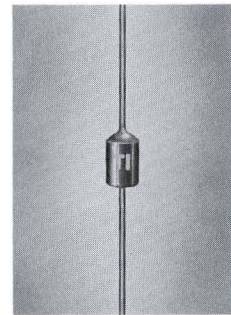




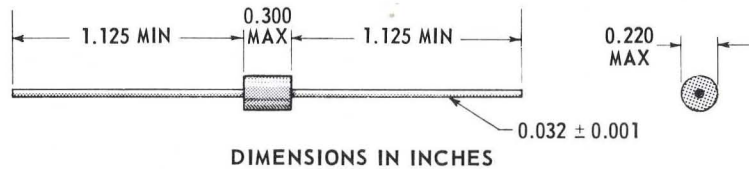
- 750 ma Average Rectified Current
- 200 to 600 Volts Peak Inverse Voltage
- Designed for Reliable Operation in Entertainment And Industrial Applications



TYPES 1N2069, 1N2070, 1N2071
BULLETIN NO. DL-S 1170, JANUARY 1960
REPLACES BULLETIN NO. DL-S 1043, FEBRUARY 1959

mechanical data

Pure silver leads allow easy soldering[†] with high thermal and electrical conduction. The epoxy encapsulated body provides minimum lead to case insulation resistance of 10^{10} ohms at 600 volts. The approximate weight of the rectifier is 0.5 grams.



[†] Because of the high thermal conductivity of the pure silver leads, care must be exercised when soldering to avoid damaging the rectifier. It is recommended that a heat sink, such as long nose pliers, be applied between the point of solder and the rectifier body. If possible, keep the leads from direct contact with the soldering iron tip, and complete the soldering operation within 5 seconds. If shorter leads are required, they should be kept to a minimum of one-half inch from the rectifier body. When dip soldering, maintain the solder pot at a temperature under 240°C and dip for a maximum of five seconds with immersion no closer than one-half inch from the rectifier body.

maximum ratings

PARAMETER	1N2069	1N2070	1N2071	UNIT
V_R Peak Inverse Voltage	200	400	600	v
V_{ac} RMS Voltage (Sinusoidal Input)	140	280	420	v
I_F Average Rectified Forward Current at 25°C	750	750	750	ma
I_F Average Rectified Forward Current at 100°C	500	500	500	ma
i_f Recurrent Peak Current at 25°C	6	6	6	a
T_A Ambient Operating Temperature	- 65 to + 100			°C

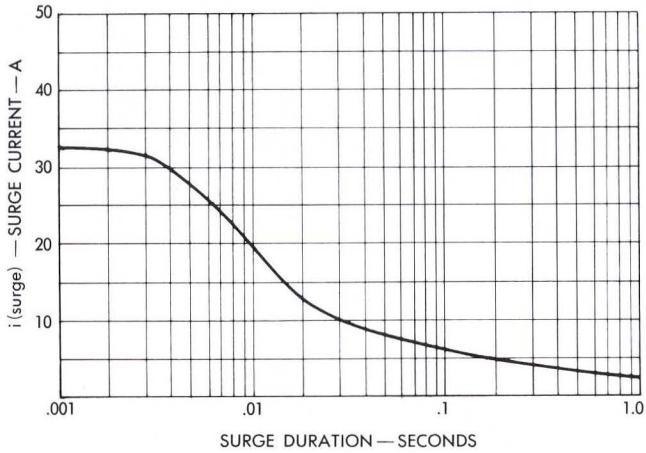
electrical specifications

I_R Max. d-c Reverse Current at PIV at +25°C	10	10	10	μa
I_r Max. Dynamic Reverse Current at 100°C*	50	50	50	μa
V_F Max. Forward Voltage Drop at $I_F = 500ma$ at 25°C	1.2	1.2	1.2	v
V_f Max. Dynamic Forward Voltage Drop at 100°C*	0.5	0.5	0.5	v

