

SB5200

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 200V

CURRENT: 5.0A

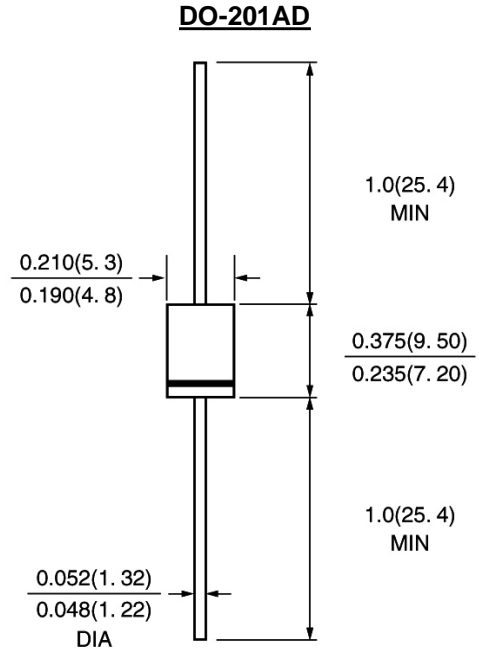


FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



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	SB5200	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	200	V
Maximum RMS Voltage	V _{rms}	140	V
Maximum DC blocking Voltage	V _{dc}	200	V
Maximum Average Forward Rectified Current 3/8" lead length	I _{f(av)}	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	150.0	A
Maximum Forward Voltage at 5.0A (Note 1)	V _f	0.90	V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C	I _r	0.5 10	mA
Typical Thermal Resistance (Note 2)	R _{th(ja)}	10.0	°C /W
Storage and Operating Junction Temperature	T _{stg, Tj}	-50 to +150	°C

Note:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

Fig. 1 – Forward Current Derating Curve

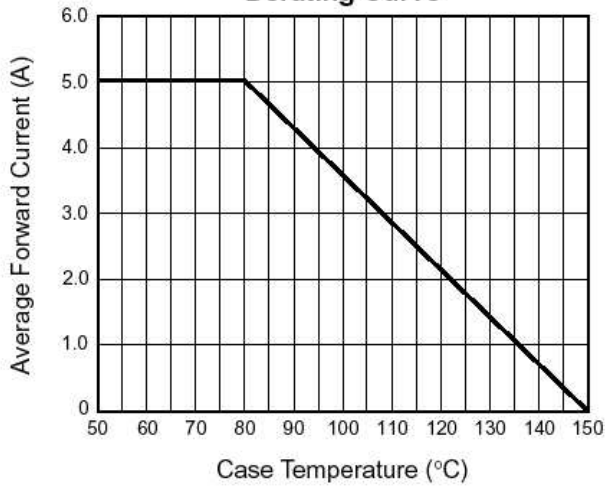


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

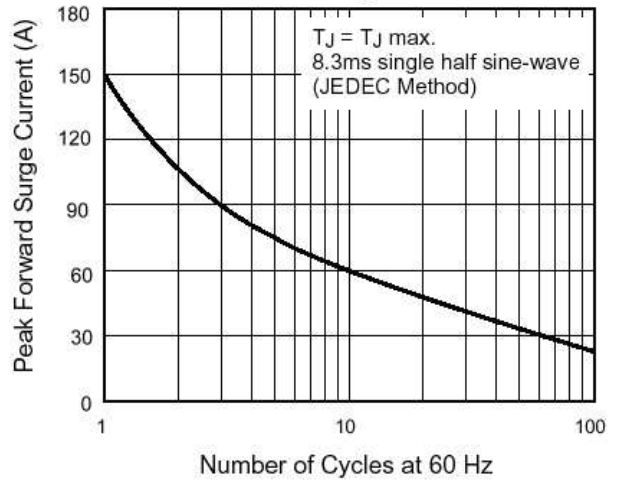


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

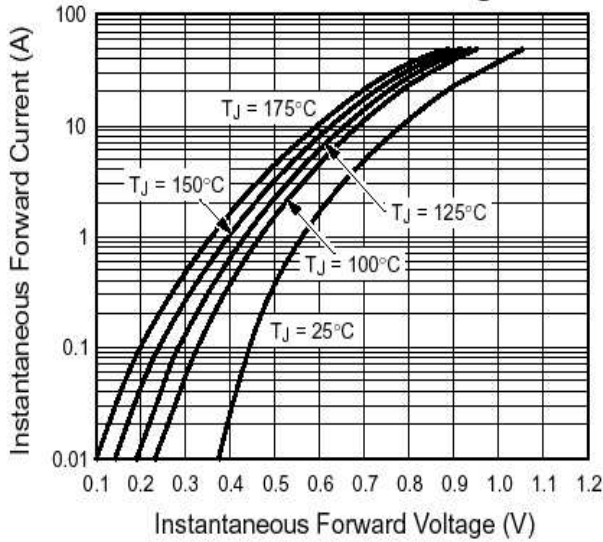


Fig. 4 – Typical Reverse Characteristics Per Leg

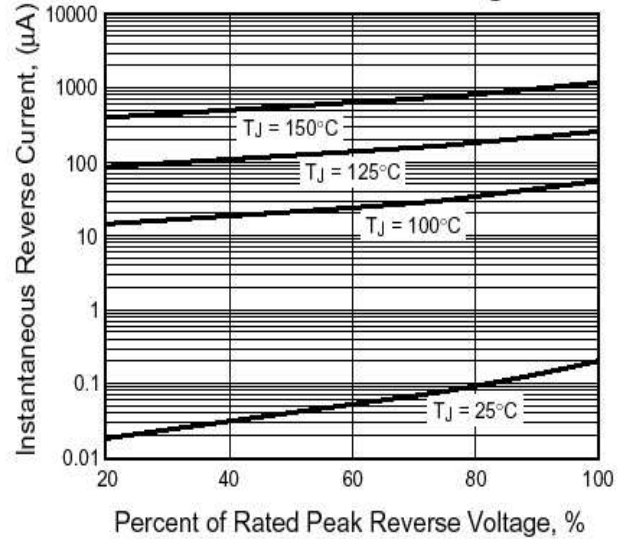


Fig. 5 - Typical Transient Thermal Impedance

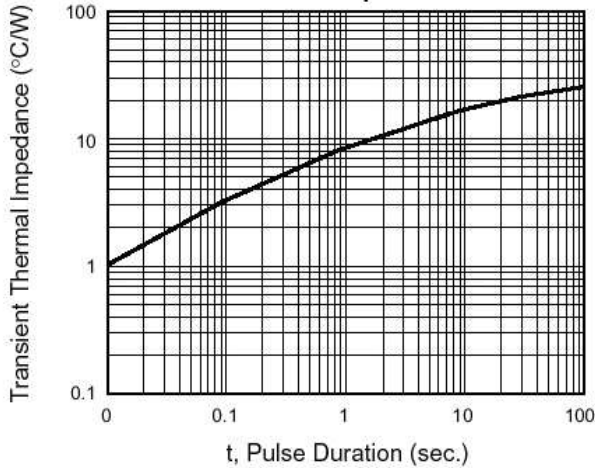


Fig. 6 – Typical Junction Capacitance

