



DATA SHEET

SEMICONDUCTOR

SB120~SB1200

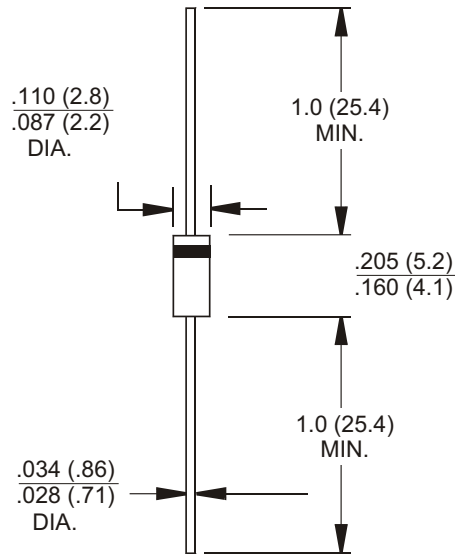
1 AMPERE SCHOTTKY BARRIER RECTIFIERS VOLTAGE 20 to 200 Volts CURRENT - 1.0 Ampere



DO-41 Unit:inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- 1 ampere operation at TA=75°C with no thermal runaway.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage,high frequency inverters ,free wheeling , and polarity protection applications .
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request



MECHANICAL DATA

- Case: DO-41 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202,Method 208
- Polarity: Color band denotes cathode
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.

	SB120	SB130	SB140	SB150	SB160	SB180	SB1100	SB1200	UNIT
Peak Reverse Voltage, Repetitive ; VRM	20	30	40	50	60	80	100	200	V
Maximum RMS Voltage	14	21	28	35	42	56	70	140	V
DC Reverse Voltage; VR	20	30	40	50	60	80	100	200	V
Maximum Forward Voltage at 1.0A	0.50		0.70		0.85		0.95		V
Maximum Average Forward Rectified Current .375" Lead Length at TA=75°C	1.0								A
Peak Forward Surge Current, IFM (surge):8. 3ms single half sine-wave superimposed on rated load(JEDEC method)	30.0								A
Maximum Full Load Reverse Current, Full Cycle Average at TA=75°C	30.0								mA
Maximum DC Reverse Current at TA=25°C	0.5								mA
At Rated DC Blocking Voltage TA=100°C	10.0								mA
Typical Junction capacitance (Note 1)	110								pF
Typical Thermal Resistance RθJA (Note 2)	80								/W
Operating Temperature Range TJ	-55 to +125			-55 to +150					

NOTES:

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

DEVICE CHARACTERISTICS

SB120~SB1200

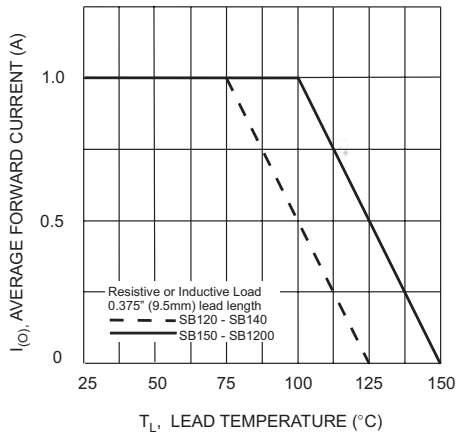


Fig. 1 Forward Current Derating Curve

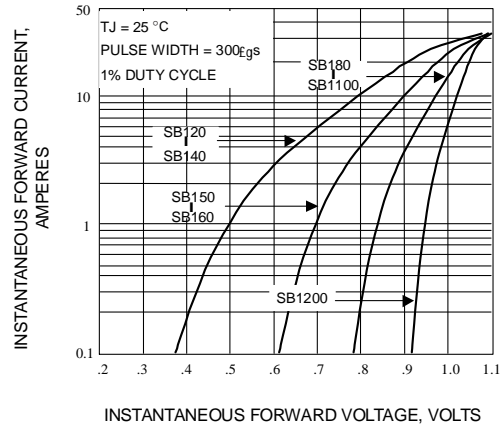


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

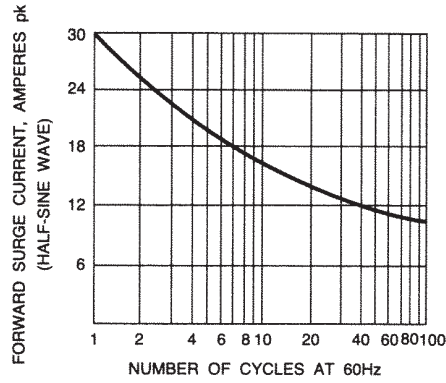


Fig. 3 - MAXIMUM NON-REPETITIVE SURGE CURRENT

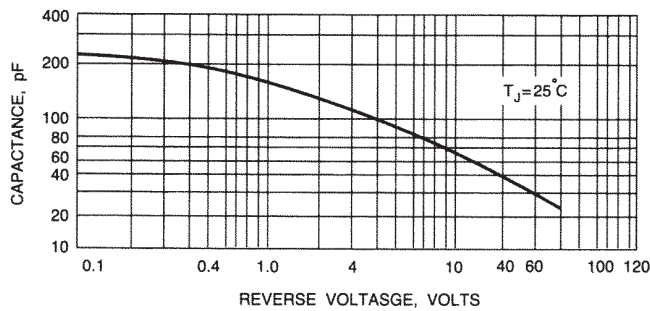


Fig. 4 - TYPICAL JUNCTION CAPACITANCE