

# SB320 THRU SB360

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 20 TO 60V

CURRENT: 3.0A



**GULF SEMI**

### 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

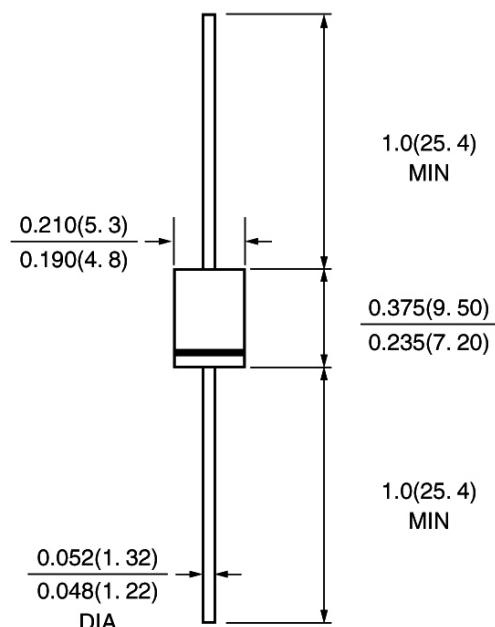
Terminal: Plated axial leads solderable per  
MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame  
Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any

### DO-201AD



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 320	SB 330	SB 340	SB 350	SB 360	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)			3.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm			100			A
Maximum Forward Voltage at 3.0A DC	Vf		0.50		0.74		V
Maximum DC Reverse Current      Ta =25°C at rated DC blocking voltage      Ta =100°C	Ir			0.5			mA
			20.0		10.0		mA
Typical Junction Capacitance      (Note 1)	Cj			220.0			pF
Typical Thermal Resistance      (Note 2)	R(ja)			30.0			°C /W
Storage and Operating Junction Temperature	Tj		-65 to +125		-65 to +150		°C

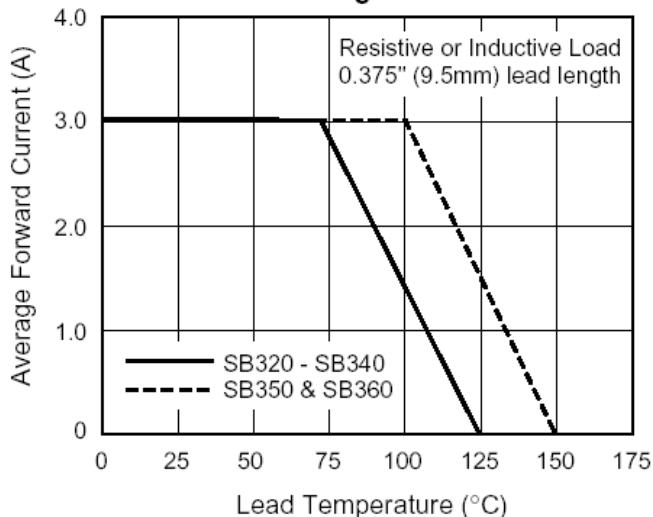
Note:

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 <sup>1</sup>

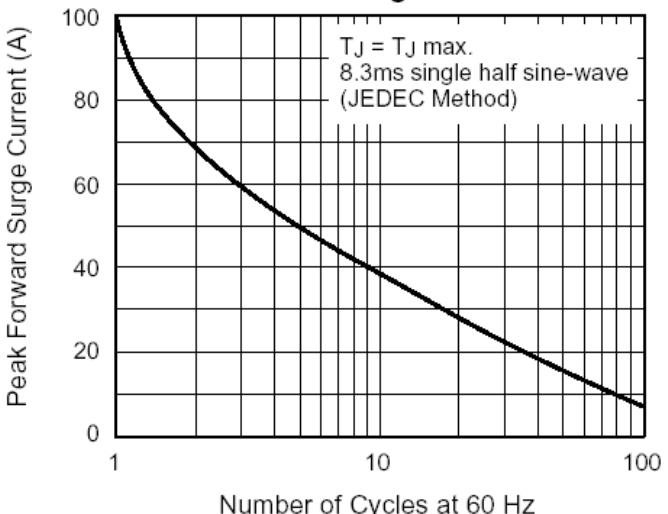
## RATINGS AND CHARACTERISTIC CURVES SB320 THRU SB360

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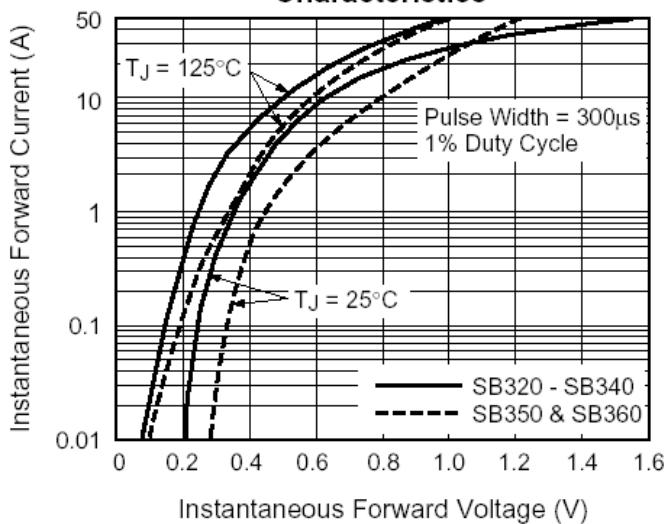
**Fig. 1 - Forward Current Derating Curve**



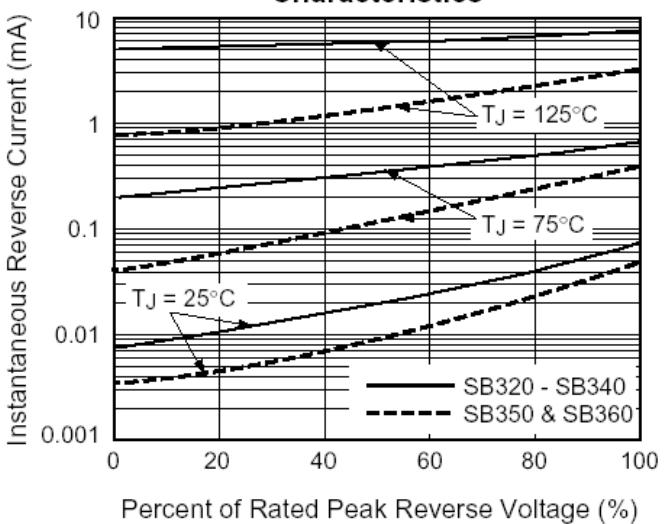
**Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current**



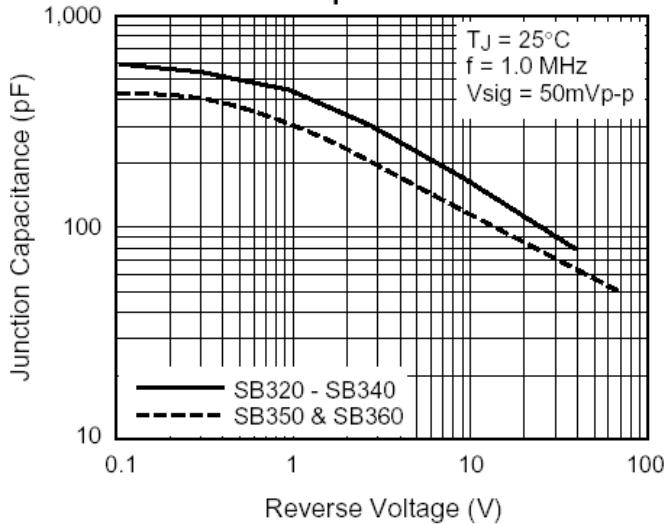
**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**



**Fig. 6 - Typical Transient Thermal Impedance**