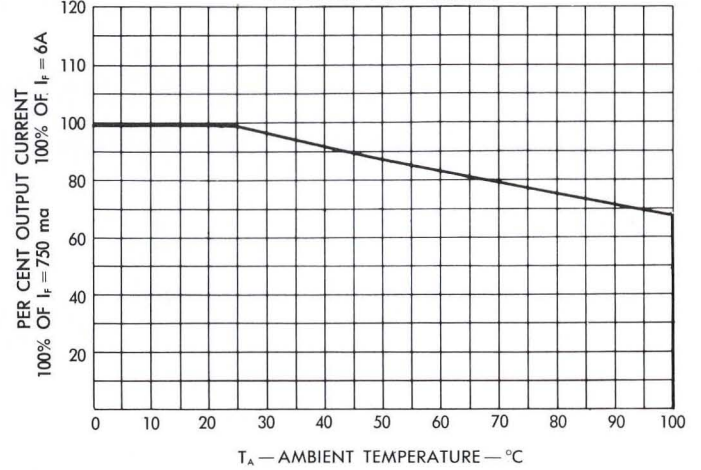
*Measured in Dynamic Test Circuit (last page) with $I_F = 500ma$ and PIV Applied.

CURRENT RATINGS

SURGE CURRENT RATING AT 100°C

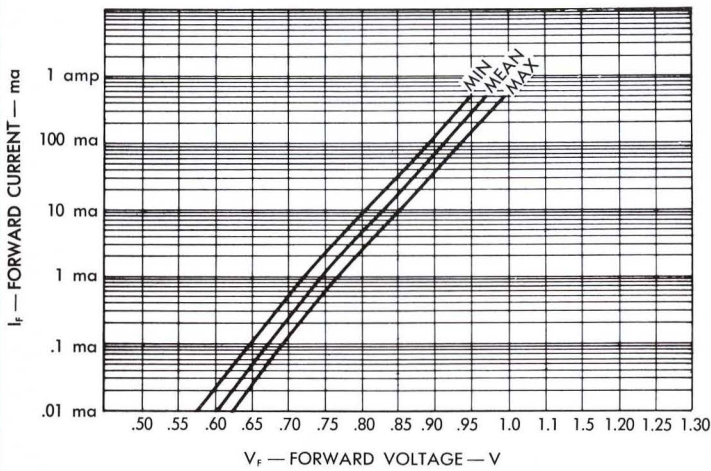


TEMPERATURE RATING CURVE FOR AVERAGE RECTIFIED CURRENT AND RECURRENT PEAK CURRENT

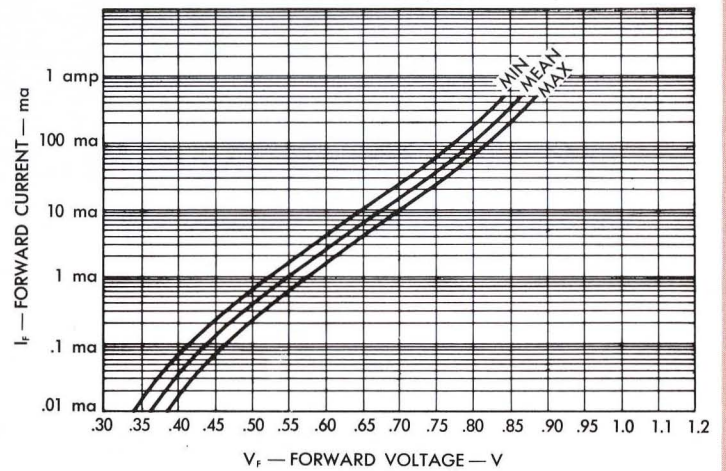


PRODUCTION DISTRIBUTIONS (IN2069, IN2070, IN2071)

FORWARD CHARACTERISTICS AT AMBIENT TEMPERATURE = -65° C (FOR ALL TYPES)



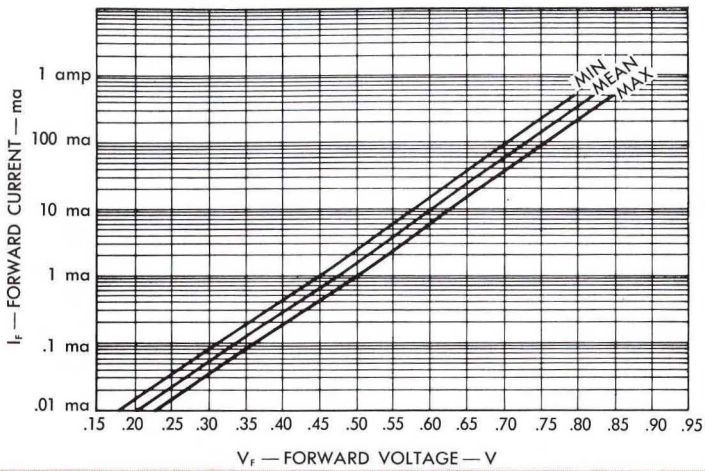
FORWARD CHARACTERISTICS AT AMBIENT TEMPERATURE = 25° C (FOR ALL TYPES)



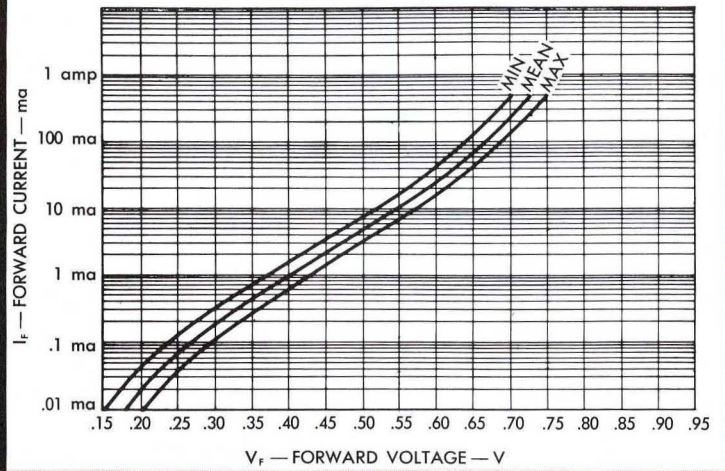
TYPES IN2069, IN2070, IN2071

PRODUCTION DISTRIBUTIONS

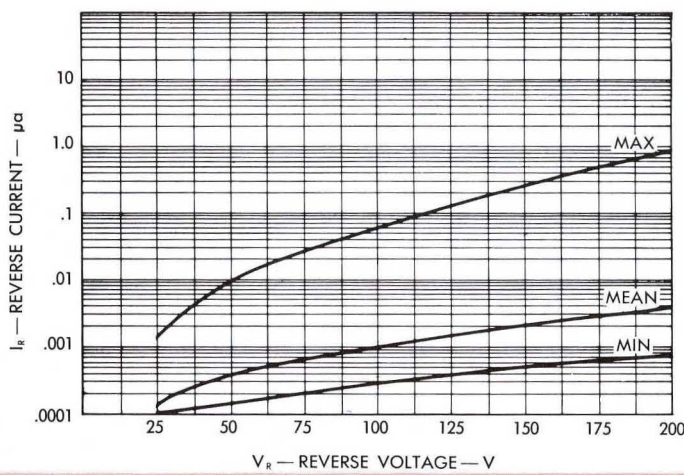
FORWARD CHARACTERISTICS AT AMBIENT TEMPERATURE = 65° C (FOR ALL TYPES)



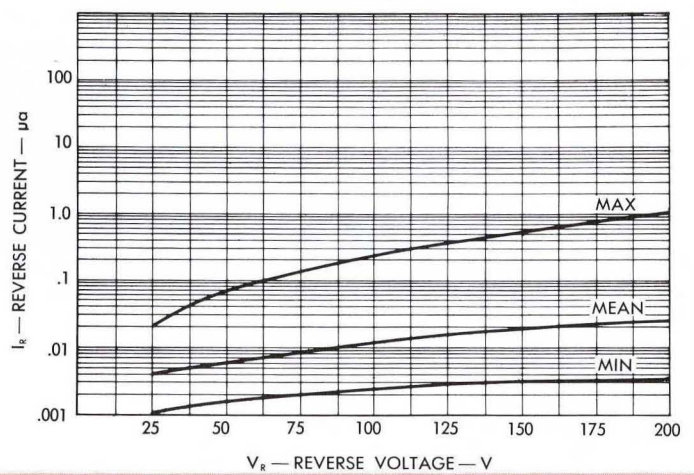
FORWARD CHARACTERISTICS AT AMBIENT TEMPERATURE = 100° C (FOR ALL TYPES)



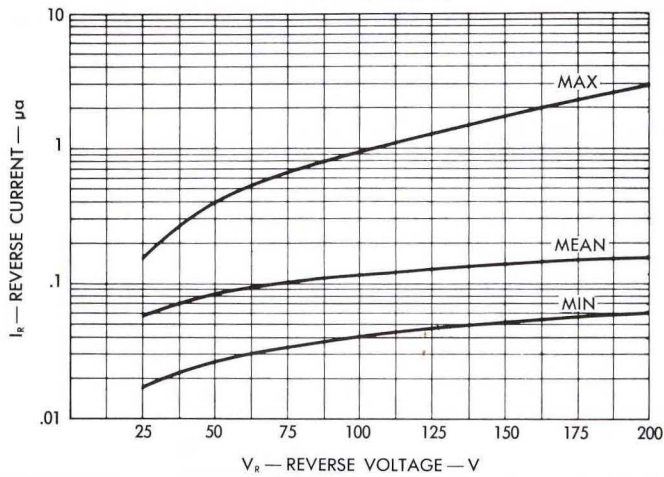
IN2069 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = -65° C



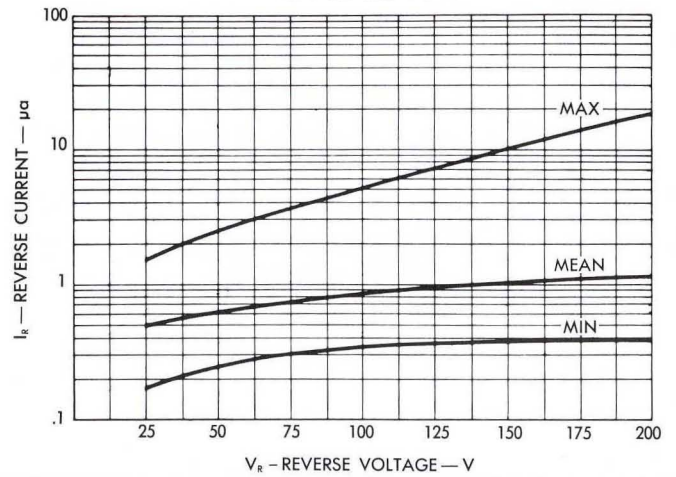
IN2069 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 25° C



