SK32 THRU SK310

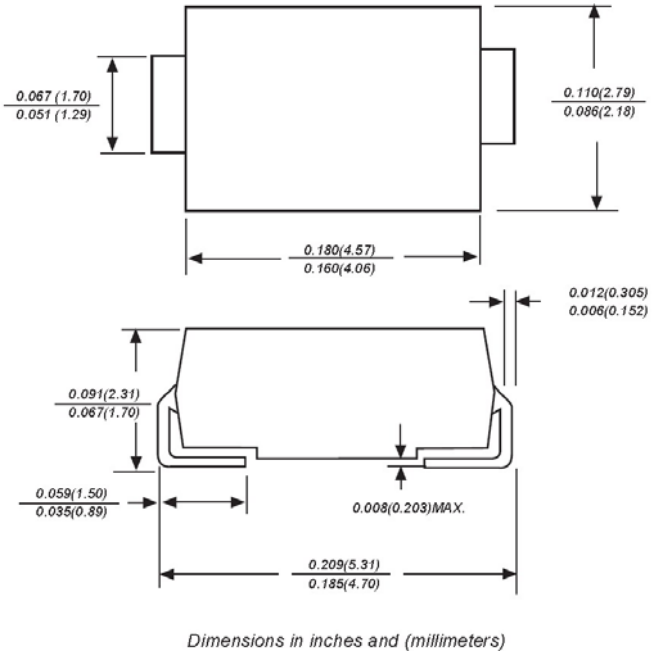
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - *20 to 100 Volts* **Forward Current -** *3.0 Amperes*

FEATURES

- ●The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ●For surface mounted applications
- ●Metal silicon junction,majority carrier conduction
- ●Low power loss,high efficiency
- ●Built-in strain relief,ideal for automated placement
- ●High forward surge current capability
- ●High temperature soldering guaranteed: 250℃/10 seconds at terminals

SMA



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC SMA molded plastic body

Terminals: leads solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.058 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	SK32	SK33	SK34	SK35	SK36	SK38	SK310	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at T_L(see fig.1)	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	70.0							Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.55			0.70		0.85		Volts
Maximum DC reverse current T_A=25℃	I_R	0.5							mA
at rated DC blocking voltage T_A=100℃		20			10				
Typical junction capacitance (NOTE 1)	C_J	500			300				pF
Typical thermal resistance (NOTE 2)	R_{qJA}	55.0							℃/W
Operating junction temperature range	T_J,	-65 to +125			-65 to +150				℃
Storage temperature range	T_{STG}	-65 to +150							℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2″(5.0x5.0mm) copper pad areas

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RATINGS AND CHARACTERISTIC CURVES SK32 THRU SK310

FIG. 1- FORWARD CURRENT DERATING CURVE

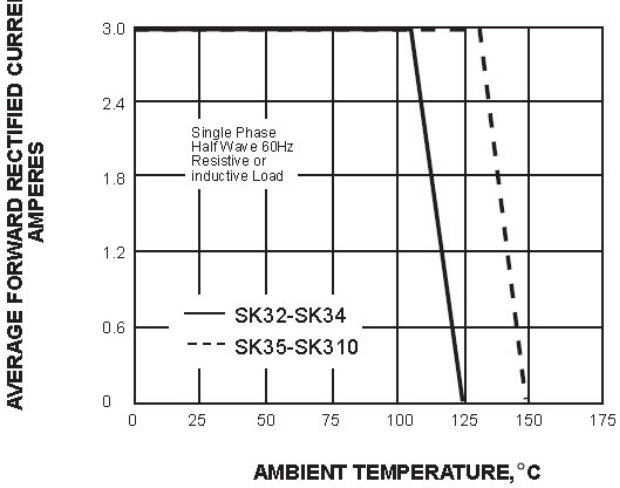

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

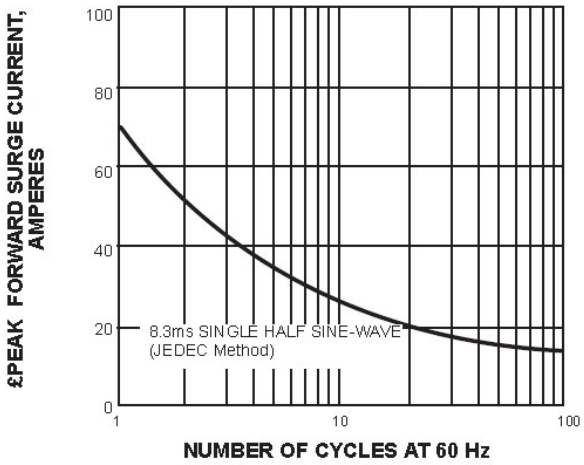

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

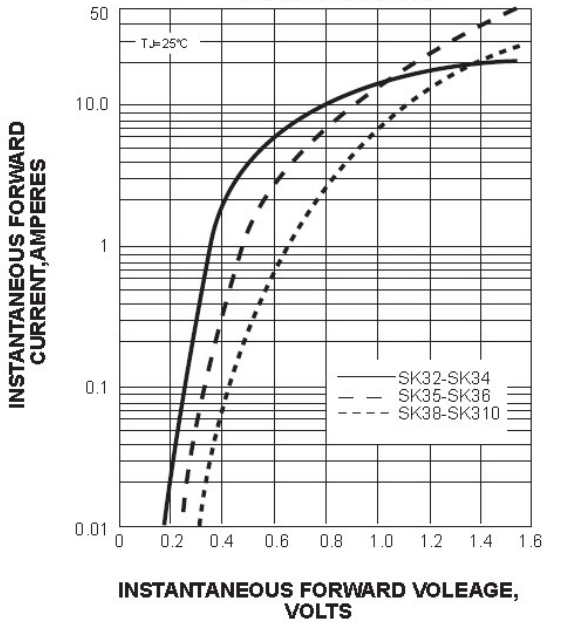

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

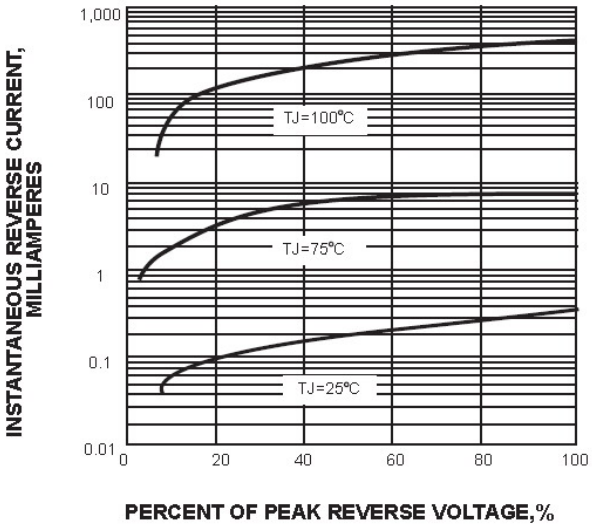

FIG. 5-TYPICAL JUNCTION CAPACITANCE

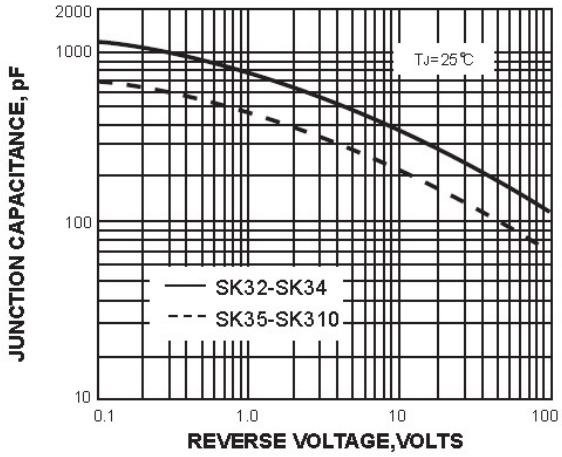

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE