

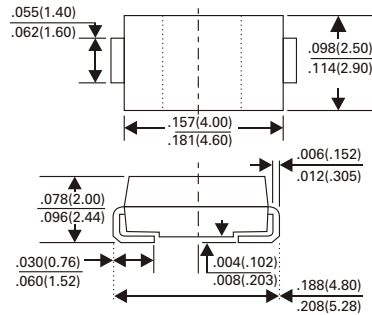
# SK22 thru SK210

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 100 VOLTS CURRENT - 2.0 AMPERES



SMA/DO-214AC



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 capacity
- High current capacity Low VF
- For use in low Voltage high frequency inverters, free wheeling, and polarity protection applications.
- High temperature soldering guaranteed 260°C/10 seconds at terminals
- High temperature soldering : 260°C/10 seconds at terminals
- Pb free product at available : 99% Sn above meet Rohs Environment substance directive request

### MECHANICAL DATA

Case : JEDEC DO-214AC molded plastic  
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity : Color band denotes cathode end (cathode)  
 Standard Package : 12mm tape (EIA STD EIA-481)  
 Weight : 0.002 ounce, 0.064gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SK22	SK23	SK24	SK25	SK26	SK28	SK29	SK210	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	64	71	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at $T_L$ (Figure 1)	$I_{(AV)}$	2.0								Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50								Amps
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	0.5		0.7		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				mA
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JA}$					20				$^\circ C / W$
	$R_{\theta JL}$					60				
Operating Junction Temperature Range	$T_J$					-50 to +150				$^\circ C$
Storage and Operating Temperature Range	$T_{STG}$					-55 to +150				$^\circ C$

NOTES :

1. Pulse test with 300  $\mu S$  pulse width, 2% duty cycle
2. Mounted on P.C.B with 5.0mm<sup>2</sup> (0.13mm thick) copper pad areas

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### RATING AND CHARACTERISTICS CURVES SK22 THRU SK210

FIG.1 - FORWARD CURRENT DERATING CURVE

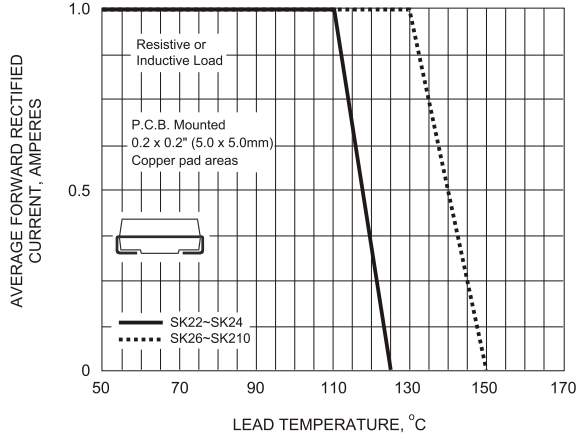


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

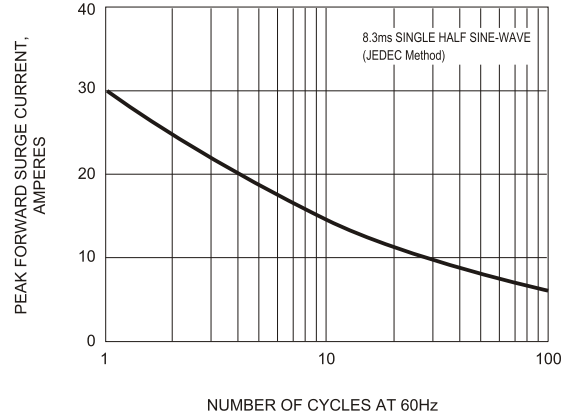


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

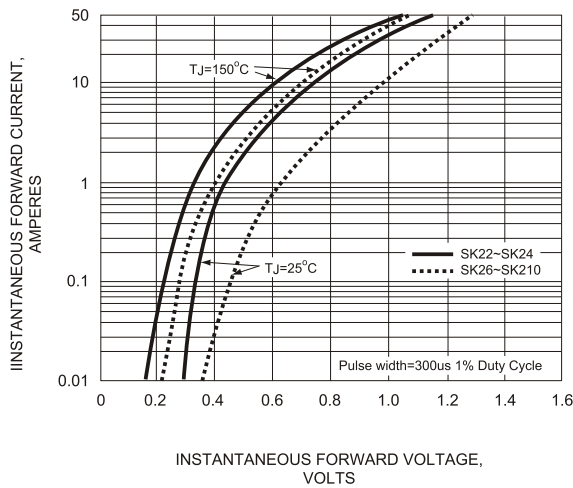


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

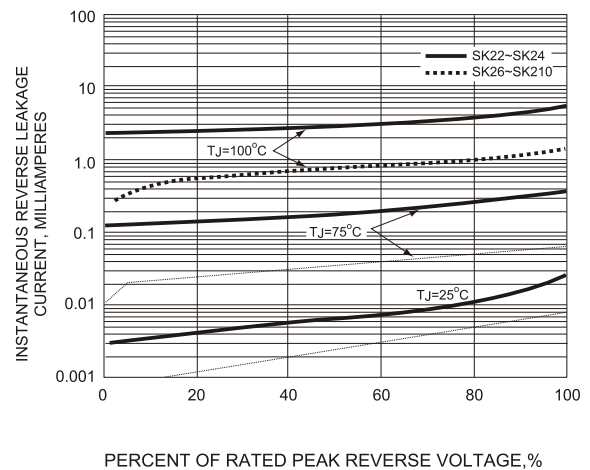


FIG.5 - TYPICAL JUNCTION CAPACITANCE

