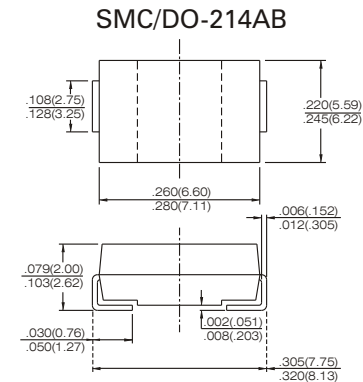


# SK32C thru SK310C

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 100 VOLTS    CURRENT - 3.0 AMPERES



Dimensions in inches and (millimeters)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mount applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High surge capability
- For use in low voltage high frequency inverters, free wheeling. and polarity protection applications
- High temperature soldering : 260°C/10 seconds at terminals

### MECHANICAL DATA

Case : JEDEC DO-214AB molded plastic  
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity : Color band denotes positive end (cathode)  
 Standard Package : 16mm tape (EIA STD EIA-481)  
 Weight : 0.007 ounce, 0.21gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified  
 Resistive or inductive load

	SYMBOL	SK32C	SK33C	SK34C	SK35C	SK36C	SK38C	SK39C	SK310C	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at $T_L$ (See Figure 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								Amps
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	$V_F$	0.5		0.75		0.85				Volts
Maximum DC Reverse Current (NOTE 1) $T_A=25^{\circ}C$ at Rated DC Blocking Voltage $T_A=100^{\circ}C$	$I_R$	0.5				20				mA
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	17				55				$^{\circ}C / W$
Operating at Storage Temperature Range $T_J$	$T_J$	-55 to +150								$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150								$^{\circ}C$

NOTES :

1. Pulse test with  $p_w=300 \mu S$ , 2% duty cycle
2. Mounted on P.C.B with  $14mm^2$  (0.13mm thick) copper pad areas

# SK32C thru SK310C

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### RATING AND CHARACTERISTICS CURVES SK32C THRU SK310C

FIG.1 - FORWARD CURRENT DERATING CURVE

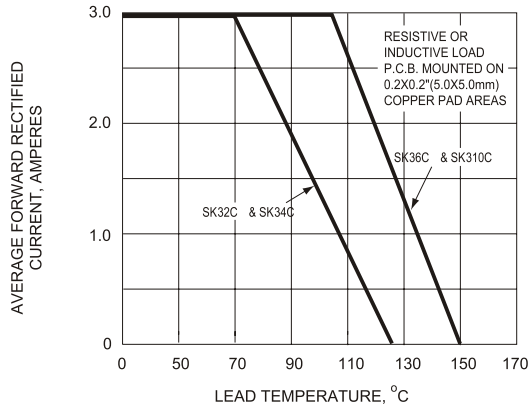


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

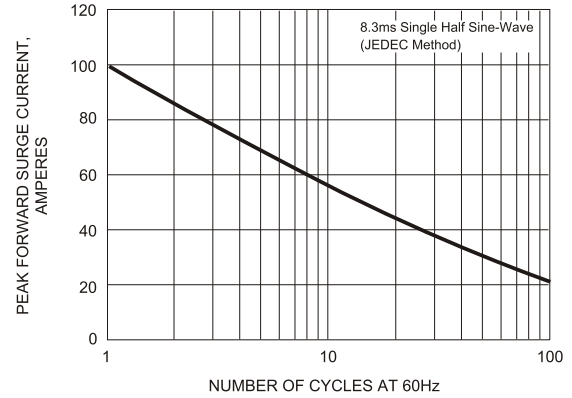


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

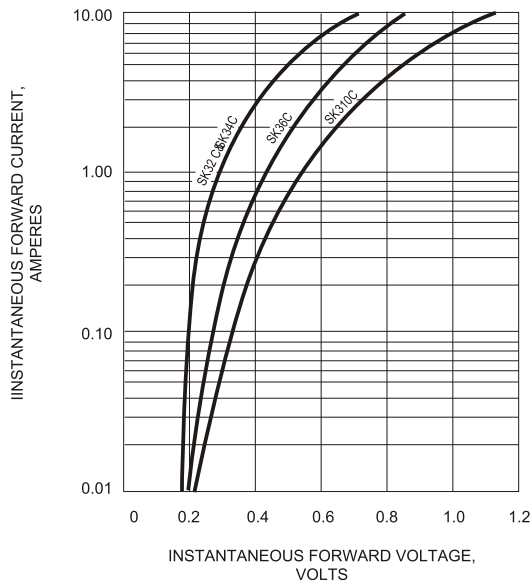


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

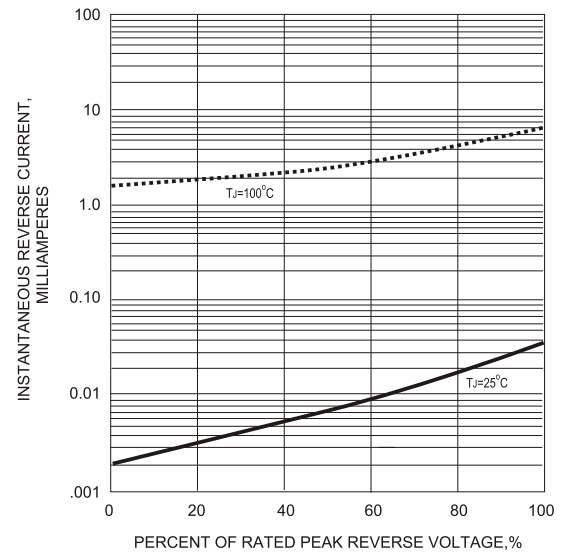


FIG.5 - TYPICAL JUNCTION CAPACITANCE

