PANJIT SEMI CONDUCTOR

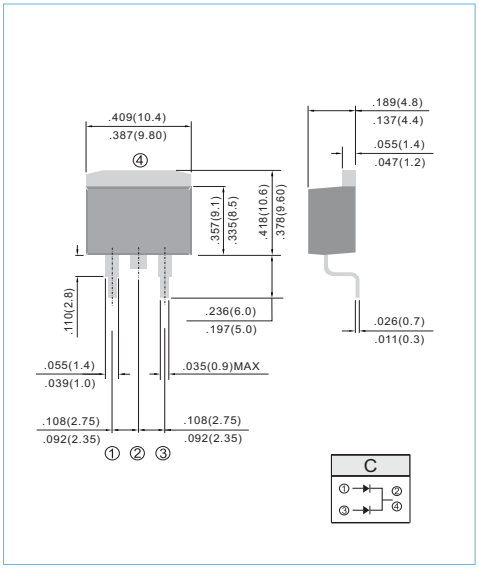
DATA SHEET

SB820DC~SB8150DC

D²PAK SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

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

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.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: D²PAK/TO-263 molded plastic package

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

Polarity: As marked.

Mounting Position: Any

Weight: 0.06 ounces, 1466mg

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	SB820DC	SB830DC	SB840DC	SB850DC	SB860DC	SB880DC	SB8100DC	SB8150DC	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 Rectified Current at Tc = 100°C	I_{AV}	8.0								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 4.0A per element	V_F	0.55			0.75		0.85		0.92	V
Maximum DC Reverse Current at T_c=25°C Rated DC Blocking Voltag T_c=100°C	I_R	0.5 100								mA
Typical Thermal Resistance	RθJA	60								°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-50 to +150								C

NOTES:

1. Ta = Tj (Junction temperature)
2. Thermal Resistance Junction to Case .

RATING AND CHARACTERISTIC CURVES

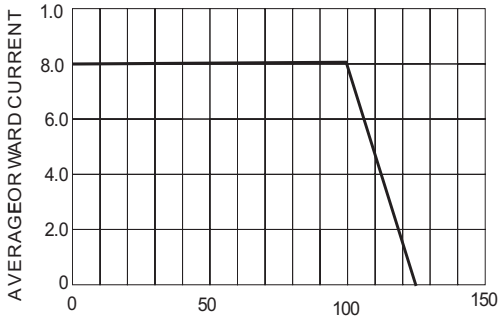


FIG.1-FORWARD CURRENT DERATING CURVE

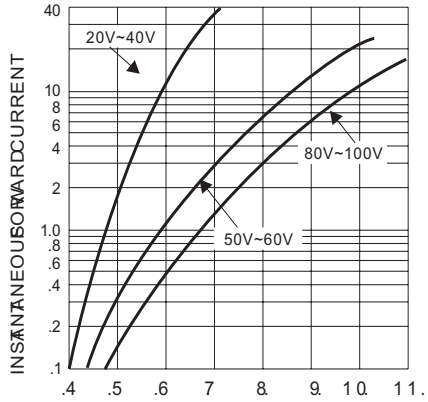


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

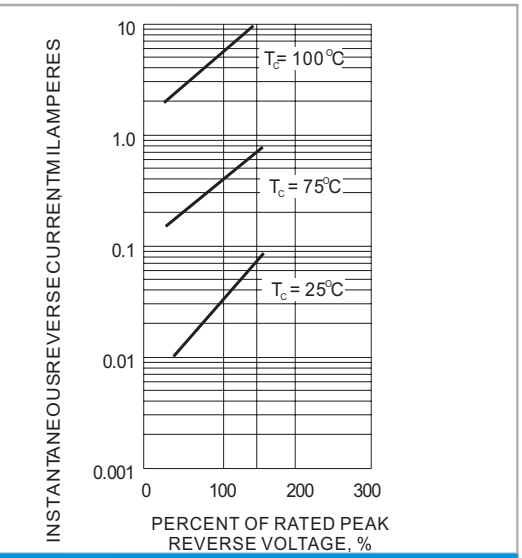


FIG.3-TYPICAL REVERSE CHARACTERISTICS

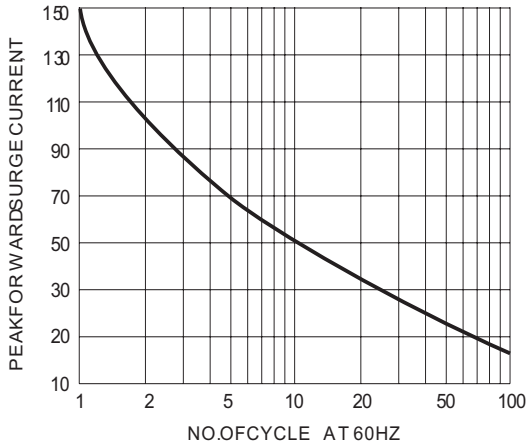


FIG.4-MAXIMUM NON-REPETITVE SURGE CURRENT

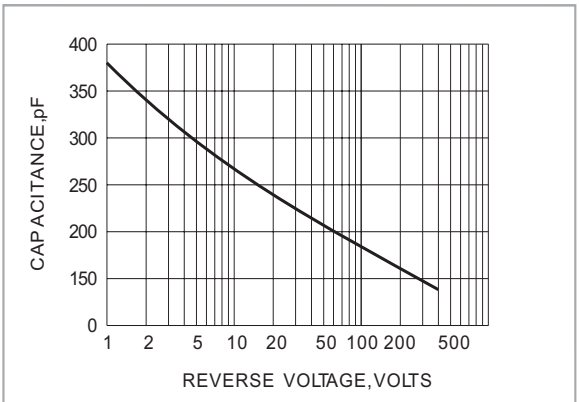


FIG.5-REVERSE VOLTAGE VOLTS