

SB32 THRU SB36

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE:20 TO 60V

CURRENT: 3.0A



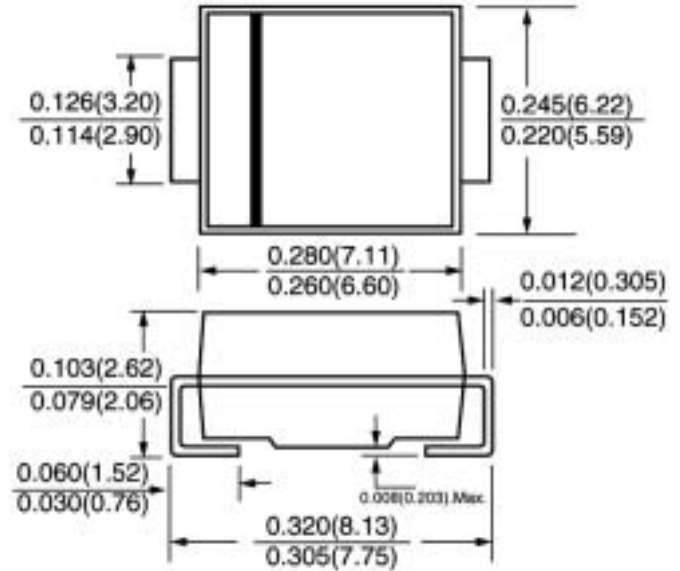
FEATURE

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
 Guarding for over voltage protection
 High temperature soldering guaranteed:
 250°C /10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Weight: 0.007 ounce, 0.25gram

SMC/DO--214AB



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	SB 33	SB 34	SB 35	SB 36	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	20	30	40	50	60	V
Maximum RMS Voltage	V _{rms}	14	21	28	35	42	V
Maximum DC blocking Voltage	V _{dc}	20	30	40	50	60	V
Maximum Average Forward Rectified Current 3/8" lead length at T _L =105°C	I _{f(av)}	3.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	100.0					A
Maximum Forward Voltage at rated Forward current (Note 1)	V _f	0.5			0.75		V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C	I _r	0.5					mA
		20.0			10.0		
Typical Thermal Resistance (Note 2)	R(ja)	55.0					°C /W
Storage and Operating Temperature Range	T _{stg}	-50 to +150					°C

NOTE:

- (1) Pulse test: 300µs pulse width, 1% duty cycle
- (2) P.C.B. mounted with 0.2 x 0.2 inches (5.0 x 5.0mm) copper pad areas¹

¹ Rev.A4, 1-Jul-03

RATINGS AND CHARACTERISTIC CURVES SB32 THRU SB36

FIG. 1 - FORWARD CURRENT DERATING CURVE

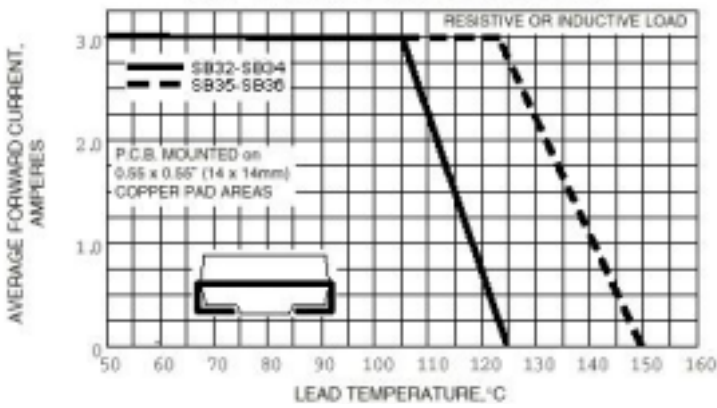


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

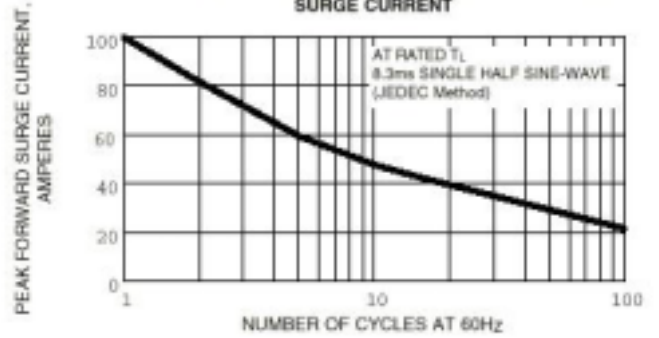


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

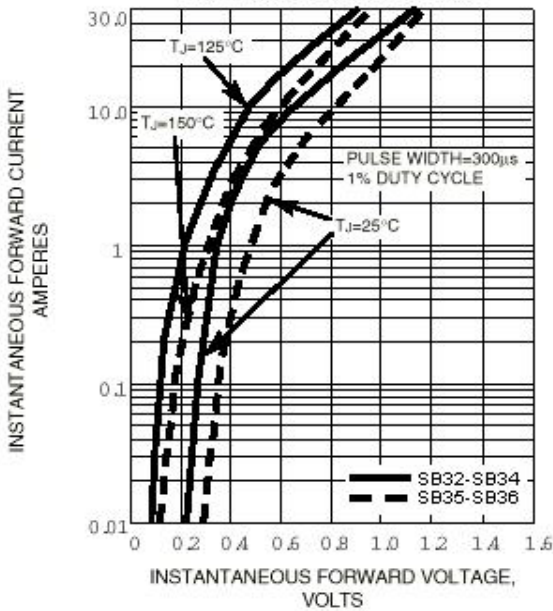


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

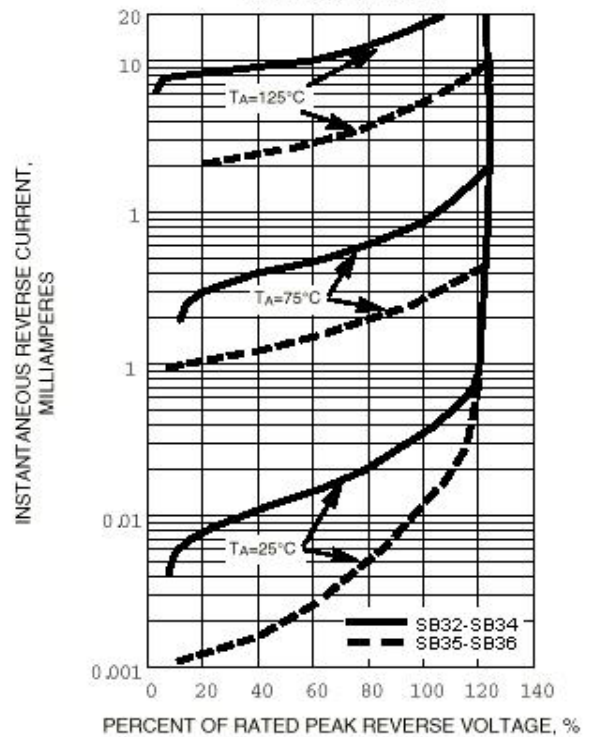


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

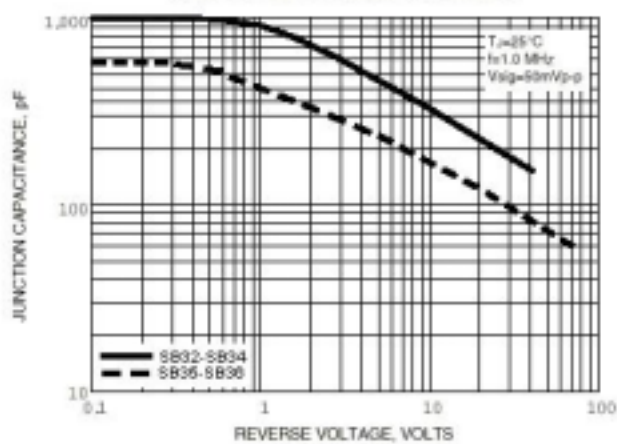


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

