SB32-B THRU SB36-B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE:20 TO 60V **CURRENT: 3.0A**

GULF SEMI

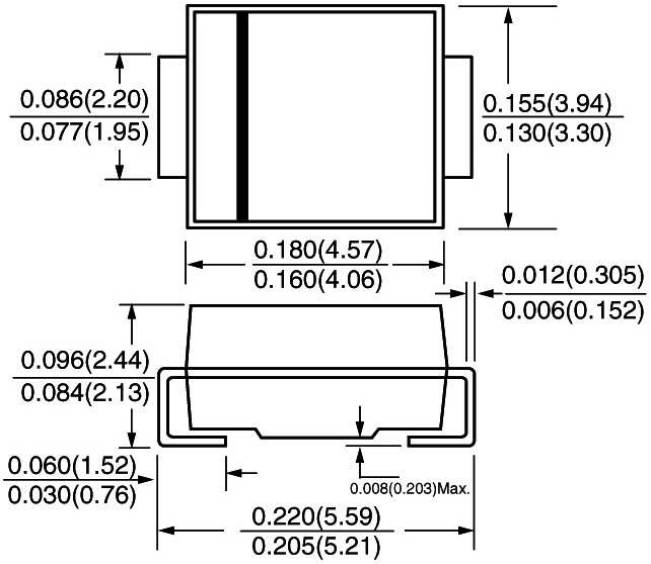
FEATURE

Plastic package has Underwriters Laboratory Flammability Classification 94V-0
For surface mounted applications
Low profile package
Built-in strain relief
Low power loss, high efficiency
High current capability, low forward voltage drop
High surge capability
For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
Guard ring for over voltage protection
High temperature soldering guaranteed:
250°C /10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: Solder plated, solder able per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end

SMB/DO--214AA



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, for capacitive load, derate current by 20%)

	SYMBOL	SB 32-B	SB 33-B	SB 34-B	SB 35-B	SB 36-B	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	If(av)	3.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	100.0					A
Maximum Forward Voltage atrated Forward current (Note 1)	Vf	0.5			0.75		V
Maximum DC Reverse Current Ta =25°C	Ir	0.5					mA
at rated DC blocking voltage Ta =100°C		20.0			10.0		
Typical Thermal Resistance (Note 2)	R(ja)	55.0					°C /W
Storage and Operating Temperature Range	Tstg	-55 to +150					°C

NOTE:

(1) Pulse test: 300μs pulse width, 1% duty cycle
(2) P.C.B. mounted with 0.2 x 0.2inches (5.0 x 5.0mm) copper pad areas[1]

2

FIG.1 - FORWARD CURRENT DERATING CURVE

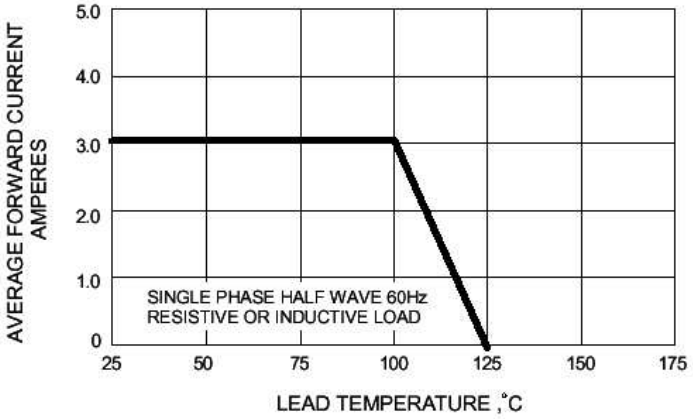


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

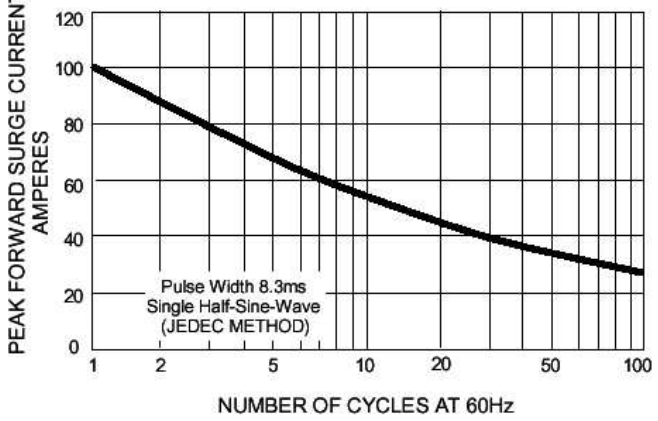


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

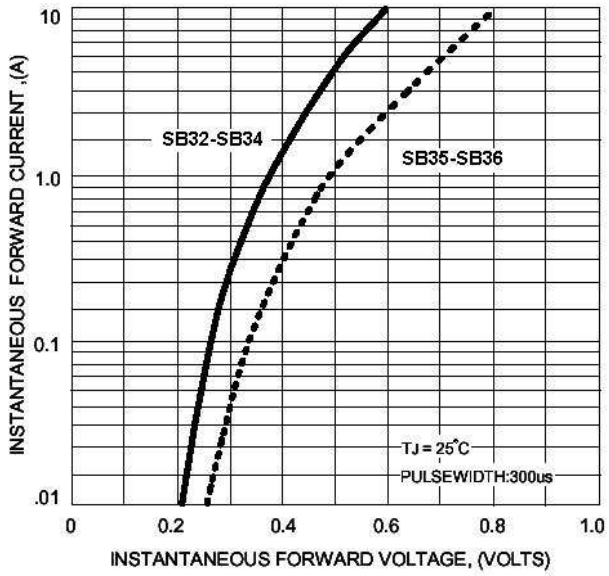


FIG.4 - TYPICAL JUNCTION CAPACITANCE

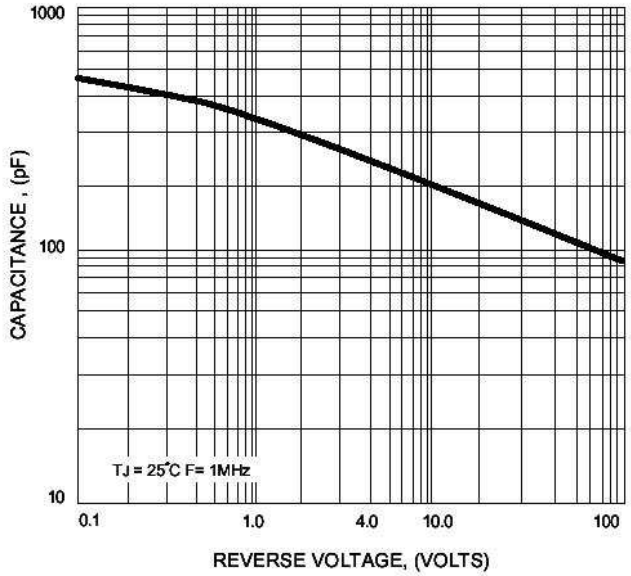


FIG.5 - TYPICAL REVERSE CHARACTERISTICS