IN2069 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 65° C

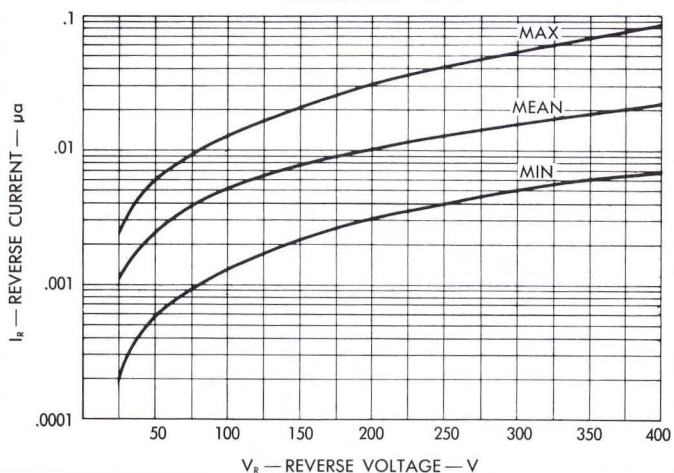


IN2069 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 100° C

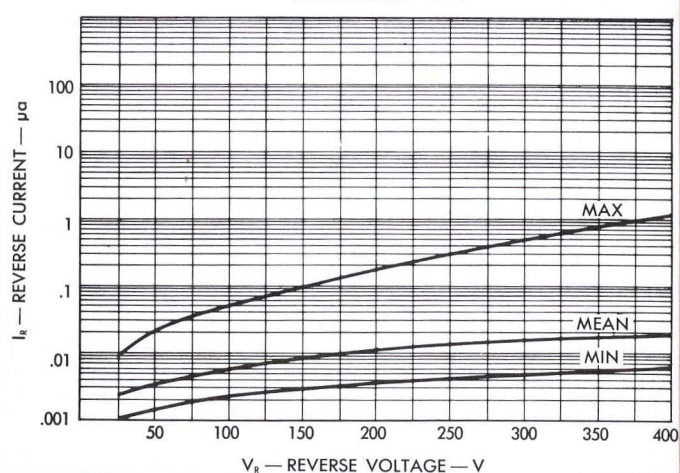


PRODUCTION DISTRIBUTIONS

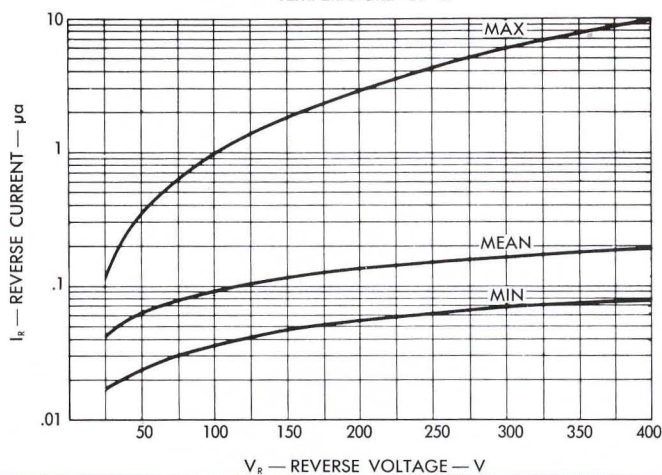
IN2070 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = -65° C



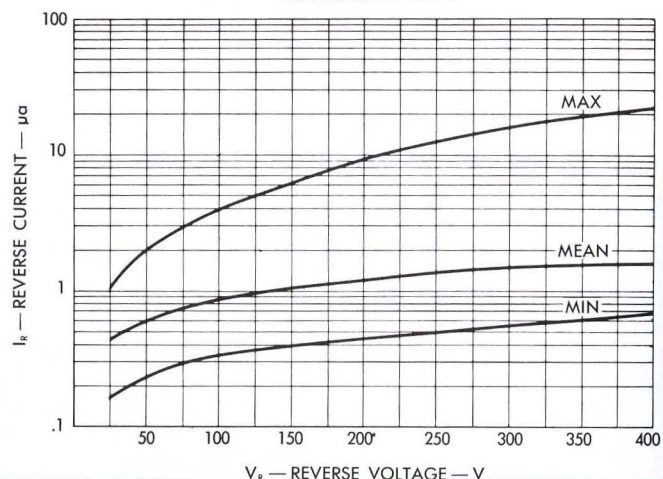
IN2070 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 25° C



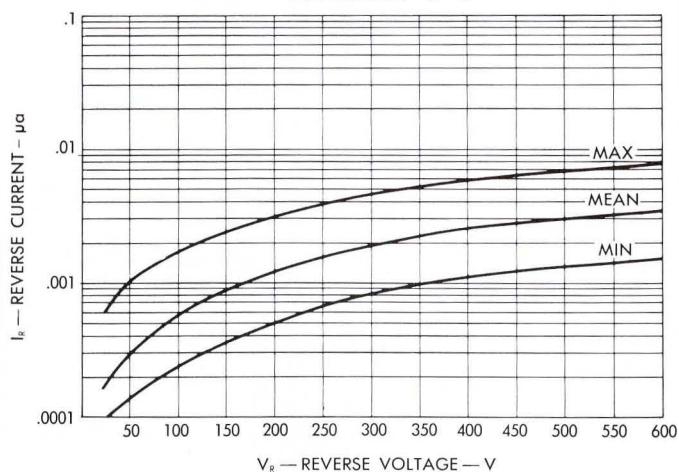
IN2070 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 65° C



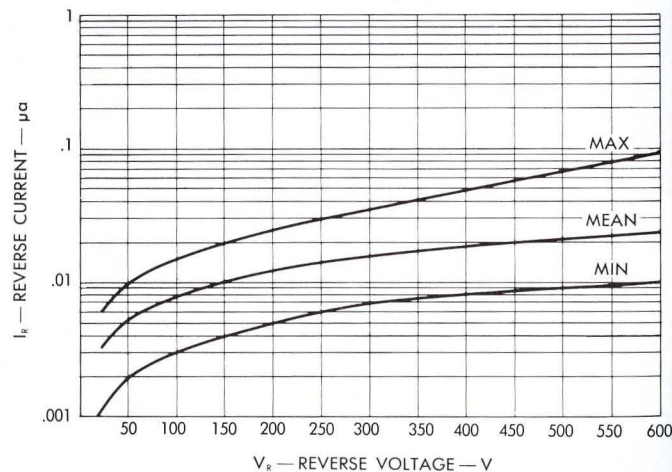
IN2070 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 100° C



IN2071 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = -65° C

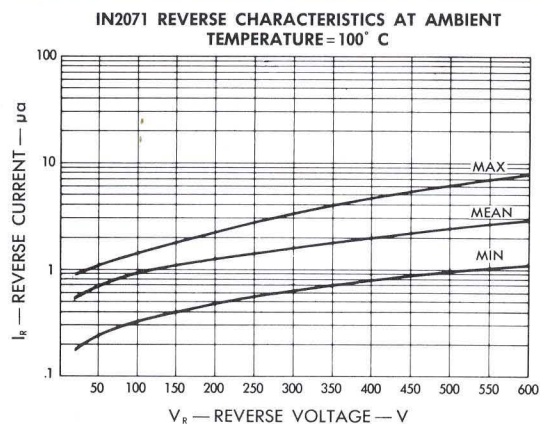
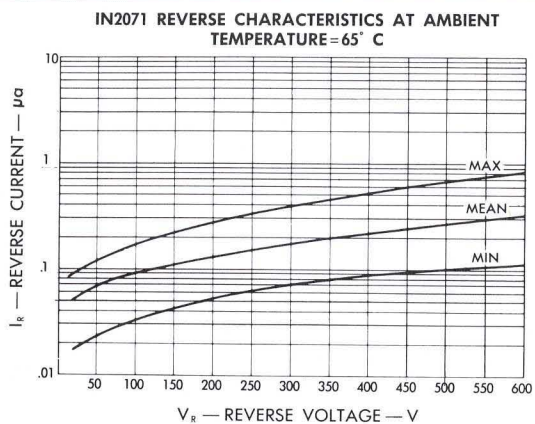


