PANJIT SEMI CONDUCTOR

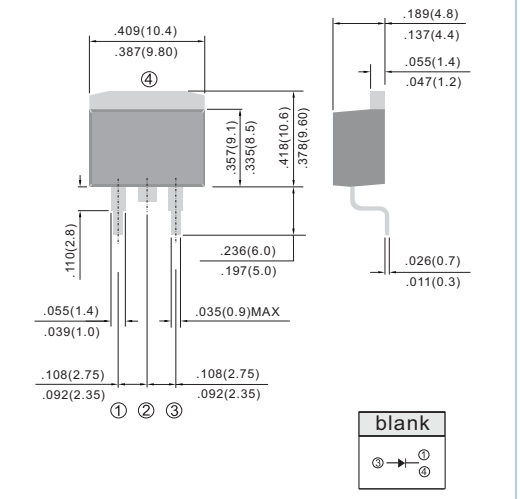
DATA SHEET

SB820D~SB8150D

D²PAK SURFACE MOUNTSCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 150 Volts **CURRENT** 8 Ampere

TO-263 / D²PAK 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: 99% Sn above

MECHANICALDATA

Case: TO-263/D²PAK molded plastic package

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

Polarity: As marked.

Mounting Position: Any

Weight: 0.06 ounces, 1.7 grams.

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	SB820D	SB830D	SB840D	SB850D	SB860D	SB880D	SB8100D	SB8150D	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	V
Maximum Average Forward Current .375"(9.5mm) lead length at Tc =100°C	I_{AV}	8								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 8.0A	V_F	0.55			0.75		0.85		0.92	V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I_R	0.5 50								mA
Typical Thermal Resistance	RθJC	6								°C / W
Operating Junction Temperature Rang	T_J	-50 to +125								°C
Storage Temperature Rang	T_J,T_{STG}	-50 to +150								°C

NOTES:

Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

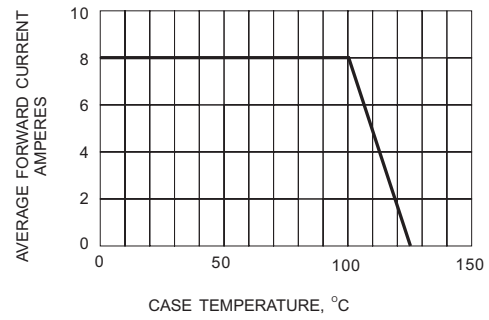


Fig.1- FORWARD CURRENT DERATING CURVE

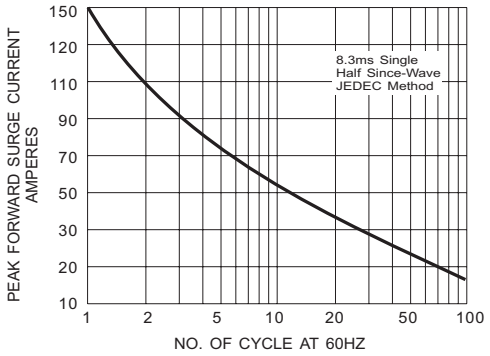


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

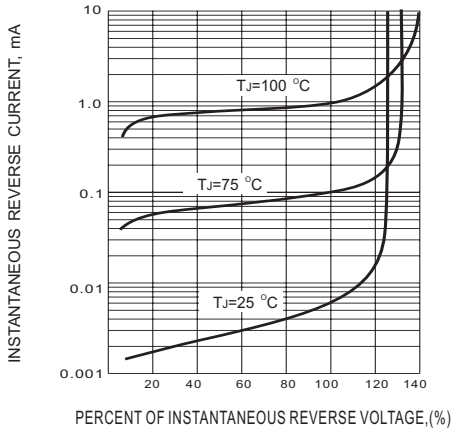


Fig.3- TYPICAL REVERSE CHARACTERISTICS

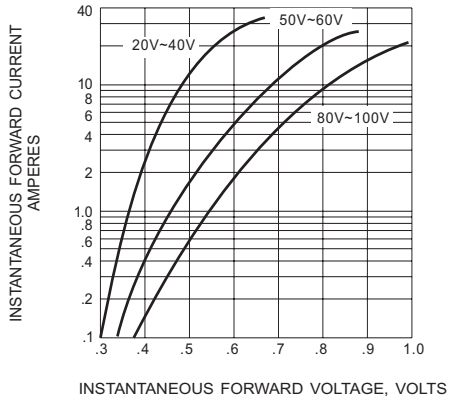


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS