



# SK12 THRU SK100

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

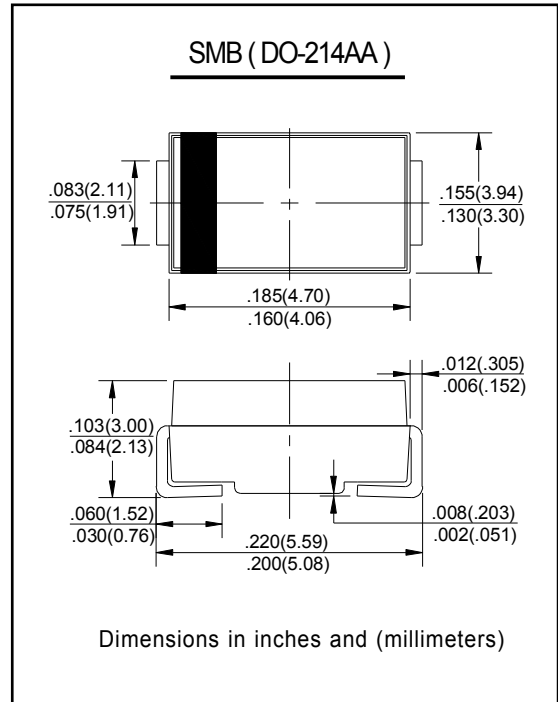
Reverse Voltage - 20 to 100 Volts    Forward Current - 1.0 Ampere

### 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 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 @<sub>T<sub>A</sub></sub>=25°C unless otherwise specified

Characteristic	Symbol	SK12	SK13	SK14	SK15	SK16	SK18	SK19	SK100	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 @ <sub>T<sub>L</sub></sub> = 75°C	I <sub>O</sub>	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30								A
Forward Voltage @ <sub>I<sub>F</sub></sub> = 1.0A	V <sub>FM</sub>	0.50		0.70		0.85			V	
Peak Reverse Current @ <sub>T<sub>A</sub></sub> = 25°C At Rated DC Blocking Voltage @ <sub>T<sub>A</sub></sub> = 100°C	I <sub>RM</sub>					0.5				mA
						20				
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>					30				°C/W
						95				
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.



# SK12 THRU SK110

## RATINGS AND CHARACTERISTIC CURVES

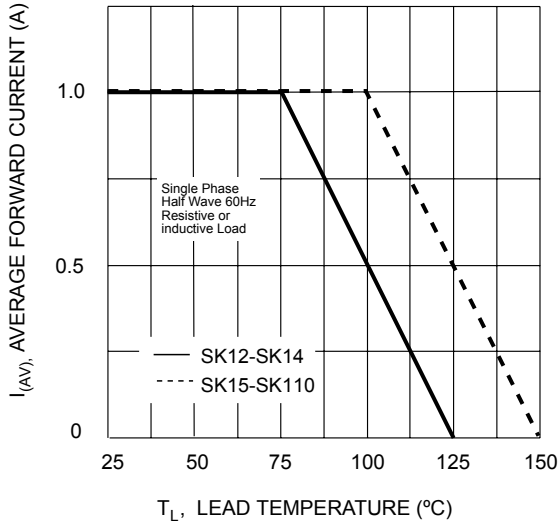


Fig. 1 Forward Current Derating Curve

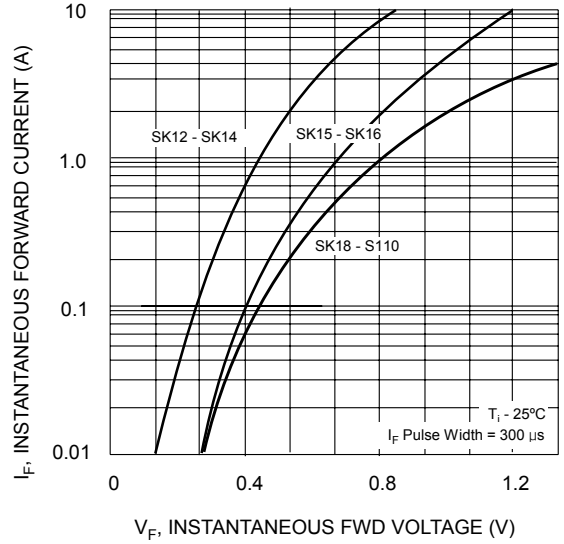


Fig. 2 Typ. Forward Characteristics

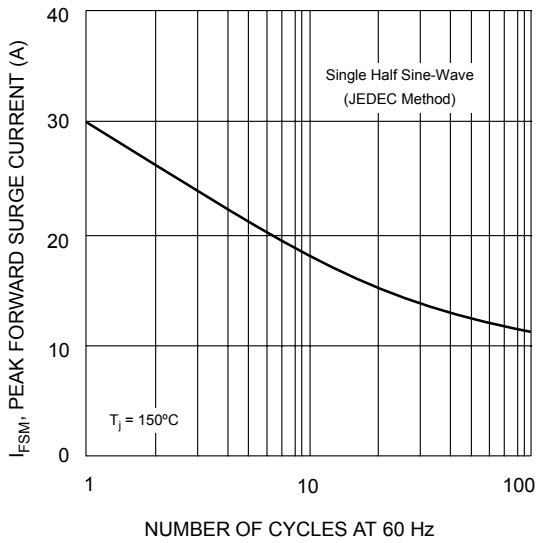


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

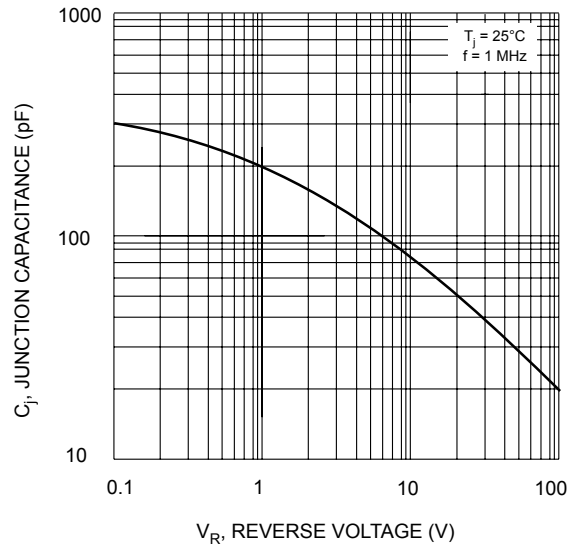


Fig. 4 Typical Junction Capacitance

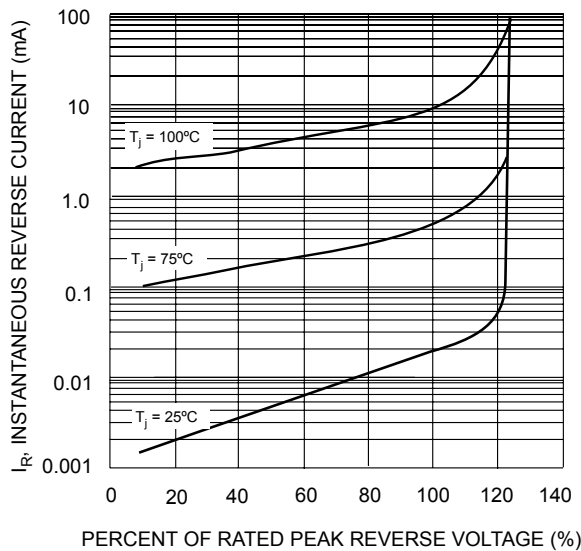


Fig. 5 Typical Reverse Characteristics