PANJIT SEMI CONDUCTOR

DATA SHEET

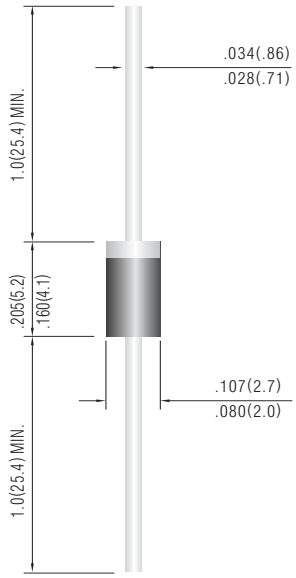
SB120~SB1100

1 AMPERE SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 50 to 100 Volts CURRENT - 1.0 Ampere

Unit: inch (mm)

DO-41



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- 1 ampere operation at T_A=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 .

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

Weight: 0.012 ounces, 0.34grams

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	UNIT
Peak Reverse Voltage,Repetitive ; V_{RM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
DC Reverse Voltage; V_R	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°C	1.0							A
Peak Forward Surge Current, IFM (surge):8. 3ms single half sine-wave superimposedon rated load(JEDEC method)	30.0							A
Maximum Full Load Reverse Current,Full Cycle Average at T_A=75°C	30.0							mA
Maximum DC Reverse Current at T_A=25°C At Rated DC Blocking Voltage T_A=100°C	0.5 10.0							mA mA
Typical Thermal Resistance RθJA(Note 1)	110							pF
Typical Junction capacitance (Note 2)	80							°C / W
Operating Temperature Range T_J	-50 to +125							°C

NOTES:

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

RATING AND CHARACTERISTIC CURVES

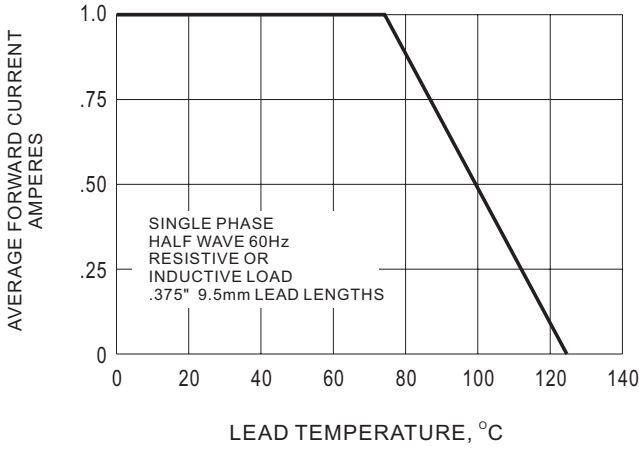


Fig.1-FORWARD CURRENT DERATING CURVE

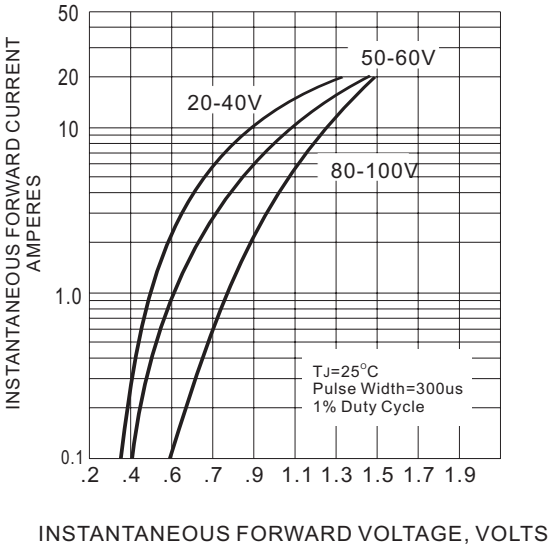


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

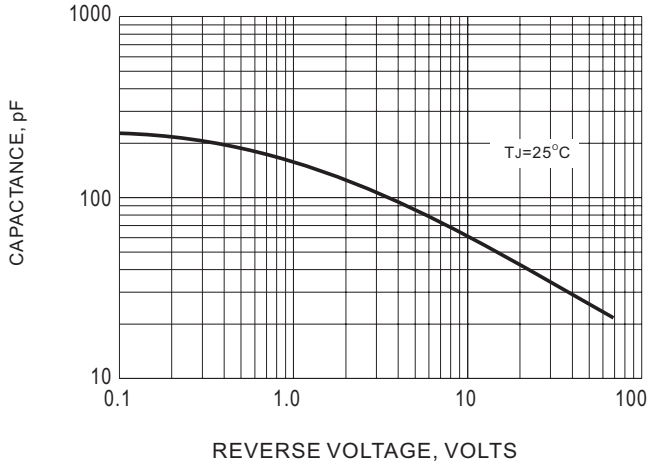


Fig.3-TYPICAL JUNCTION CAPACITANCE

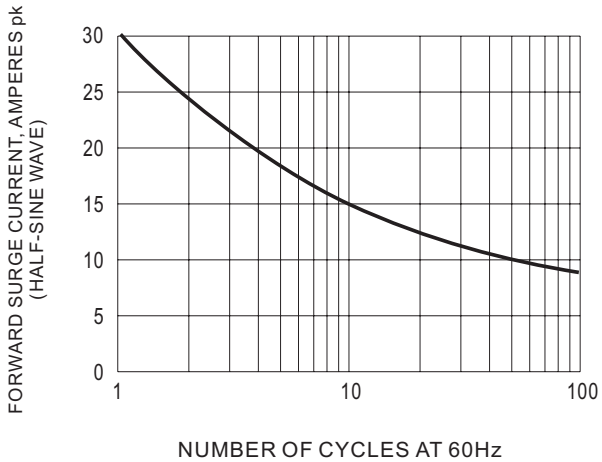


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT