

### Major Ratings and Characteristics

$I_{F(AV)}$	1.0 A
$V_{RRM}$	20 V to 100 V
$I_{FSM}$	30 A
$V_F$	0.55 V, 0.70 V, 0.85V
$T_j \text{ max.}$	150 °C



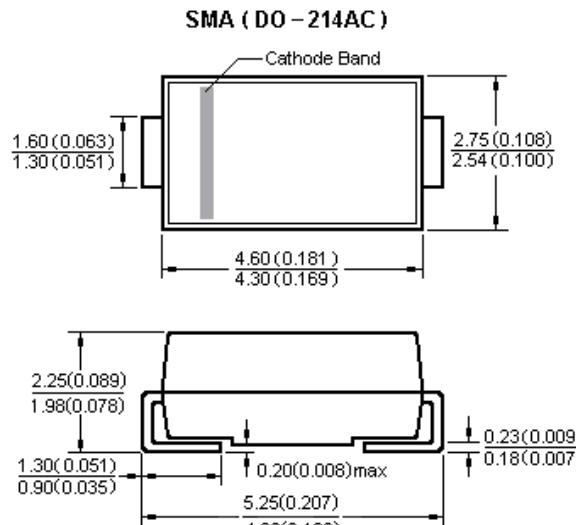
SMA (DO-214AC)

### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Data

- Case: JEDEC DO-214AC molded plastic body over passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



Dimensions in millimeters and (inches)

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

(TA = 25 °C unless otherwise noted)

	Symbol	SK12 (SS12)	SK13 (SS13)	SK14 (SS14)	SK15 (SS15)	SK16 (SS16)	SK18 (SS18)	SK110 (SS110)	UNIT
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	$I_{FSM}$				30				A
Maximum instantaneous forward voltage at 1.0A	$V_F$		0.55	0.70	0.85				V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at Rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$			0.5					mA
				5					mA
Voltage rate of change (rated VR)	$dv/dt$			10000					V/ $\mu$ s
Thermal resistance from junction to ambient	$R_{\theta JA}$			88					°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$			–65 to +150					°C

# SK12~SK110(SS12~SS110) SMA

Schottky rectifier



Characteristic Curves ( $T_A=25^\circ\text{C}$  unless otherwise noted)

Fig.1 Forward Current Derating Curve

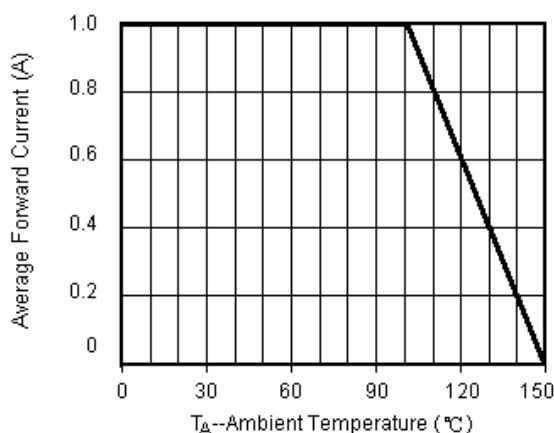


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

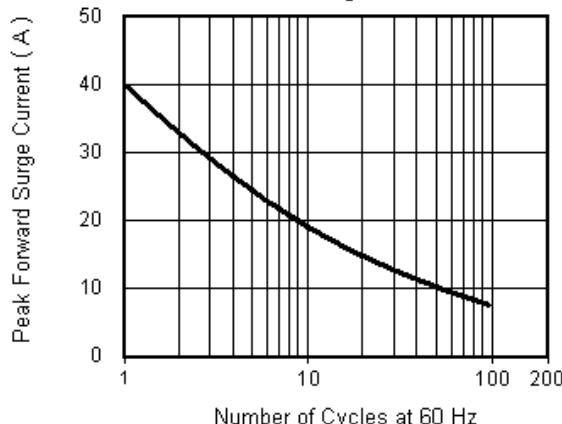


Fig.3 Typical Instantaneous Forward Characteristics

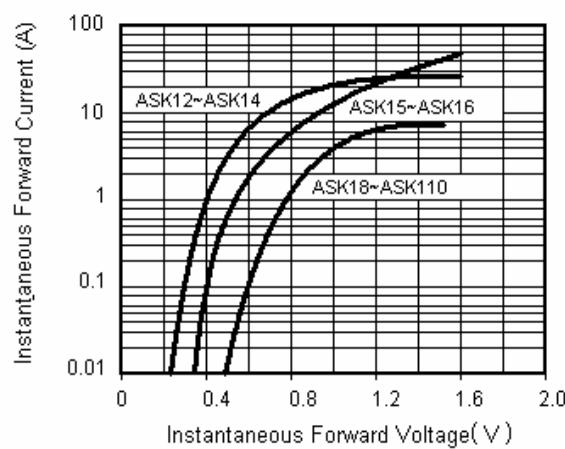


Fig.4 Typical Reverse Leakage Characteristics

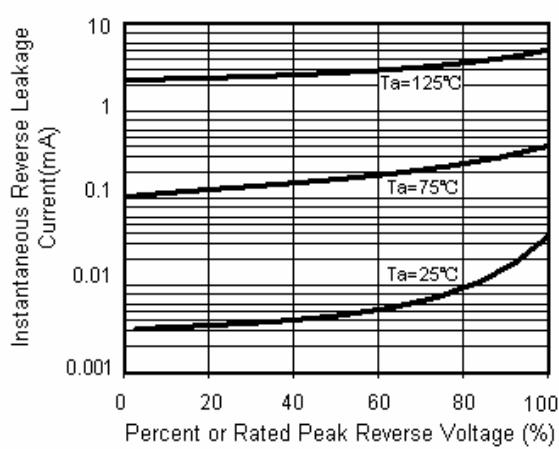


Fig.5 Typical Junction Capacitance

