



SK84

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 Volt **CURRENT** 8 Ampere

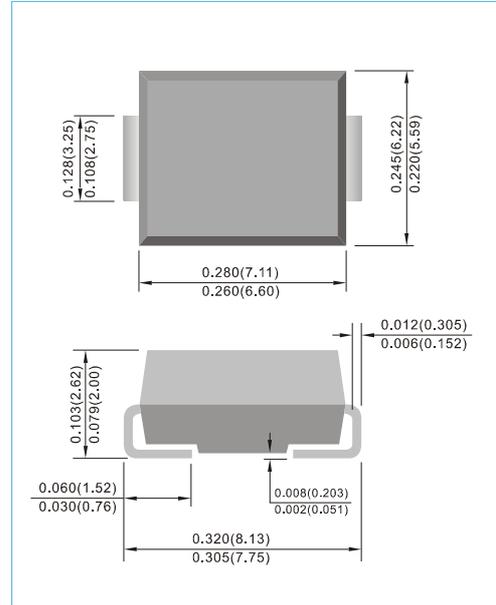
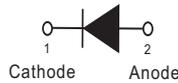
SMC / DO-214AB Unit : inch(mm)

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
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.2325 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | VALUE | UNITS |
|---|------------------------------------|-------------|--------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 40 | V |
| Maximum RMS Voltage | V_{RMS} | 28 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 8 | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 150 | A |
| Maximum Forward Voltage at 8A (Notes 1) | V_F | 0.55 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 0.5 | mA |
| Typical Thermal Resistance (Notes 1) (Notes 2) | $R_{\theta JA}$ $R_{\theta JL}$ | 110 17 | °C / W |
| Operating Junction Temperature Range | T_J | -55 to +150 | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | °C |

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.



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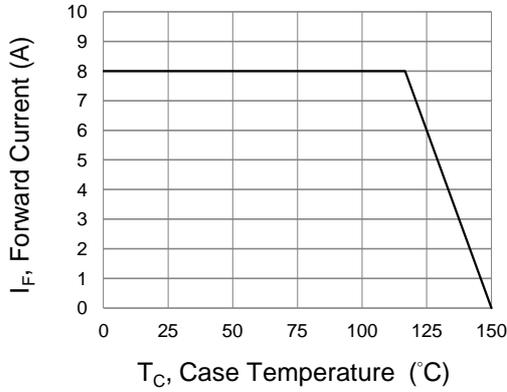


Fig.1 Forward Current Derating Curve

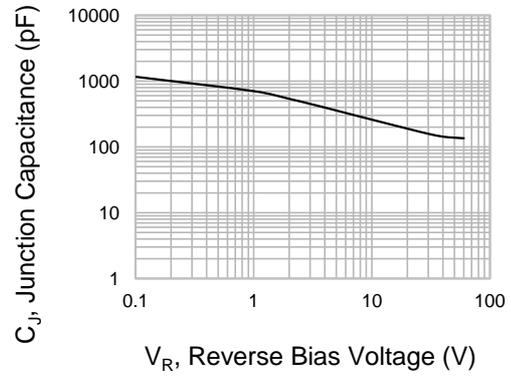


Fig.2 Typical Junction Capacitance

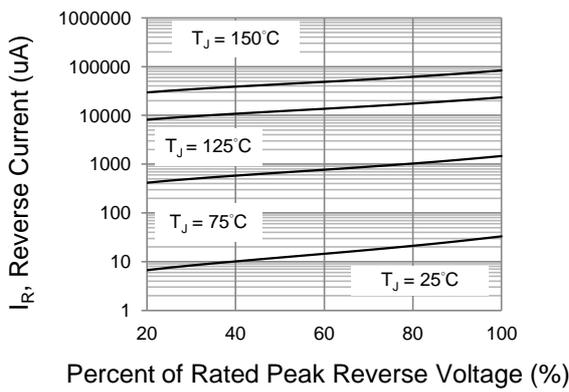


Fig.3 Typical Reverse Characteristics

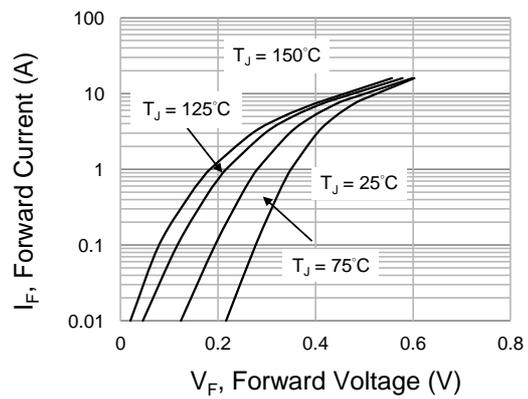


Fig.4 Typical Forward Characteristics

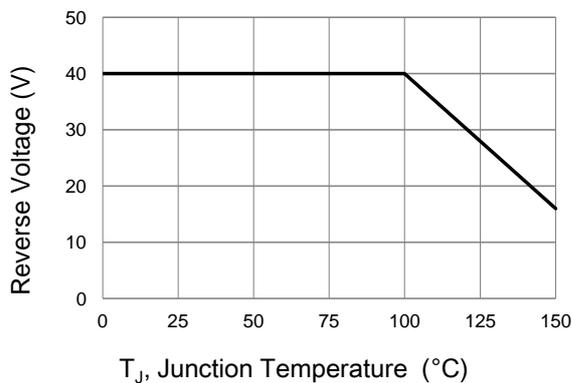
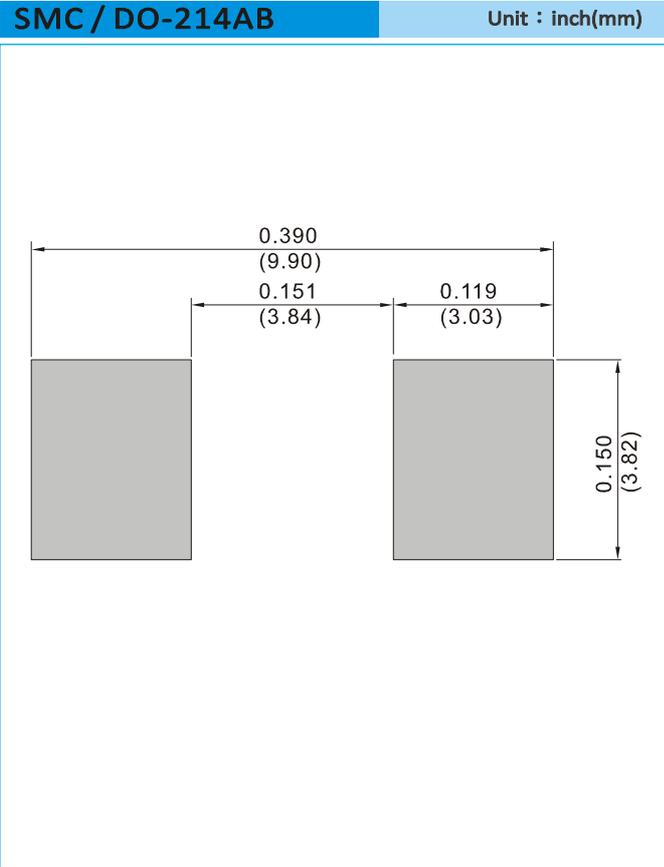


Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.8K per 7" plastic Reel



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Part No_packing code_Version

SK84_R1_00001

SK84_R2_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



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