



SK12~SK16

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

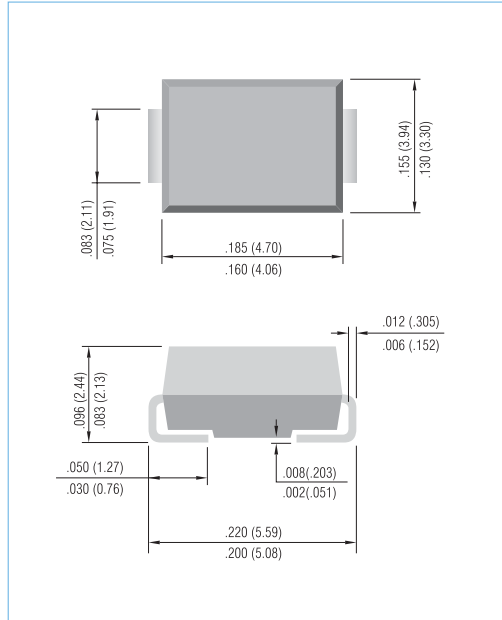
SMB / DO-214AA Unit: inch (mm)

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

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 | 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 $T_L=75^\circ\text{C}$ | $I_{F(AV)}$ | 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 $T_j=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_j=100^\circ\text{C}$ | I_R | 0.2 20 | | | 0.1 20 | | mA |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL}$ $R_{\theta JA}$ | 30 95 | | | | | $^\circ\text{C} / \text{W}$ |
| Operating Junction Temperature Range | T_J | -50 to +125 | | -50 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

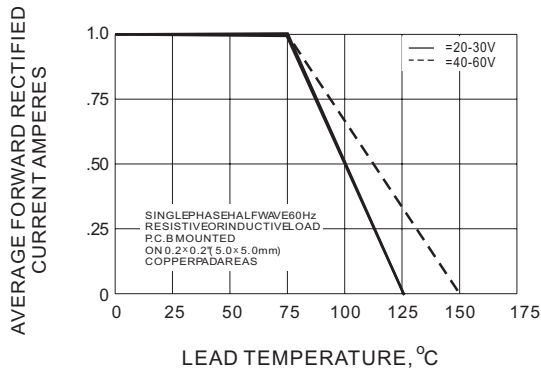


Fig. 1-FORWARD CURRENT DERATING CURVE

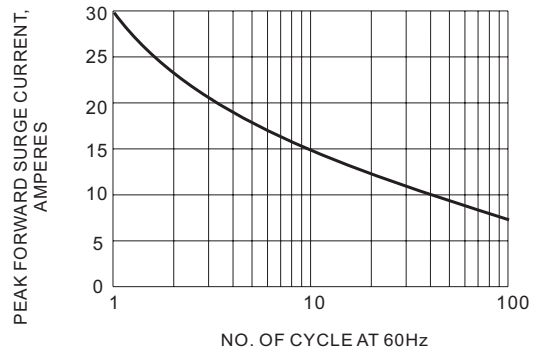


Fig. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

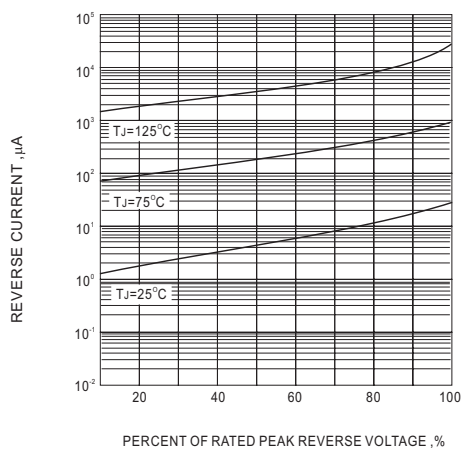


Fig. 3-TYPICAL REVERSE CHARACTERISTIC

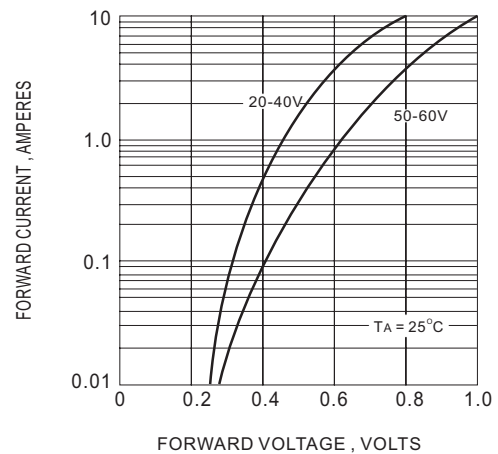
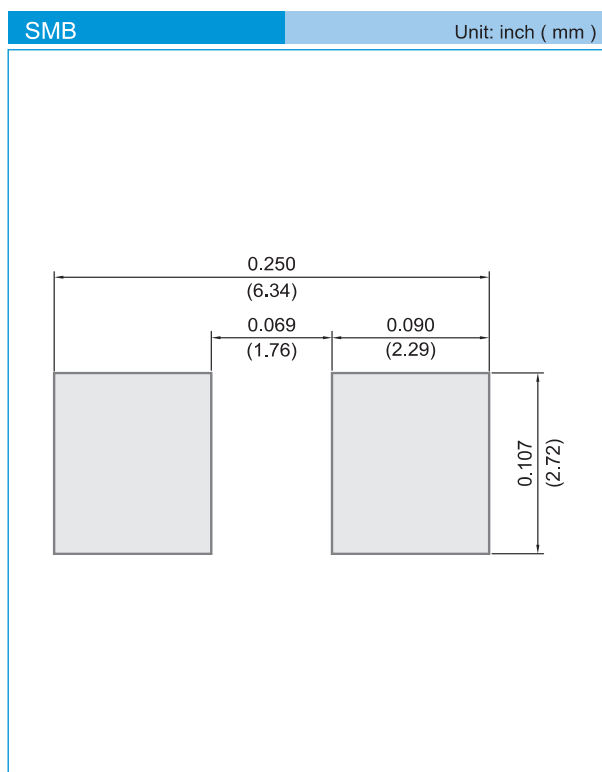


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



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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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