PANJIT SEMI CONDUCTOR

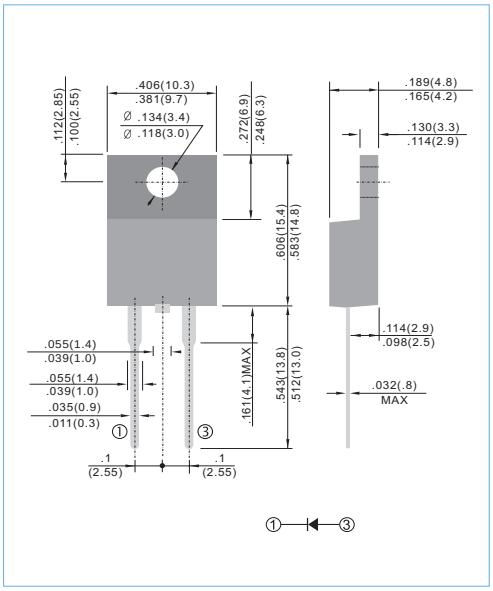
DATA SHEET

SB1020F~SB10150F

ISOLATION SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 150 Volts **CURRENT** 10 Amperes

ITO-220AC Unit : inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. 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.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICALDATA

Case: ITO-220AC Molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: As marked.

Standard packaging: 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	SB10 20F	SB10 30F	SB10 40F	SB10 45F	SB10 50F	SB10 60F	SB10 80F	SB10 100F	SB10 150F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	V
Maximum Average Forward Current .375" (9.5mm) lead length at Tc =100℃	I_{AV}	10									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150									A
Maximum Forward Voltage at 10A	V_F	0.55				0.75		0.85		0.92	V
Maximum DC Reverse Current TA=25℃ at Rated DC Blocking Voltage TA=100℃	I_R	0.5 50									mA
Typical Thermal Resistance	$R_{\theta JA}$	60									℃/ W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 50 to + 125									℃

Note.

Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

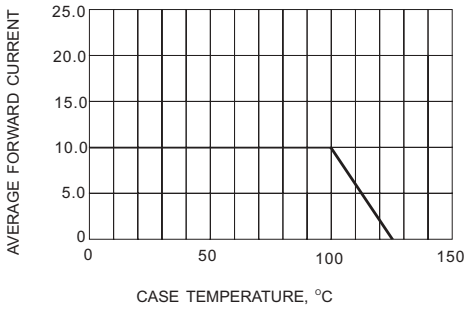


Fig.1- FORWARD CURRENT DERATING CURVE

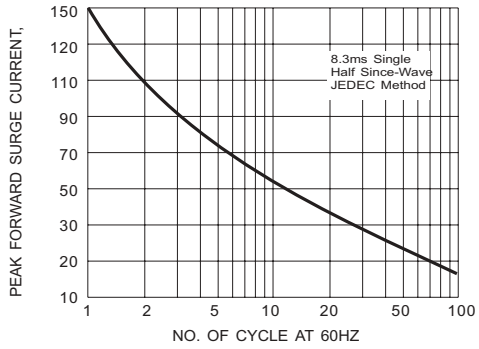


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

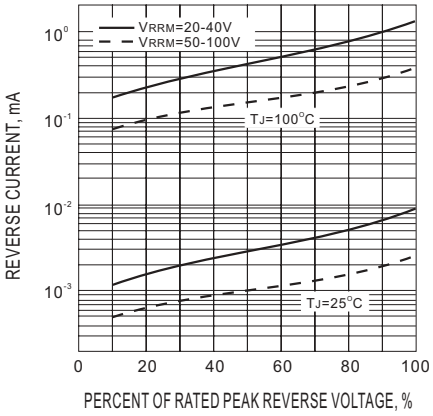


Fig.3- TYPICAL REVERSE CHARACTERISTIC

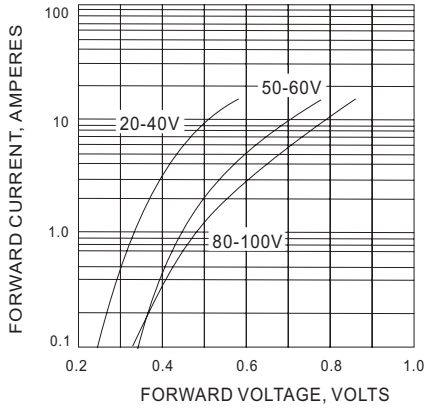


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC