INTERNATIONAL SEMICONDUCTOR INC.

10 Amp SINGLE PHASE BRIDGE

TU1000 thru TU1010

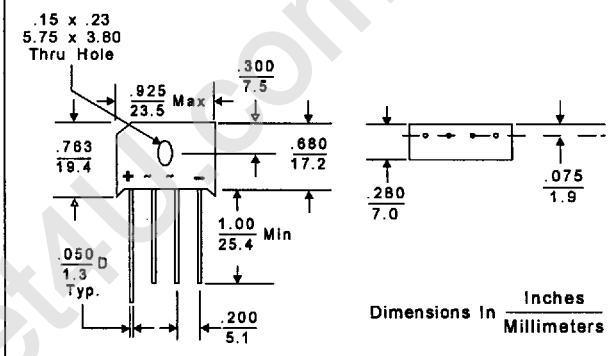
FEATURES:

Plastic material used carries Underwriters Laboratory Flammability Classification 94 V-O
Low Leakage
Surge overload rating - 200 amperes peak
Ideal for printed circuit board applications
Exceeds environmental standards of MIL-STD 19500

MECHANICAL DATA:

CASE: Reliable low cost construction utilizing transfer molding techniques
TERMINALS: Leads Solderable per MIL-STD-202, Method 208
POLARITY: Polarity symbols molded on body
MOUNTING POSITION: Any
WEIGHT: 0.28 OUNCE (7.86 GRAM)

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
10.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified
Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

	TU1000	TU1001	TU1002	TU1004	TU1006	TU1008	TU1010	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_c = 100 °C at T_A = 45 °C	10.0 10.0							A A
Peak Forward Surge Current 8.3 ms single half sine wave superimposed on rated load	300							A_{PK}
Maximum Instantaneous Forward Voltage Drop per element at 5.0 A	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element T_J=25°C T_J=100°C	10.0 1.0							ua ma
Maximum Thermal Resistance $R_{\theta JC}$ (Note 1)	8.0							°C/W
Operating Temperature Range	-55 to +125							°C
Storage Temperature Range	-55 to +150							°C

Note 1: Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length

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TU1000 thru TU1010 BRIDGES
RATING AND CHARACTERISTIC CURVES

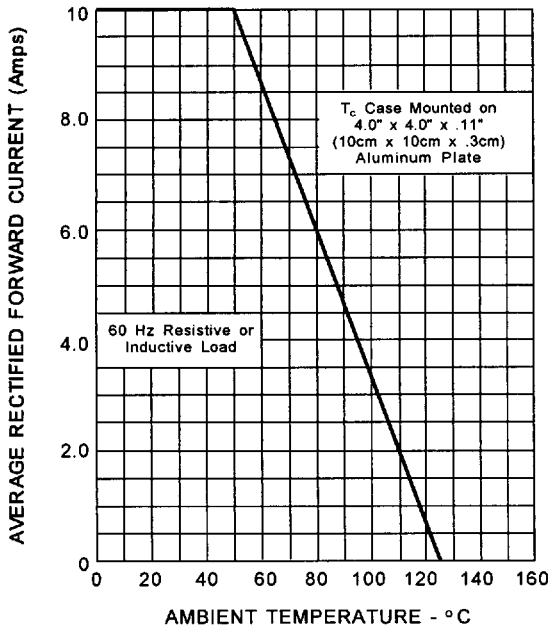

FIG.2 - FORWARD CURRENT DERATING CURVE

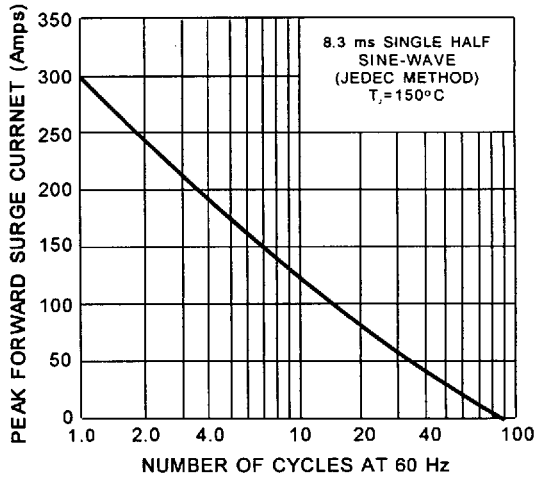

FIG. 3 - MAXIMUM NON-REPETETIVE SURGE CURRENT

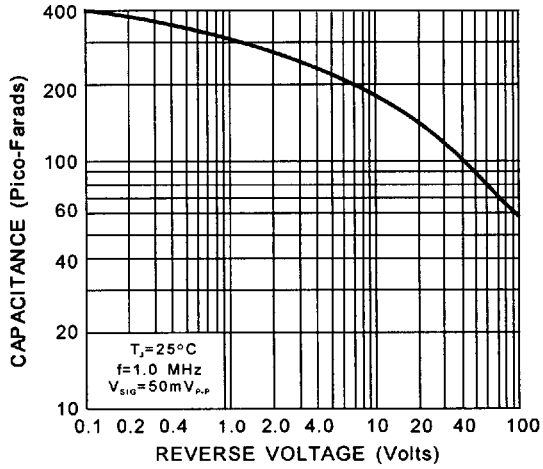

FIG. 4 - TYPICAL JUNCTION CAPACITANCE

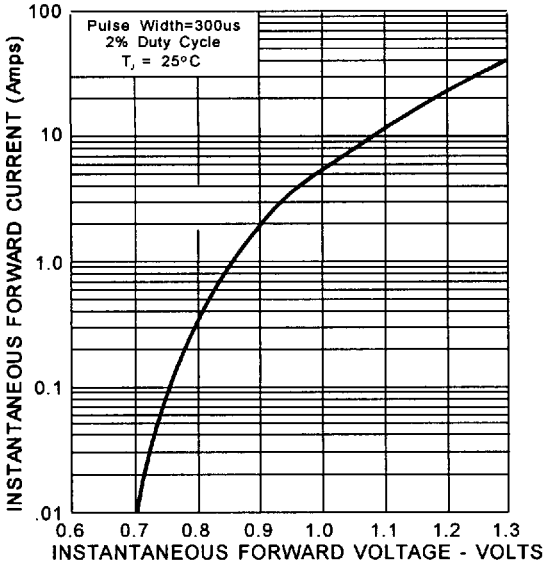

FIG. 5 - TYPICAL FORWARD CHARACTERISTICS PER LEG

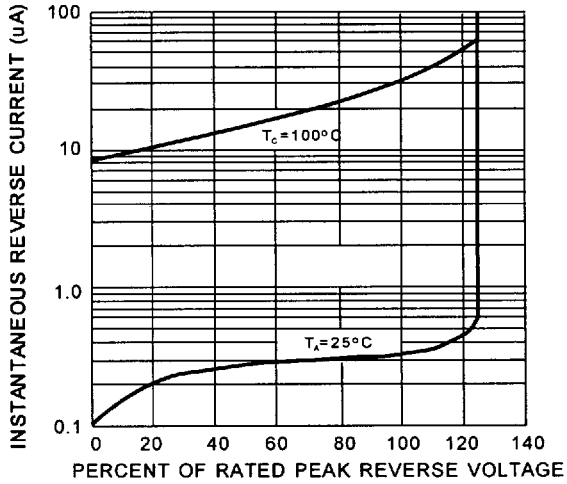

FIG. 6 - TYPICAL REVERSE CHARACTERISTICS