



# SK32B THRU SK310B

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts    Forward Current - 3.0 Ampere

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds at terminals

### MECHANICAL DATA

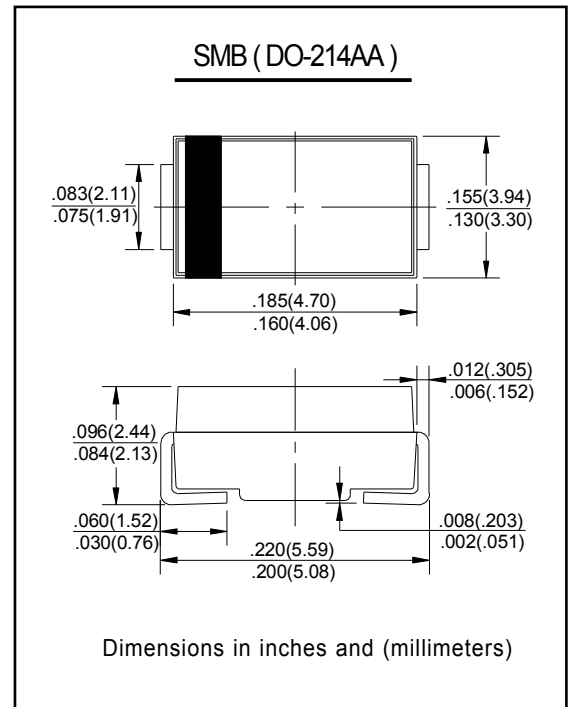
**Case:** JEDEC SMB(DO-214AA) molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.005 ounce, 0.138 grams



### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	SK32B	SK33B	SK34B	SK35B	SK36B	SK38B	SK39B	SK310B	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>									
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	40	50	60	80	90	100	V
DC Blocking Voltage	V <sub>R</sub>									
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @T <sub>L</sub> = 75°C	I <sub>O</sub>	3.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	70								A
Forward Voltage @I <sub>F</sub> = 3.0A	V <sub>FM</sub>	0.50			0.70		0.85			V
Peak Reverse Current @T <sub>A</sub> = 25°C	I <sub>RM</sub>	0.5								mA
At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C		10								
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub>	17								°C/W
	R <sub>θJA</sub>	75								
Operating Temperature Range	T <sub>j</sub>	-65 to +125								°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C

Note: 1. Mounted on P.C. Board with 5.0mm<sup>2</sup> copper pad area.



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## RATINGS AND CHARACTERISTIC CURVES

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

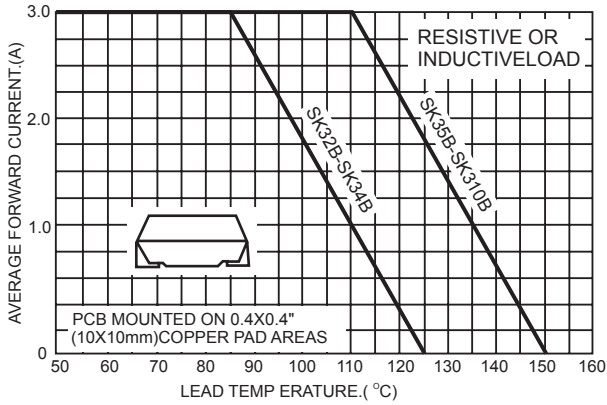


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

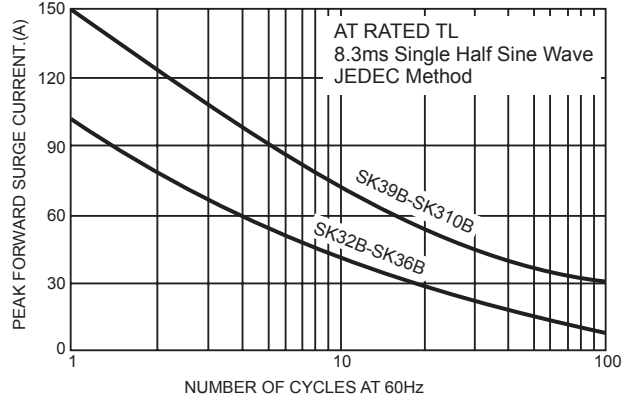


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

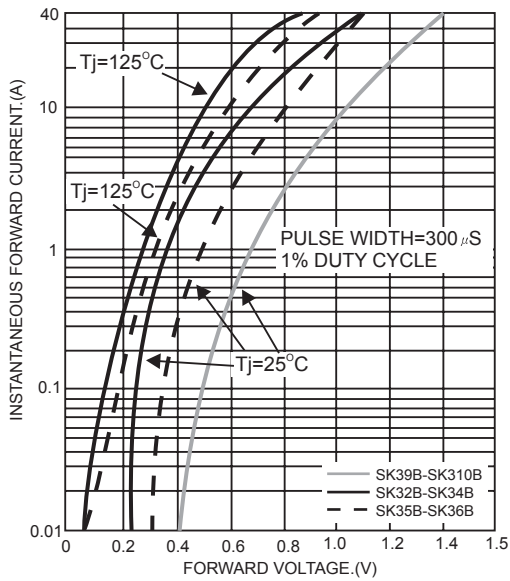


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

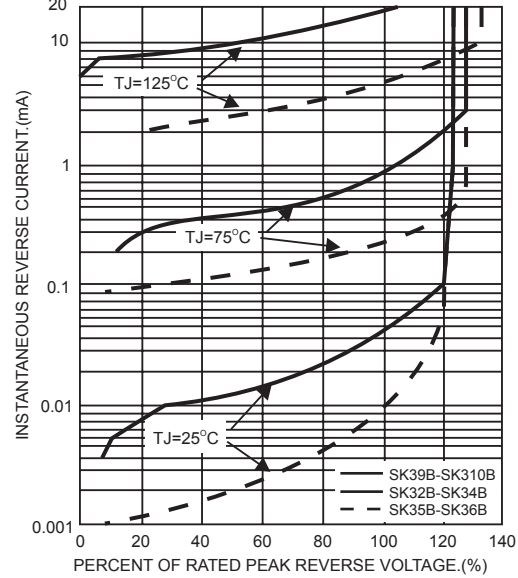


FIG. 5- TYPICAL JUNCTION CAPACITANCE

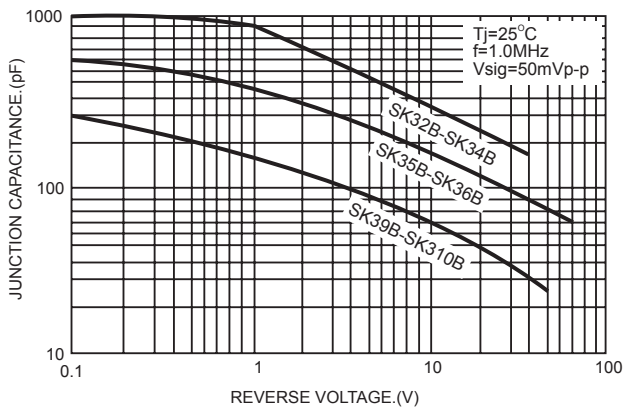


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

