PANJIT SEMI CONDUCTOR

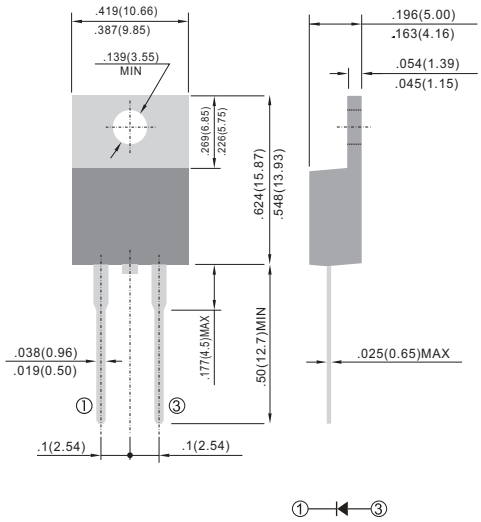
DATA SHEET

SB620~SB660

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts **CURRENT** 6.0 Amperes

TO-220AC Unit : inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.
- Both normal and Pb free product are available : Normal : 80~95% Sn, 5~20% Pb Pb free: 98.5% Sn above

MECHANICAL DATA

Case: TO-220AC full molded plastic package

Terminals: Lead solderable per MIL-STD-202, Method 208

Polarity: As marked.

Mounting Position: Any

Weight: 0.08 ounces, 2.24grams.

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%

PARAMETER	SYMBOL	SB620	SB630	SB640	SB650	SB660	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Current .375"(9.5mm) lead length at Tc =75°C	I_{AV}	6.0					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	75					A
Maximum Forward Voltage at 6.0A	V_F	0.55			0.70		V
Maximum DC Reverse Current Tc=25°C at Rated DC Blocking Voltage Tc=100°C	I_R	0.2 15					mA
Typical Thermal Resistance	RθJC RθJA	6 80					°C / W
Operating Junction Temperature Range	T_J	-50 to +125					°C
Storage Temperature Range	T_J,T_{STG}	-50 to +150					°C

NOTES:

Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

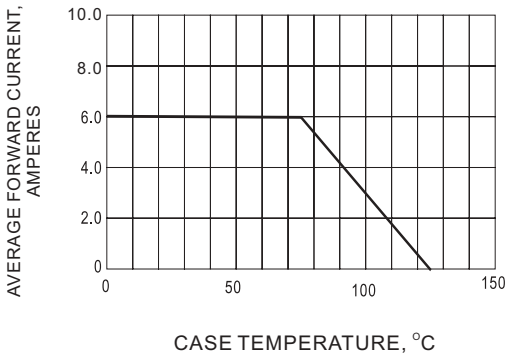


Fig.1- FORWARD CURRENT DERATING CURVE

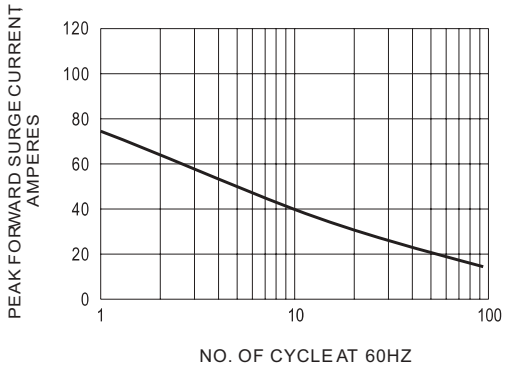


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

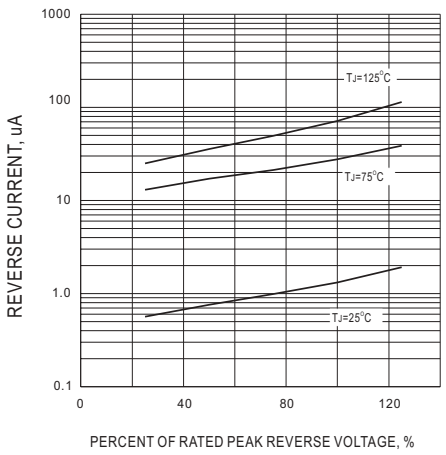


Fig.3- TYPICAL REVERSE CHARACTERISTIC

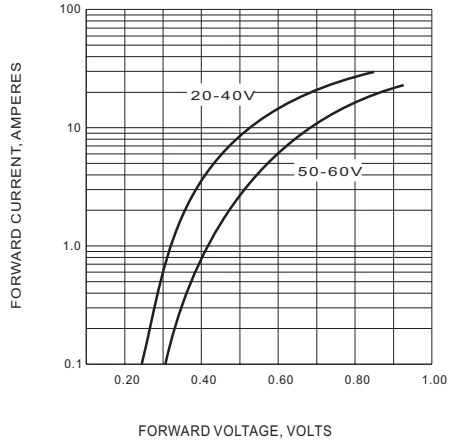


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHRACTERISTIC