

SK54L~SK56L

5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE **40~60 Volts** CURRENT **5.0 Amperes**

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
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives
- * Lead Free Finish/RoHS Compliant

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)

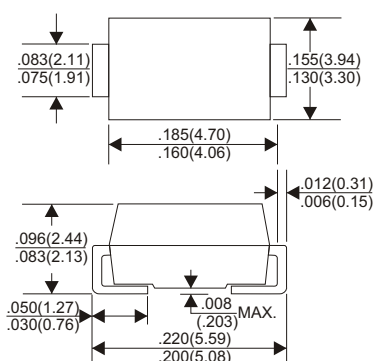
VOLTAGE RANGE

40 to 60 Volts

CURRENT

5.0 Ampere

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | SK54L | SK56L | UNITS |
|--|-----------------|---|-------|-----------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 40 | 60 | V |
| Maximum RMS Voltage | V_{RMS} | 28 | 42 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | 60 | V |
| Maximum Average Forward Rectified Current at $T_C=120^{\circ}C$ | $I_{F(AV)}$ | 5.0 | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 100 | | A |
| Maximum Forward Voltage at 5.0A (Note 1) | V_F | 0.45 | 0.55 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 1.0 50 | | mA |
| | | $T_J=25^{\circ}C$ $T_J=100^{\circ}C$ | | |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL}$ | 17.0 | | $^{\circ}C / W$ |
| Operating Junction Temperature Range | T_J | -55 to +150 | | $^{\circ}C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | $^{\circ}C$ |

NOTES:

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES (SK54L THRU SK56L)

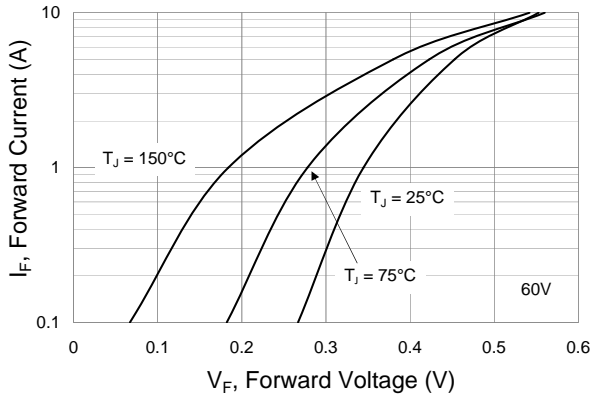


Fig.1 Typical Forward Characteristics

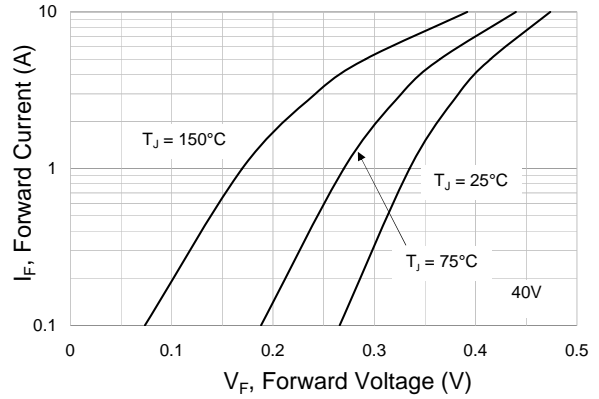


Fig.2 Typical Forward Characteristics

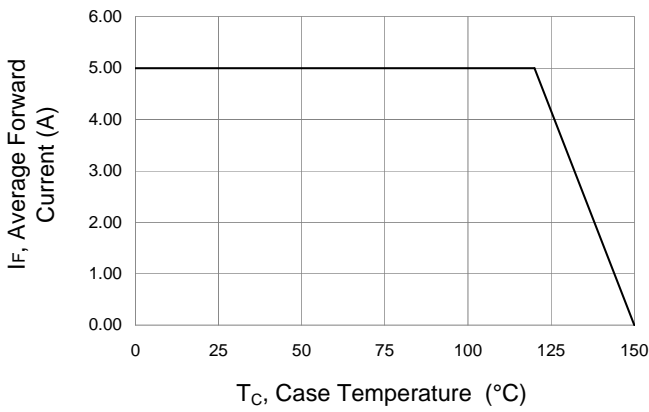


Fig.3 Forward Current Derating Curve

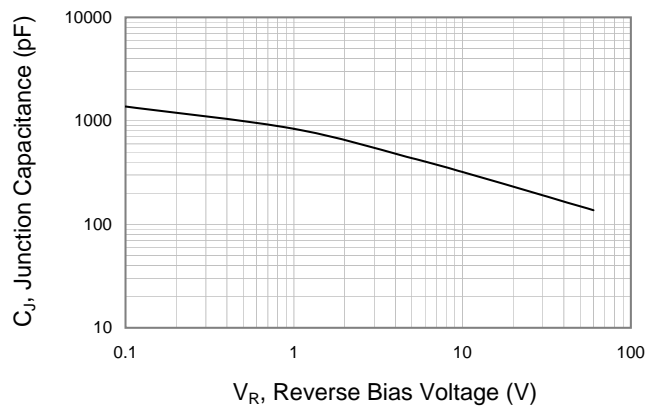


Fig.4 Typical Junction Capacitance under Bias

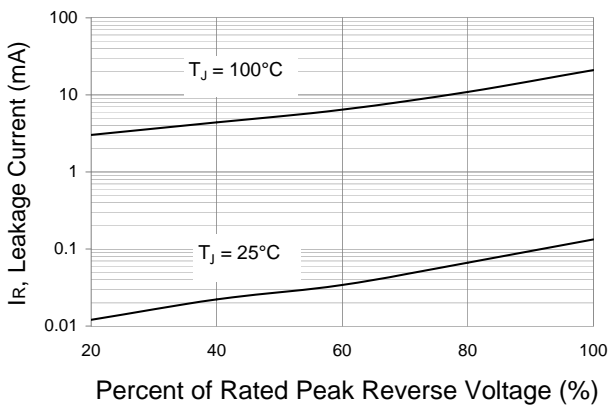
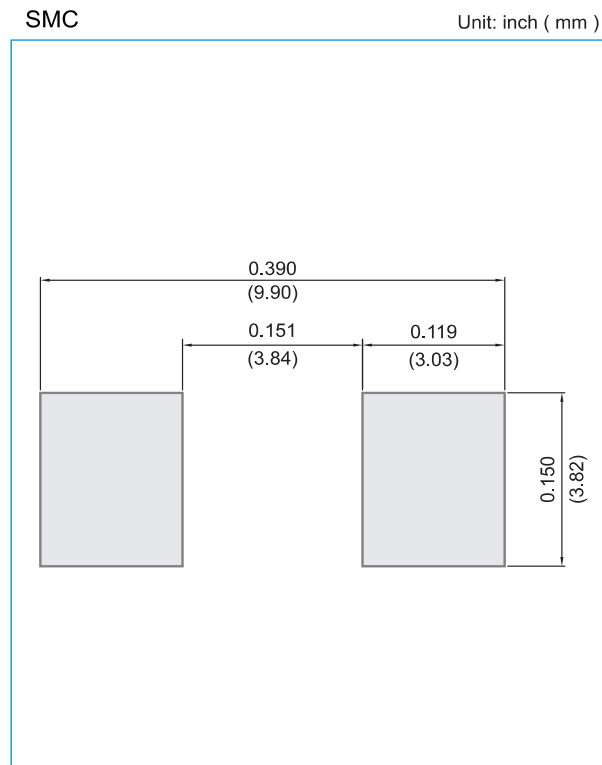


Fig.5 Typical Reverse Characteristics

SK54L THRU SK56L

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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