

# SK22 THRU SK210

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



康比電子  
HORNBY ELECTRONIC

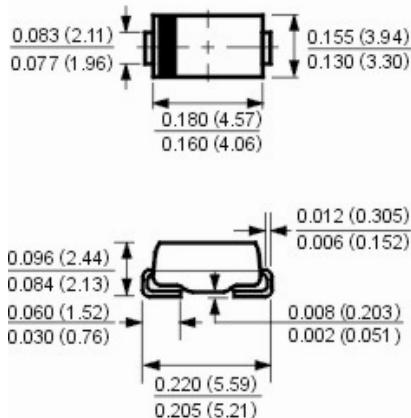
**REVERSE VOLTAGE:** 20 to 100 VOLTS

**FORWARD CURRENT:** 2.0 AMPERE

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- High current capacity
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier, majority carrier conduction
- High surge capacity
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering : 250°C / 10 seconds at terminals

### DO-214AA(SMB)



### MECHANICAL DATA

Case: Molded plastic, DO-214AA(SMB)

Terminals: Axial leads, solderable per MIL-STD-750, method 2026 guaranteed

Polarity: Color band denotes cathode end

Packaging: 12mm tape per EIA STD RS-481

Weight: 0.003 ounce, 0.093 gram

### Dimensions in inches and (millimeters)

### 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, derate current by 20%.

	Symbols	SK22	SK23	SK24	SK25	SK26	SK28	SK29	SK210	Units				
<b>Maximum Recurrent Peak Reverse Voltage</b>	<b>V<sub>RRM</sub></b>	20	30	40	50	60	80	90	100	Volts				
<b>Maximum RMS Voltage</b>	<b>V<sub>RMS</sub></b>	14	21	28	35	42	56	64	71	Volts				
<b>Maximum DC Blocking Voltage</b>	<b>V<sub>DC</sub></b>	20	30	40	50	60	80	90	100	Volts				
<b>Maximum Average Forward Rectified Current at T<sub>L</sub> (See Fig. 1)</b>	<b>I<sub>(AV)</sub></b>	2.0							Amp					
<b>Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)</b>	<b>I<sub>FSM</sub></b>	50							Amp					
<b>Maximum Forward Voltage at 2.0A (Note 1)</b>	<b>V<sub>F</sub></b>	0.50		0.70		0.85		Volts						
<b>Maximum Reverse Current at T<sub>A</sub>=25°C at Rated DC Blocking Voltage T<sub>A</sub>=100°C</b>	<b>I<sub>R</sub></b>	0.5 20							mAmp					
<b>Typical Thermal Resistance (Note 2)</b>	<b>R<sub>0JA</sub></b>	75							°C/W					
	<b>R<sub>0JL</sub></b>	17												
<b>Operating Junction Temperature Range</b>	<b>T<sub>J</sub></b>	-55 to +125							°C					
<b>Storage Temperature Range</b>	<b>T<sub>stg</sub></b>	-55 to +150							°C					

### NOTES:

1- Pulse test: 300μs pulse width, 1% duty cycle

2- P.C.B. mounted with 0.3 x 0.3" (8.0 x 8.0mm) Copper Pad Areas

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### RATINGS AND CHARACTERISTIC CURVES

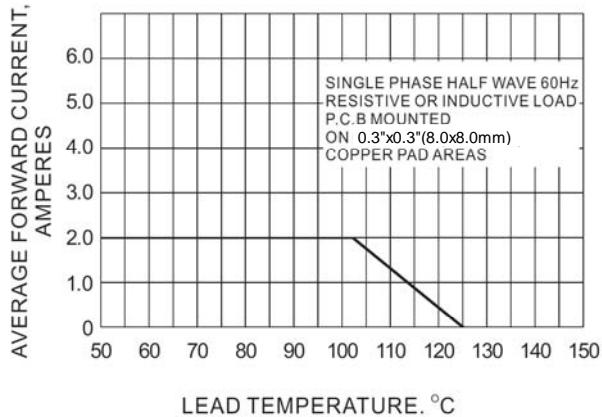


Fig.1- FORWARD CURRENT DERATING CURVE

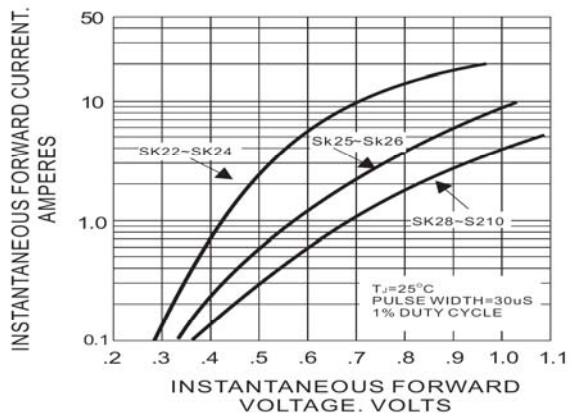


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

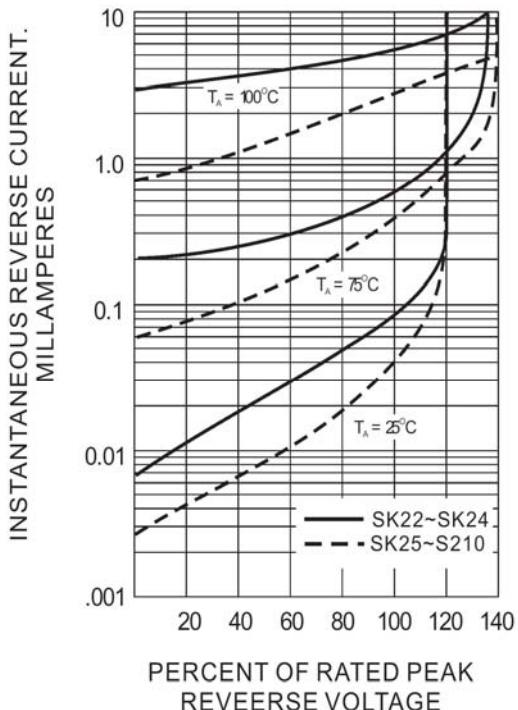


Fig.3- TYPICAL REVERSE CHARACTERISTICS

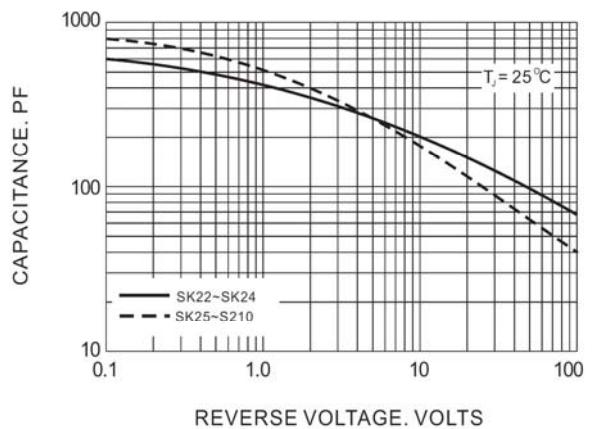


Fig.4- TYPICAL JUNCTION CAPACITANCE

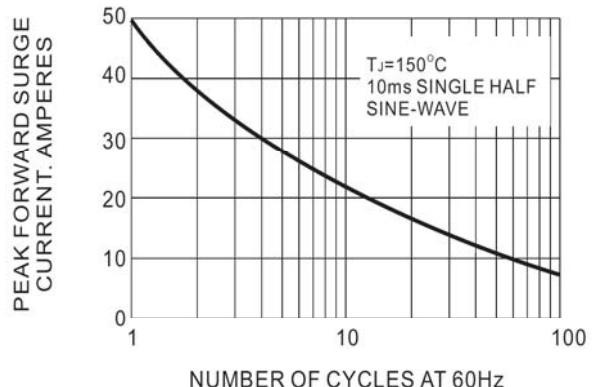


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT