



SK12E~SK16E

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 60 Volts **CURRENT** 1.0 Ampere

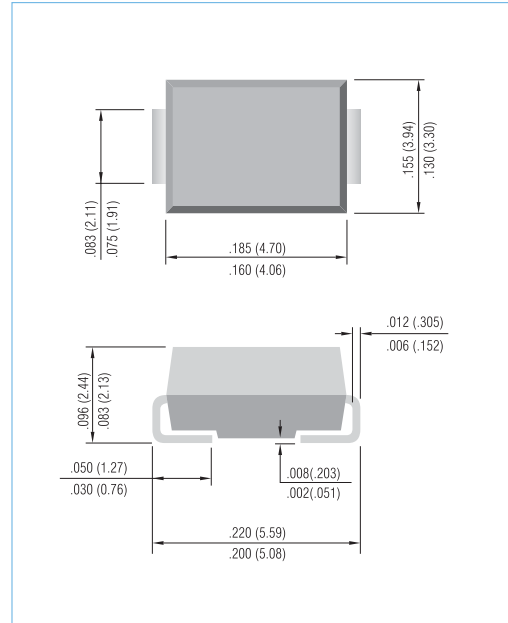
SMB / DO-214AA Unit: inch (mm)

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.
- In compliance with EU RoHS 2002/95/EC directives
- ESD passes devices : Air mode 15KV ,human body mode 8KV

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0032 ounce, 0.092 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SK12E	SK13E	SK14E	SK15E	SK16E	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	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		V
Maximum DC Reverse Current at $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	I_R	0.2			0.1		mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	28					$^\circ\text{C} / \text{W}$
	$R_{\theta JA}$	88					
Operating Junction Temperature Range	T_J	-55 to +125	-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150					$^\circ\text{C}$

NOTES:

- 1.Pulse Test with PW =300μsec, 1% Duty Cycle.
- 2.Mounted on P.C. Board with 5.0mm² (.013mm thick) copper pad areas.



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RATING AND CHARACTERISTIC CURVES

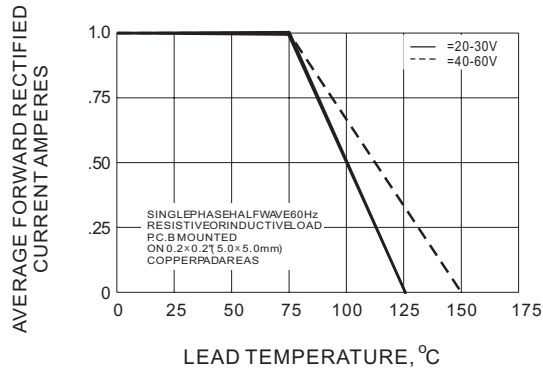


Fig. 1-FORWARD CURRENT DERATING CURVE

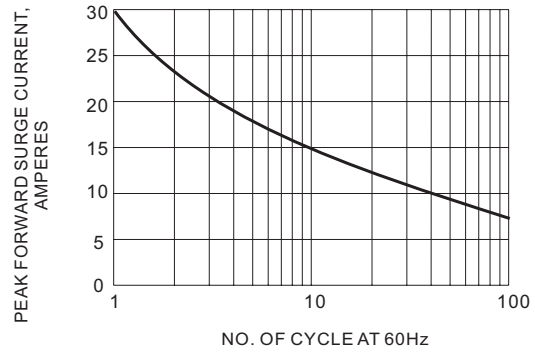


Fig. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

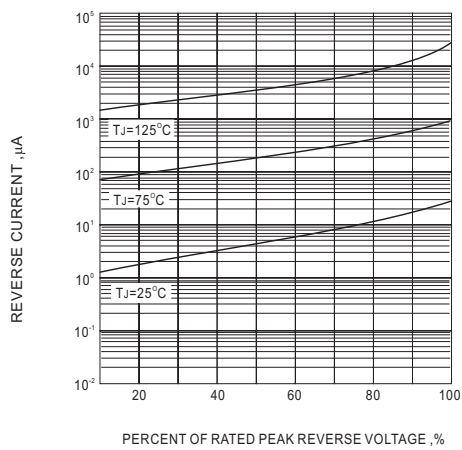


Fig. 3-TYPICAL REVERSE CHARACTERISTIC

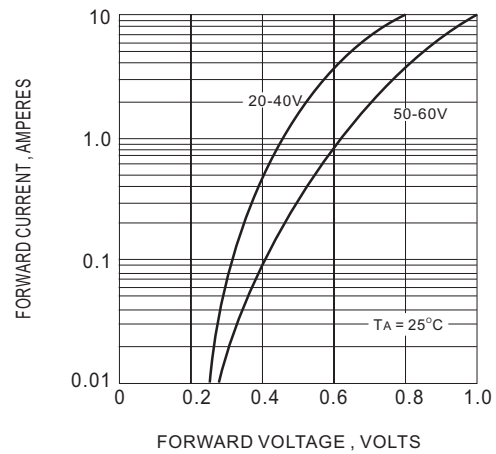
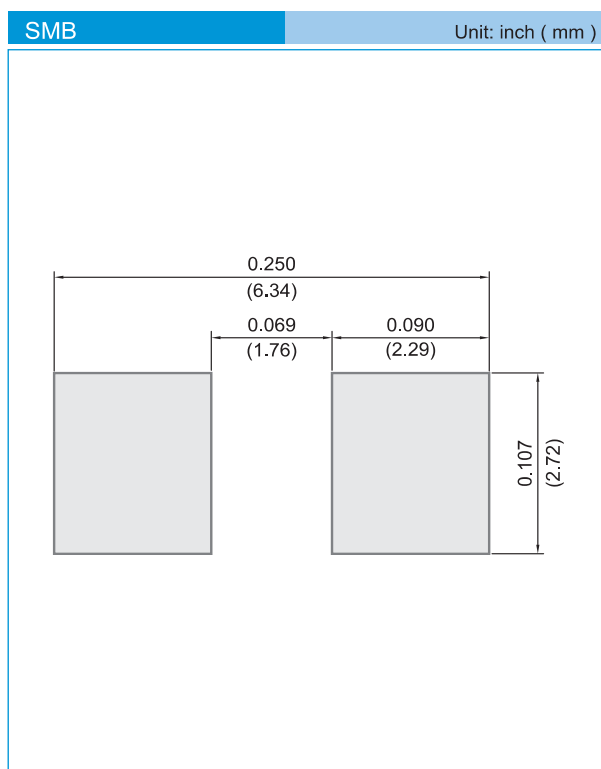


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.5Kper 7" plastic Reel

LEGAL STATEMENT

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