termination, Discrete Wire Tooling

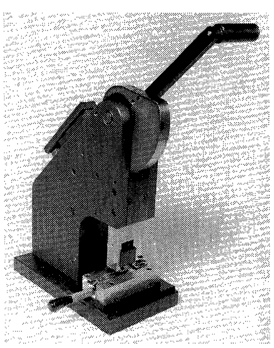


C

Connector	Description	Order No.				Figure
		Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Tool Kit	
71156	Feed-To or Feed-Through, No Index—4 wire	11-20-1286			11-39-0034	C
70156	Feed-To or Feed-Through, No Index—4 wire	11-20-1317			11-39-0119	C

ORDERING INFORMATION

Mass Termination, Ribbon Cable



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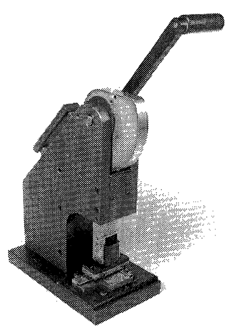


F

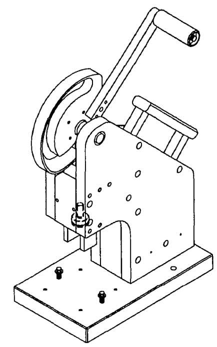
Connector	Description	Order No.				Figure
		Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Tool Kit	
30452—2.00mm	Feed-To or Feed-Through, No Index	11-20-1327				E
2.50mm—SPOX	Feed-To or Feed-Through, No Index	11-21-9757			11-32-1956	F
2.50mm—"User Friendly"	Feed-To or Feed-Through, No Index	11-20-1277			11-39-0002	F

molex®

Insulation Displacement Technology Tooling

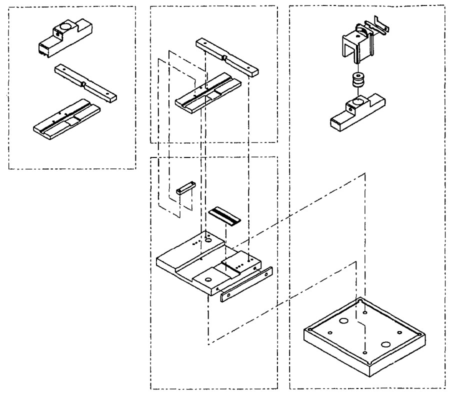
Tooling for Manual and Electric Presses

Mass Termination, Ribbon Cable .050 and .025"

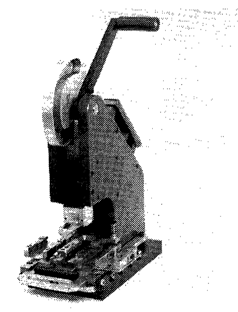


A

D



C B



E

Tooling Accessories		
Description	**Order No.**	**Figure**
Universal Adapter Plate	11-31-2176	C
Ribbon Cable Tooling Adapter	11-20-0947	B
Manual Press with Tooling Adapter	11-20-1170	A + B
Universal Adapter Plate and Ribbon Cable Adapter	11-21-9933	B + C
Milli-Grid™ Adapter	11-32-5762	D

Connector	Description	Order No.				Circuit Size Change Kit Only†	Tool Kit Figure
		Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Tool Kit Only*		
71522 DL50 Plug	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1163	11-20-1156		11-31-5557		D
71521 DL50 Receptacle	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1164	11-20-1157		11-31-5555		D
71527, 71528, 71530, 71531 D-Sub	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1165	11-20-1158		11-21-9391		D
40312 MX50™, 70121 Slimline	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1166	11-20-1159		11-31-2181		D
5360 QF50™	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1168	11-20-1161		11-31-2187		D
5320 QF50	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1169	11-20-1162		11-31-2335		D
70720, 70721 DL50	1.27mm (.050") Ribbon Cable Feed-To, Feed-Through	11-20-1834			11-21-9746		D
87259 Milli-Grid	0.63mm (.025") Ribbon Cable Feed-To, Feed-Through	11-39-0049			11-32-5760		D
79058 SCSI+ —50 circuit	0.63mm (.025") Ribbon Cable Feed-To, Feed-Through	11-20-1341			62200-2200	11-32-7223	E
79058 SCSI+ —68 circuit	0.63mm (.025") Ribbon Cable Feed-To, Feed-Through	11-20-1340			62200-1900	11-32-7224	E
70498 SCSI+ —50 circuit	0.63mm (.025") Ribbon Cable Feed-To, Feed-Through	11-20-1343			62200-2000	11-32-7860	E
70498 SCSI+ —68 circuit	0.63mm (.025") Ribbon Cable Feed-To, Feed-Through	11-20-1342			62200-2100	11-32-7861	E
EBBI	0.63mm (.025") Ribbon Cable Feed-To, Feed-Through	11-20-1307			11-39-0152		E

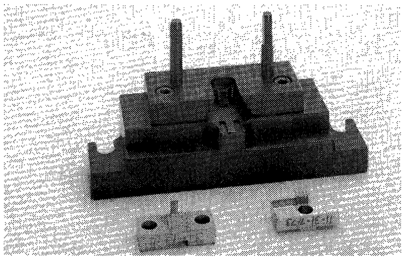
* If you already own a press, only tool kit is necessary

† If you are already terminating SCSI and you want to terminate a different circuit size, only a new nest is necessary

ORDERING INFORMATION

Insulation Displacement Technology Tooling Tooling for Manual and Electric Presses

SEMCONN™ Tooling



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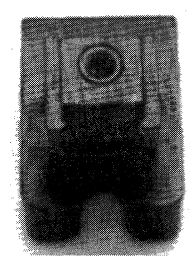


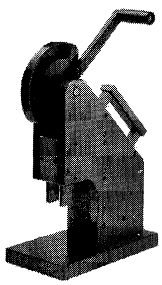
B

C

Connector	Plug Insert Termination				Plug Termination			
	Order No.				Order No.			
	Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Tooling Only	Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Tooling Only
	Figure C			Figure B	Figure C			Figure A
SEMCONN—4 circuit	11-31-6365	11-32-1448	11-32-1440	11-31-6369	11-31-6357	11-32-1453	11-32-1445	11-31-6361
SEMCONN—6 circuit	11-31-6366	11-32-1449	11-32-1441	11-31-6370	11-31-6358	11-32-1454	11-32-0580	11-31-6362
SEMCONN—8 circuit	11-31-6367	11-32-1450	11-32-1442	11-31-6371	11-31-6359	11-32-1455	11-32-1446	11-31-6363
SEMCONN—16 circuit	11-31-6368	11-32-1451	11-32-1443	11-31-6372	11-31-6360	11-32-1456	11-32-1447	11-31-6364
SEMCONN—6-loaded-4	11-31-8633	11-32-1255	11-32-0579	11-31-8630				
SEMCONN—8-loaded-6	11-31-8634	11-32-1452	11-32-1444	11-31-8631				

ORDERING INFORMATION

Ferrule Crimp Tooling



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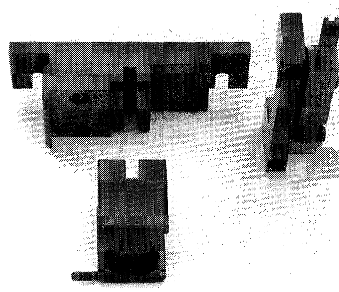

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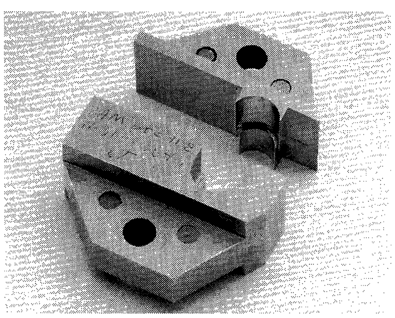

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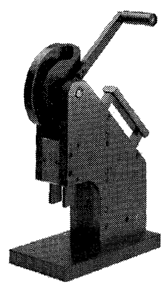


D

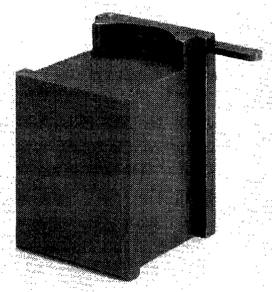
Description	Order No.	Figure
Press and Fixture	11-21-9507	A, B
Ferrule Crimp Fixture	11-31-7559	B

Connector Series	Ferrule Order No.	Ferrule Size (OD)	Order No.			
			Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Dies Only
			Figure D			Figure C
SEMCONN™—Ferrule 4 circuit	89-00-3104	7.72/6.45 (.304/.254)		11-32-1457	11-32-1437	11-31-6382
SEMCONN—Ferrule 6 circuit	89-00-3106	8.36/7.09 (.329/.279)		11-32-1458	11-32-0581	11-31-6383
SEMCONN—Ferrule 8 circuit	89-00-3108	8.86/7.57 (.349/.298)		11-32-1459	11-32-1438	11-31-6384
SEMCONN—Ferrule 16 circuit	89-00-3116	10.47/9.19 (.412/.362)		11-32-1460	11-32-1439	11-31-6385
ACCESS.bus—Ferrule 4 circuit	89-00-3034	5.72 (.225)	11-20-1246			11-21-9921*
LFH™	71256-0001	12.17/6.96 (.479/.274)	62200-1295			62200-1202
LFH	71256-0002	12.17/10.64 (.479/.419)	62200-1395			62200-1301

* Complete kit

Insulation Displacement Technology Tooling Tooling for Manual and Electric Presses

Telephone Plug Tooling



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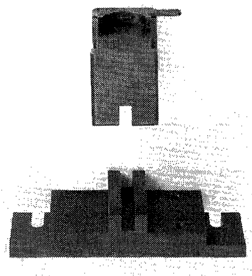

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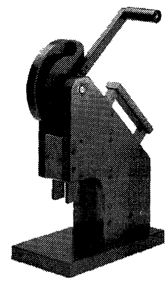

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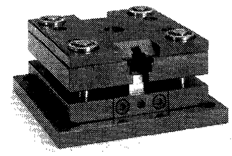

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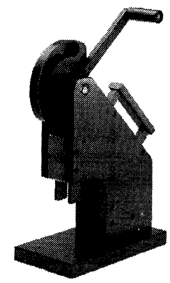
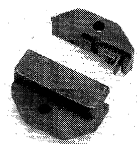


E



F

Description	Order No.	Figure
Adapter for 90075	11-21-9933	A
Adapter for 87031	11-31-7559	B

Connector	Size	Order No.			
		Complete Manual Press	Complete Electric Press (120V)	Complete Electric Press (220V)	Dies Only
		Figure C			Figure D
90075	4/4-6/6	11-20-1273			11-28-0225
90075	8/6-8/8	11-20-1274			69020-0140
		Figure E			Figure F
87031	4/4	11-20-1270			11-32-4767
87031	6/6	11-20-1271			11-32-4768
87031	6/2-6/4	11-20-1272			11-32-4769

Note: The above listed tools require loose piece telephone plugs

FEATURES AND SPECIFICATIONS

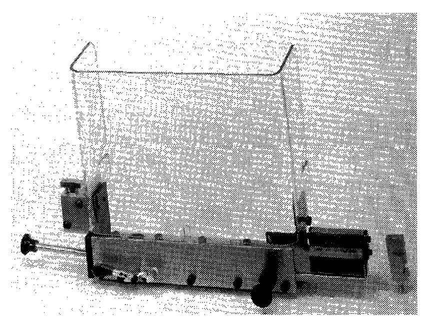
TM-42 Terminator for Insulation Displacement

Features

- Low cost alternative for IDT termination
- Auto indexing to next position after insertion of discrete wire
- New guard included
- For feed-to connectors only
- Fits all existing TM-40/42 Presses

Specifications

Size: Width—453mm (17.1")
Depth—100mm (3.9")
Height—73mm (2.9")
Weight: 4.76kg (10.5 lb)
Press: Standard TM-40/42
Speed: Up to 850 insertions per hour, dependent on operator speed



ORDERING INFORMATION

KK® Connectors		
Description	Module Order No.	Use with Molex Connector
IDT Terminator for TM-40/42	11-39-0051	7720, 40555
IDT Terminator for TM-40/42	11-39-0052	7674, 7675

Mini-Fit™ Connectors		
Description	Module Order No.	Use with Molex Connector
IDT Terminator for TM-40/42	11-39-0296	71690, 71694

Insulation Displacement Technology Tooling Pneumatic Press

PB13 Pneumatic Terminator

FEATURES AND SPECIFICATIONS

Features
- For processing hand-placed connectors, discrete wire
- Automatic connector indexing after termination
- Pneumatically operated cycle timer ensures stroke completion
- Leaves operator free to work with both hands

Specifications
Size: Width—250mm (9.8")
Depth—150mm (5.9")
Height—215mm (8.5")
Weight: 11kg (24.3 lb) approx.
Pressure: 6 BAR (90psig)

ORDERING INFORMATION *Preferred Version in Europe—Not Available in the US*

Description	Module Order No.	Use with Molex Connector
Hand Placed Connectors	69012-0750	7675
Side Loader	69012-0600	7720
Hand-Placed Connectors	69012-0700	7720
	69012-0350	52051
Manual Stick Separation	69012-0500	90061, 90062
Automatic Stick Separation	69012-0550	90061, 90062
Tape Feed	69012-0900	90062
	69012-0280	90153, 90154, 90175

PB11 Pneumatic Terminator

FEATURES AND SPECIFICATIONS

Features
- Totally pneumatic
- Pneumatically operated cycle timer ensures stroke completion
- Base unit is hand loaded and can be adapted for magazine or auto-feed

Specifications
Size: Width—300mm (11.8")
Depth—250mm (9.8")
Height—250mm (9.8")
Weight: 21kg (46.3 lb)
Pressure: 10 BAR (150psig)
Press Stroke: 19mm (.750")

ORDERING INFORMATION *Preferred Version in Europe—Not Available in the US*

Description	Module Order No.	Use with Molex Connector
Automatic	69029-1019	7720S
Automatic	69029-1020	8160G
Automatic	69029-1031	90327
Automatic	69029-1018	90410
Automatic	69029-1025	90609

Insulation Displacement Technology Tooling Semi-Automatic Terminator

P-B15 Pneumatic Terminator for MX50™ and QF50™

FEATURES AND SPECIFICATIONS

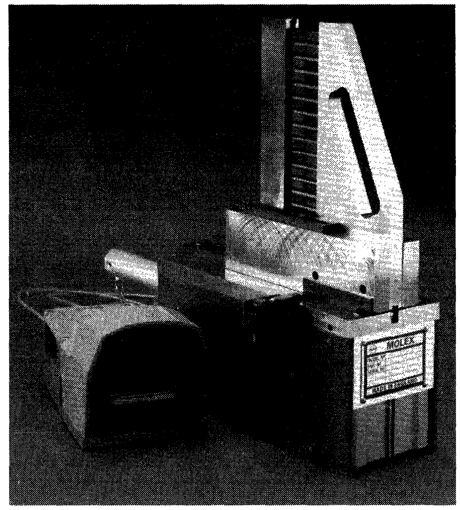
Features
- Totally pneumatic
- Automatic connector reloading
- Magazine feed with connector orientation
- Timer to ensure complete termination
- Cable guide
- Quick adjustments between circuit sizes
- Foot pedal operation
- Automatic tape feed available

Specifications
Weight: 28kg
Pneumatic: 6 BAR
Air Consumption: 14L per minute

ORDERING INFORMATION

Preferred Version in Europe—Not Available in the US

Description	Module Order No.	Use With Molex Connector
PB15 Magazine Terminator	69127-1050	40312, 90635
PB15 Tape Feed Terminator	69127-1100	40312, 90635



Application Tooling

W

Insulation Displacement Technology Tooling Semi-Automatic Terminators

Semi-Automatic Mini-Cam III™ for Discrete Wire

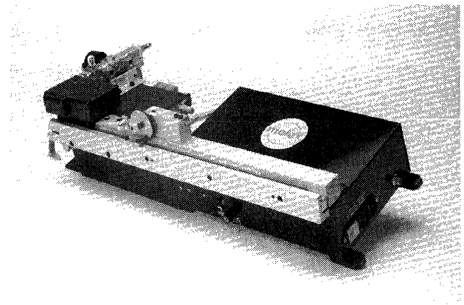
FEATURES AND SPECIFICATIONS

Features

- Utilizes air-powered cylinder, which assures uniform and proper insertion depth (solenoid-operated units are available if air is not available in plant)
- Provides a fast, low cost method of assembly
- Top loading, conveyor feed, belt type
- Release mechanism for stop pawl and feed finger
- Optional batch counter with certain connectors
- Can accept 4 to 28 circuit connectors with no adjustment

Specifications

Size: Width—609mm (24")
Depth—203mm (8")
Height—203mm (8")
Weight: 18.2kg (40 lb)
Pneumatics: Pressure—4 to 4.5 BAR (60 to 80psig)
Consumption—7L per minute (0.25 CFM)
Electrical: Voltage—120V AC, 50 Hz or 220V AC, 60 Hz
Current—5A
Rate: Up to 1200 terminations per hour, dependent on operator speed and application



ORDERING INFORMATION

Description	Order No. Air Operated (120V)	Air Operated (220V)	Electrically Operated (120V)	Electrically Operated (220V)	Electrical Wire Trigger Unit (120V)	Use with Molex Connector
For 2.54mm (.100") Pitch Connectors	11-20-0954	11-20-1255	11-20-0688	11-20-0689		7720, 7720S, 40555, 41716
For 2.54mm (.100") Pitch Connectors	11-20-0952	11-20-1253	11-20-0686	11-20-0696		7745, 40775
For 2.54mm (.100") Pitch Connectors	11-20-0956	11-20-1257	11-20-0720	11-20-0721		7822
For 2.54mm (.100") Pitch Connectors				11-20-0535		3481
For 3.96mm (.156") Pitch Connectors	11-20-0953	11-20-1254	11-20-0691	11-20-0692	11-20-1335	7674, 7675, 7991, 40590
For 5.08mm (.200") Pitch Connectors	11-20-0955	11-20-1256	11-20-0694	11-20-0695		7933

Semi-Automatic Terminator for 2.00 and 2.50mm

Hawk™ Series

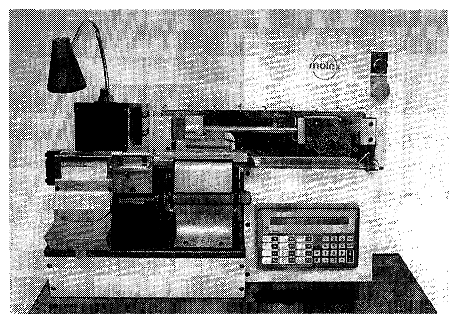
FEATURES AND SPECIFICATIONS

Features

- Assembles either discrete wire or cable
- Connector packaged in "Ammo-Pak" and linked together by terminal carrier strips
- Automatic connector loading
- Automatic carrier break off
- Programmable void capability
- Foot-pedal operated
- Tooling supplied for both ribbon cable and discrete wire (2 cable blades supplied for largest circuit size require alteration to your specific application circuit size, see machine manual for ordering information on specific circuit size tools)

Specifications

Size: Width—760mm (30")
Depth—480mm (19")
Height—480mm (19")
Weight: 70kg (150 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—28L per minute (1 CFM)
Electrical: Voltage—120V AC, 60 Hz or 220V AC, 50 Hz
Current—2A at 120V or 1A at 220V
Rate: Up to 1200 terminations per hour (discrete) and 350 assemblies per hour (cable), dependent on operator speed and wire length



ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
Hawk Terminator for SPOX™—Discrete Wire or Ribbon Cable	11-20-1252	42219, 42254
Hawk Terminator for "User Friendly"—Discrete Wire or Ribbon Cable	11-20-1280	90650, 90652
Hawk Terminator for 2.00mm—Discrete Wire or Ribbon Cable	11-20-1293	30452

Insulation Displacement Technology Tooling Semi-Automatic Terminators

Semi-Automatic Terminator for Ribbon Cable

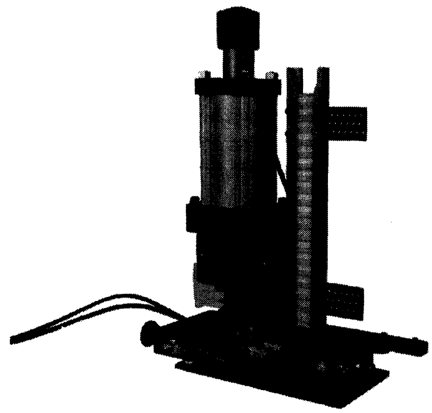
FEATURES AND SPECIFICATIONS

Features

- Terminates prenotched cable to pre-assembled connectors
- Bench mounted and operator controlled
- Feeding of connectors from machine's magazine
- Pneumatically operated
- Feed-to or feed-through capabilities

Specifications

Size: Width—203mm (8")
Depth—305mm (12")
Height—432mm (17")
Weight: 13.5kg (30 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Rate: Up to 550 assemblies per hour, dependent on operator speed and application



ORDERING INFORMATION

Description	Order No.	Use with Molex Connector
.100" Pitch Cable Terminator	11-20-0412	7720
.100" Pitch Cable Terminator with Backwalls	11-20-0771	7720, 40555
.100" Pitch Cable Terminator	11-20-1004	7720S
.100" Pitch Cable Terminator (Edge Card)	11-20-0411	7822
.156" Pitch Cable Terminator	11-20-0418	7674, 7675
.098" Pitch Cable Terminator	11-20-0498	8160
.098" Pitch Cable Terminator (Edge Card)	Contact factory	

Semi-Automatic Terminator for MX50™ and QF50™

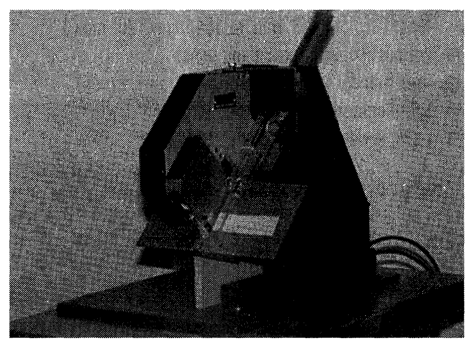
FEATURES AND SPECIFICATIONS

Features

- Pneumatically operated, no need for electrical power
- Feed-to or feed-through capabilities
- Automatic connector feed from plastic packaging tube

Specifications

Size: Width—508mm (20")
Depth—458mm (18")
Height—458mm (18")
Weight: 27kg (60 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—14L per minute (0.5 CFM)
Rate: Up to 550 assemblies per hour, dependent on operator speed and wire/cable parameters



ORDERING INFORMATION

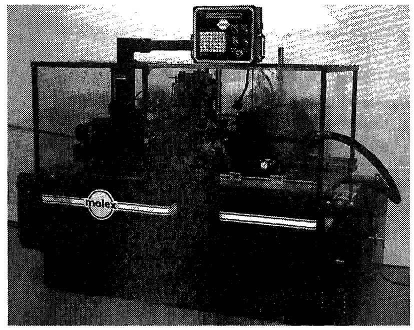
Description	Order No.	Use With
Base Machine Only	11-20-0899	All modules listed below

Description	Order No.		Use with Molex Connector
	Module Only	Base Machine and Module	
Slimline Connector Tool Module	11-31-4236	11-20-0974	70121, 71891, MX50 Slimline
MX50 Connector Tool Module	11-31-4361	11-20-0985	40312 Standard MX50
Transition Connector Tool Module	11-31-7695	11-20-0975	5360 Transition Connector
International .050" Connector Module	11-21-9521	11-20-1215	5320 QF50 Connector

Note: "H" version currently not available in tubes

Insulation Displacement Technology Tooling Fully Automatic Harness Assembly Machines

Eagle™ Series 62600-0000



FEATURES AND SPECIFICATIONS

Features

- Fully automatic mass terminating machines for high volume applications (minimum estimated annual usage of 10 million terminations)
- Dereel systems for discrete wire or cable available
- Double end having single-ended harness capabilities without strip
- Full strip for discrete wire
- Strip and retain for cable
- Single-ended harness capability with strip (38mm/1.5" max.) (Harness length of 76mm/3" min. to 610mm/24" max.)
- Up to 64 terminations per cycle (dependent on circuit size)
- User friendly solid state controller
- Self-diagnostic with program storage
- Large variety of value-added options (maximum of 2 secondary operation stations)

Specifications

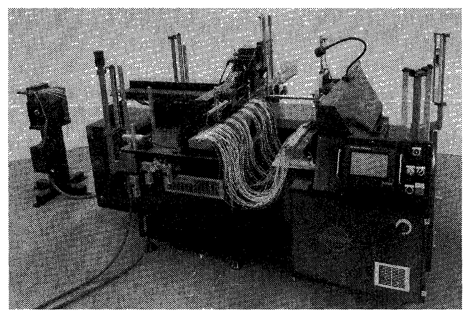
Size: Width—1800mm (71")
Depth—915mm (36")
Height—1500mm (59")
Weight: 1370kg (2800 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—142L per minute (5 CFM)
Electrical: Voltage—220V AC, 50 Hz or 240V AC, 60 Hz
Current—40.0A (dependent on wire feed option)
Rate: 300 cycles per hour average, dependent on harness length

The Eagle machine is defined in this series by having wire length capability up to 610mm (24") max. and up to 2 secondary operator stations.

ORDERING INFORMATION

Contact Factory to Order

Phoenix™ Series 62700-0000



FEATURES AND SPECIFICATIONS

Features

- Fully automatic mass terminating machines for high volume applications
- Dereel system for discrete wire or cable availability
- Double end having single-ended harness capabilities without strip
- Single-ended harness capability with strip (38mm/1.5" max.)
- Full strip for discrete wire
- Strip and retain for cable
- Up to 64 terminations per cycle (dependent on circuit size)
- Discrete wire with equal wire length capability (Harness length of 76mm/3" min. to 3048mm/120" max.)
- Various connector packaging options
- User friendly solid state controller (touch screen)
- Self-diagnostic with program storage
- Large variety of value-added options

Specifications

Size: Width—2300mm (91")
Depth—1800mm (71")
Height—1500mm (59")
Weight: 1800kg (4000 lb)
Pneumatics: Pressure—5 BAR (80psig)
Consumption—142L per minute (5 CFM)
Electrical: Voltage—220V AC, 50 Hz or 240V AC, 60 Hz
Current—40.0A (dependent on wire feed option)
Rate: 300 cycles per hour average, dependent on harness length

The Phoenix machine is defined in this series by having wire length capability up to 3048mm (120") and/or more than 2 secondary operator stations.

ORDERING INFORMATION

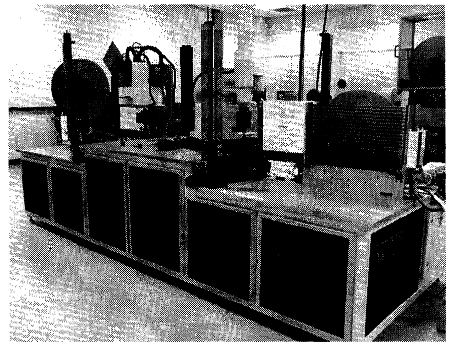
Contact Factory to Order

OPTIONAL FEATURES FOR EAGLE AND PHOENIX SERIES

- Wire dereeler systems: Up to 32 barrel capacity and up to 32 reel capacity
- Missing wire detection
- Wire splice detection
- Full strip for discrete wire
- Variable wire length capability: For single-end Eagle series: 76mm (3") min. to 610mm (24") max. For double-end Eagle series: 152mm (6") min. to 610mm (24") max.
- Discrete wire with variable wire length capability:
  —For single-end Phoenix series: Harness length of 152mm (6") min. to 3048mm (120") max. and maximum wire length within harness equal to approximately 4 times minimum length
  —For double-end Phoenix series: Harness length of 152mm (6") min. to 3048mm (120") max.
- Single or multiple notching or slitting for ribbon cable applications
- Housing load:
  —Magazine style for bulk packaging
  —Single detuber for extruded tube packaging
  —Manual track for operator loading
  —Welded film dereeler for mylar reel packaging
  —Welded film unloader for mylar "Ammo Pak"
  —Vibratory or centrifugal bowl feeding for continuous loading
  —Tape dereeler for continuous tape packaging
- Full strip and strip/retain for discrete wire and ribbon cable
- Terminal insertion into housings (SL)
- Continuity testing for double-ended assemblies
- Product marking:
  —Hot stamping
  —Ink pad printing
  —Ink jet printing
  —Automatic labeling
- Data storage for recall on floppy disk media through a personal computer

Insulation Displacement Technology Tooling

Robotics Technology



Introduction
The use of industrial robots to complete the automation of PC boards has been growing in recent years. The flexibility of a robot assembly cell allows economical assembly of the "odd form" category of hard-to-automate components. The successful implementation of an odd-form robot assembly system depends on several factors. Of primary importance: Proper design and quality of the component, a packaging system that preserves the quality at a reasonable cost and feeding systems that reliably deliver components in proper orientation to the robot for assembly.

Connectors Designed for Automation
Molex has accepted the challenge of providing board-level interconnection systems with materials, features and tolerances demanded by automated assembly processes, both through-hole and surface mount.

Packaging for Automation
Packaging is provided to meet the demands of preserving quality and interfacing smoothly with automated warehousing while keeping costs reasonable.

Feeders and Delivery Systems
The Application Tooling Division has developed space effective feeding systems that automatically depackage our connectors and accurately locate them for acquisition by a robot system. Molex delivery systems have been in operation for several years and are proven to contain all the elements for successful operation in an automated system.

Application Assistance
Molex Application Tooling Engineers are available to assist with integration of Molex products and feeders into robotics assembly systems. We can provide assistance in selecting robot end-effectors best suited to our product or custom tooling for unique applications.

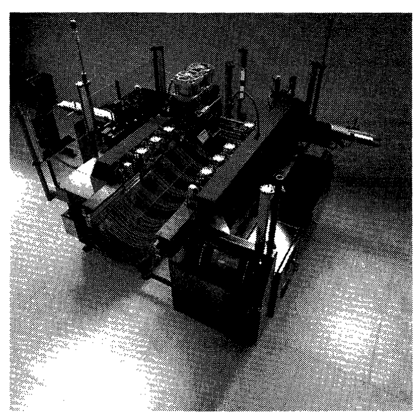
Contact your local Molex sales engineer for more information.

Vision Guided Systems
We will continue developing and testing products, packaging and delivery systems that operate with vision-guided robot assemblies to keep pace with the quality demands of shrinking PCB spacings and increasing demands for flexibility.
PC board level interconnects designed for automated assembly have unique requirements:
- High accuracy on body-to-lead specifications and on lead-to-lead specifications
- Designed-in hold down features
- Packaging systems to preserve quality and provide a large on-line supply of components with minimal reload time
- Feeding systems designed to depackage and position components reliably at automated line rates

Molex has been supplying interconnection systems to fully automated PC board assembly customers since 1984. We have a full line of products, packaging systems and application tooling to meet the needs of the most demanding automated assembly project. We maintain a fully equipped robotics lab to develop new applications.

Special Machines 62900-0000

Molex can quote special machines upon request with optional features that parallel the Phoenix/Eagle Series. In general, these machines differ by the manner in which connector termination and wire handling are accomplished. Additionally, daisy chain and different connector orientations can be accomplished.



molex® Wire Gauge Classifications*

AWG	Diameter	Area	
		Circular Mils	mm² (In.²)
10 (1)	2.590 (.1019)	10,384.00	5.27000 (.00816)
10 (37/26)	2.830 (.1113)	9361.00	4.75000 (.00736)
12 (1)	2.050 (.0808)	6528.00	3.31000 (.00513)
12 (19/25)	2.270 (.0895)	6088.00	3.09000 (.00479)
12 (37/28)	2.240 (.0882)	5883.00	2.88000 (.00463)
14 (1)	1.630 (.0641)	4109.00	2.08000 (.00323)
14 (19/27)	1.800 (.0710)	3831.00	1.94000 (.00300)
16 (1)	1.290 (.0508)	2581.00	1.31000 (.00203)
16 (19/29)	1.410 (.0557)	2426.00	1.23000 (.00190)
18 (1)	1.020 (.0403)	1620.00	0.82300 (.00128)
18 (19/30)	1.270 (.0500)	1900.00	0.96300 (.00149)
20 (1)	0.813 (.0320)	1020.00	0.51900 (.000804)
20 (7/28)	0.960 (.0378)	1113.00	0.56300 (.000875)
20 (19/32)	1.020 (.0400)	1216.00	0.61600 (.000956)
22 (1)	0.643 (.0253)	640.00	0.32400 (.000503)
22 (7/30)	0.762 (.0300)	700.00	0.35500 (.000550)
22 (19/34)	0.800 (.0315)	754.00	0.38200 (.000593)
24 (1)	0.511 (.0201)	404.00	0.20500 (.000317)
24 (7/32)	0.609 (.0240)	448.00	0.22700 (.000352)
24 (19/36)	0.635 (.0250)	475.00	0.24100 (.000372)
26 (1)	0.404 (.0159)	253.00	0.12800 (.000199)
26 (7/34)	0.480 (.0189)	278.00	0.14100 (.000218)
26 (19/38)	0.510 (.0200)	304.00	0.15400 (.000239)
28 (1)	0.320 (.0126)	159.00	0.08040 (.000125)
28 (7/36)	0.381 (.0150)	175.00	0.08890 (.000137)
28 (19/40)	0.395 (.0155)	183.00	0.09250 (.000143)
30 (1)	0.254 (.0100)	100.00	0.05070 (.0000785)
30 (7/38)	0.306 (.0120)	112.00	0.05680 (.0000882)
30 (19/42)	0.320 (.0125)	119.00	0.06000 (.0000933)
32 (1)	0.203 (.0080)	64.00	0.03240 (.0000503)
32 (7/40)	0.237 (.0093)	67.30	0.03410 (.0000529)
32 (19/44)	0.255 (.0100)	76.00	0.03860 (.0000597)
34 (1)	0.160 (.0063)	39.70	0.02010 (.0000312)
34 (7/42)	0.192 (.0075)	43.80	0.02220 (.0000344)
36 (1)	0.127 (.0050)	25.00	0.01270 (.0000196)
36 (7/44)	0.153 (.0060)	28.00	0.01420 (.0000220)
38 (1)	0.102 (.0040)	16.00	0.00811 (.0000126)
40 (1)	0.079 (.0031)	9.61	0.00487 (.00000755)
42 (1)	0.064 (.0025)	6.25	0.00317 (.00000491)
44 (1)	0.051 (.0020)	4.00	0.00203 (.00000314)

* Classifications of insulated round Copper conductors

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London, Ontario N6E 2S5
(519) 668-2890

MONTREAL

FAI Electronics
Montreal, Quebec H4P 1N1
(514) 731-7444

Future Electronics
Pointe Clair, Quebec H9R 5C7
(514) 694-7710

Hamilton Hallmark
St. Laurent, Quebec H4T IV6
(514) 335-1000

Pioneer/Zentronics
St. Laurent, P.Q. H4T 1N1
(514) 737-9700

NOVA SCOTIA

Arcom Electronics LTD
Dartmouth, Nova Scotia B3A 1K4
(902) 464-1600

OTTAWA

FAI Electronics
Ottawa, Ontario K2C 3P2
(613) 820-8244

Future Electronics
Ottawa, Ontario K2C 3P2
(613) 820-8313

Hamilton Hallmark
Nepean, Ontario K2E 7J5
(613) 226-1700

Pioneer/Standard
Nepean, Ontario K2E 7K3
(613) 226-8840

QUEBEC CITY

FAI Electronics
Quebec, Qc G1N 4K8
(418) 682-5775

Future Electronics
Quebec, Qc G2E 5G5
(418) 877-6666

TORONTO

FAI Electronics
Mississauga, Ontario L4V 1W5
(905) 612-9888

Future Electronics
Mississauga, Ontario L4V 1W5
(905) 612-9200

Hamilton Hallmark
Mississauga, Ontario L5T 2L1
(905) 564-6060

Innovative Nova Group
Mississauga, Ontario L5S 1R6
(905) 795-8180

Pioneer/Standard
Mississauga, Ontario L4V 1T4
(905) 405-8300

Simcona Electronics
North York, Ontario M2J 1P9
(416) 502-2120

WESTERN CANADA

BRITISH COLUMBIA

Cardinal Industrial Electronics
Burnaby, B.C. V5C 5A5
(604) 299-1920

FAI Electronics
Vancouver, B.C. V5K 4X7
(604) 654-1050

Future Electronics
Vancouver, B.C. V5K 4X7
(604) 294-1166

Hamilton Hallmark
Burnaby, B.C. V5A 4N6
(604) 420-4101

Pioneer/Standard
Richmond, B.C. V6E 2Y3
(604) 273-5575

CALGARY

Cardinal Industrial Electronics
Calgary, Alberta T2H 2M4
(403) 259-6817

FAI Electronics
Calgary, Alberta T2E 6Z3
(403) 291-5333

Future Electronics
Calgary, Alberta T1Y 6B5
(403) 250-5550

Pioneer/Standard
Calgary, Alberta T2E 7S8
(403) 291-1988

EDMONTON

Cardinal Industrial Electronics
Edmonton, Alberta T5J 2P4
(403) 483-6266

FAI Electronics
Edmonton, Alberta T6H 2H3
(403) 438-5888

Pioneer/Standard
Edmonton, Alberta T5S 1G3
(403) 482-3038

SASKATOON

Cardinal Industrial Electronics
Saskatoon, Sask. S7L 6H8
(306) 934-3443

WINNIPEG

FAI Electronics
Winnipeg, Manitoba R3H 0N8
(204) 786-3075

CORPORATE HEADQUARTERS

2222 Wellington Court
Lisle, IL 60532
Phone: (708) 969-4550
FAX: (708) 969-1352

NORTHWEST REGION

920 Hillview Court
Suite 200
Milpitas, CA 95035
Phone: (408) 946-4700
Fax: (408) 946-5386

14 Inverness Drive East
Suite C-216
Englewood, CO 80112
Phone: (303) 799-4450
Fax: (303) 799-4460

SOUTHWEST REGION

641 North Poplar Street
Orange, CA 92668
Phone: (714) 937-9380
FAX: (714) 978-9106

Molex Industrial Interfaces
641 North Poplar Street
Orange, CA 92668
Phone: (714) 937-9393
FAX: (714) 978-9107

Ulti-Mate Inc.
641 North Poplar Street
Orange, CA 92668
Phone: (714) 937-9388
FAX: (714) 978-9352

District Office
12325 Hymeadow
Suite 2-202
Austin, TX 78750
Phone: (512) 219-0990
FAX: (512) 219-0993

Dallas Office
4570 Westgrove
Suite 151
Addison, TX 75248
Phone: (214) 931-0999
FAX: (214) 931-1754

MIDWEST REGION

2222 Wellington Court
Lisle, IL 60532
Phone: (708) 969-4550
FAX: (708) 512-8622

District Office
3601 Minnesota Dr.
Suite 880
Minneapolis, MN 55435
Phone: (612) 921-5863
FAX: (612) 829-9112

CENTRAL REGION

11350 N. Meridian
Suite 300
Carmel, IN 46032
Phone: (317) 571-3877
FAX: (317) 571-3866

District Office Serving Automotive Customers
1607 East Big Beaver Road
Suite 101
Troy, MI 48083
Phone: (810) 528-0011
FAX: (810) 528-3887

Molex Fiber Optic Interconnect Technologies
5224 Katrine
Downers Grove, IL 60515
Phone: (708) 512-8787
FAX: (708) 512-8777

NORTHEAST REGION

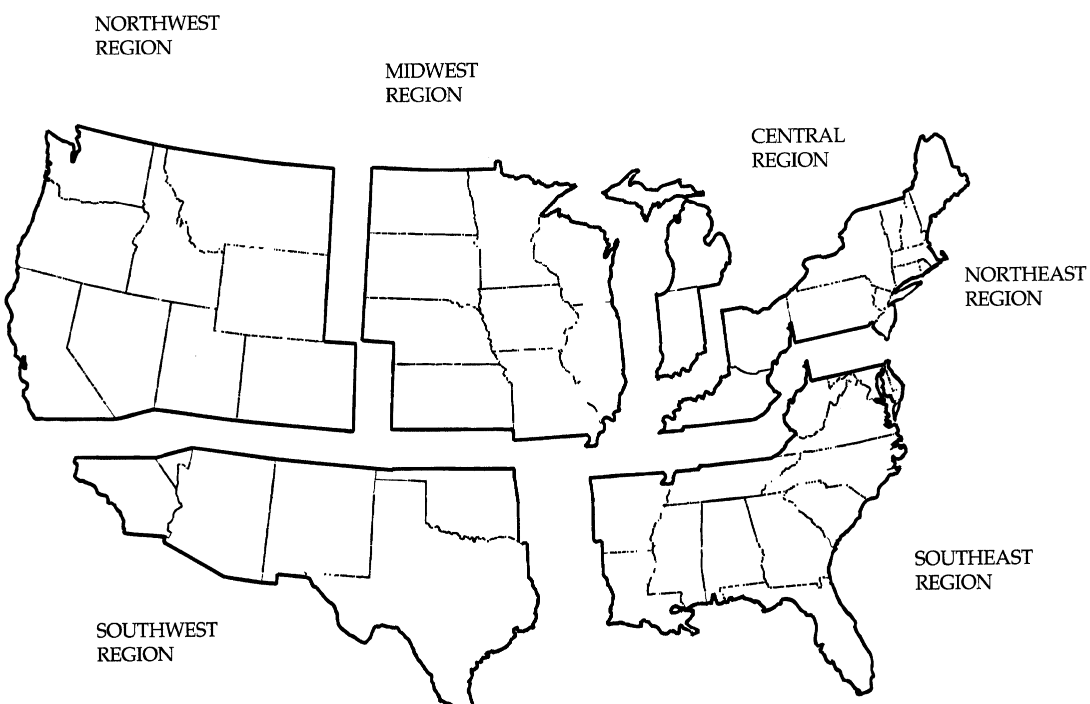
600 West Cummings Park
Suite 6900
Woburn, MA 01801
Phone: (617) 935-8983
FAX: (617) 932-3857

