

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 - 100 V
FORWARD CURRENT: 3.0 A

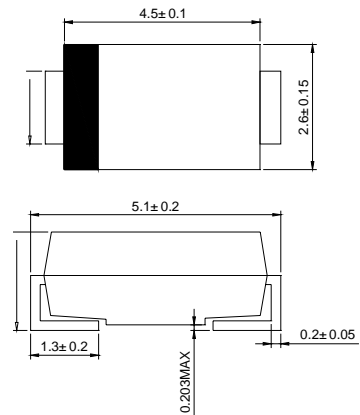
FEATURES

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

MECHANICAL DATA

- ◇ Case: SMC molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.007 ounces, 0.21 gram

SMA



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SK32A	SK33A	SK34A	SK35A	SK36A	SK38A	SK39A	SK310A	UNITS
Device marking code		SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS39A	SS310A	
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 $T_L=90^\circ\text{C}$	$I_{F(AV)}$	3.0								A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	100.0								A
Maximum instantaneous forward voltage at $I_{FM}=3.0\text{A}$ (NOTE1)	V_F	0.55			0.75		0.85			V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$	I_R	0.5 20.0								m A
Maximum thermal resistance	$R_{\theta JL}$	17.0								$^\circ\text{C}/\text{W}$
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

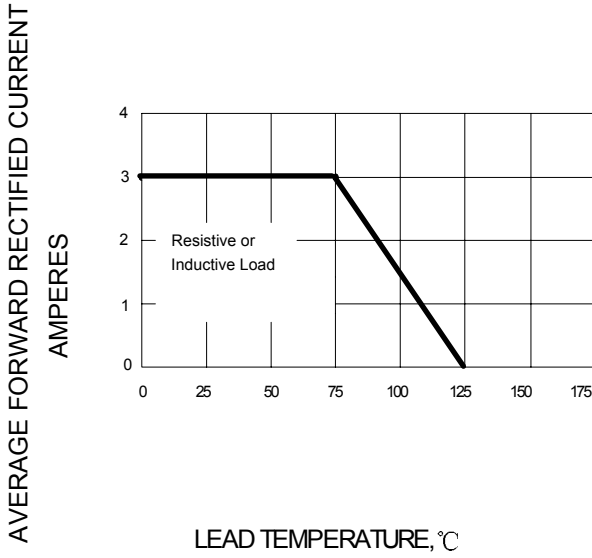


FIG.2 – PEAK FORWARD SURGE CURRENT

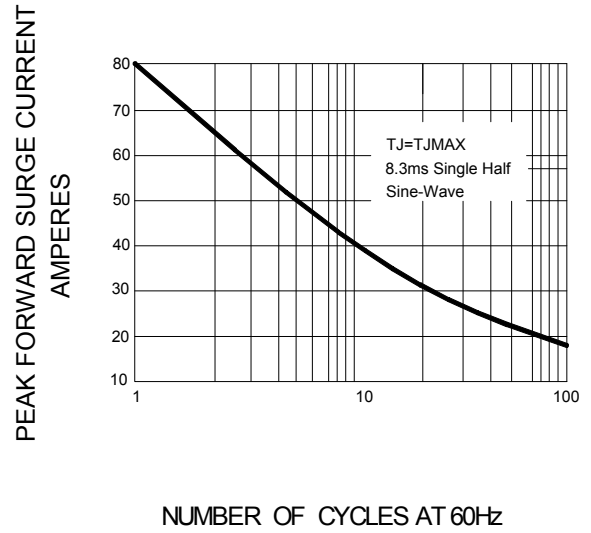


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

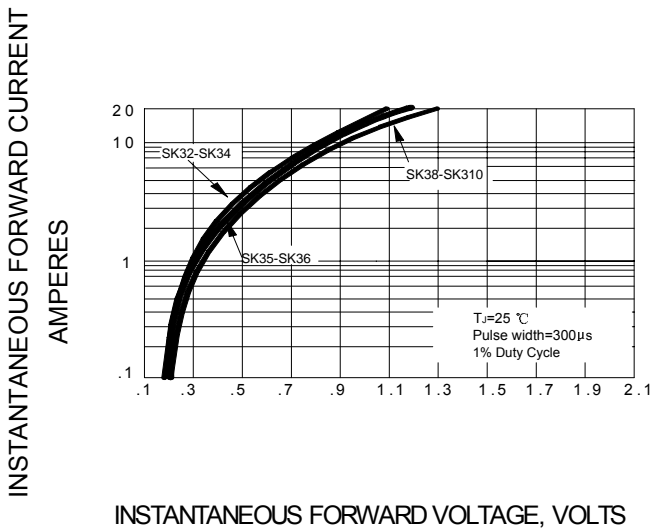


FIG.4 – TYPICAL JUNCTION CAPACITANCE

