

# SK12 THRU SK110

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage – 20 to 100 V

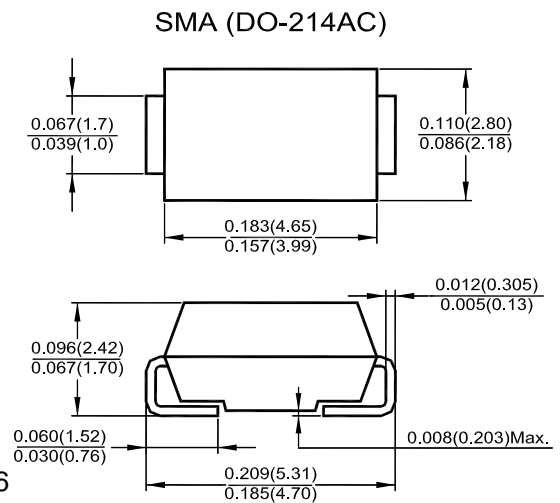
Forward Current – 1 A

### 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



Dimensions in inches and (millimeters)

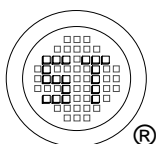
### Maximum Ratings and Electrical Characteristics

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%.

Parameter	Symbols	SK12	SK13	SK14	SK15	SK16	SK18	SK110	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	40							A
Maximum Instantaneous Forward Voltage at 1 A	$V_F$	0.55		0.75		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A = 25^\circ\text{C}$		0.5		$T_A = 100^\circ\text{C}$		20	mA
Typical Junction Capacitance <sup>1)</sup>	$C_J$	110		90		pF			
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	88							°C/W
Operating Junction Temperature Range	$T_J$	- 65 to + 125		- 65 to + 150		°C			
Storage Temperature Range	$T_{STG}$	- 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.



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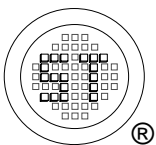
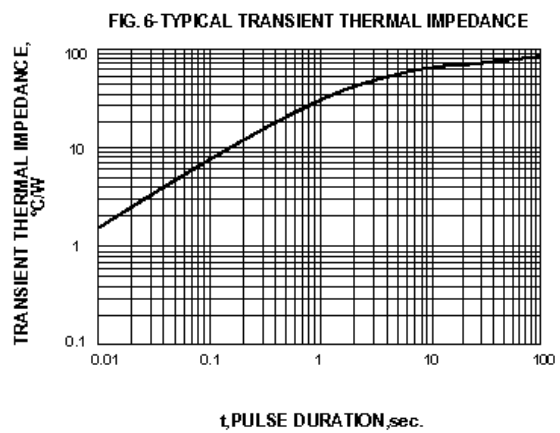
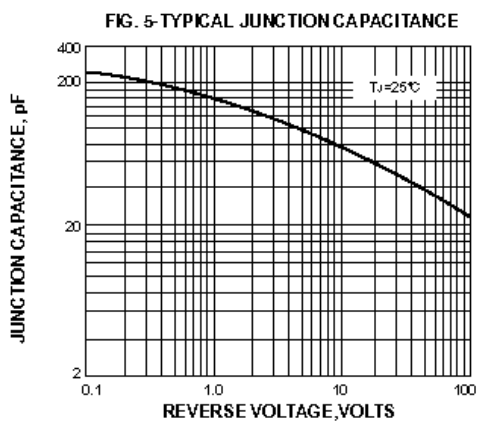
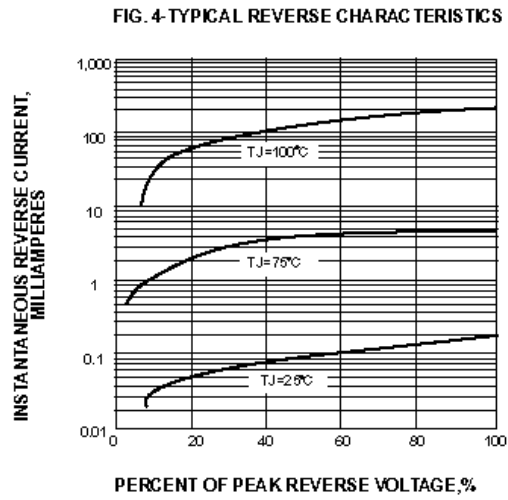
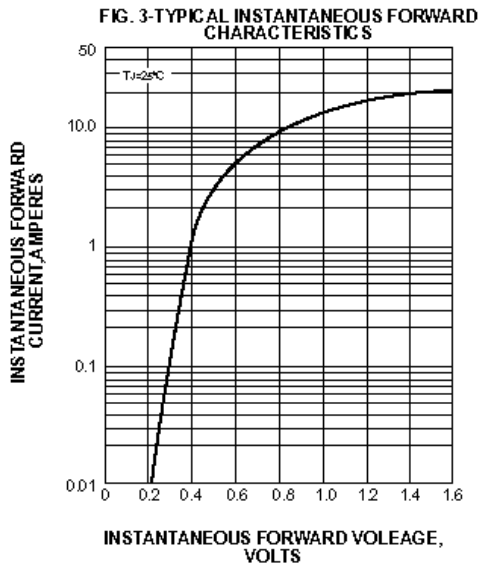
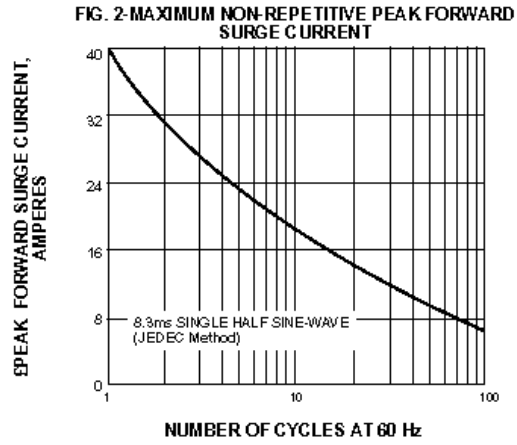
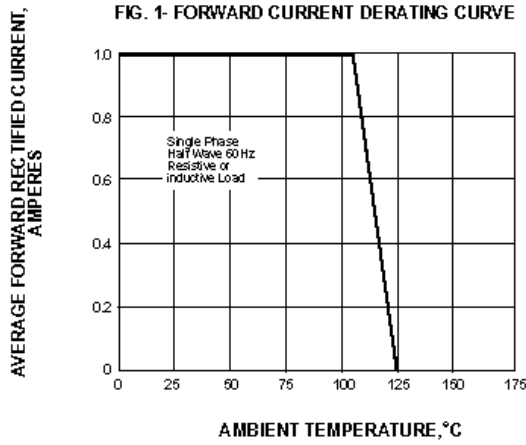
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ISO/TS 16949 : 2002 Certificate No. 05103  
 ISO 14001:2004 Certificate No. 7116  
 ISO 9001:2000 Certificate No. 0506098

Dated : 14/04/2008

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