Mod-Tap W. Corp.
285 Ayer Road
PO Box 706
Harvard, MA 01451

SOUTHEAST REGION

9755 Dogwood Road
Suite 111
Roswell, GA 30075
Phone: (404) 992-3715
FAX: (404) 992-0152

Molex-ETC, Inc.
4650 62nd Avenue North
Pinellas Park, FL 34665
Phone: (813) 521-2700
FAX: (813) 528-1010



In Puerto Rico call (809) 848-5044

HEADQUARTERS

Molex International

Corporate Headquarters
International Division
2222 Wellington Court
Lisle, IL 60532 USA
Phone: (708) 969-4550
FAX: (708) 969-1352
TLX: 27-4069

European Headquarters
Molex Services GmbH
Dingolfinger Strasse 4
D-81673 Munich, Germany
Phone: 49-89-413092-0
FAX: 49-89-401527
TLX: 5214425

Far East North Headquarters
Molex Japan Co. LTD.
1-5-4 Fukami-Higashi
Yamato-City, Kanagawa
242 Japan
Phone: 81-462-4500
FAX: 81-462-1470

Far East South Headquarters
Molex Singapore Pte. LTD.
No. 110, International Road
Jurong Town 2262, Singapore
Phone: 65-268-6868
FAX: 65-265-6044
TLX: 786-24583

MOLEX SUBSIDIARY AND REP LIST

Argentina
Reycom Electronica S.R.L.
B. De Irigoyen 972 2 C
1304-Buenos Aires, Argentina
Phone: 54-1-300-2013
FAX: 54-1-300-2010

Australia
Utilux Pty. LTD.
14 Commercial Road,
Kingsgrove, N.S.W. 2208
Australia
Phone: 61-2-500-155
FAX: 61-2-5021753
TLX: 790-21516

MOD-TAP Pacific Rim Headquarters
MOD-TAP (Australia) Pty. LTD.
86-100 High Street
PO Box 574
Melton, Victoria 3337
Australia
Phone: 61-3-747-8322
FAX: 61-3-747-8627

Brazil
Molex Eletronica LTDA.
Rua Capitao Francisco Teixeira
Nogueira #232 Bairro Agua Branca
05038-Sao Paulo-SP-Brazil
Phone: 55-11-861-2399
FAX: 55-11-861-1891

Molex Da Amazonia
Avenida Cupiuba 476
Distrito Industrial
Manaus, Amazonas Brazil
Phone: 55-92-615-1213
FAX: 55-92-615-2536
TLX: 391-0922828

Canada
Molex Electronics LTD.
1870 Des Sources Blvd, Suite 302
Pointe Claire, QC
Canada H9R 5N4
Phone: (514) 630-1177
FAX: (514) 630-1440
TLX: 058-27728

Molex Electronics LTD.
85 Select Avenue
Scarborough, Ontario M1V 4A9
Canada
Phone: (416) 292-1444
FAX: (416) 292-2922
TLX: 065-25390

Chile
Victronics LTDA.
Casilla 283-V, Correo 21
Santiago 01, Chile
Phone: 56-2-2253788
FAX: 56-2-341-5578

China
Molex Dongguan
Weixin Road, Xinwei Village
Shilong Town, Dongguang
Guangdong Province, China
Correspondence Address:
c/o Molex Nanco LTD. (See Hong Kong)
Phone: 86-769-6611376
FAX: 86-769-6612716

Molex Shanghai Co. LTD.
G/F and I/F, Building T20-5
Block 20 Jinqiao Export Processing Zone
Pudong, Shanghai, PR China
201206
Phone: 86-21-8549-123
FAX: 86-21-8549-222

Denmark
Molex G. Ostervig A/S
Paul Bergsoes VEJ 16
2600 Glostrup, Denmark
Phone: 45-43-431030
FAX: 45-43-434460

Eastern Europe
Molex France SARL
4 Boulevard Arago-B.P. 108
91320 Wissous, France
Phone: 33-1-69814900
FAX: 33-1-69206703
TLX: 842-603059

Egypt
High Technology Systems LTD.
28 Mohyeldin Abouelezz Street
PO Box 59 Mohandessin
12655 Cairo Egypt
Phone: 20-2-3491051
FAX: 20-2-3486278
TLX: 927-23360

UK (England)
Molex Electronics LTD. (UK)
Molex House, Farnham Road
Bordon, Hampshire GU35 ONU
England
Phone: 44-1420-477070
FAX: 44-1420-478185

MOD-TAP European Headquarters
7 Northbrook Industrial Estate
Vincent Avenue
Southhampton, Hants, SO1 6PB
England
Phone: 44-1703-701919
FAX: 44-1703-702147

Finland
Intotel Oy
Lammittajankatu 4
SF-00810 Helsinki, Finland
Phone: 358-0-755-950
FAX: 358-0-755-3581

France
Molex France SARL
4 Boulevard Arago-B.P. 108
91320 Wissous, France
Phone: 33-1-69814900
FAX: 33-1-69206703
TLX: 842-603059

Molex Switch
Z.I. De Bellitourne-B.P. 414
53200 Chateau-Gontier
France
Phone: 33-43-07-39-80
FAX: 33-43-70-36-01

Germany
Molex Elektronik GmbH
Grashofstrasse 17
76275 Ettlingen, Germany
Phone: 49-7243-3350
FAX: 49-7243-31420
TLX: 841-782936

Molex Deutschland GmbH
Einsteinstrasse 16
76275 Ettlingen
Germany
Phone: 49-7243-3350
FAX: 49-7243-335232

Molex Services GmbH
Dingolfinger Strasse 4
D-81673 Munich, Germany
Phone: 49-89-413092-0
FAX: 49-89-401527

Molex GmbH
Felix-Wankel-Strasse 9
D-74078 Heilbronn-Biberach, Germany
Phone: 49-7066-30-0
FAX: 49-7066-30-26

Hong Kong
Molex Hong Kong/China LTD.
2/F Blk A, Shatin Ind. Center
5-7 Yuen Shun Circuit
Siu Lek Yuen, Shatin, N.T. Hong Kong
Phone: 852-2637-3111
FAX: 852-2637-5990
TLX: 780-51251

India
Molex (India) LTD.
Plot No. 6 (A)
Sadaramangala Industrial Area
Kadugodi
Bangalore 560 067, India
Phone: 91-80-845-2911...21
FAX: 91-80-845-2922

Ireland
Molex S.A. (Ireland)
Site 3, Shannon Industrial Est
Shannon Free Airport, Shannon
Ireland
Phone: 353-61-471566
FAX: 353-61-471908
TLX: 852-72146

Molex Millstreet
Mount Leader Industrial Ests
Millstreet Town
County Cork, Ireland
Phone: 353-29-70252
FAX: 353-29-70648
TLX: 852-75586

Israel
TELESYS LTD.
Atidim, Bldg 3, Dvora
Hanevia Str. Neve Sharet
Tel Aviv 61431 Israel
Phone: 972-03-492001
FAX: 972-03-497407
TLX: 922-371279

Italy
Molex Italia S.P.A.
Via Milano 8/11
20068 Peschiera Borromeo
(Milano) Italy
Phone: 39-2-553-01408
FAX: 39-2-553-01405
TLX: 843-316174

Zetronic SPA
IX Strada, 27
35129 Padova, Italy
Phone: 39-49-8072071
FAX: 39-49-8072548

Japan
Molex Japan Co. LTD.
1-5-4 Fukami-Higashi
Yamato-City, Kanagawa
242 Japan
Phone: 81-462-61-4500
FAX: 81-462-64-1470
TLX: 781-03872486

Korea
Molex Korea Co. LTD.
726-3, Wonsi-Dong
Ansan City, Kyunggi-Do
Republic of Korea
Phone: 82-345-492-9000
FAX: 82-345-492-0888
TLX: 787-22597

Seoul Office, Molex Korea
#303 Shinsong Bldg,
25-4, Yoido-Dong, Youngdungpo-Ku
Seoul, Korea, 150-010
Phone: 82-2-780-2333
FAX: 82-2-780-3989

Hyundai Terminal Co., LTD.
726-3, Wonsi-Dong
Ansan City, Kyunggi-Do
Republic of Korea
Phone: 82-345-492-9000
FAX: 82-345-492-0888

Malaysia
Molex Malaysia SDN BHD
2607 Jalan Perusahaan
Kawasan Perindustrian Perai
13600 Perai, Penang Malaysia
Phone: 60-4-507-8788
FAX: 60-4-507-8140
TLX: MA 47049

Molex Malaysia SDN BHD
19-2nd Floor, USJ 10/1F,
UEP Subang Jaya
47620 Petaling Jaya, Malaysia
Phone: 60-3-7329980
FAX: 60-3-7310052

Mexico
Molex De Mexico, S.A. De C.V.
Av. De La Productividad #305
Parque Industrial
Guadalajara, Jalisco, Mexico
Phone: 52-36-89-14-33
FAX: 52-36-89-00-29

Netherlands
Molex BV
Postbus 295, 5500 AG Veldhoven
De Run 5211, 5504 DC Veldhoven
The Netherlands
Phone: 31-40-583190
FAX: 31-40-583199
TLX: 844-51323

Molex EDC BV
Postbus 411, 5500 AK Veldhoven
Derun 5211, 5504 DC Veldhoven
The Netherlands
Phone: 31-40-583180
FAX: 31-40-583185

New Zealand
Utilux New Zealand LTD.
2 Woodson Place, Glenfield
Auckland 10, New Zealand
PO Box 100-056, N. Shore Mail Centre
Auckland, New Zealand
Phone: 64-9-443-9525
FAX: 64-9-443-9539
TLX: 791-21212

Norway
Molex-G. Knutsen As.
Trondheimsveien 80
Postboks 6598 Rodeloekka
0501 Oslo 5, Norway
Phone: 47-22-384330
FAX: 47-22-373717

Philippines
Molex Philippines
Suite 7A Eisenhower Condominium
No. 7 Eisenhower St.
Green Hills, San Juan
Metro Manila 1504 Philippines
Phone: 632-722-0225
FAX: 632-723-9925
TLX: 762-63101

Singapore
Molex Singapore Pte. LTD.
No. 110, International Road
Jurong Town 2262, Singapore
Phone: 65-268-6868
FAX: 65-265-6044
TLX: 786-24583

MEC International Pte. LTD.
No. 87 Defu Lane 10
The Excalibur #05-00
Singapore 1953
Phone: 65-380-0188
Phone: 65-380-0168 (Direct No.)
FAX: 65-282-9995

South Africa
Molex (Pty.) LTD.
Cnr. Gazelle Avenue and Lechwe Street
Corporate Park
Midrand, South Africa 1685
Phone: 27-11-314-4700
FAX: 27-11-314-4681

Spain
Molex Espana
Buenaventura Munoz 13
08018 Barcelona, Spain
Phone: 34-3-3003414
FAX: 34-3-300-7659

Sweden
Molex Sweden
Travgatan 88 Box 2007
S-194 02 Upplands Vasby Sweden
Phone: 46-8-590930-40
FAX: 46-8-590882-50

Switzerland
Molex Interconnect AG
Lohwisstrasse 50
CH-8123 Ebmatingen, Switzerland
Phone: 41-1-980-3814
FAX: 41-1-980-3838

EME AG
Bauteile Und Steuersysteme
Lohwisstrasse 50
CH-8123 Ebmatingen, Switzerland
Phone: 41-1-9801111
FAX: 41-1-9800869

Taiwan
Molex Taiwan LTD.
100-3 Shia-Kwei-Rou-Shan
Tamshui, Taipei Hsien Taiwan
Republic of China
Phone: 886-2-620-2300
Phone: 886-2-621-9630
FAX: 886-2-622-3124
TLX: 785-31546

Thailand
Molex (Thailand) LTD.
No. 71/4 Moo 5 Bangpakong Ind. Pk
Bangna-Trad Road, KM52, Tambol Takar
Bangpakong, Chachoengsao 24130
Thailand
Phone: 66-38-573020
FAX: 66-38-573023

Turkey
Spektrum Elektronik
Sarrafali Sok. 36/7
Kadikoy, 81300
Istanbul, Turkey
Phone: 90-216-347-2286
FAX: 90-216-336-8566
TLX: 821-29505

WORLD HEADQUARTERS
2222 Wellington Court
Lisle, Illinois 60532 U.S.A.
Tel: 708-969-4550
Fax: 708-969-1352
Tlx: 25-4069

AMERICAS HEADQUARTERS
Lisle, Illinois
Tel: 708-969-4550
Fax: 708-969-1352
Tlx: 25-4069

EUROPEAN HEADQUARTERS
Munich, Germany
Tel: 89-413092-0
Fax: 89-401527

FAR EAST NORTH HEADQUARTERS
Kanagawa, Japan
Tel: 81-462-2336
Fax: 81-462-2361

FAR EAST SOUTH HEADQUARTERS
Jurong Town, Singapore
Tel: 65-268-6868
Fax: 65-265-6044
Tlx: 786-24583

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