# **SK12 THRU SK110**

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER Reverse Voltage - 20 to 100 V

Forward Current – 1 A

### **Features**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- · Low power loss, high efficiency
- · Built in strain relief, ideal for automated placement
- High forward surge current capability

### **Mechanical Data**

- Case: SMA (DO-214AC) molded plastic body
- Terminals: leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

#### **Maximum Ratings and Electrical Characteristics**

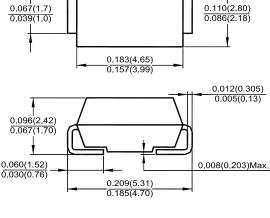


Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half-wave, 60 Hz, resistive or inductive load, for capacitive load current derate by 20%

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Parameter	Symbols	SK12	SK13	SK14	SK15	SK16	SK18	SK110	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20 30 40 50 60 80 100				100	V		
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1							А
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	40							A
Maximum Instantaneous Forward Voltage at 1 A	V <sub>F</sub>	0.55 0.75			0.	85	V		
Maximum DC Reverse Current $T_A = 25 ^{\circ}C$ at Rated DC Blocking Voltage $T_A = 100 ^{\circ}C$	I <sub>R</sub>	0.5 20							mA
Typical Junction Capacitance <sup>1)</sup>	CJ	110 90						pF	
Typical Thermal Resistance <sup>2)</sup>	$R_{ ext{ heta}JA}$	88							°C/W
Operating Junction Temperature Range	TJ	- 65 to + 125 - 65 to + 150						°C	
Storage Temperature Range	T <sub>Stg</sub>	- 65 to + 150							°C

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C.

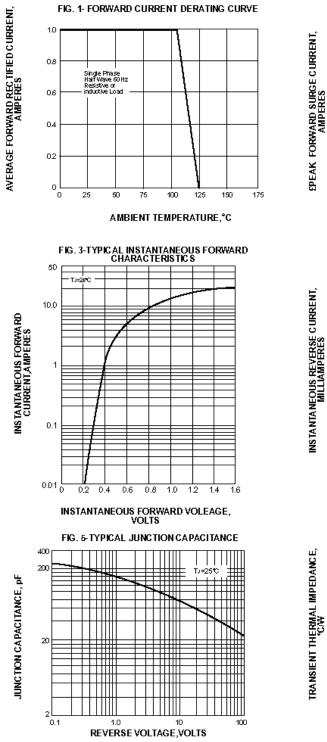
<sup>2)</sup> P.C.B. mounted with 0.2 X 0.2 (5 X 5 mm) copper pad areas.

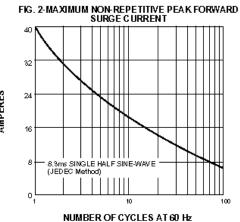


SMA (DO-214AC)

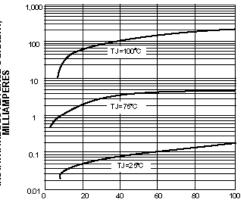


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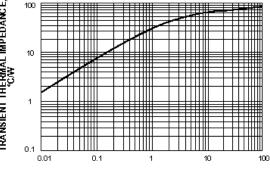






PERCENT OF PEAK REVERSE VOLTAGE,%





t, PULSE DURATION, sec.



Dated : 14/04/2008