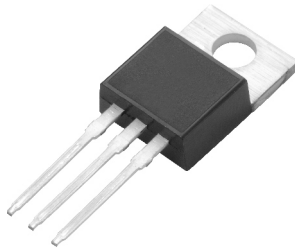


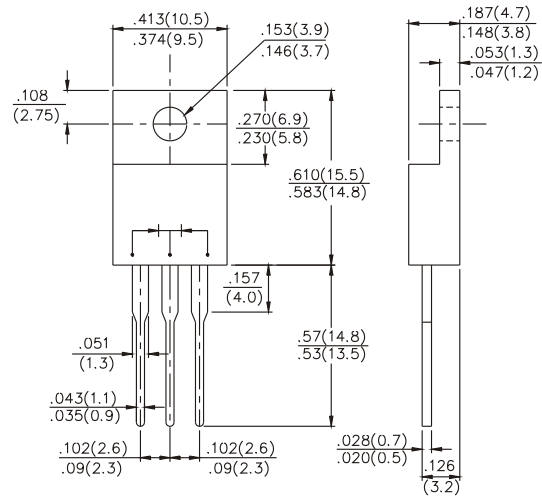
# SB2020CT thru SB20150CT

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 150 VOLTS CURRENT - 20 AMPERES



TO-220AB



Dimensions in inches and (millimeters)

### FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94-0 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 Capability
- For use 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 Molded plastic  
 Terminals : Lead solderable per MIL-STD-202, Method 208  
 Polarity : As Marked on Body  
 Mounting Position : Any  
 Weight : 0.08ounces, 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%

PARAMETER	SB 2020CT	SB 2030CT	SB 2040CT	SB 2050CT	SB 2060CT	SB 2080CT	SB 20100CT	SB 20150CT	UNITS
Maximum Repetitive Peak Reverse Voltage	20	30	40	50	60	80	100	150	Volts
Maximum RMS Voltage	14	21	28	35	42	56	70	105	Volts
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	150	Volts
Maximum Average Forward Rectified Current at Tc=90°C	20								Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	200							150	Amps
Maximum Forward Voltage at 10A per element	0.55		0.75		0.85		0.92		Volts
Maximum DC Reverse Current at Rated Tc=25°C DC Blocking Voltage Tc=100°C	0.5 100							0.1 7	mA
Typical Junction Resistance Note RθJA	100								°C / W
Operating and Storage Temperature Range	-55 to +150								°C

NOTE:

1. Thermal Resistance Junction to Ambient

# SB2020CT thru SB20150CT

## SCHOTTKY BARRIER RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES SB2020CT THRU SB20150CT

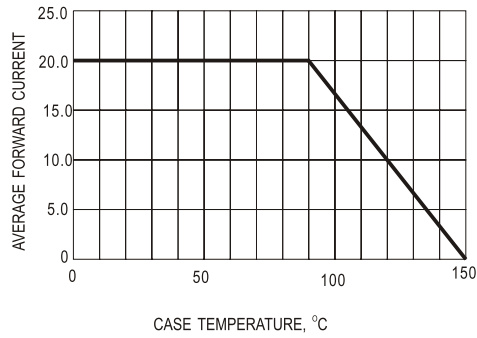


Fig. 1- FORWARD CURRENT DERATING CURVE

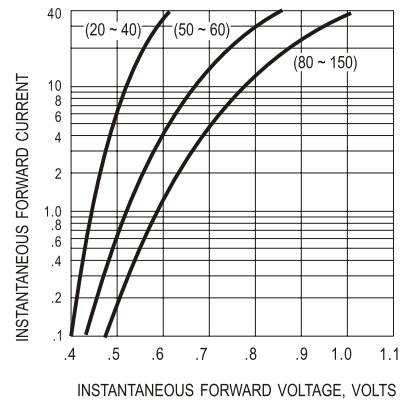


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

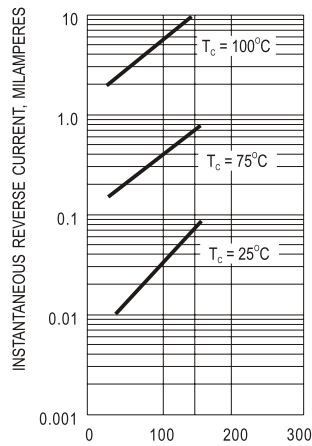


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

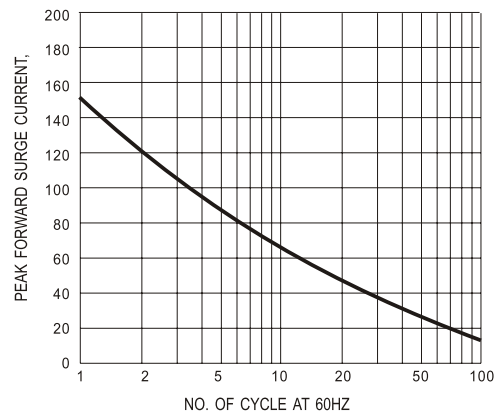


Fig. 4- MAXIMUM NON-REPETITIVE SURGE CURRENT

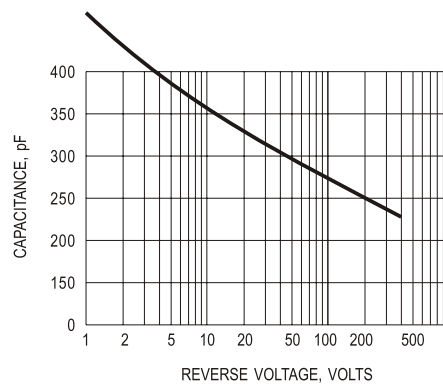


Fig. 5- TYPICAL JUNCTION CAPACITANCE