IN2071 REVERSE CHARACTERISTICS AT AMBIENT TEMPERATURE = 25° C

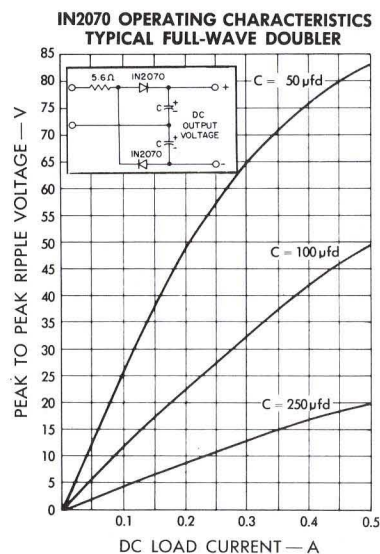
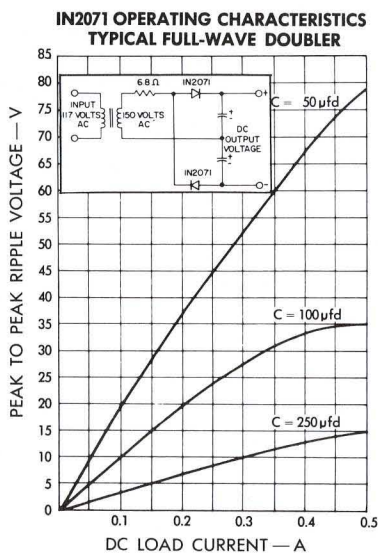
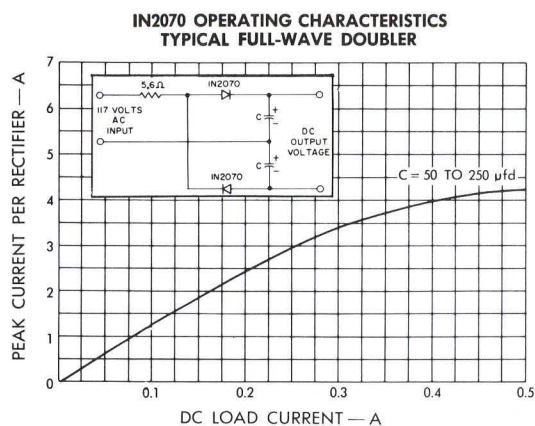
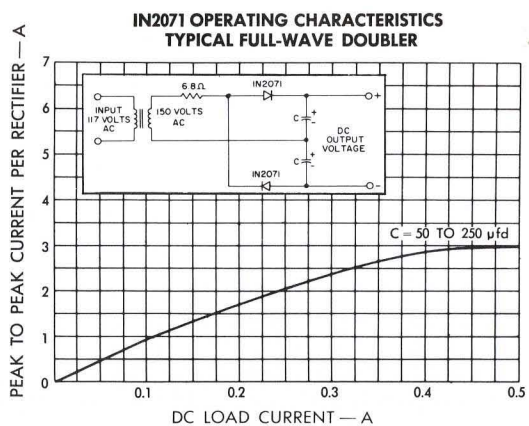


