



DATA SHEET

SB820CT~SB8100CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts CURRENT - 8 Ampere

FEATURES

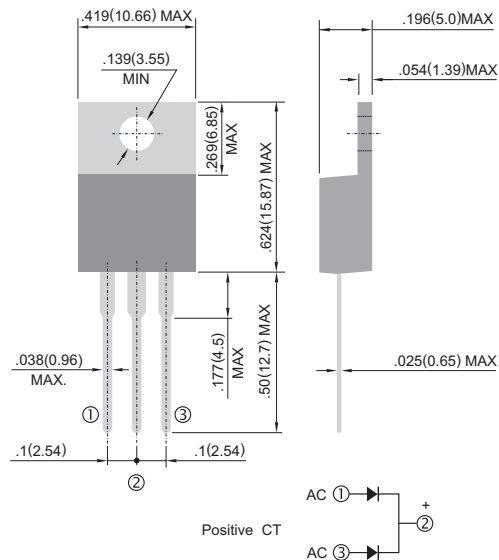
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.

MECHANICAL DATA

Case: TO-220AB full molded plastic package
 Terminals: Lead solderable per MIL-STD-202, Method 208
 Polarity: As marked.
 Mounting Position: Any
 Weight: 0.08 ounces, 2.24grams.

TO-220AB

Unit: inch (mm)



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%

	SB820CT	SB830CT	SB840CT	SB850CT	SB860CT	SB880CT	SB8100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at Tc=100°C	8							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Forward Voltage at 4.0A per element	0.55		0.75		0.85		V	
Maximum DC Reverse Current at Tc=25°C	0.5							mA
DC Blocking Voltage per element Tc=100°C	50							
Typical Thermal Resistance Note RθJA	60							°C/W
Operating and Storage Temperature Range	-50 to +125							°C

NOTES:

1. Thermal Resistance Junction to Ambient .



RATING AND CHARACTERISTIC CURVES

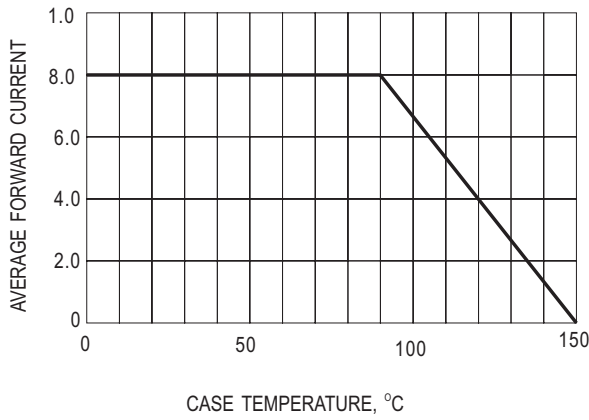


Fig.1- FORWARD CURRENT DERATING CURVE

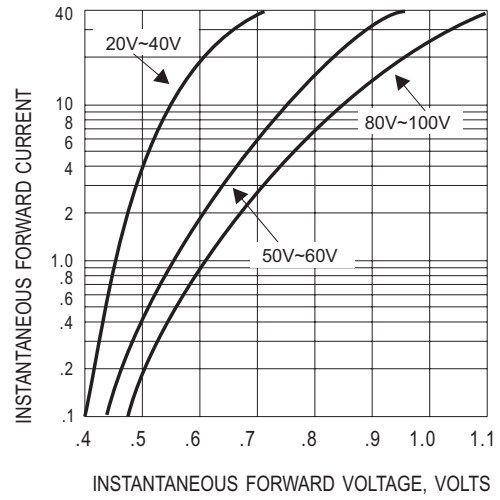


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

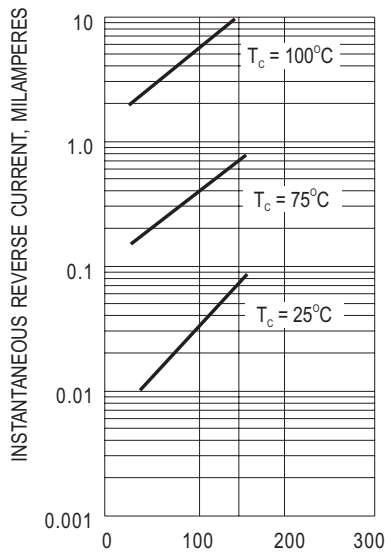


Fig.3- TYPICAL REVERSE CHARACTERISTIC

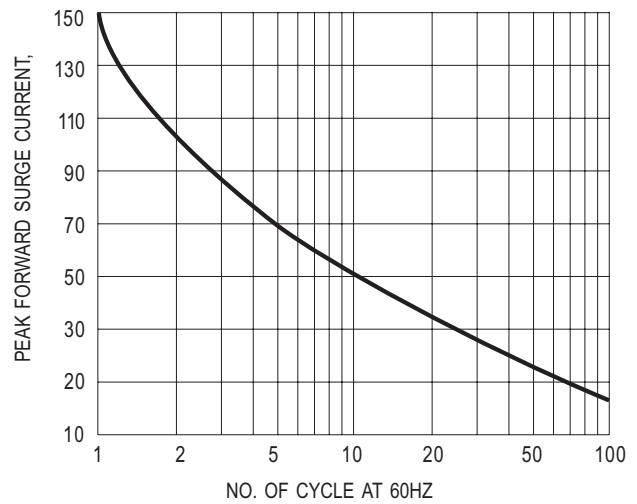


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

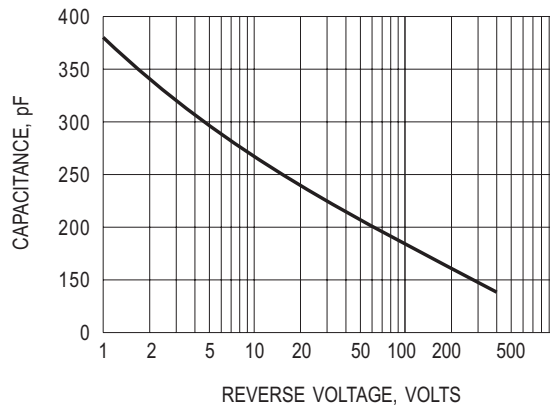


Fig.5- TYPICAL JUNCTION CAPACITANCE