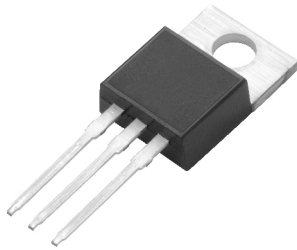


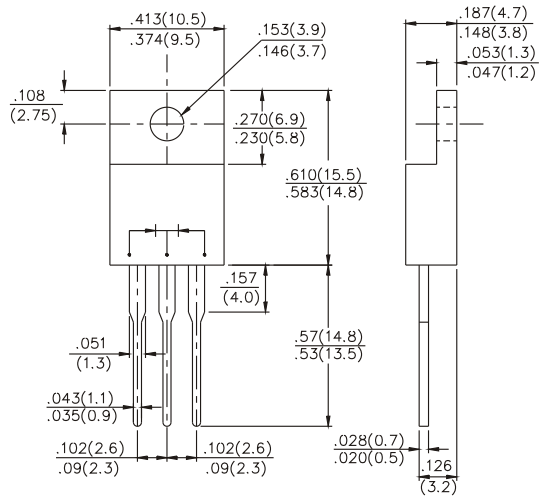
# SB820CT thru SB8100CT

## ISOLATION SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 100 VOLTS CURRENT - 8.0 AMPERES



TO-220AB



Dimensions in inches and (millimeters)

### FEATURES

- Plastic package has Underwriters laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MILS-19500 / 228
- Low power loss, high efficiency
- Low forward voltage. high current capability
- High surge capability
- For use in low voltage, high frequency inverters Free wheeling. And polarity protection applications
- High temperature soldering : 260°C/10seconds at terminals
- Pb free product are available : 99% Sn above can meet RoHS
- environment substance directive request

### MECHANICAL DATA

Case : TO220AB full molded plastic package  
 Terminals : Lead solderable per MIL-STD-202, Method 208  
 Polarity : As marked.  
 Mounting Position : Any  
 Weight : 0.08 ounce, 2.24gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified  
 Single phase, half wave, 60Hz, resistive or inductive load  
 For capacitive load, derate current by 20%

	SB820CT	SB830CT	SB840CT	SB850CT	SB860CT	SB880CT	SB8100CT	UNITS
Maximum Repetitive Peak Reverse Voltage	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at T <sub>c</sub> =100°C	8.0							Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	150							Amps
Maximum Forward Voltage at 4.0A per element	0.55		0.75		0.85			Volts
Maximum DC Reverse Current T <sub>A</sub> =25°C at Rated DC Blocking Voltage T <sub>A</sub> =100°C	0.5 50							mA
Typical Thermal Resistance Note R <sub>θJA</sub>	6							°C / W
Operating and Storage Temperature Range	-55 to +150							°C

NOTE :

1. Thermal Resistance Junction to Ambient

# SB820CT thru SB8100CT

## ISOLATION SCHOTTKY BARRIER RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES SB820CT THRU SB8100CT

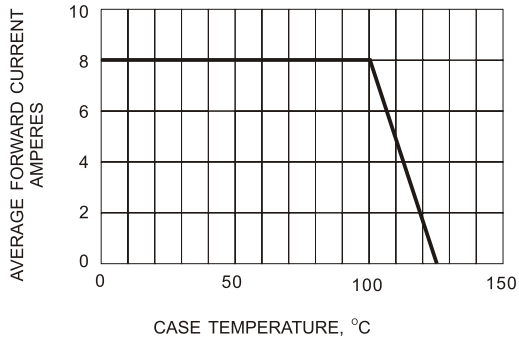


Fig.1- FORWARD CURRENT DERATING CURVE

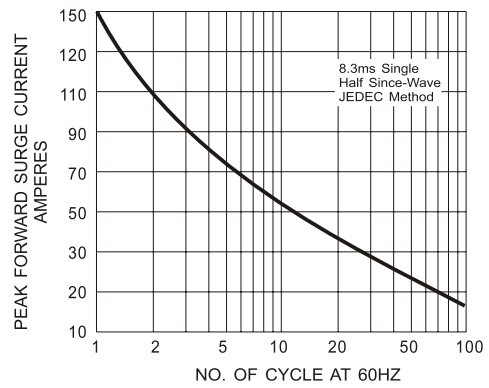


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

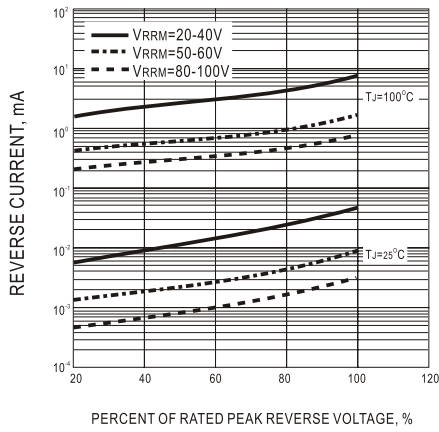


Fig.3- TYPICAL REVERSE CHARACTERISTIC

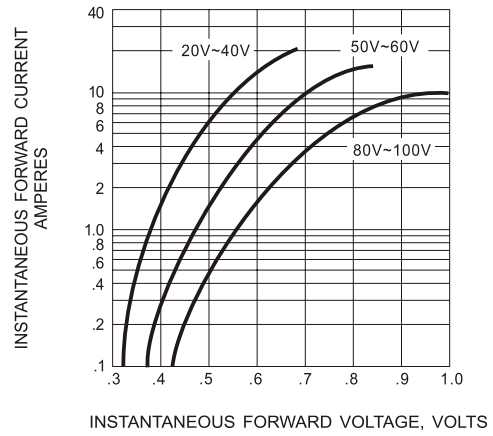


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC