

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 - 100 V  
FORWARD CURRENT: 1.0 A

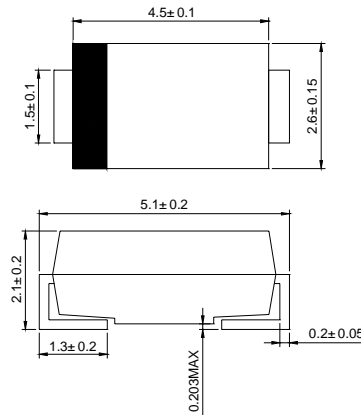
#### FEATURES

- ◇ Schottky barrier rectifier
- ◇ Guardring protection
- ◇ Low forward voltage
- ◇ Reverse energy tested
- ◇ High current capability
- ◇ Extremely low thermal resistance

#### MECHANICAL DATA

- ◇ Case: SMA molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.002 ounces, 0.064 gram

#### (DO-214AC)SMA



Dimensions in millimeters

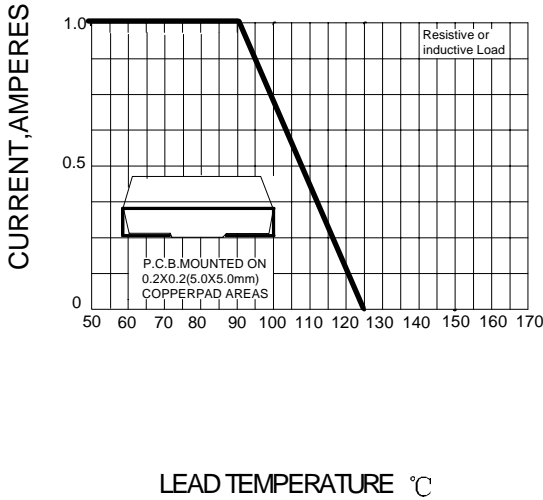
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

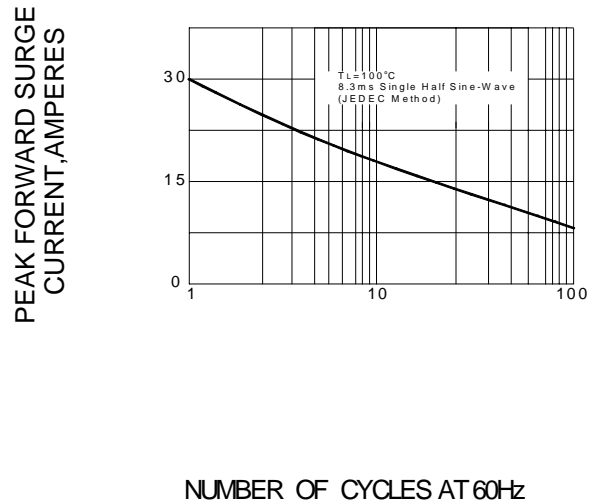
		SK12	SK13	SK14	SK15	SK16	SK18	SK19	SK110	UNITS
Device marking code		SK12	SK13	SK14	SK15	SK16	SK18	SK19	SK110	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	$V_{RWS}$	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	30.0								A
Maximum instantaneous forward voltage at $I_{FM}=1.0\text{A}$ (NOTE1)	$V_F$	0.50			0.70		0.85			V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=100^\circ\text{C}$	$I_R$	0.5 20								m A
Maximum thermal resistance	$R_{\theta JL}$	35.0								$^\circ\text{C/W}$
Operating temperature range	$T_J$	-55 ---- +125								$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 ---- +150								$^\circ\text{C}$

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

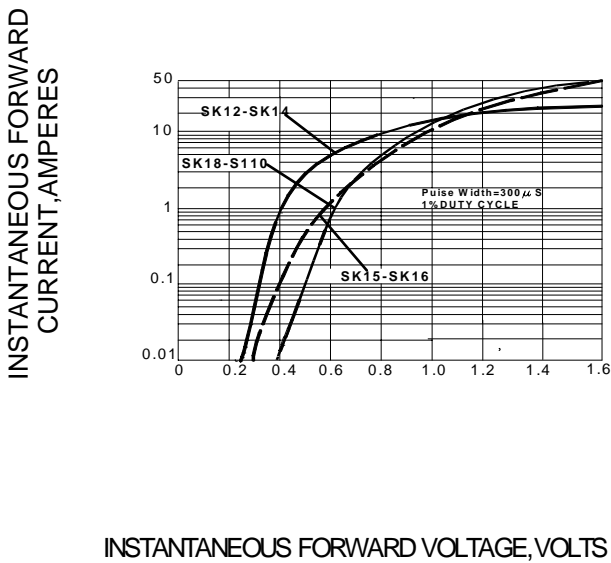
**FIG.1 – FORWARD DERATING CURVE**



**FIG.2– PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

