SK22 THRU S210

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



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 : 260°C /10 seconds at terminals

MECHANICAL DATA

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

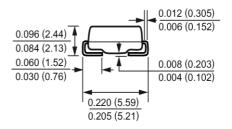
Terminals: Axial leads, solderable per MIL-STD-750,

method 2026 guaranteed

Polarity: Color band denotes cathode end Packaging: 12mm tape per EIA STD RS-481

Weight: 0.003 ounce, 0.093 gram

0.083 (2.11) 0.077 (1.96) 0.180 (4.57) 0.160 (4.06)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 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	S210	Units
Maximum Recurrent 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 (See Fig. 1)	I _(AV)	2.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50								Amp
Maximum Forward Voltage at 2.0A (Note 1)	$V_{\rm F}$		0.50 0.70				0.85			Volts
Maximum Reverse Current at T _A =25 at Rated DC Blocking Voltage T _A =100	I _R	0.5 20								mAmp
Typical Thermal Resistance (Note 2)	$R_{ heta JA} \ R_{ heta JL}$	75 17								/ W
Operating Junction Temperature Range	T_{J}	-55 to +125								
Storage Temperature Range	Tstg	-55 to +150								

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



RATINGS AND CHARACTERISTIC CURVES

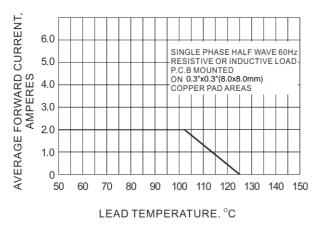


Fig.1- FORWARD CURRENT DERATING CURVE

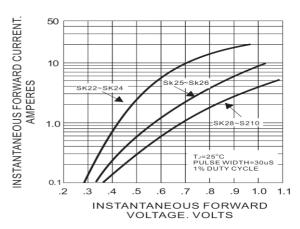


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

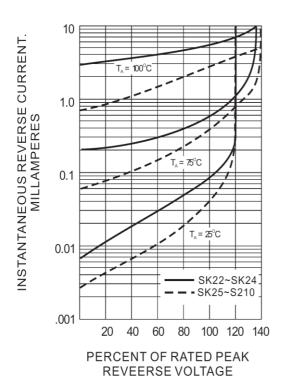


Fig.3-TYPICAL REVERSE CHARACTERISTICS

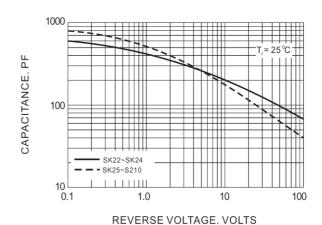


Fig.4-TYPICAL JUNCTION CAPACITANCE

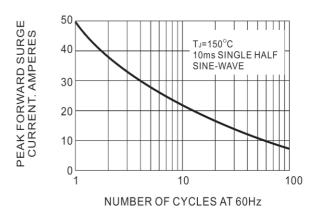


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT