

SK12-SK110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

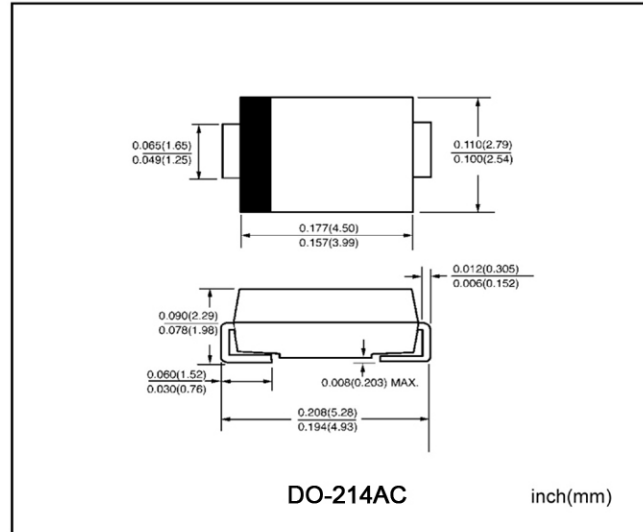
REVERSE VOLTAGE: 20 - 100 V
FORWARD CURRENT: 1.0 A

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



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	K110		
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				mA
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 %

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FIG.1 – FORWARD DERATING CURVE

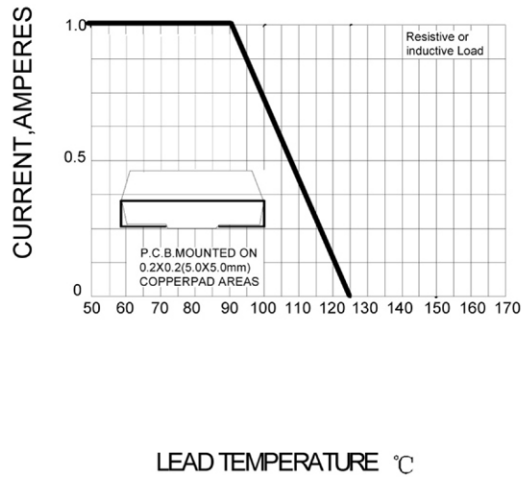


FIG.2– PEAK FORWARD SURGE CURRENT

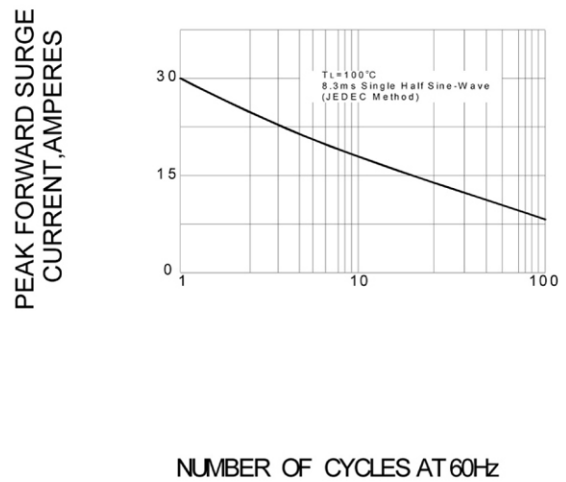


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

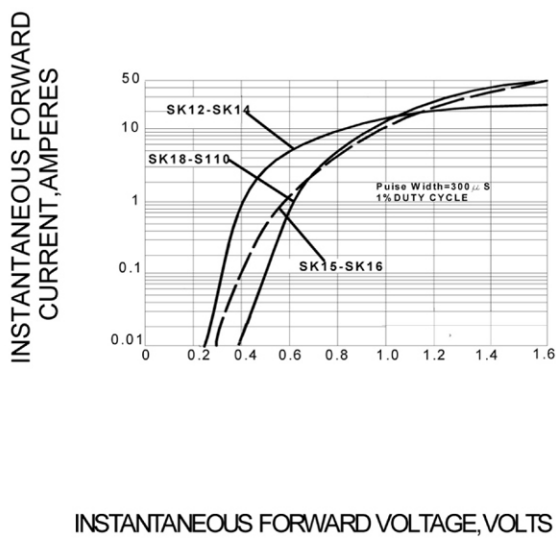


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

