



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 forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

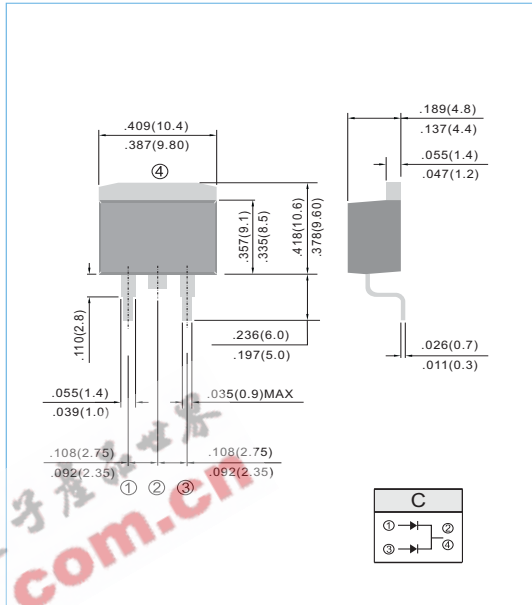
Case: D²PAK/TO-263 molded plastic package

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

Polarity: As marked.

Mounting Position: Any

Weight: 0.06 ounces, 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 T _c = 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 TA=25°C Rated DC Blocking Voltage TA=100°C	I _R					0.5 100					mA
Typical Thermal Resistance	R _{θJC}	2.0								°C / W	
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 to +125								°C	



RATING AND CHARACTERISTIC CURVES

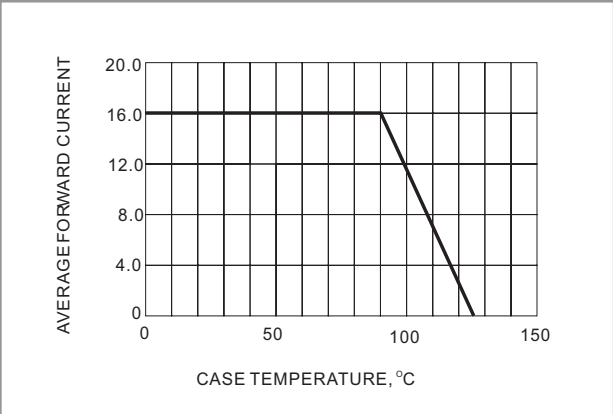


Fig.1- FORWARD CURRENT DERATING CURVE

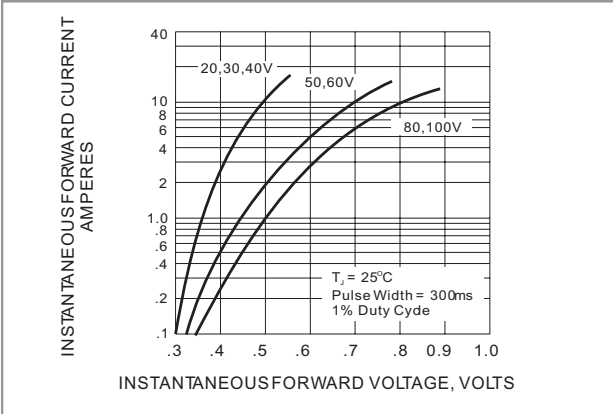


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

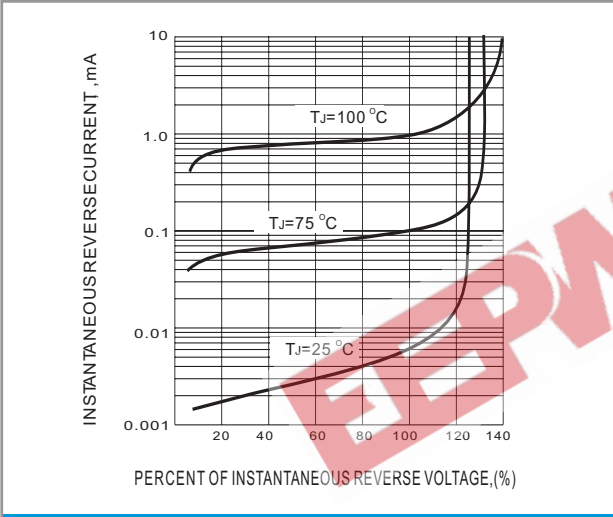


Fig.3- TYPICAL REVERSE CHARACTERISTIC

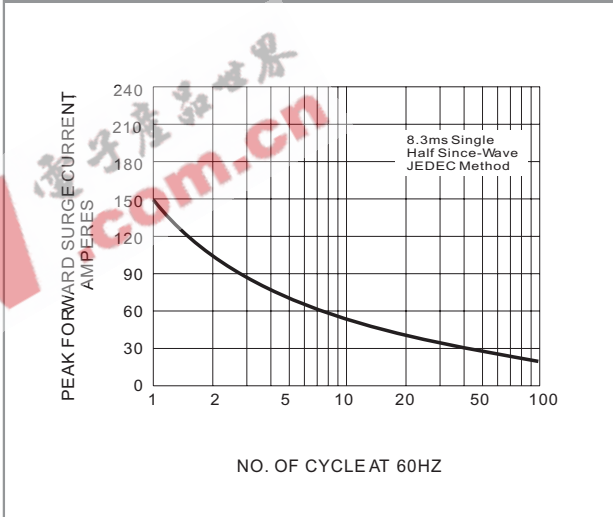


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT