



DATA SHEET

SK12~S110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

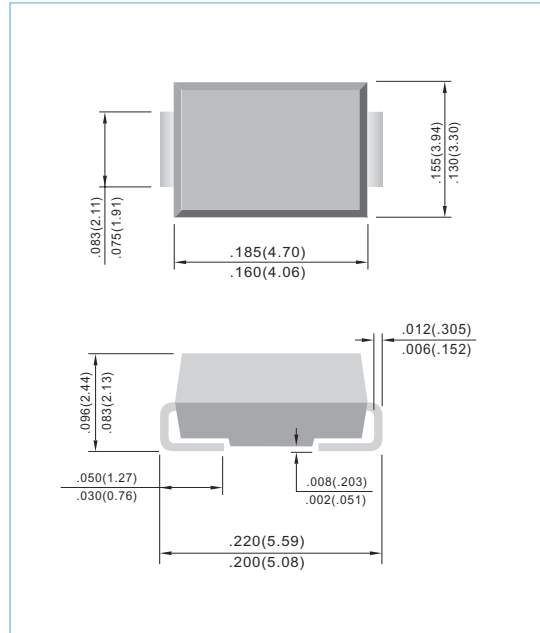
VOLTAGE 20 to 100 Volts **CURRENT** 1.0 Ampere

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
- High current capacity ,low V_F
- 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	SK12	SK13	SK14	SK15	SK16	SK18	SK19	S110	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 $T_L=75^\circ C$	I_{AV}	1.0								A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30								A
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.5		0.7		0.85			V	
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R					0.5				mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$					30				$^\circ C / W$
	$R_{\theta JA}$					95				
Operating Junction Temperature Range	T_J					-50 to +125				$^\circ C$
Storage Temperature Range	T_{STG}					-50 to +150				$^\circ C$

NOTES:

- A.Pulse Test with $PW = 300\mu sec$, 1% Duty Cycle.
 B.Mounted on P.C. Board with $5.0mm^2$ (.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES

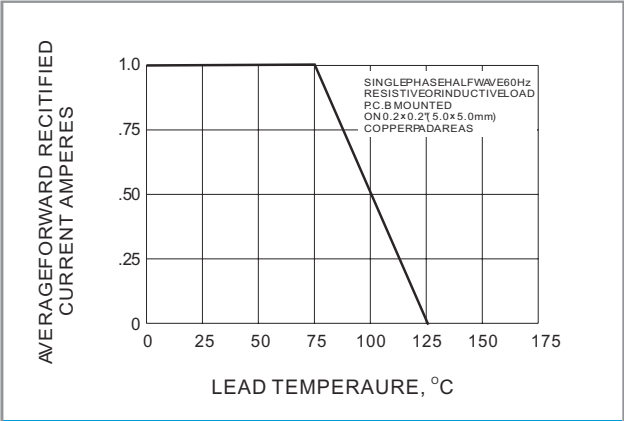


Fig.1- FORWARD CURRENT DERATING CURVE

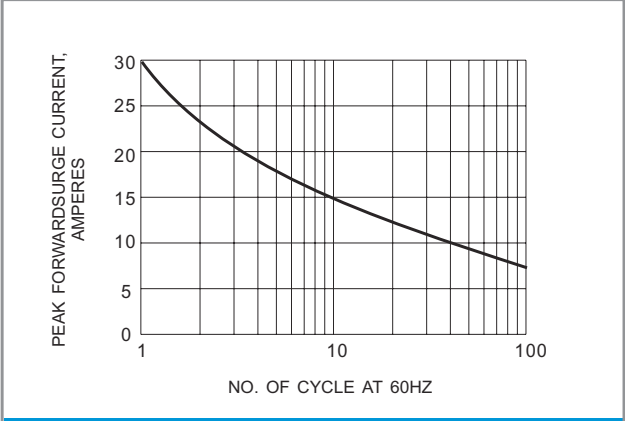


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

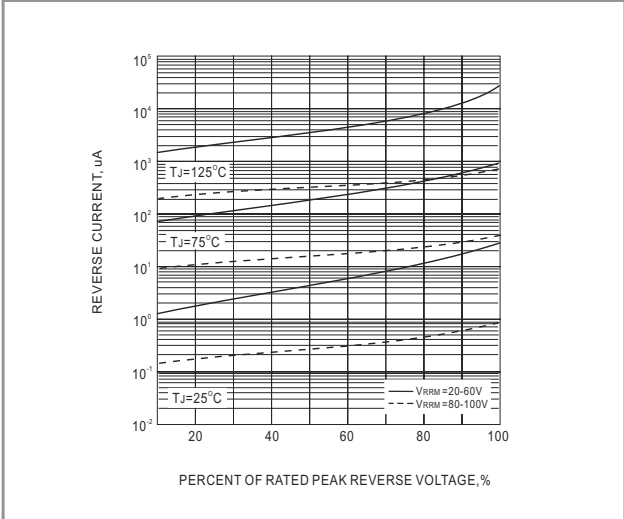


Fig.3- TYPICAL REVERSE CHARACTERISTIC

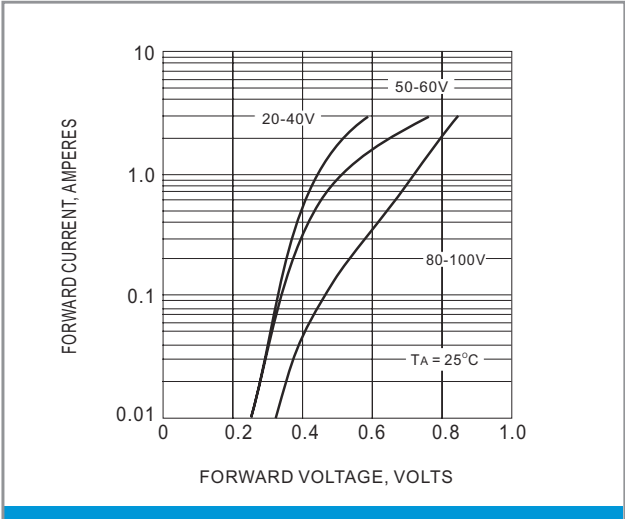


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC