

# SB5200

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 200V

CURRENT: 5.0A

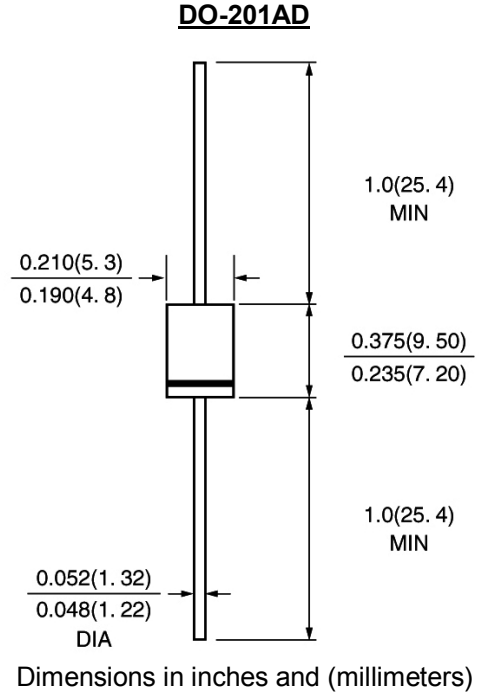


### FEATURE

High current capability, Low forward voltage drop  
Low power loss, high efficiency  
High surge capability  
High temperature soldering guaranteed: 260°C/10sec

### MECHANICAL DATA

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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

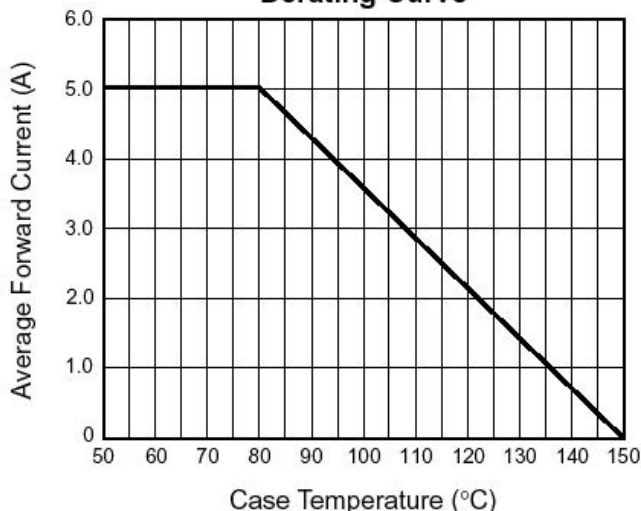
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB5200	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>	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	150.0	A
Maximum Forward Voltage at 5.0A (Note 1)	V <sub>f</sub>	0.90	V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C	I <sub>r</sub>	0.5 10	mA
Typical Thermal Resistance (Note 2)	R <sub>th(jc)</sub>	10.0	°C/W
Storage and Operating Junction Temperature	T <sub>stg,Tj</sub>	-50 to +150	°C

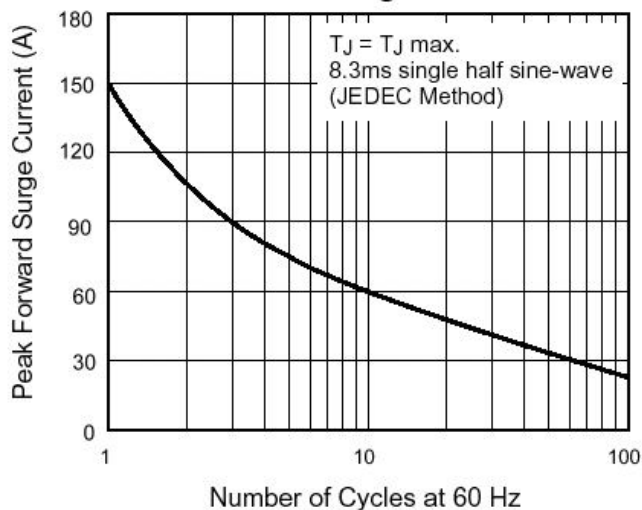
Note:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. Thermal Resistance from Junction to Case

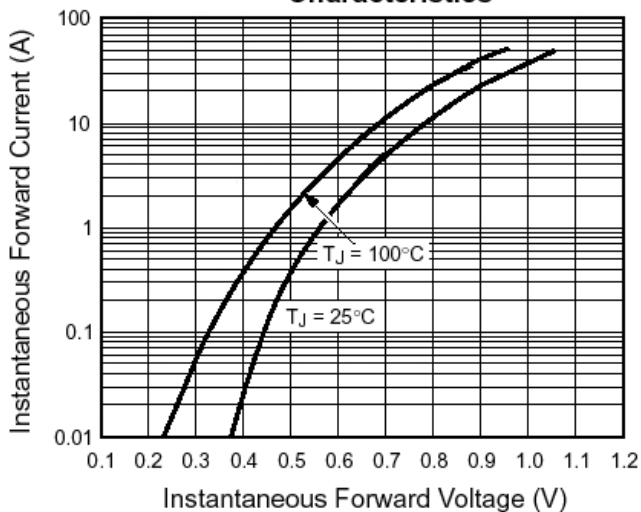
**Fig. 1 – Forward Current Derating Curve**



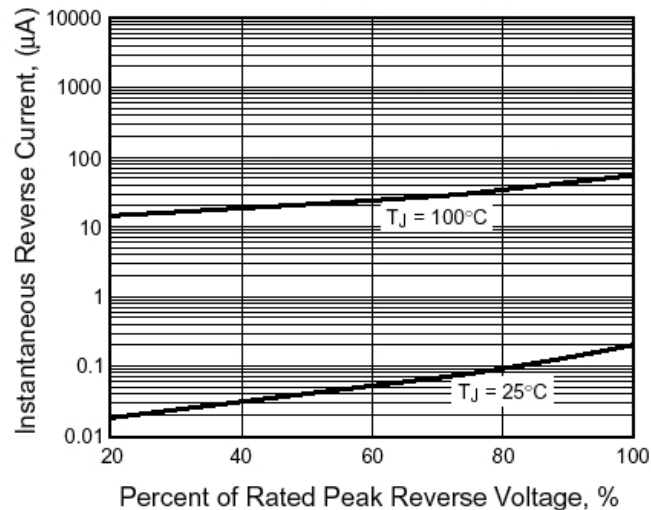
**Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current**



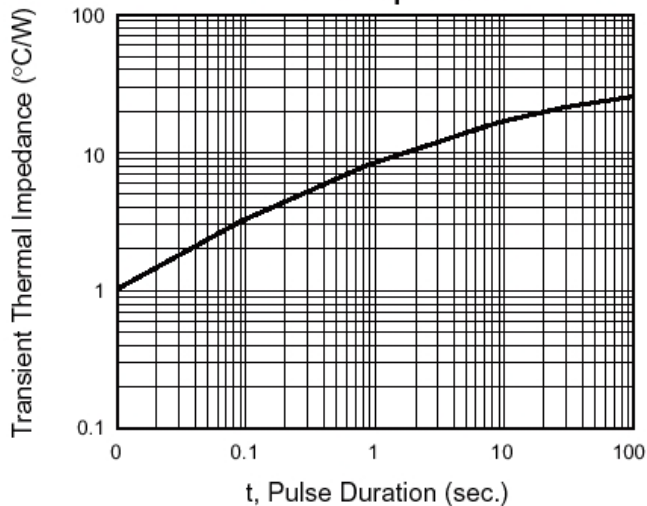
**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 - Typical Transient Thermal Impedance**



**Fig. 6 – Typical Junction Capacitance**