TYPES IN2069, IN2070, IN2071

PRODUCTION DISTRIBUTIONS



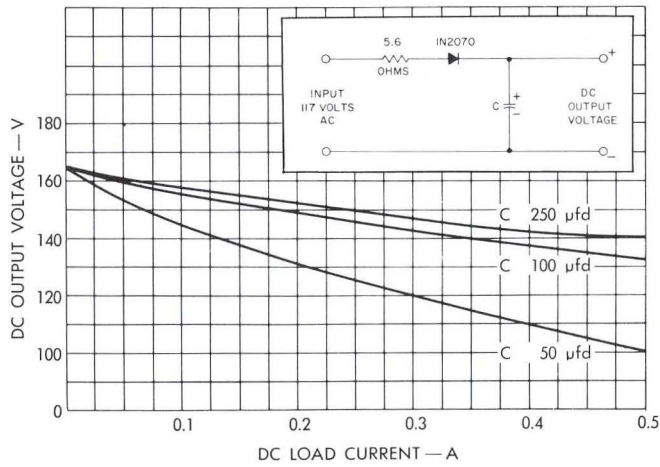
OPERATING CHARACTERISTICS



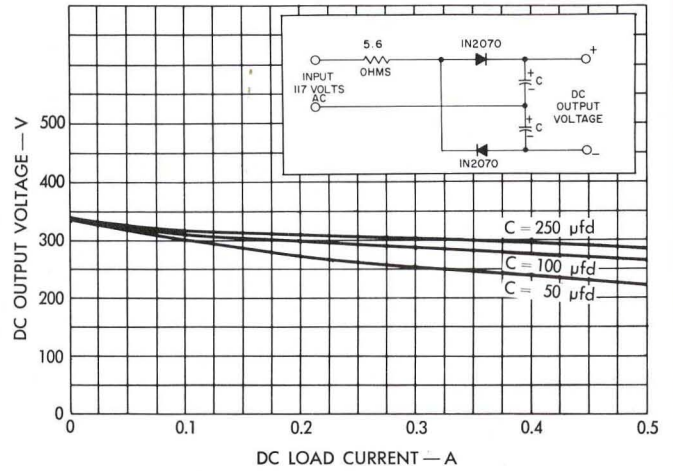
TYPES IN2069, IN2070, IN2071

OPERATING CHARACTERISTICS

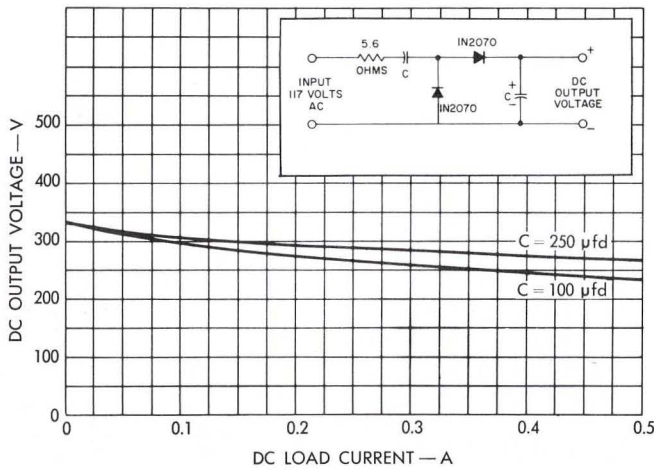
IN2070 OPERATING CHARACTERISTICS
TYPICAL HALF-WAVE



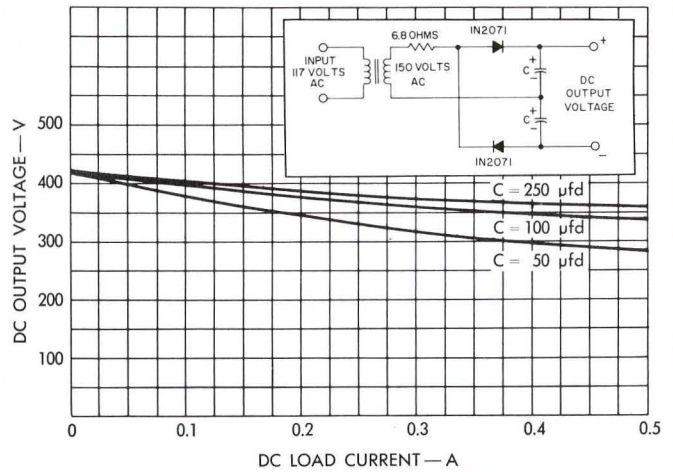
IN2070 OPERATING CHARACTERISTICS
TYPICAL FULL-WAVE DOUBLER



IN2070 OPERATING CHARACTERISTICS
TYPICAL HALF-WAVE DOUBLER



IN2071 OPERATING CHARACTERISTICS
TYPICAL FULL-WAVE DOUBLER



DYNAMIC TEST CIRCUIT

