

SK12~SK16

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 60 Volt **CURRENT** 1 Ampere

SMB / DO-214AA

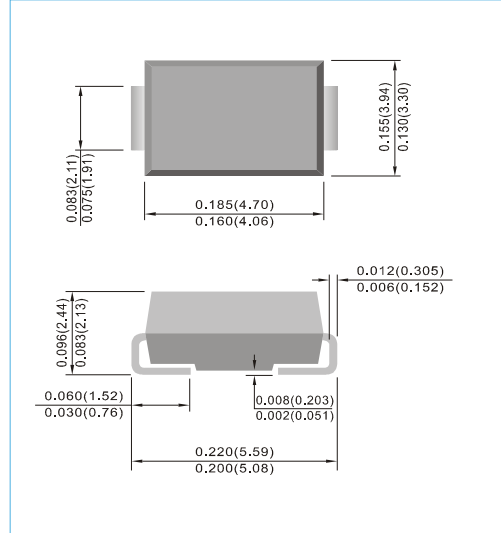
Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- High current capacity, low V_F
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

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



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	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°C	I _{F(AV)}	1					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30					A
Maximum Forward Voltage at 1A (Note 1)	V _F	0.5			0.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	0.2 20			0.1 20		mA
Typical Thermal Resistance (Note 2)	R _{θJL} R _{θJA}	30 95					°C / W
Operating Junction Temperature Range	T _J	-50 to +125		-50 to +150			°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

NOTES :

- 1.Pulse Test with $PW=300\mu\text{sec}$, 1% Duty Cycle.
- 2.Mounted on P.C. Board with 5mm^2 (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

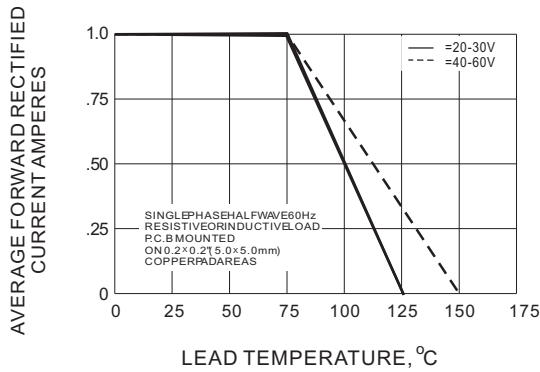


Fig.1 FORWARD CURRENT DERATING CURVE

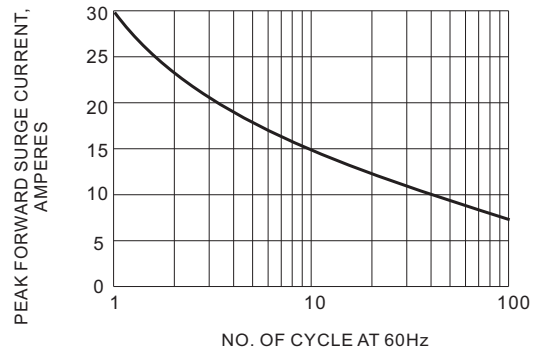


Fig.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

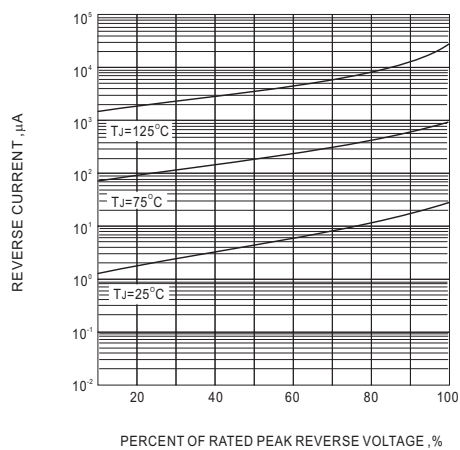


Fig.3 TYPICAL REVERSE CHARACTERISTIC

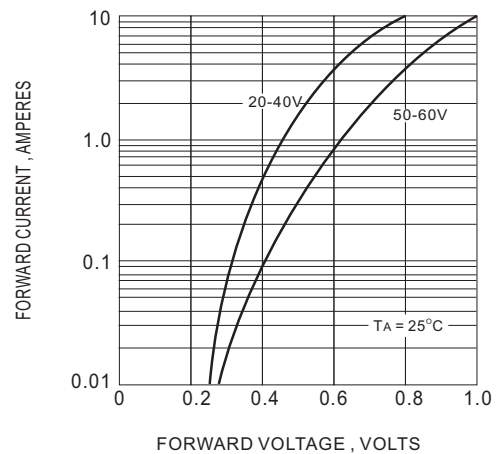


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

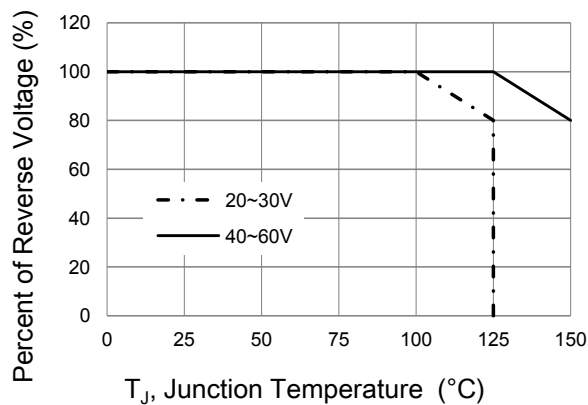


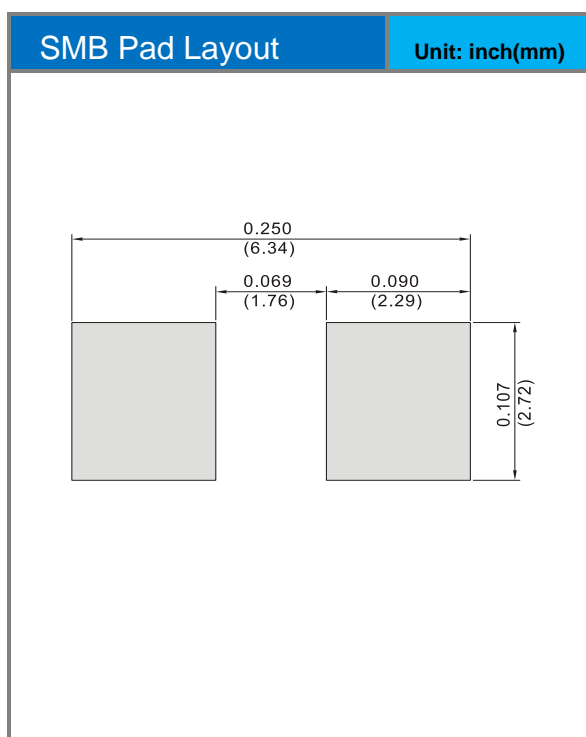
Fig.5 Operating Temperature Derating Curve

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SK12	SMB	0.8K pcs / 7" reel	SK12
SK12	SMB	3K pcs / 13" reel	SK12
SK13	SMB	0.8K pcs / 7" reel	SK13
SK13	SMB	3K pcs / 13" reel	SK13
SK14	SMB	0.8K pcs / 7" reel	SK14
SK14	SMB	3K pcs / 13" reel	SK14
SK15	SMB	0.8K pcs / 7" reel	SK15
SK15	SMB	3K pcs / 13" reel	SK15
SK16	SMB	0.8K pcs / 7" reel	SK16
SK16	SMB	3K pcs / 13" reel	SK16

Mounting Pad Layout



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