

# SB270 THRU SB2100

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 70 TO 100V

CURRENT: 2.0A



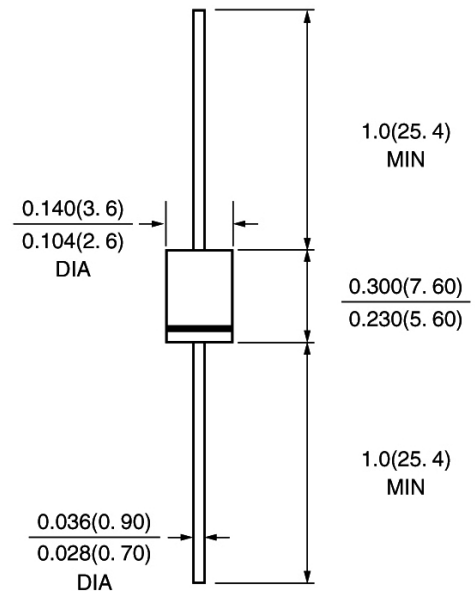
### FEATURE

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

### DO-15\ DO-204AC



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	SB270	SB280	SB290	SB2100	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	70	80	90	100	V
Maximum RMS Voltage	V <sub>rms</sub>	49	56	63	70	V
Maximum DC blocking Voltage	V <sub>dc</sub>	70	80	90	100	V
Maximum Average Forward Rectified Current 0.375" lead length Ta=25°C	I <sub>f(av)</sub>	2.0				A
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load	I <sub>fsm</sub>	70.0				A
Maximum Forward Voltage at 2.0A DC (Note 1)	V <sub>f</sub>	0.79				V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C	I <sub>r</sub>	0.5 20.0				mA
Typical Thermal Resistance (Note 2)	R <sub>th(ja)</sub>	60.0				°C/W
Storage and Operating Junction Temperature	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150				°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES SB270 THRU SB2100

Fig. 1 – Forward Current Derating Curve

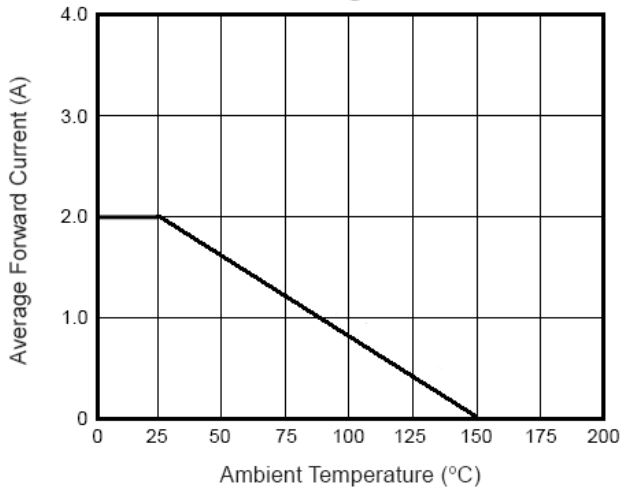


Fig. 2 – Typical Instantaneous Forward Characteristics

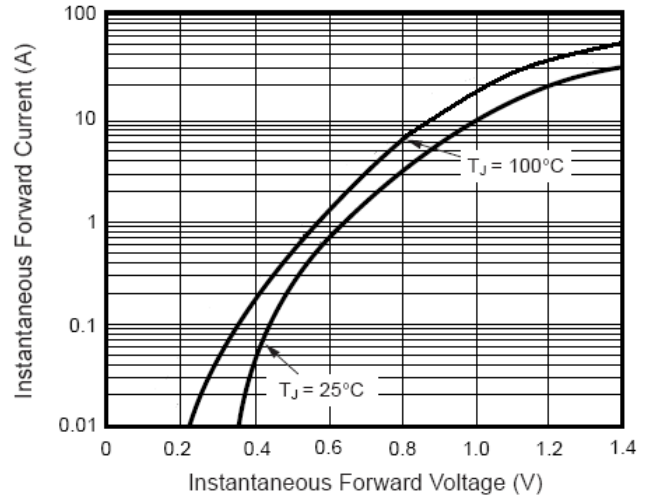


Fig. 3 – Typical Reverse Characteristics

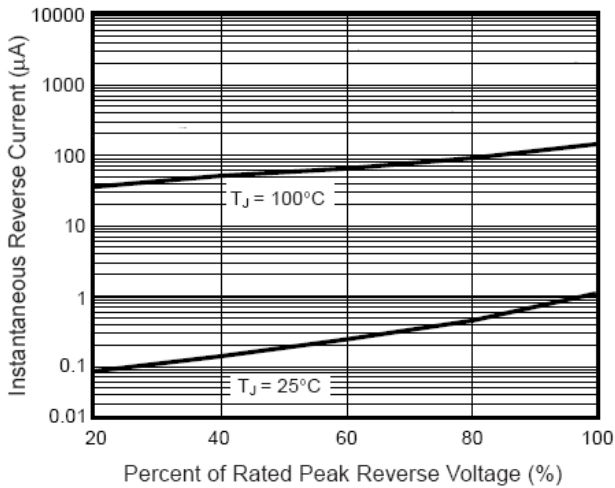


Fig. 4 – Typical Junction Capacitance

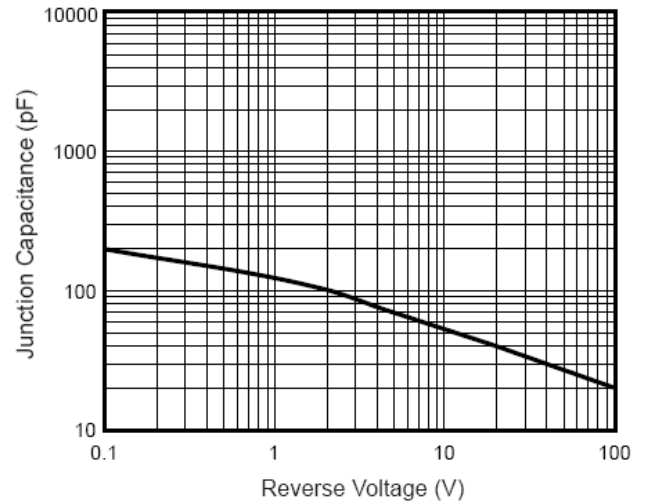


Fig. 5 - Typical Transient Thermal Impedance

