



# DATA SHEET

## SK22~S210

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 20 to 100 Volts **CURRENT** 2.0 Amperes

**SMB/DO-214AA**

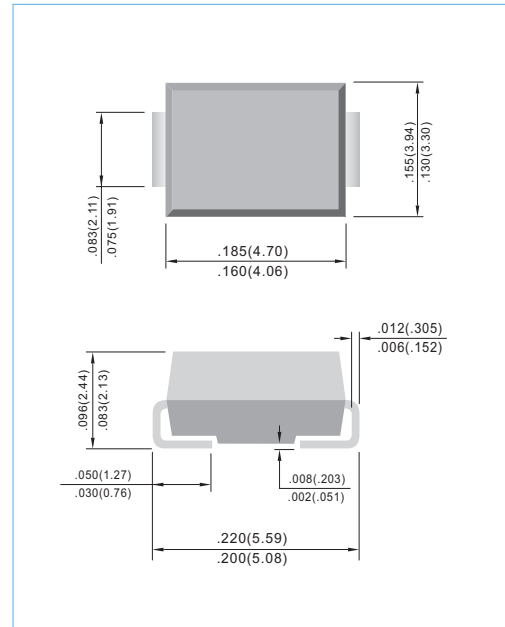
Unit: inch (mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic  
 Terminals:Solder plated, solderable per MIL-STD-202G, Method 208  
 Polarity: Color band denotes positive end (cathode)  
 Standard packaging: 12mm tape (EIA-481)  
 Weight: 0.003 ounce, 0.093 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Resistive or inductive load.

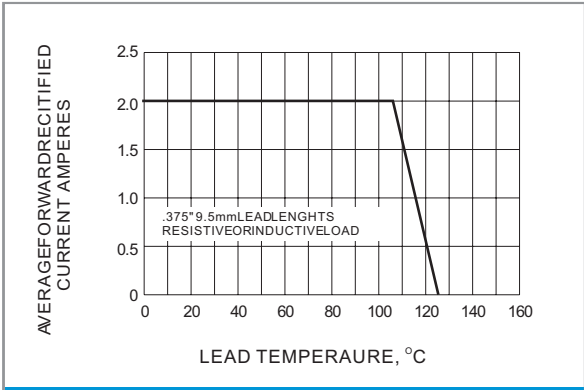
PARAMETER	SYMBOL	SK22	SK23	SK24	SK25	SK26	SK28	SK29	S210	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	90	100	V	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	63	70	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	90	100	V	
Maximum Average Forward Current .375"(9.5mm) lead length at T <sub>L</sub> =105°C	I <sub>AV</sub>	2.0								A	
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	50								A	
Maximum Forward Voltage at 2.0A ( Note 1)	V <sub>F</sub>	0.5			0.7		0.85			V	
Maximum DC Reverse Current T <sub>A</sub> =25°C at Rated DC Blocking Voltage T <sub>A</sub> =100°C	I <sub>R</sub>					0.5					mA
Maximum Thermal Resistance ( Note 2)	R <sub>θJL</sub>	12								°C / W	
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125								°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C	

**NOTES:**

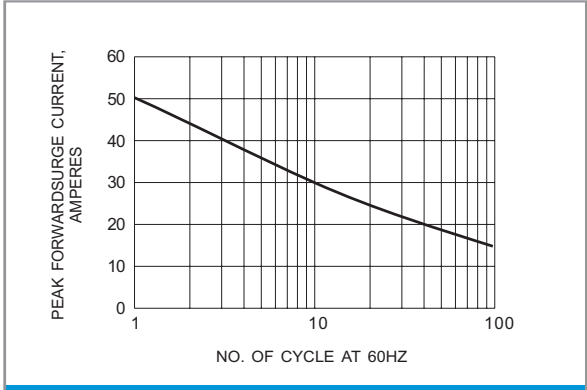
1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8mm<sup>2</sup> (.013mm thick) copper pad areas.



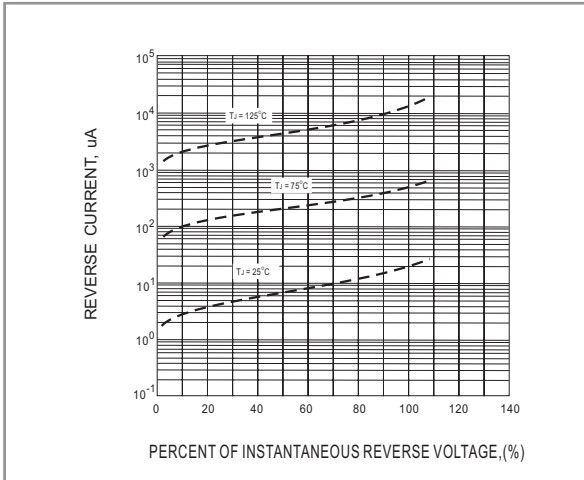
**RATING AND CHARACTERISTIC CURVES**



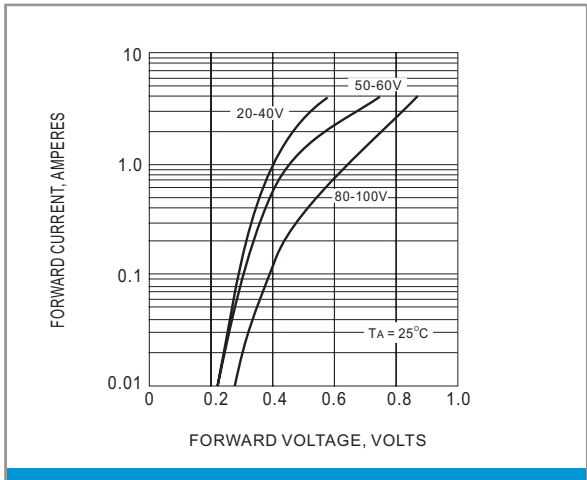
**Fig.1- FORWARD CURRENT DERATING CURVE**



**Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**Fig.3- TYPICAL REVERSE CHARACTERISTICS**



**Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**