

DATA SHEET

SK22~S210

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 100 Volts **CURRENT** 2.0 Amperes

SMB/DO-214AA

Unit: inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

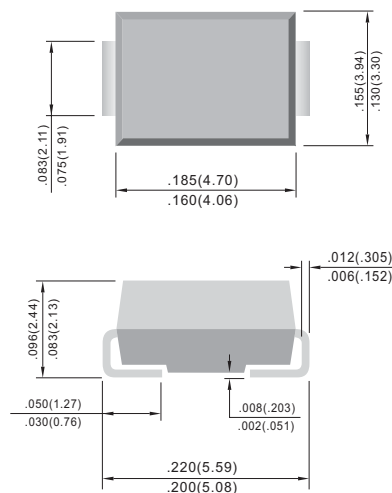
Case: JEDEC DO-214AA molded plastic

Terminals:Solder plated, solderable per MIL-STD-202G, Method 208

Polarity: Color band denotes positive end (cathode)

Standard packaging: 12mm tape (EIA-481)

Weight: 0.003 ounce, 0.093 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

PARAMETER	SYMBOL	SK22	SK23	SK24	SK25	SK26	SK28	SK29	S210	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Current .375"(9.5mm) lead length at T _L =105°C	I _{AV}	2.0								A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	50								A
Maximum Forward Voltage at 2.0A (Note 1)	V _F	0.5			0.7		0.85			V
Maximum DC Reverse Current T _A =25°C at Rated DC Blocking Voltage T _A =100°C	I _R	0.5 20								mA
Maximum Thermal Resistance (Note 2)	R _{θJL}	12								°C / W
Operating Junction Temperature Range	T _J	-55 to +125								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

NOTES:

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8mm² (.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES

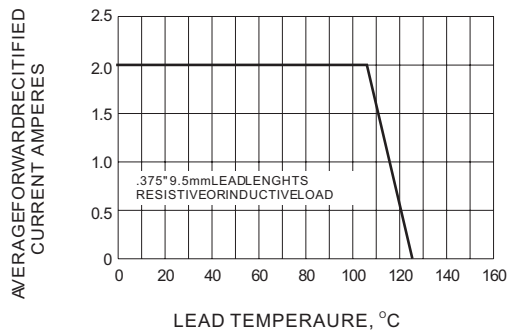


Fig.1- FORWARD CURRENT DERATING CURVE

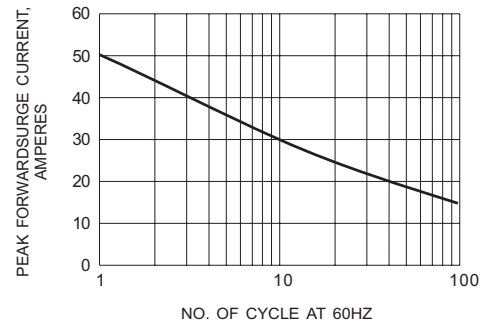


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

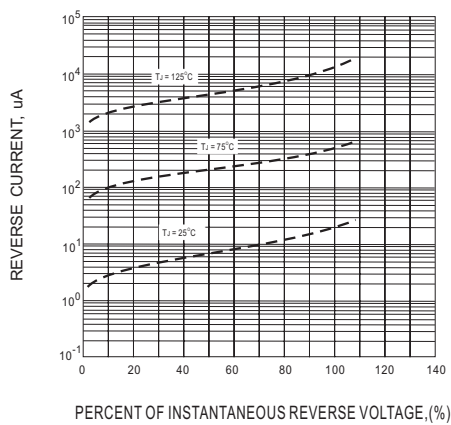


Fig.3- TYPICAL REVERSE CHARACTERISTICS

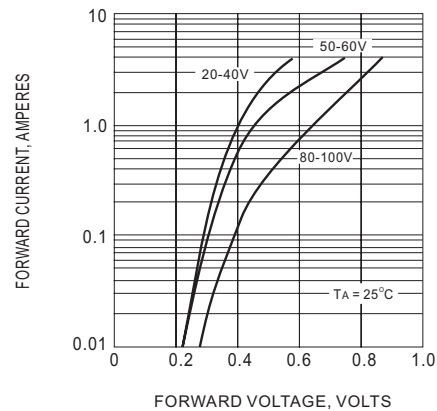


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS