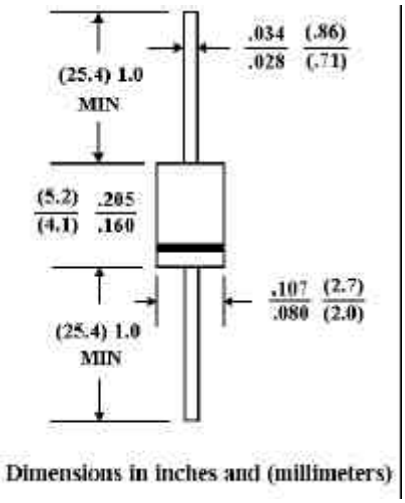
TRANSYS ELECTRONICS LIMITED

SB120 THRU SB1100

1 AMPERE SCHOTTKY BARRIER RECTIFIERS

VOLTAGE - 20 to 100 Volts CURRENT - 1.0 Ampere

DO-41



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwriters Laboratory Flammabi ty Classification 94V-O uti zing Flame Retardant Epoxy Molding Compound
- 1 ampere operation at T_A=75 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polar ty protection applications

MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.012 ounce, 0.34 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

	SB120	SB130	SB140	SB150	SB160	SB180	SB1100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	26	35	42	56	80	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Forward Voltage at 1.0A	0.50			0.70		0.85		V
Maximum Average Forward Rectified Current .375" Lead Length at T_A=75 ¢J	1.0							A
Peak Forward Surge Current I_{FM} (surge) 8.3msec. single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Fu Load Reverse Current, Full Cycle Average at T_A=75 ¢J	30							mA
Maximum Reverse Current T_A=25 ¢J at Rated Reverse Voltage T_A=100 ¢J	0.5 10.0							mA
Typical Junction capacitance (Note 1)	110							pF
Typical Thermal Resistance £KJA (Note 2)	80							¢J/W
Operating and Storage Temperature Range	-50 TO +125							¢J

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal Resistance Junction to Ambient

RATING AND CHARACTERISTIC CURVES

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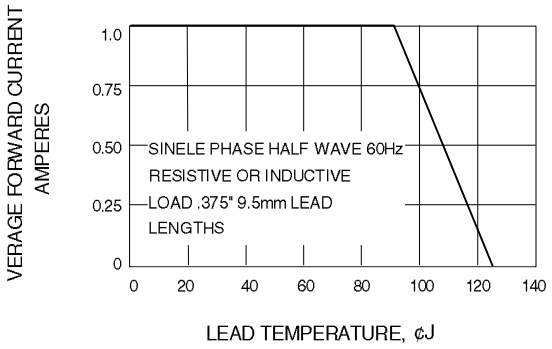

Fig. 1-FORWARD CURRENT DERATING CURVEE

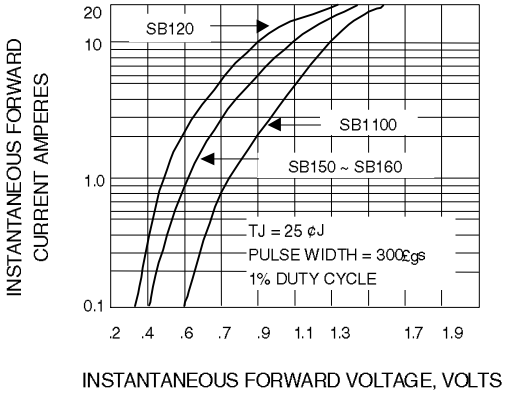

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

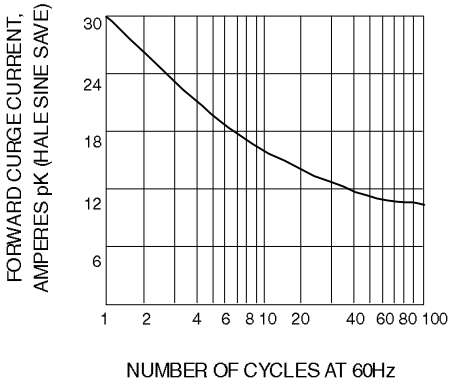

Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

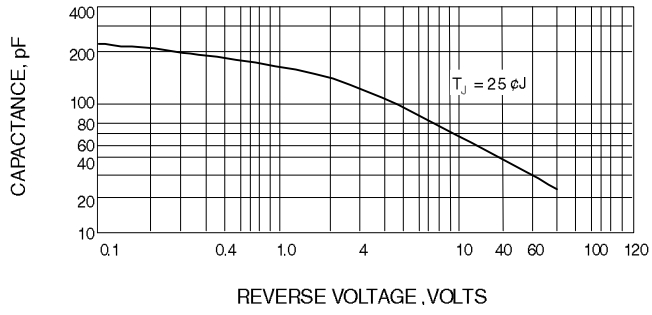

Fig. 4-TYPICAL JUNCTION CAPACITANCE