

# SB3200-E

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 200V

CURRENT: 3.0A

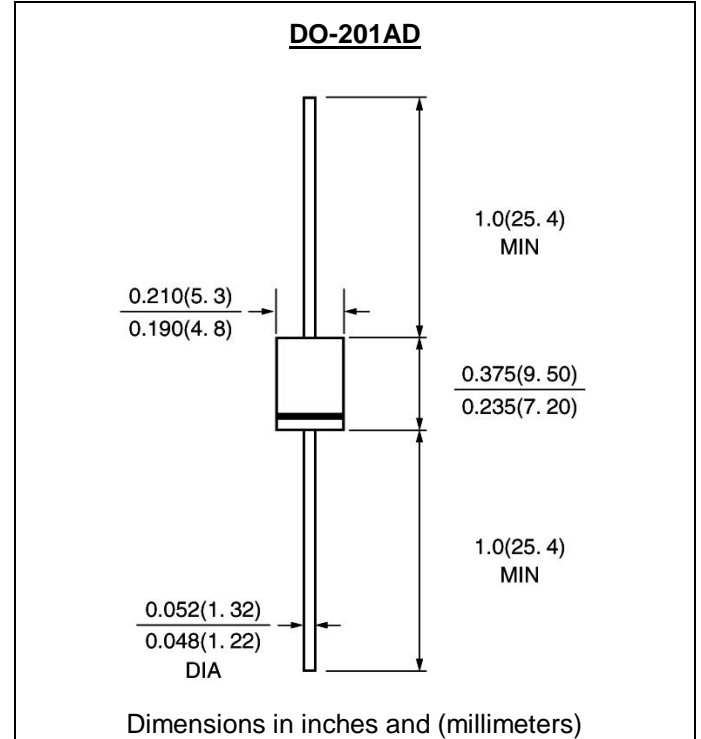


### FEATURE

High current capability  
Low forward voltage drop  
Low power loss, high efficiency  
High surge current capability  
High temperature soldering guaranteed  
260°C /10sec/0.375" lead length  
Halogen Free

### MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002  
Case: Molded with UL-94 Class V-0 recognized Halogen Free Epoxy  
Polarity: color band denotes cathode  
Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

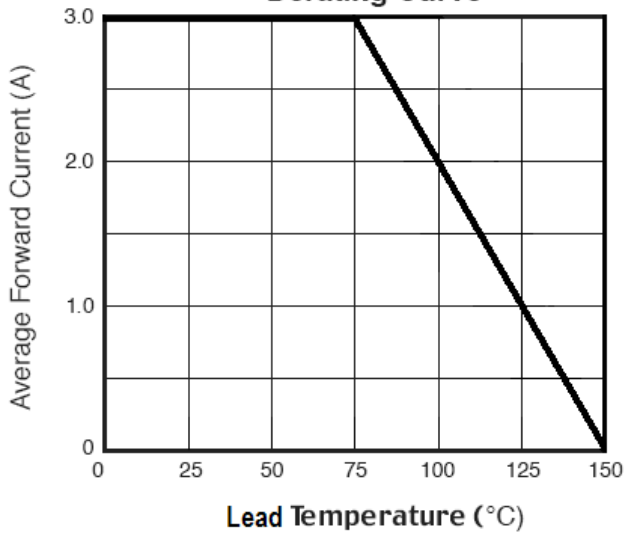
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	SB3200-E	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>	80	A
Maximum Forward Voltage at rated Forward Current	V <sub>f</sub>	0.88	V
Maximum DC Reverse Current T <sub>j</sub> =25°C at rated DC blocking voltage T <sub>j</sub> =125°C	I <sub>r</sub>	0.05 2.0	mA
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	62	pF
Typical Thermal Resistance (Note 3)	R <sub>th(jc)</sub>	15.0	°C/W
Operating Junction Storage Temperature Range	T <sub>j</sub> ,T <sub>stg</sub>	-55 to +150	°C

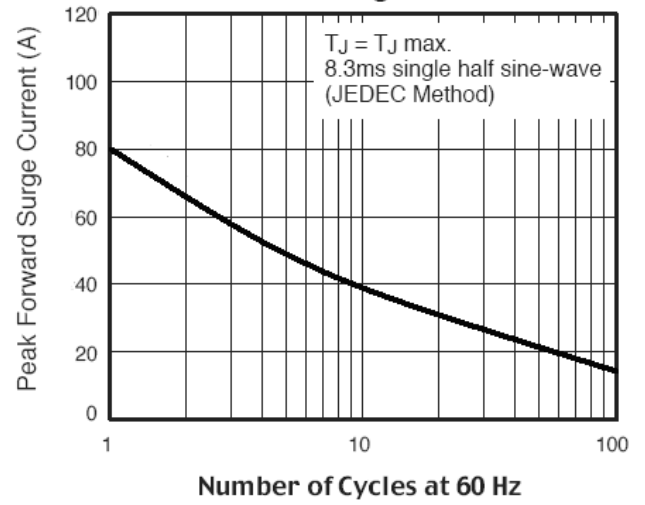
Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Case

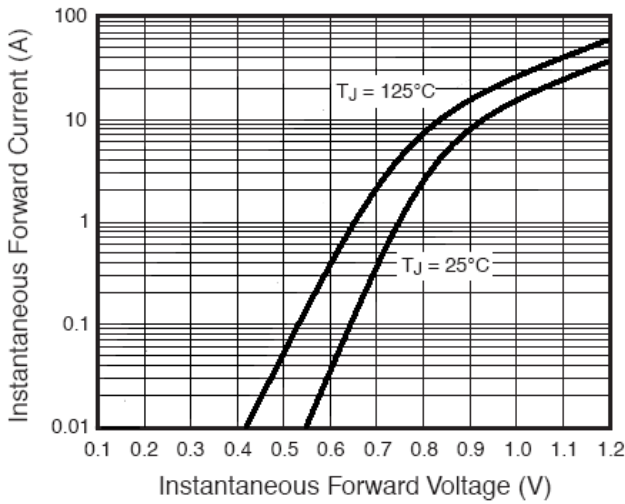
**Fig. 1 – Forward Current Derating Curve**



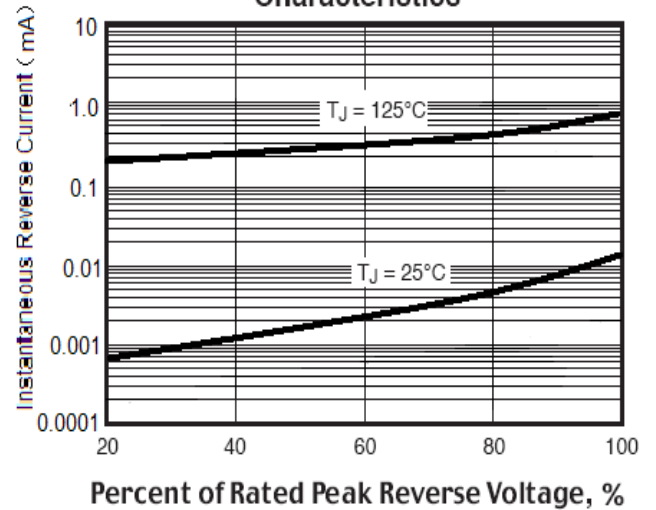
**Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**

