IBM INDUSTRIAL PRODUCTS

8

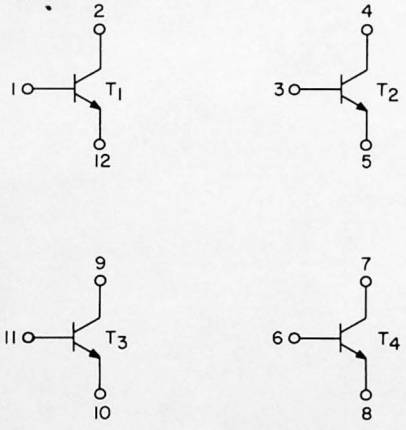
FOUR TRANSISTORS (FTX-1A) MODULE P/N 841529

341429

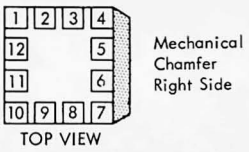
Functional Description

The Four Transistor, FTX-1A, module consists of four single transistors with individual base, emitter and collector leads terminated at specific pins. The individual transistors offer the circuit designer uniformity of circuit packaging as well as flexibility in application with other SLT modules. The FTX-1A has the highest collector to emitter breakdown voltage of the three medium speed transistor modules.

Schematic



Terminal Configuration



Maximum Ratings

I_E = 50 Milliamps

FTX-1A Test Conditions

INDIVIDUAL DEVICE PARAMETER TESTS					
TESTS	TEST CONDITIONS	T °C	LIMITS		
			MIN	MAX	UNITS
BV_{CEO}	I_C = 5ma, I_B = 0	25	10		V
BV_{CBO}	I_C = 10 μa	25	12		V
BV_{EBO}	I_E = 10 μa	25	2.5		V
I_{CEX}	V_{CE}=10V, V_{BE} = .35V	75		20	μa
H_{FE}	I_E = 10.0ma, V_{CB} = 0V	25	25		
τ_s	See Fig 1	25		50	nsec
/GAIN/	f = 100 mhz, I_E = 10ma, R_L= 50Ω V_{CB} = 3.0V	25	1.5		
C_{ib}	V_{EB} = 0, f = 1 ± .5 mhz	25		7.5	pf
C_{ob}	V_{CB} = 0, f = 1 ± .5 mhz	25		6.5	pf
V_{CE}	I_C = 1.0ma, I_B = .05ma	25		.30	V
V_{CE}	I_C = 10.0ma, I_B = .5ma	25		.30	V
V_{CE}	I_C = 50.0ma, I_B = 2.5ma	25		.50	V
V_{BE}	I_C = 1.0ma, I_B = .05ma	25	.60	.75	V
V_{BE}	I_C = 10.0ma, I_B = .5ma	25	.70	.85	V
V_{BE}	I_C = 50.0ma, I_B = 2.5ma	25	.80	1.10	V
h_{rb}	I_C = 1.0ma, V_{CB} = + 1V, f = 10mhz	25		.05	

τ_s Test Circuit

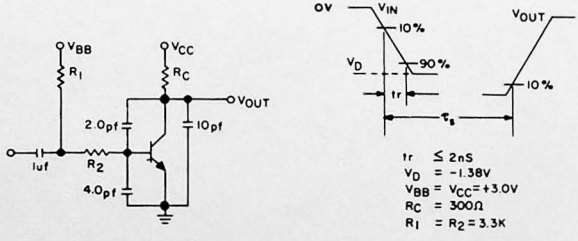


FIGURE 1