PANJIT SEMI CONDUCTOR

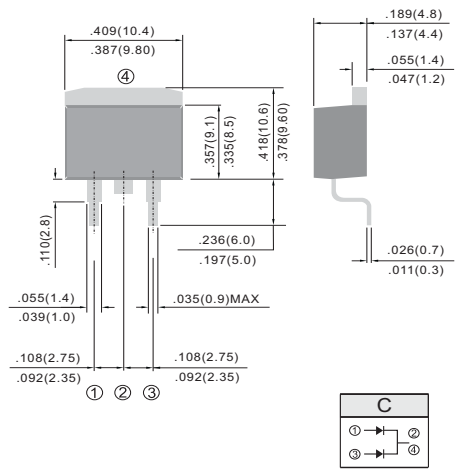
DATA SHEET

SB1620DC~SB16150DC

D²PAK SURFACE SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 150 Volts **CURRENT** 16 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

MECHANICALDATA

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, 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	SB1620 DC	SB1630 DC	SB1640 DC	SB1650 DC	SB1660 DC	SB1680 DC	SB16100 DC	SB1650 DC	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 = 90°C	I_{AV}	16								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 per leg	V_F	0.55			0.75		0.85		0.92	V
Maximum DC Reverse Current at T_A=25°C Rated DC Blocking Voltag T_A=100°C	I_R	0.5 100								mA
Typical Thermal Resistance	RθJC	2.0								°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-50 to +125								°C

RATING AND CHARACTERISTIC CURVES

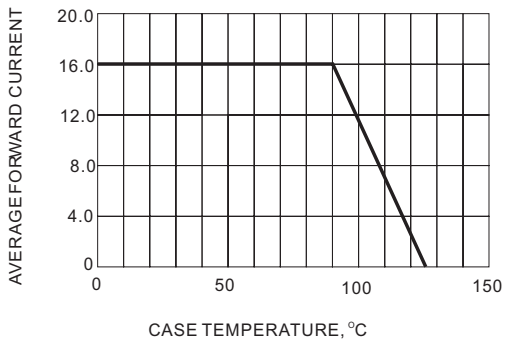


Fig.1- FORWARD CURRENT DERATING CURVE

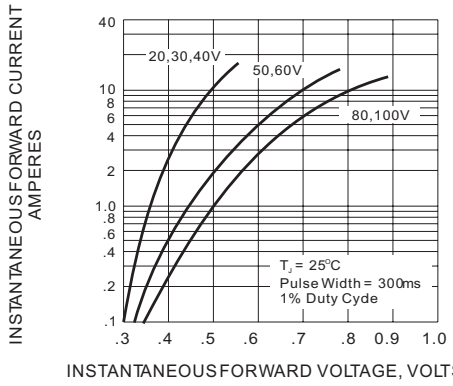


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHRACTERISTICS

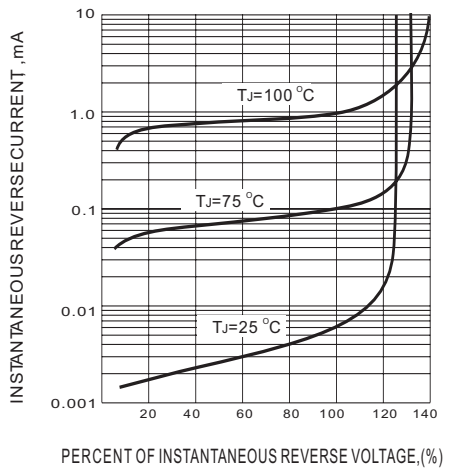


Fig.3- TYPICAL REVERSE CHARACTERISTIC

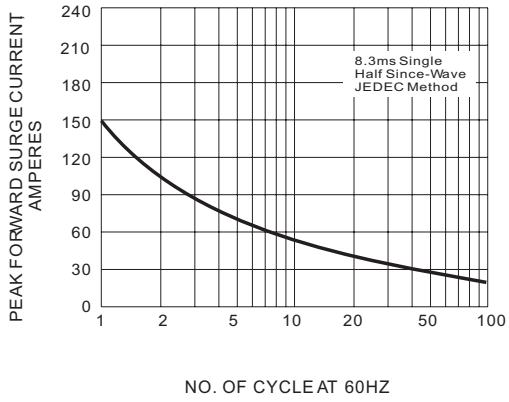


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT