



Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 60V
Forward Current - 5.0A

FEATURES

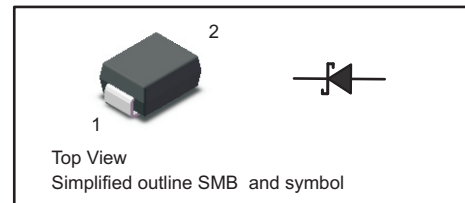
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.1g / 0.0034oz

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

| Parameter | Symbols | SSL56BM | Units |
|--|---|---------------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 60 | V |
| Maximum RMS voltage | V_{RMS} | 42 | V |
| Maximum DC Blocking Voltage | V_{DC} | 60 | V |
| Maximum Average Forward Rectified Current @ Fig.1 | $I_{F(AV)}$ | 5.0 | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 150 | A |
| Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 300 | A |
| I^2t Rating for fusing (3ms ≤ t ≤ 8.3ms) | I^2t | 93.3 | A ² S |
| Max Instantaneous Forward Voltage at 5 A | V_F | 0.45 | V |
| Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$ | I_R | 0.5 50 | mA |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 540 | pF |
| Typical Thermal Resistance ⁽²⁾ | $R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$ | 43 9 18 | °C/W |
| Operating Junction Temperature Range | T_j | -55 ~ +150 | °C |
| Storage Temperature Range | T_{stg} | -55 ~ +150 | °C |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.



Fig.1 Forward Current Derating Curve

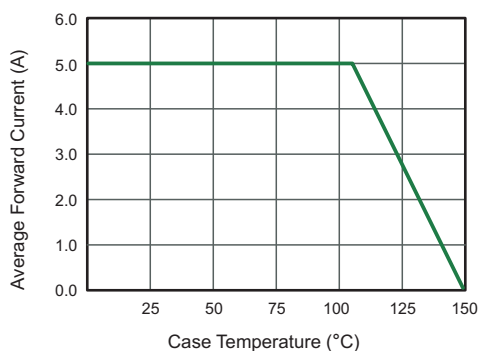


Fig.2 Typical Reverse Characteristics

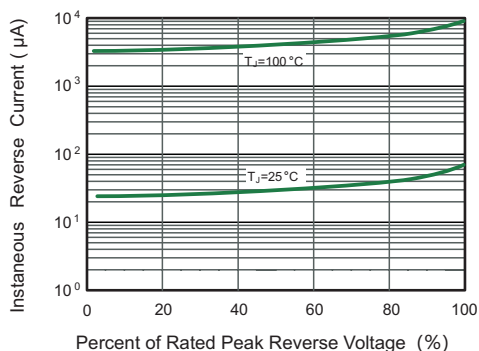


Fig.3 Typical Forward Characteristic

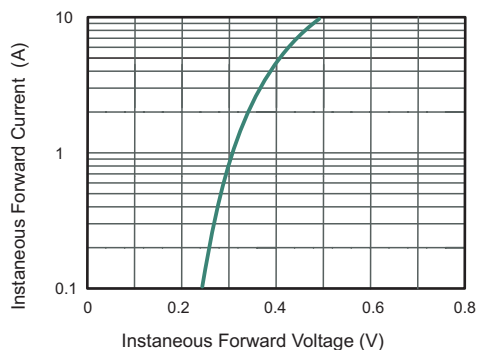


Fig.4 Typical Junction Capacitance

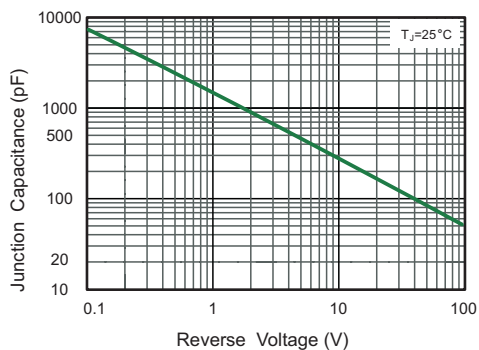
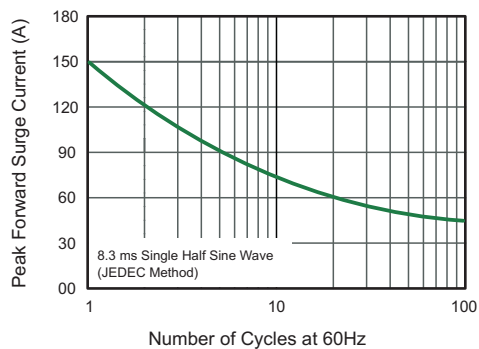


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

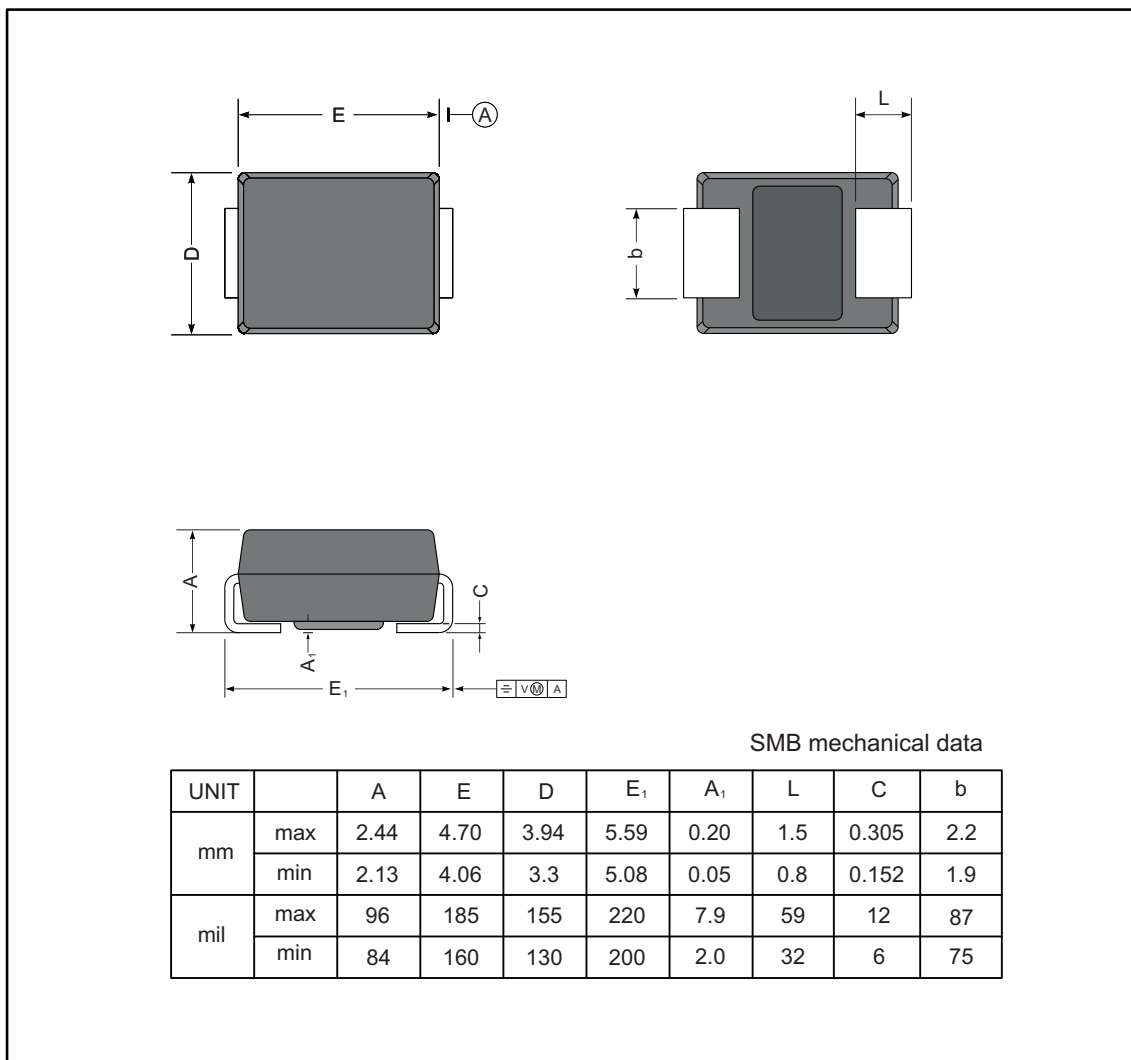




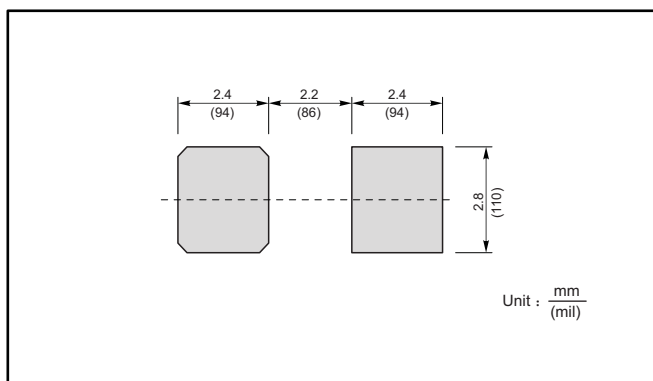
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMB



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| SSL56BM | SSL56 |



Important Notice and Disclaimer

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice.

Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Jingdao Microelectronics assume any liability for application assistance or customer product design.

Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.