

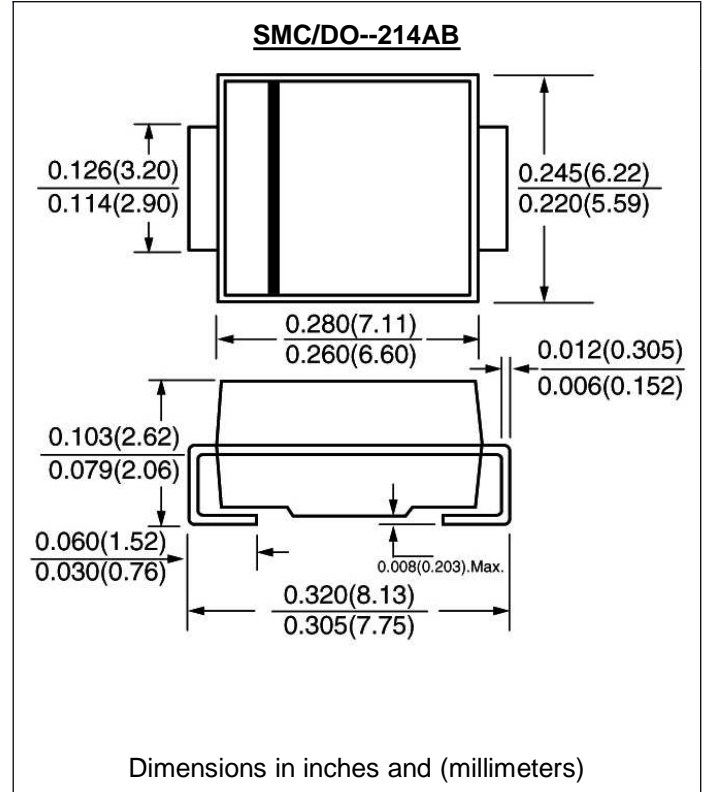


**FEATURE**

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



**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 <sub>rrm</sub>	20	30	40	50	60	V
Maximum RMS Voltage	V <sub>rms</sub>	14	21	28	35	42	V
Maximum DC blocking Voltage	V <sub>dc</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current 3/8"lead length at T <sub>L</sub> =105°C	I <sub>f(av)</sub>	3.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	100.0					A
Maximum Forward Voltage at rated Forward current (Note 1)	V <sub>f</sub>	0.5			0.75		V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =100°C	I <sub>r</sub>	0.5			10.0		mA
Typical Thermal Resistance (Note 2)	R(ja)	55.0					°C /W
Storage and Operating Temperature Range	T <sub>stg</sub>	-50 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<sup>1</sup>



FIG. 1 - FORWARD CURRENT DERATING CURVE

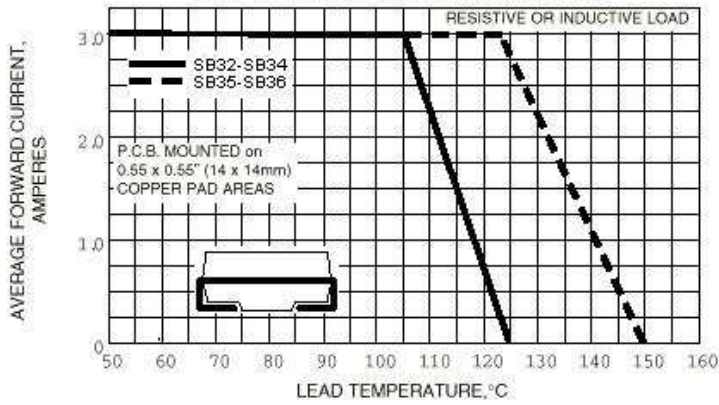


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

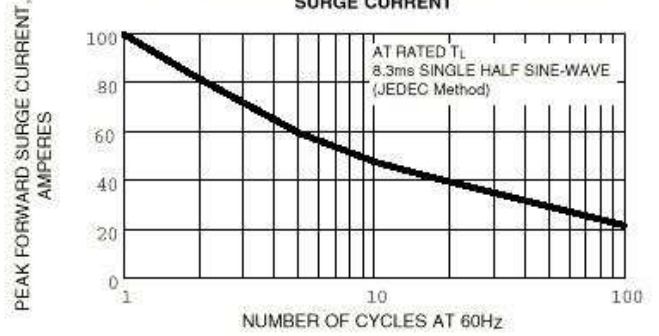


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

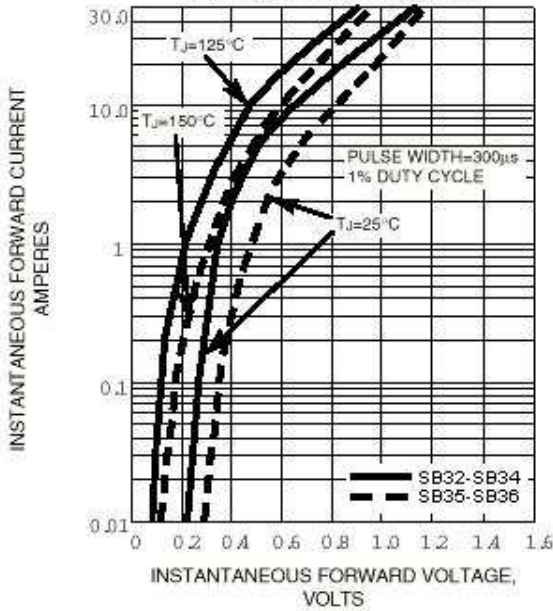


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

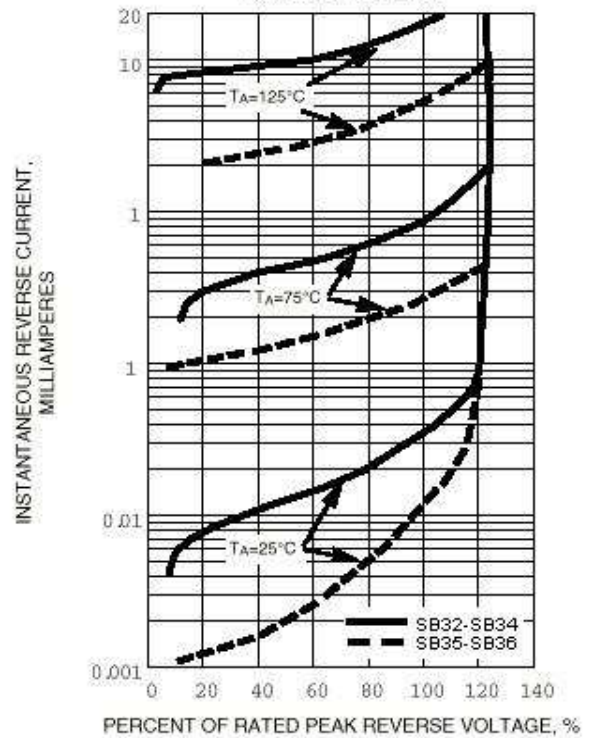


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

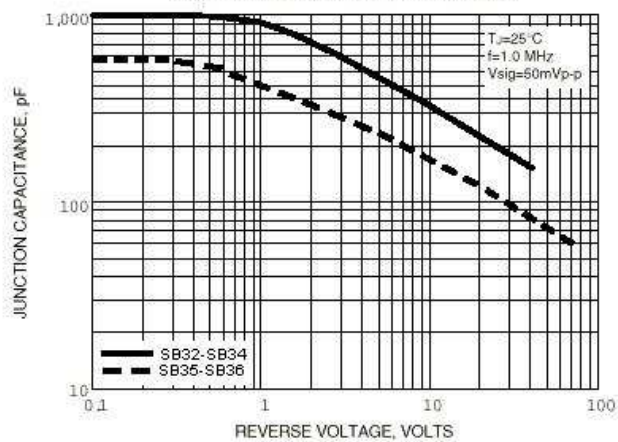


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

