

SB180 THRU SB1100

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 80 TO 100V

CURRENT: 1.0A



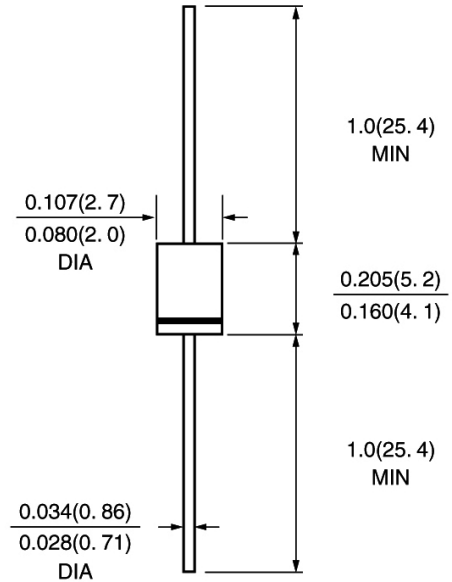
FEATURE

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-41\DO-204AL



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	SB 180	SB 190	SB 1100	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	80	90	100	V
Maximum RMS Voltage	V _{rms}	56	63	70	V
Maximum DC blocking Voltage	V _{dc}	80	90	100	V
Maximum Average Forward Rectified Current 3/8" lead length	I _{f(av)}	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	40.0			A
Maximum Forward Voltage at 1.0A DC	V _f	0.84			V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	500 10.0			μA mA
Typical Junction Capacitance (Note 1)	C _j	110.0			pF
Typical Thermal Resistance (Note 2)	R(jc)	50.0			°C /W
Storage and Operating Junction Temperature	T _j	-55 to +125			°C
Storage Temperature	T _{stg}	-55 to +150			°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted ¹

Fig. 1 – Forward Current Derating Curve

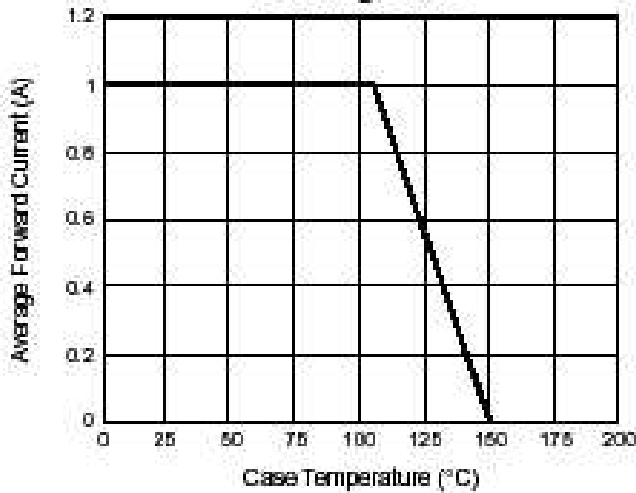


Fig. 2 – Typical Instantaneous Forward Characteristics

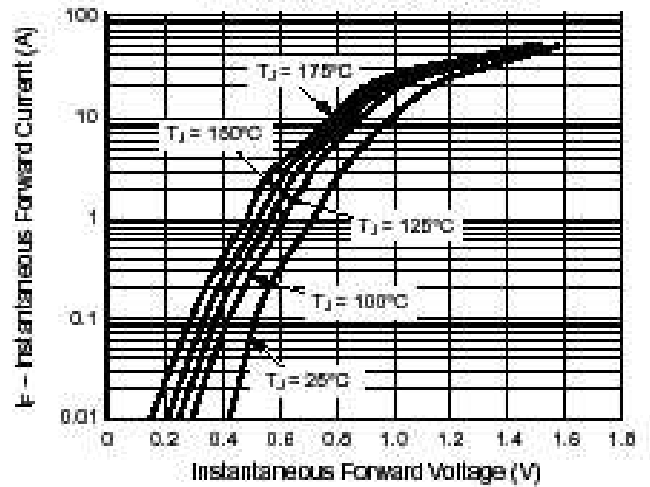


Fig. 3 – Typical Reverse Characteristics per Leg

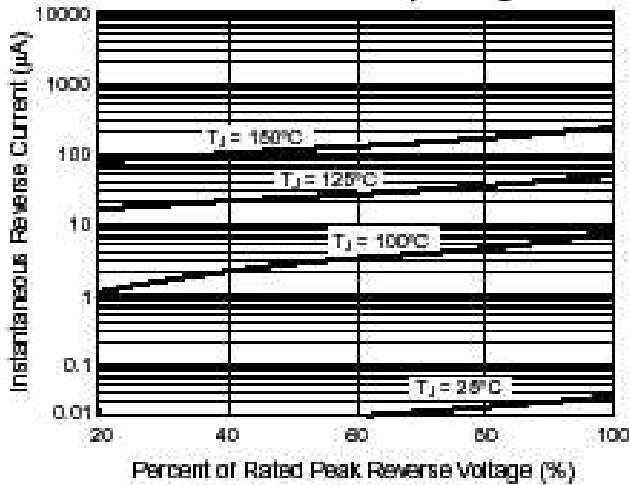


Fig. 4 – Typical Junction Capacitance

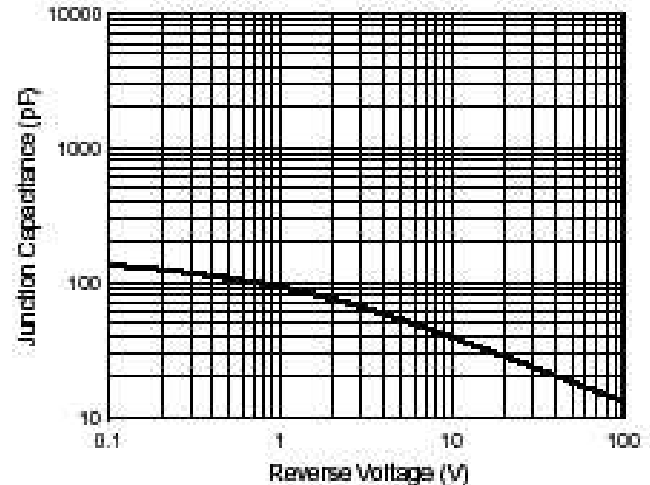


Fig. 5 – Typical Transient Thermal Impedance

