# **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 250℃ /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℃, unless otherwise stated)

SYMBOL	SB 520	SB 530	SB 540	SB 550	SB 560	units
Vrrm	20	30	40	50	60	V
Vrms	14	21	28	35	42	V
Vdc	20	30	40	50	60	V
If(av)	5.0					А
Ifsm	200.0				А	
Vf	0.55			0.67		V
lr	0.5					mA
l II		50		25		mA
Cj		220.0				
R(ja)	25.0				℃/W	
Tj	-65 to +125 -65 to +150		+150	C		
	Vrrm Vrms Vdc If(av) Ifsm Vf Ir Cj R(ja)	SYMBOL         520           Vrrm         20           Vrms         14           Vdc         20           If(av)         Ifsm           Vf         Ir           Cj         R(ja)	SYMBOL         520         530           Vrrm         20         30           Vrms         14         21           Vdc         20         30           If(av)         Ifsm         0.55           Ir         50         Cj           R(ja)         R(ja)         R(ja)	SYMBOL         520         530         540           Vrrm         20         30         40           Vrms         14         21         28           Vdc         20         30         40           If(av)         5.0         5.0           Ifsm         200.0         200.0           Vf         0.55         0.5           Ir         50         220.0           R(ja)         25.0	SYMBOL         520         530         540         550           Vrrm         20         30         40         50           Vrms         14         21         28         35           Vdc         20         30         40         50           If(av)         5.0         50         200.0           Vf         0.55         0.6         0.5           Ir         50         2         2           Cj         220.0         2         2           R(ja)         25.0         2         2	SYMBOL         520         530         540         550         560           Vrrm         20         30         40         50         60           Vrms         14         21         28         35         42           Vdc         20         30         40         50         60           If(av)         5.0         50         60           Vf         0.55         0.67           Ir         50         25           Cj         220.0         25           R(ja)         25.0

# 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>

<sup>1</sup> Rev.A5 www.gulfsemi.com

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### **RATINGS AND CHARACTERISTIC CURVES SB520 THRU SB560**



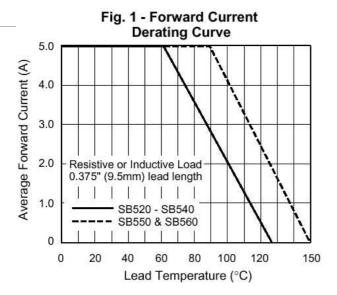
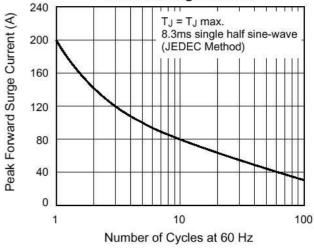


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current



<sup>2</sup> Rev.A5 www.gulfsemi.com