

SK32C thru SK310C

PB FREE PRODUCT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

FEATURES

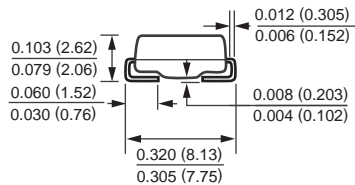
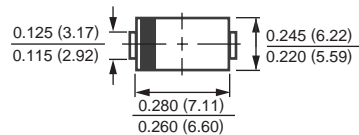
- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.24 gram

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0



SMC / DO-214AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	SK32C	SK33C	SK34C	SK35C	SK36C	SK38C	SK310C	UNIT
Marking Code		SK32C	SK33C	SK34C	SK35C	SK36C	SK38C	SK310C	
Maximum Recurrent 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 0.375" (9.5mm) lead length at TL = 90°C	I _O	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100							Amps
Typical Thermal Resistance (Note 1)	R _{θJA}	25							°C/W
	R _{θJL}	11							
Typical Junction Capacitance (Note 2)	C _J	45							pF
Operating Temperature Range	T _J	-65 to +125			-65 to +150				°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SK32C	SK33C	SK34C	SK35C	SK36C	SK38C	SK310C	UNIT
Maximum Instantaneous Forward Voltage at 3.0A DC (Note 3)	V _F	0.5			0.70		0.85		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@TA=25°C	0.5							mAmps
	@TA=100°C	10							

- NOTES :
1. Thermal Resistance (Junction to Ambient).
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 3. P.C.B Mounted with 0.4X0.4" (10.0X10.0mm²) copper pad area.

RATING AND CHARACTERISTIC CURVES (SK32C THRU SK310C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

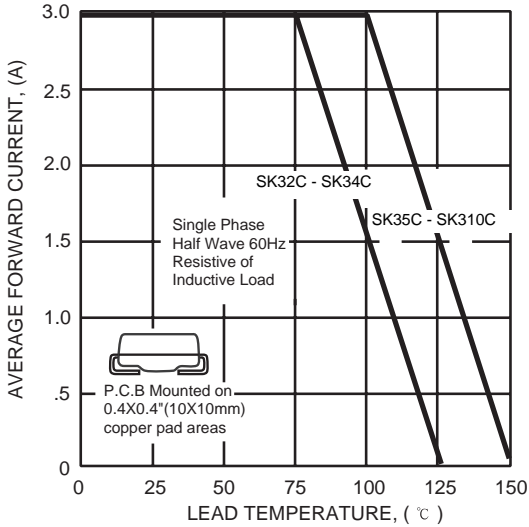


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

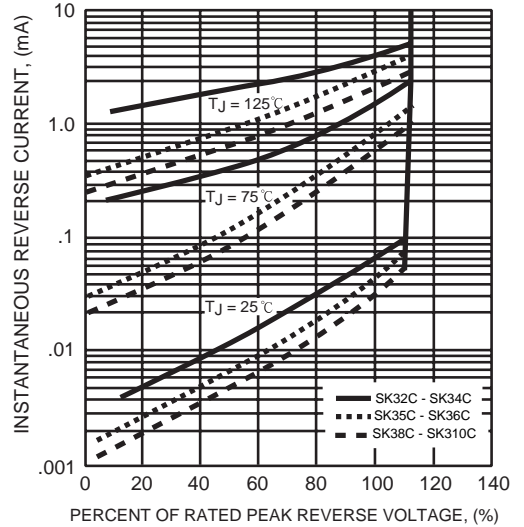


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

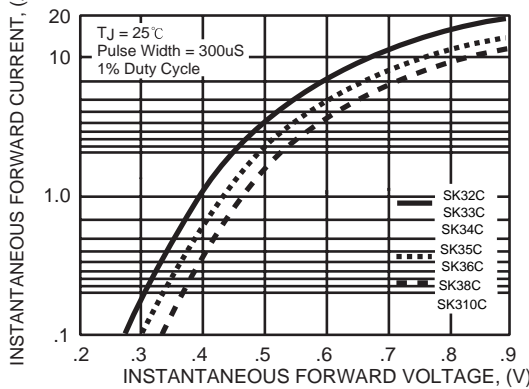


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

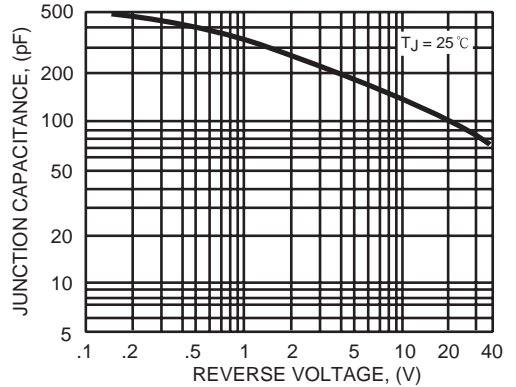


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

