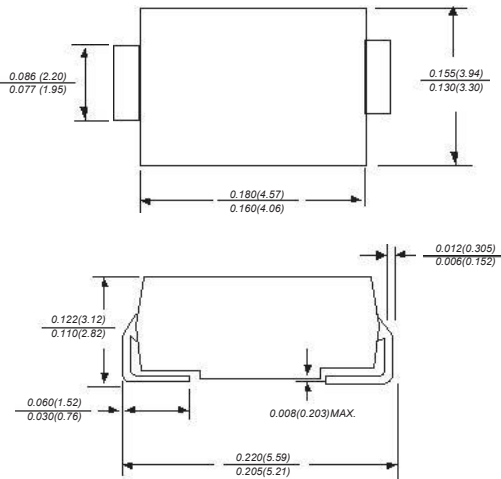


SK32 THRU SK310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

DO-214AA(SMB)



Dimensions in inches and (millimeters)

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°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.005 ounce, 0.138 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C 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}	100.0							Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.55		0.70		0.85		Volts	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5							mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		20		10					
Typical junction capacitance (NOTE 1)	C_J	500			300			pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0							°C/W
Operating junction temperature range	T_J	-65 to +125			-65 to +150				°C
Storage temperature range	T_{STG}	-65 to +150							°C

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

SK32 THRU SK310

RATINGS AND CHARACTERISTIC CURVES SK32 THRU SK310

FIG. 1- FORWARD CURRENT DERATING CURVE

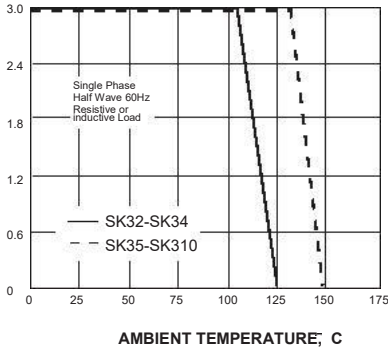


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

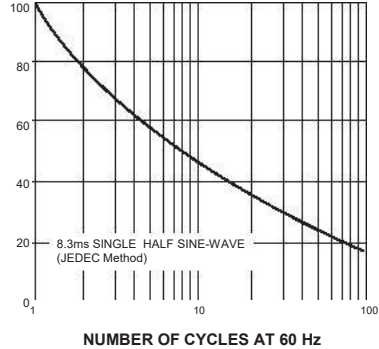


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

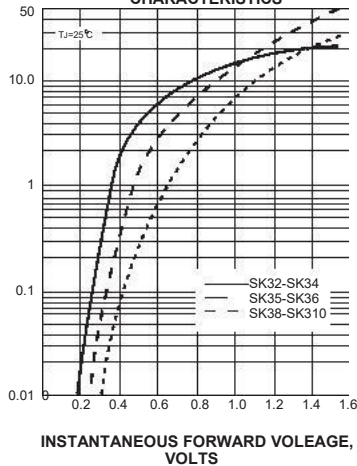


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

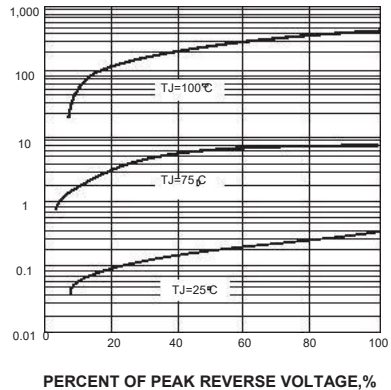


FIG. 5-TYPICAL JUNCTION CAPACITANCE

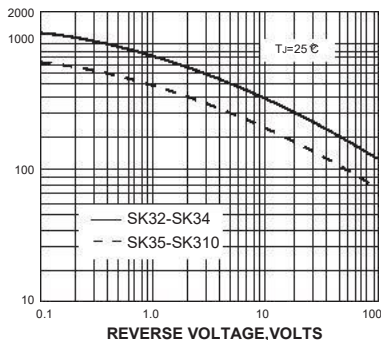


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

