

# SB320-B

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 200V

CURRENT: 3.0A



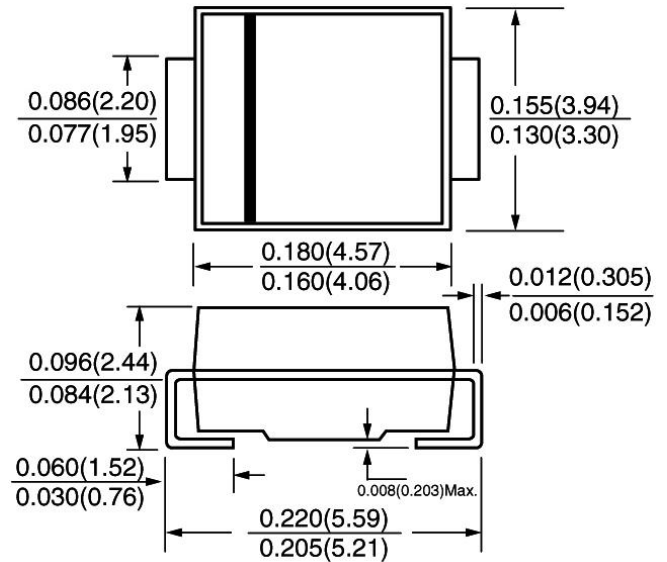
### FEATURE

Plastic package has Underwriters Laboratory Flammability Classification 94V-0  
For surface mounted applications  
Low profile package  
Built-in strain relief  
Low power loss, high efficiency  
High surge capability  
For use in low voltage high frequency inverters, free wheeling, and polarity protection applications  
Guard ring for over voltage protection  
High temperature soldering guaranteed: 250°C /10 seconds at terminals

### MECHANICAL DATA

Terminal: Solder plated, solder able per J-STD-002  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

### SMB/DO-214AA



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB320-B	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	V
Maximum RMS Voltage	V <sub>rms</sub>	140	V
Maximum DC blocking Voltage	V <sub>dc</sub>	200	V
Maximum Average Forward Rectified Current 3/8" lead length	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	100	A
Maximum Forward Voltage at rated Forward Current	V <sub>f</sub>	0.88	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	0.02 2.0	mA
Typical Thermal Resistance (Note 1)	R <sub>th(jl)</sub>	15.0	°C /W
Operating Junction Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

Note:  
1. Thermal resistance from junction to lead mounted on P.C.B. with 0.3 x 0.3inches (8.0 x 8.0mm) copper pad areas

Fig. 1 – Forward Current Derating Curve

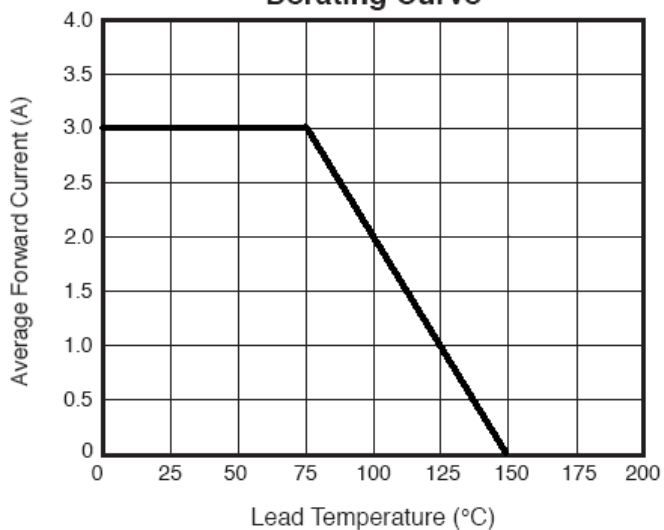


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

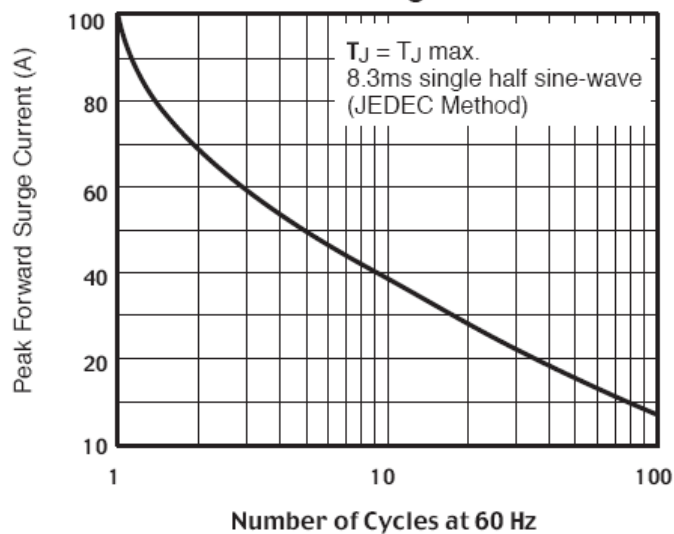


Fig. 3 – Typical Instantaneous Forward Characteristics

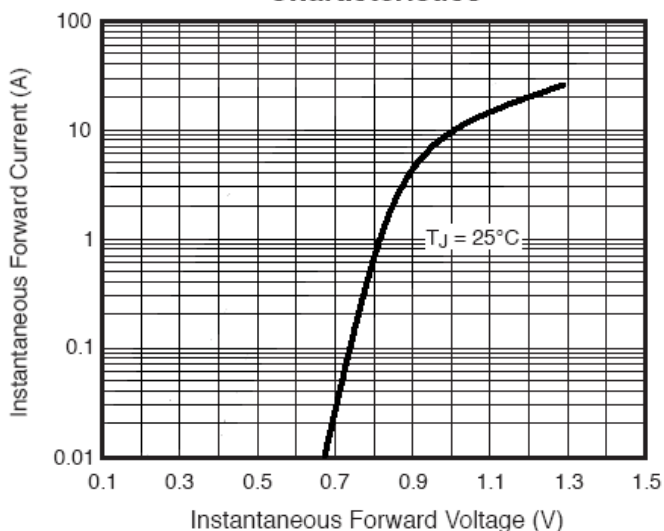


Fig. 4 – Typical Reverse Characteristics

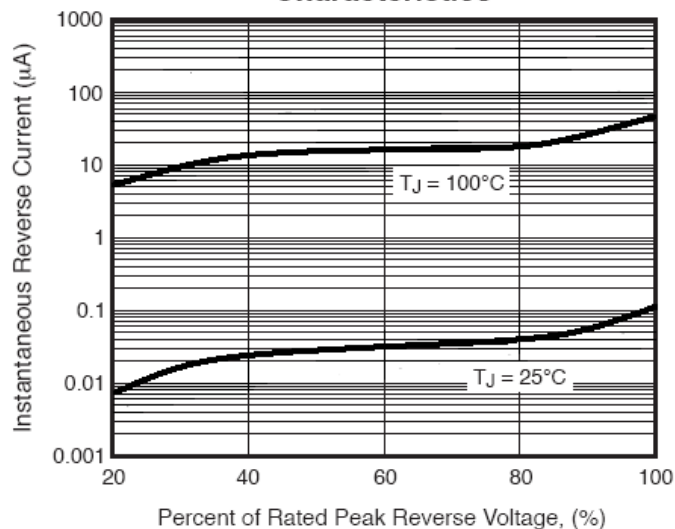


Fig. 5 – Typical Junction Capacitance

