



Surface Mount Schottky Barrier Rectifier  
Reverse Voltage - 100V  
Forward Current - 5.0A

#### FEATURES

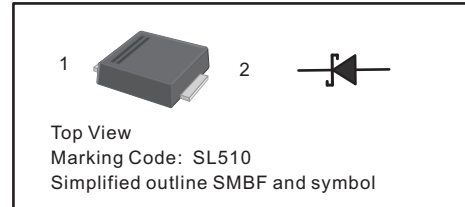
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

#### MECHANICAL DATA

- Case: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg / 0.002oz

#### 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         | SSL510BF   | Units |
|--|-----------------|------------|-------|
| Maximum Repetitive Peak Reverse Voltage  | $V_{RRM}$       | 100        | V     |
| Maximum RMS voltage  | $V_{RMS}$       | 70         | V     |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 100        | V     |
| Maximum Average Forward Rectified Current  | $I_{F(AV)}$     | 5.0        | A     |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)            | $I_{FSM}$       | 150        | A     |
| Max Instantaneous Forward Voltage at 5 A   | $V_F$           | 0.6        | V     |
| Maximum DC Reverse Current $T_a = 25^\circ\text{C}$<br>at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$ | $I_R$           | 1.0<br>50  | mA    |
| Typical Junction Capacitance <sup>(1)</sup>  | $C_j$           | 600        | pF    |
| Typical Thermal Resistance <sup>(2)</sup>  | $R_{\theta JA}$ | 45         | °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 2.0" X 2.0" (5 X 5 cm) copper pad areas.



Fig.1 Forward Current Derating Curve

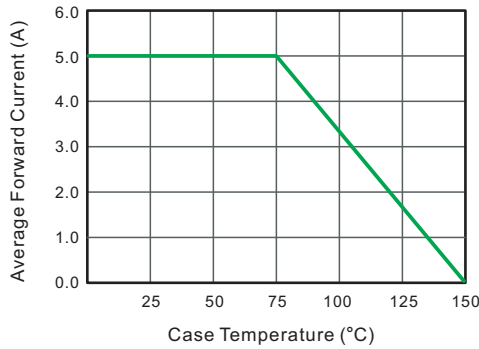


Fig.2 Typical Reverse Characteristics

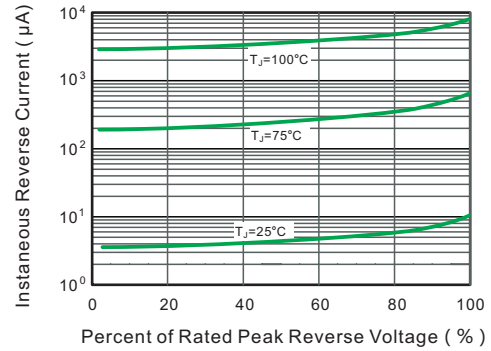


Fig.3 Typical Forward Characteristic

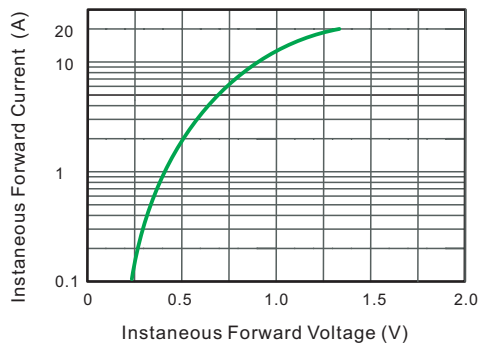


Fig.4 Typical Junction Capacitance

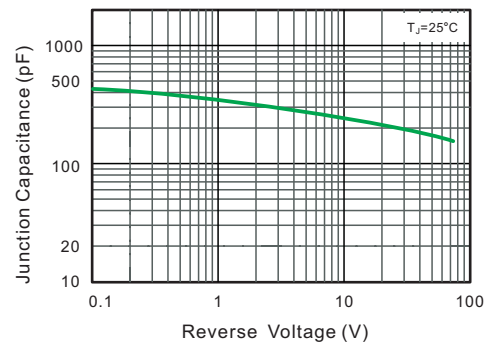


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

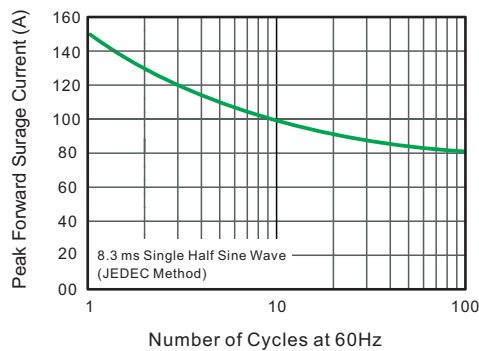
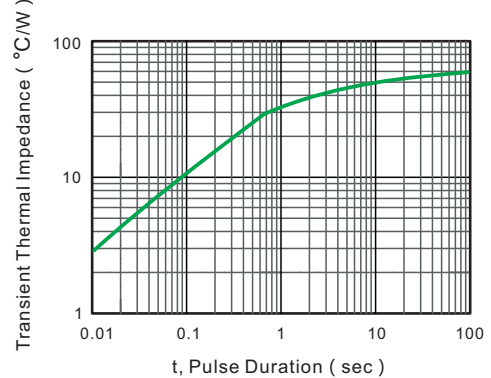


Fig.6- Typical Transient Thermal Impedance

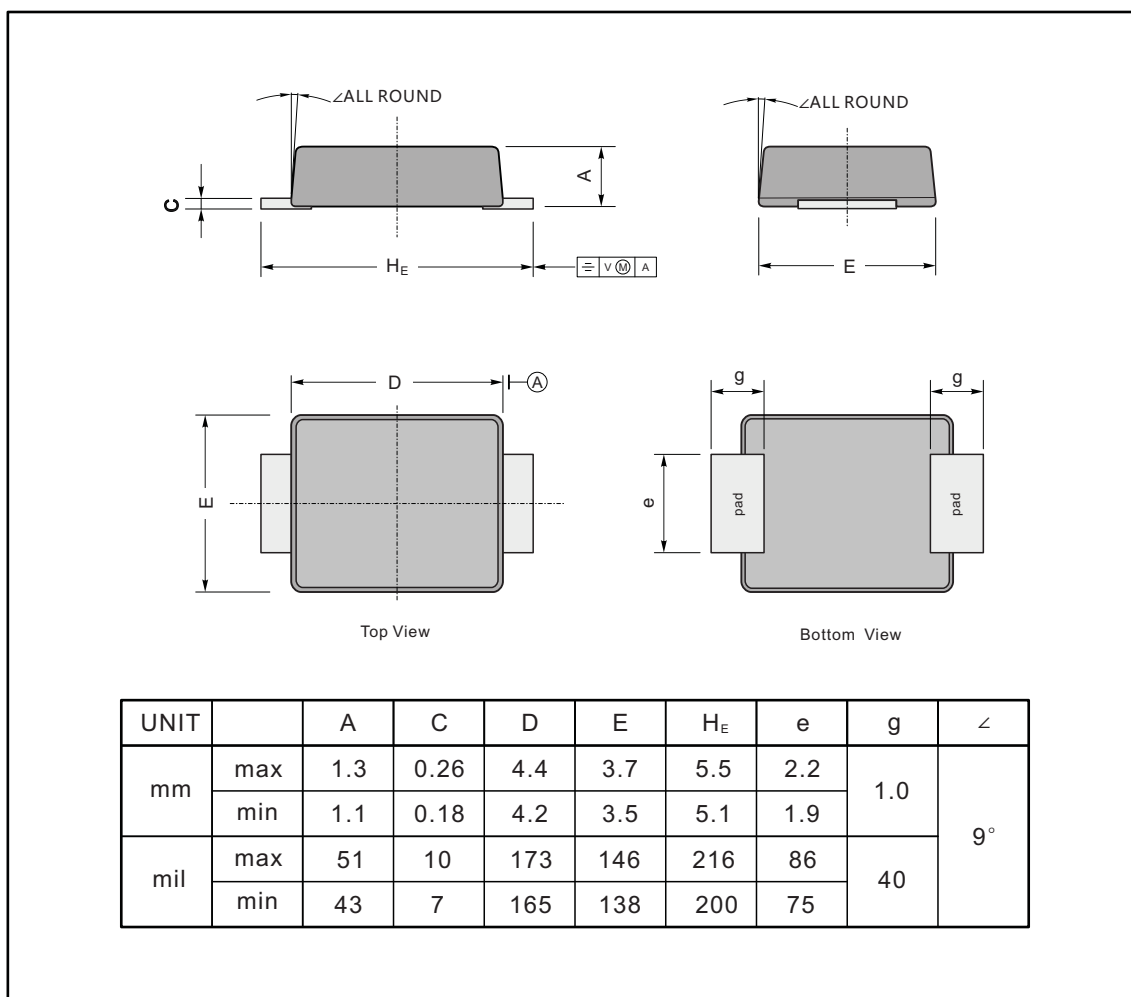




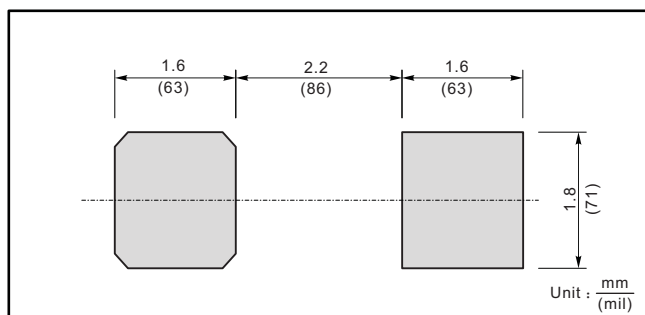
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMBF



### The recommended mounting pad size



### Marking

| Type number | Marking code |
|-------------|--------------|
| SSL510BF    | SL510        |

单击下面可查看定价，库存，交付和生命周期等信息

[>>JINGDAO\(晶导微\)](#)