

**SURFACE MOUNT SCHOTTKY
BARRIER RECTIFIERS**

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

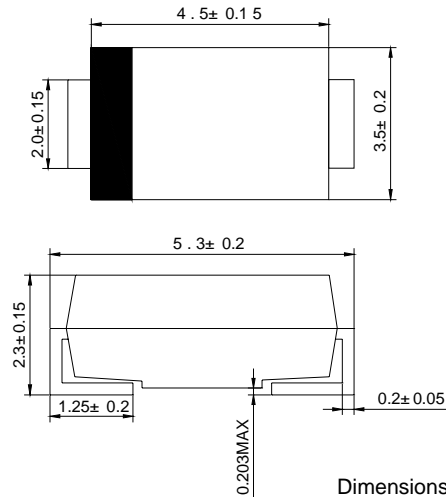
FEATURES

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

MECHANICAL DATA

- ◇ Case: SMB molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.003 ounces, 0.093 gram

SMB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK19B	SK110B	UNITS
Device marking code		SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK19B	SK110B	
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	$R_{\theta JL}$	28								$^\circ\text{C/W}$
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

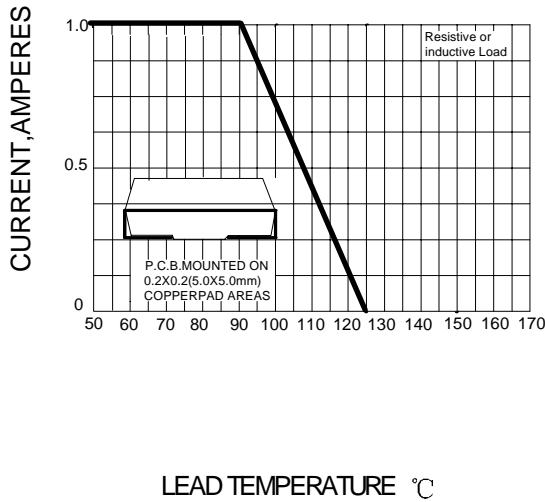


FIG.2– PEAK FORWARD SURGE CURRENT

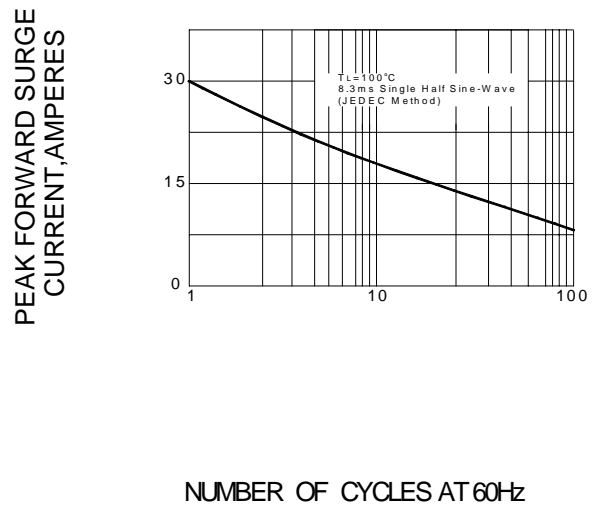


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

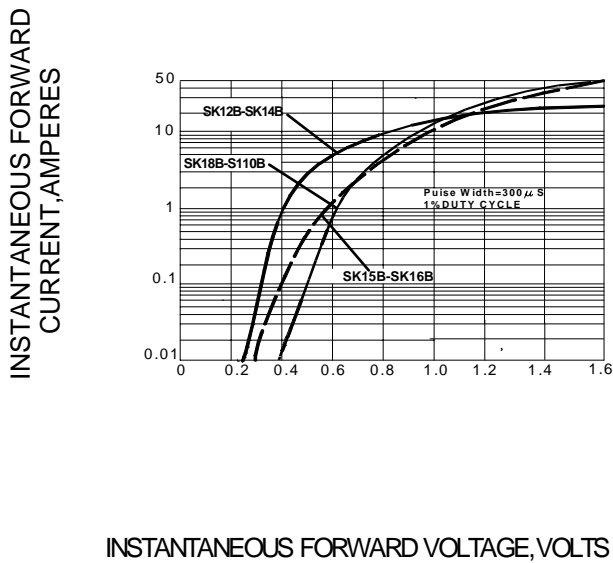


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

