

SK22 THRU S210

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
VOLTAGE - 20 TO 100 Volts CURRENT - 2.0 Amperes

FEATURES

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

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic

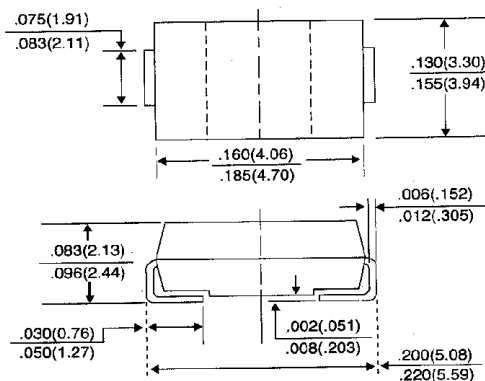
Terminals: Solder plated solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode

Standard Packaging: 12mm tape (EIA-481)

Weight: 0.003 ounces 0.093 gram

SMB/DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		SYMBOLS	SK22	SK23	SK24	SK25	SK26	SK28	SK29	S210	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	20	30	40	50	60	80	90	100	Volts
Maximum RMS voltage		VRMS	14	21	28	35	42	56	64	71	Volts
Maximum DC Blocking Voltage		VDC	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at TL (See Figure 1)		IAV	2.0								Amps
Peak forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	50.0								Amps
Maximum Instantaneous Forward Voltage at 2.0A (NOTE 1)		VF	0.50			0.70		0.85			Volts
Maximum DC Reverse Current(NOTE 1) TA = 25°C at Rated DC Blocking Voltage TA = 100°C		IR	0.5 20.0								mA
Maximum Thermal Resistance (NOTE 2)		RθJL RθJA	17 75								°C/W
Operating Junction Temperature Range		TJ	-50 to +125								°C
Storage Temperature Range		TSTG	-50 to +150								°C

NOTES:

1. Pulse Test with $PW = 300\mu sec$, 2% Duty Cycle.
2. Mounted on P.C. Board with 8.0mm² (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES SK22 THRU S210

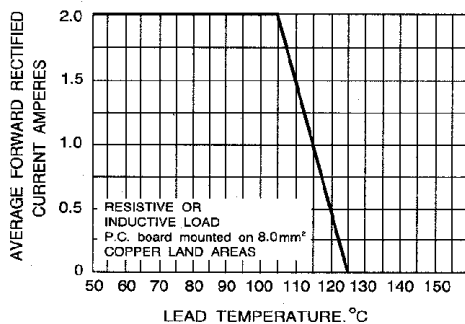


FIG. 1 - FORWARD CURRENT DERATING CURVE

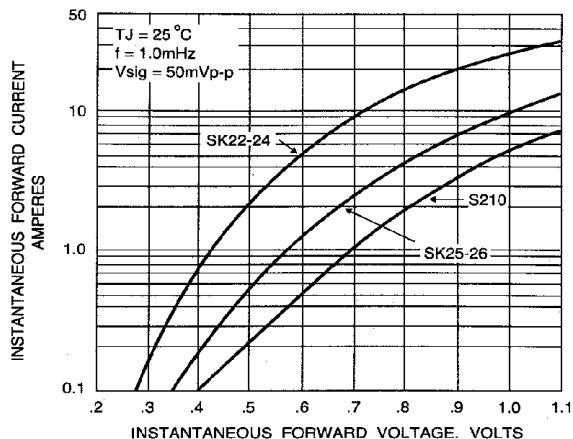


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

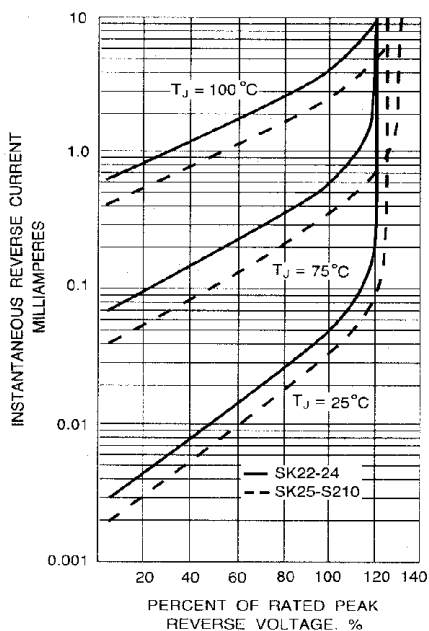


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

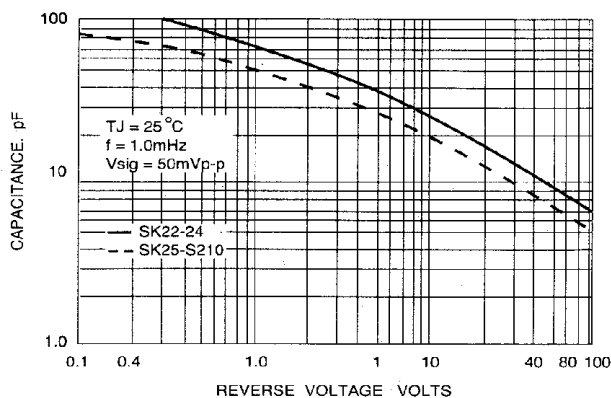


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

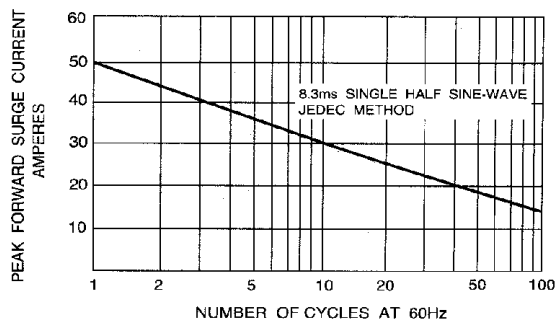


FIG. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT