

# SB310-B

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 100V

CURRENT: 3.0A



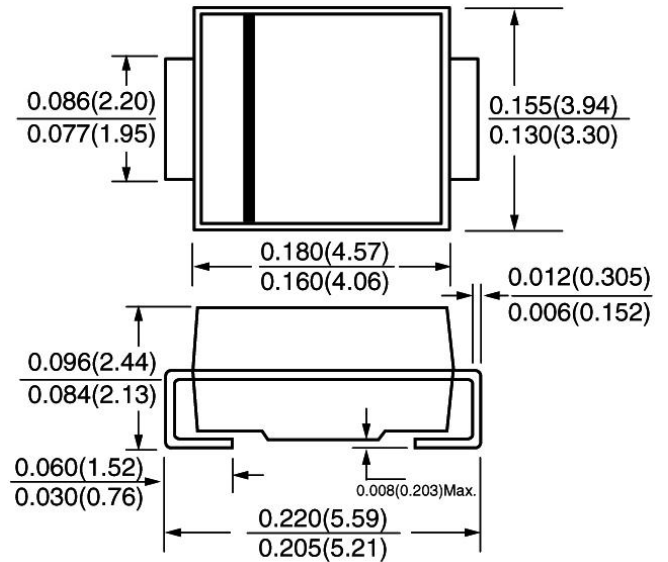
### FEATURE

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 current capability, low forward voltage drop  
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: 260°C /10seconds

### MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body  
Terminals: Solder plated, solder able per J-STD-002  
Polarity: Color band denotes cathode end

### 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	SB310-B	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	100	V
Maximum RMS Voltage	V <sub>rms</sub>	70	V
Maximum DC blocking Voltage	V <sub>dc</sub>	100	V
Maximum Average Forward Rectified Current	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>	0.85	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	0.1 2.0	mA
Typical Thermal Resistance	(Note 1) R <sub>th(ja)</sub>	55.0	°C/W
Typical Junction Capacitance	(Note 2) C <sub>j</sub>	125	pF
Storage and Operating Temperature Range	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150	°C

Note:

1. P.C.B. mounted with 0.27 x 0.27 inches (7.0 x 7.0mm) copper pad areas
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

# RATINGS AND CHARACTERISTIC CURVES SB310-B

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

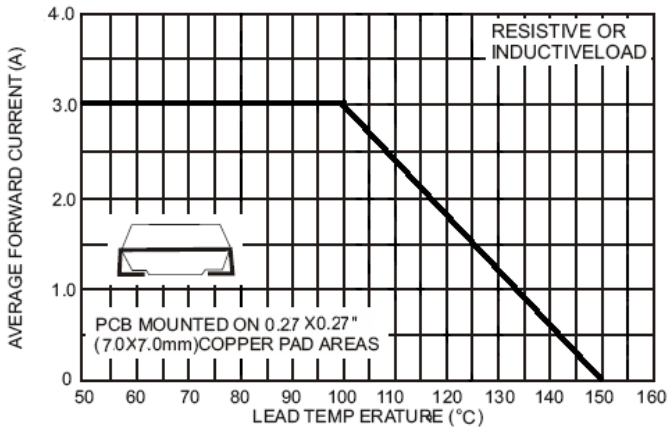


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

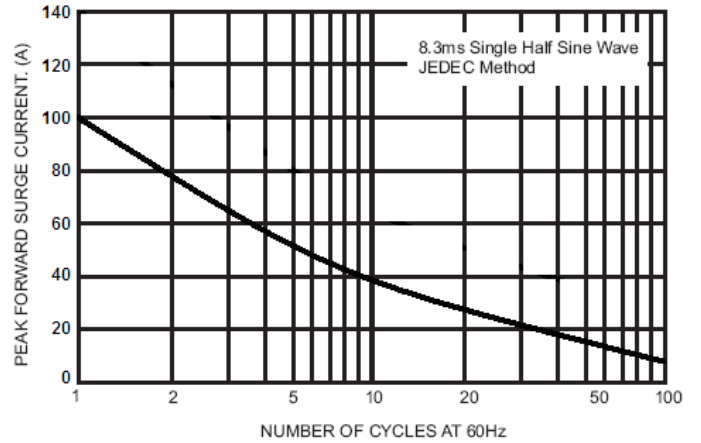


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

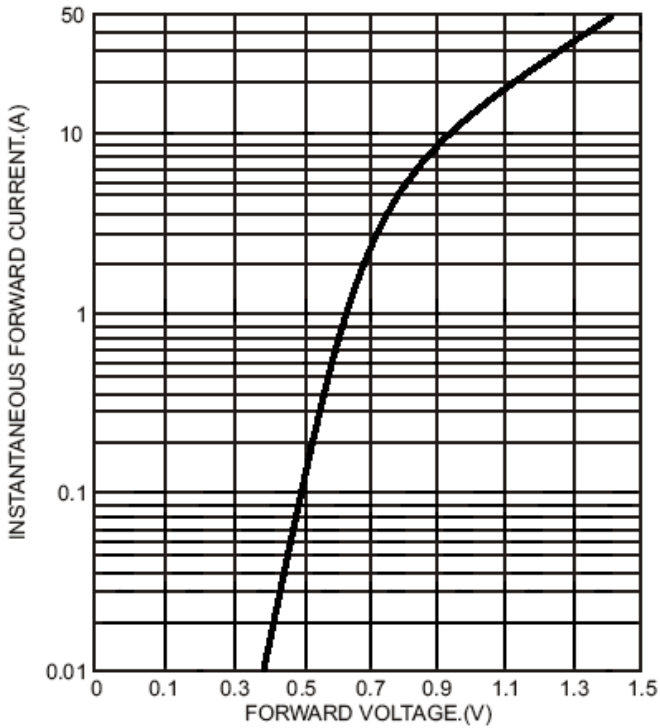


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

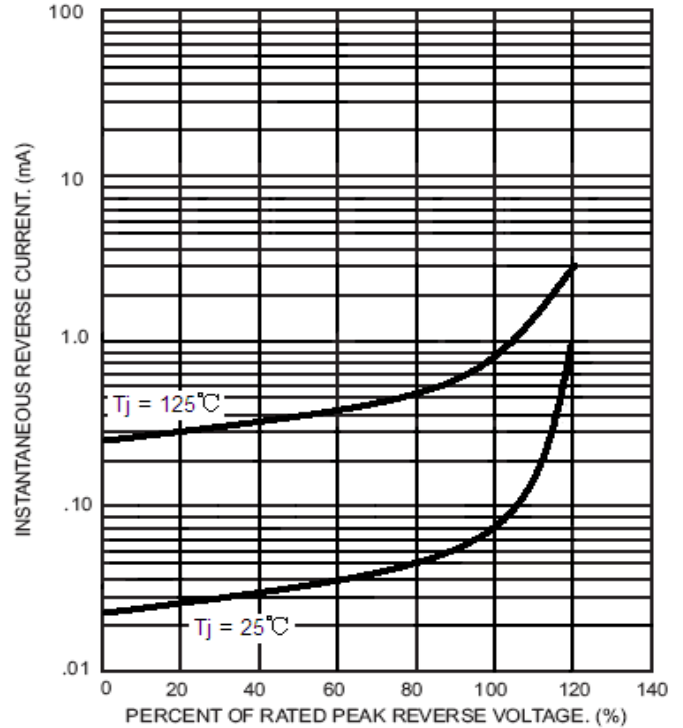


FIG. 5- TYPICAL JUNCTION CAPACITANCE

