

SB520 THRU SB560

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 20 to 60V

CURRENT: 5.0A

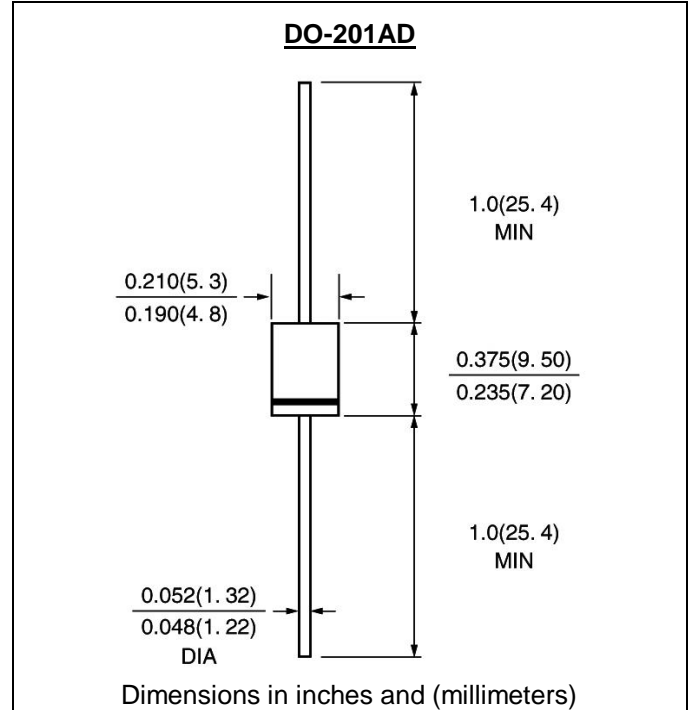


FEATURE

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

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	SB 520	SB 530	SB 540	SB 550	SB 560	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	20	30	40	50	60	V
Maximum RMS Voltage	Vrms	14	21	28	35	42	V
Maximum DC blocking Voltage	Vdc	20	30	40	50	60	V
Maximum Average Forward Rectified Current 3/8" lead length	If(av)	5.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	200.0					A
Maximum Forward Voltage at 5.0A DC	Vf	0.55		0.67		V	
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C	Ir	0.5					mA
		50		25		mA	
Typical Junction Capacitance (Note 1)	Cj	220.0					pF
Typical Thermal Resistance (Note 2)	Rth(ja)	25.0					°C /W
Storage and Operating Junction Temperature	Tj, Tstg	-65 to +125			-65 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

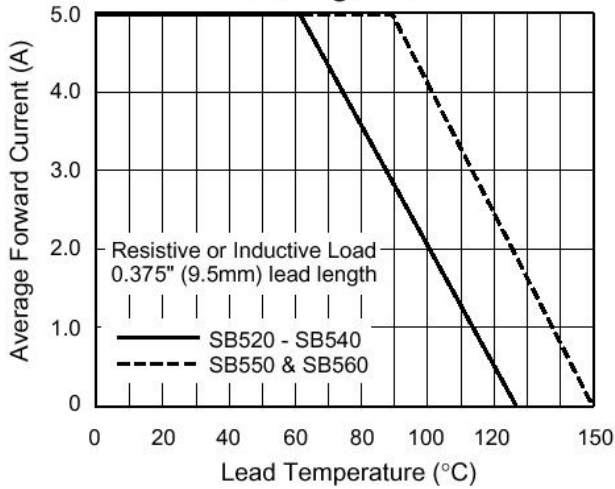


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

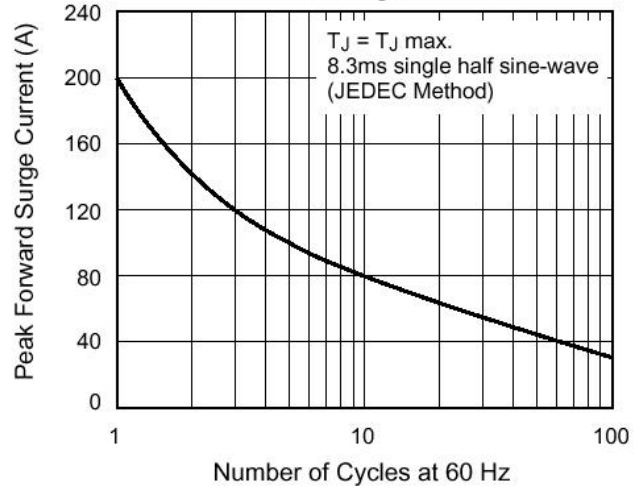


Fig. 3 - Typical Instantaneous Forward Characteristics

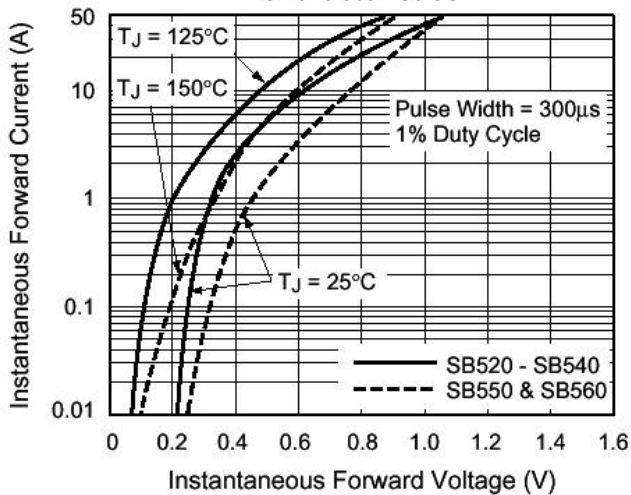


Fig. 4 - Typical Reverse Characteristics

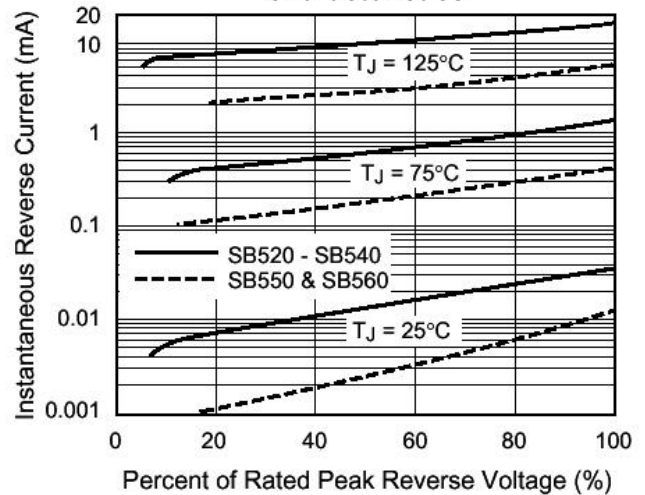


Fig. 5 - Typical Junction Capacitance

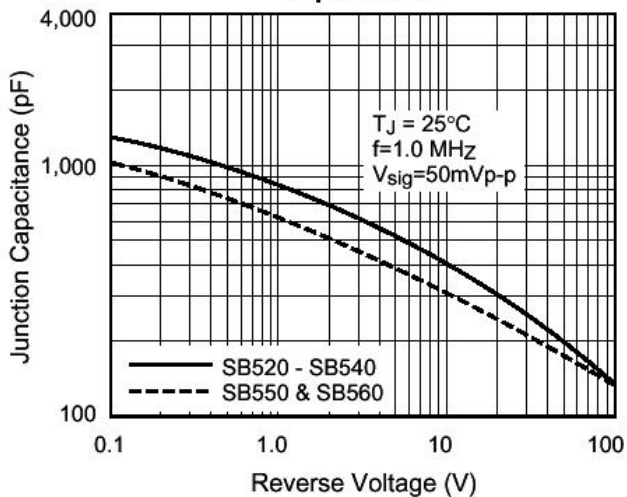


Fig. 6 - Typical Transient Thermal Impedance

