



DATA SHEET

SB820~SB8100

SCHOTTKY BARRIER RECTIFIERS

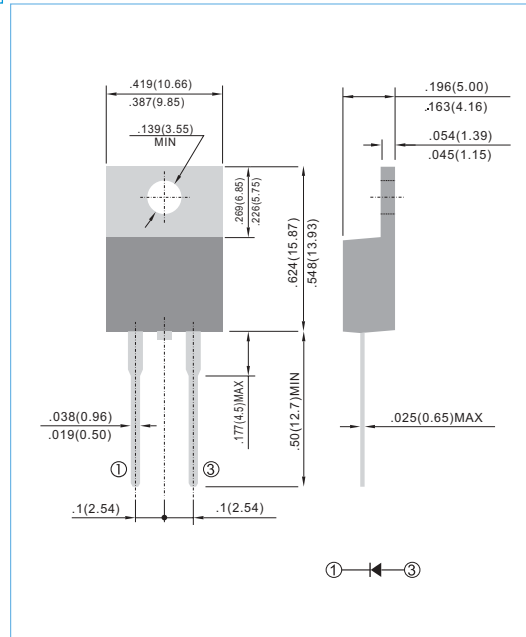
VOLTAGE	20 to 100 Volts	CURRENT	8 Ampere	TO-220AC	Unit : inch (mm)
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FEATURES

- 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: TO-220AC full molded plastic package
 Terminals: Lead solderable per MIL-STD-202G, Method 208
 Polarity: As marked.
 Mounting Position: 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	SB820	SB830	SB840	SB850	SB860	SB880	SB8100	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Current .375" (9.5mm) lead length at T _c = 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		V	
Maximum DC Reverse Current T _A = 25°C at Rated DC Blocking Voltage T _A = 100°C	I _R	0.5 50							mA
Typical Thermal Resistance	R _{θJC}	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

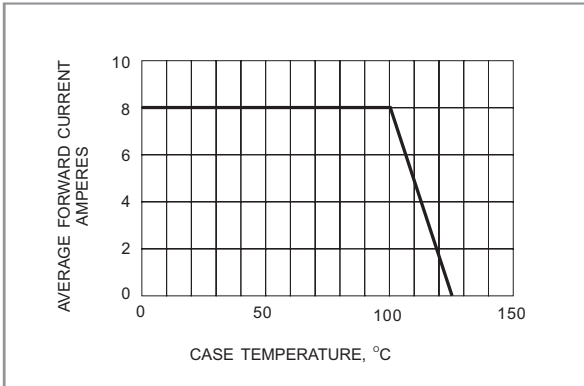


Fig.1- FORWARD CURRENT DERATING CURVE

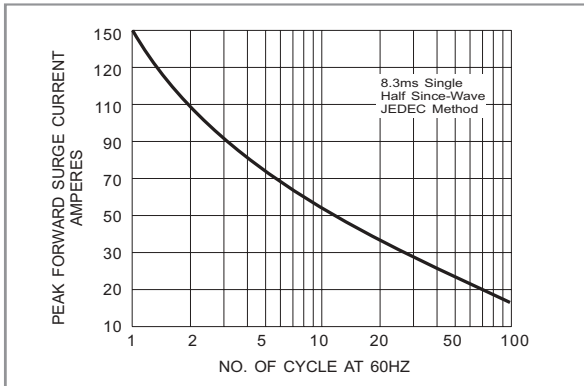


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

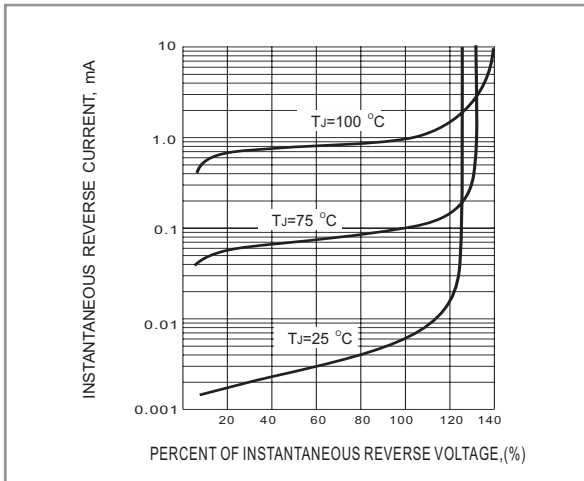


Fig.3- TYPICAL REVERSE CHARACTERISTICS

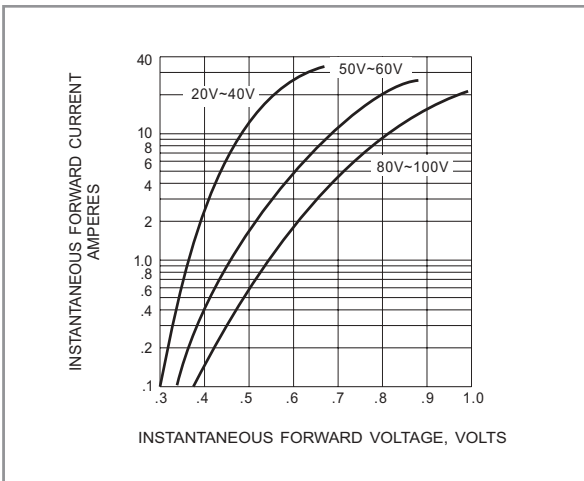


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS