

# SSL25F-HAF

## Surface Mount Schottky Barrier Rectifier

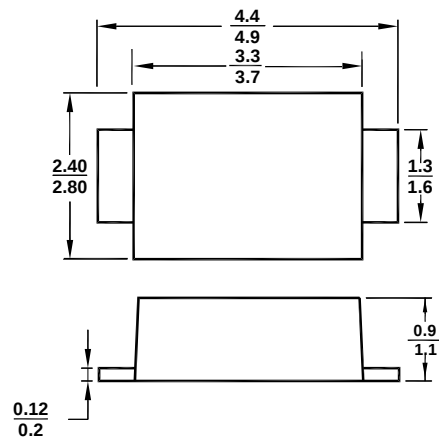
Reverse Voltage - 50 V

Forward Current - 2 A

### 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
- Halogen and Antimony Free(HAF),RoHS compliant

### SMAF



All Dimensions in mm

### Maximum Ratings and Electrical Characteristics

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

| Parameter                                                                                                        | Symbols         | SSL25F        | Unit |
|------------------------------------------------------------------------------------------------------------------|-----------------|---------------|------|
|                                                                                                                  | Marking         | SSL25         | -    |
| Maximum Repetitive Peak Reverse Voltage                                                                          | $V_{RRM}$       | 50            | V    |
| Maximum RMS voltage                                                                                              | $V_{RMS}$       | 35            | V    |
| Maximum DC Blocking Voltage                                                                                      | $V_{DC}$        | 50            | V    |
| Maximum Average Forward Rectified Current                                                                        | $I_{F(AV)}$     | 2             | A    |
| Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)                       | $I_{FSM}$       | 50            | A    |
| Maximum Instantaneous Forward Voltage at 2 A                                                                     | $V_F$           | 0.5           | V    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage<br>$T_a = 25^\circ\text{C}$<br>$T_a = 100^\circ\text{C}$ | $I_R$           | 0.4<br>10     | mA   |
| Typical Junction Capacitance <sup>1)</sup>                                                                       | $C_j$           | 290           | pF   |
| Typical Thermal Resistance from junction to ambient <sup>2)</sup>                                                | $R_{\theta JA}$ | 65            | °C/W |
| Junction Temperature Range                                                                                       | $T_j$           | - 55 to + 125 | °C   |
| Storage Temperature Range                                                                                        | $T_{stg}$       | - 55 to + 150 | °C   |

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

2) P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

TOP DYNAMIC



Dated: 13/07/2016 Rev: 03

Fig.1 Forward Current Derating Curve

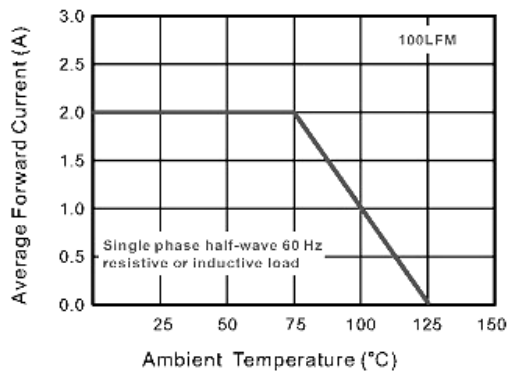


Fig.2 Typical Reverse Characteristics

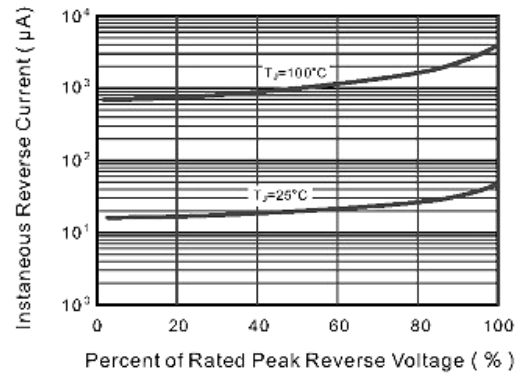


Fig.3 Typical Forward Characteristic

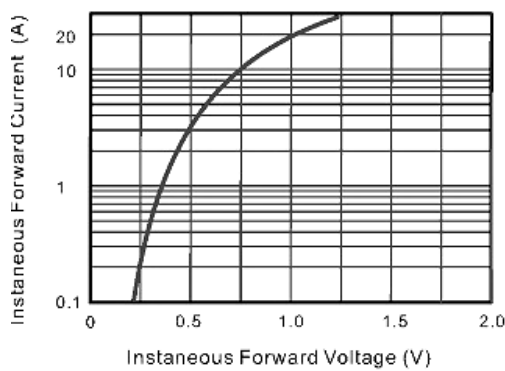


Fig.4 Typical Junction Capacitance

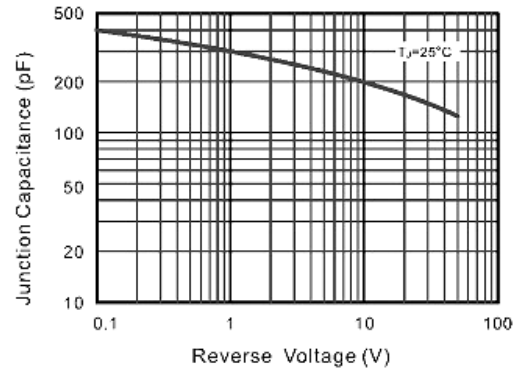


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

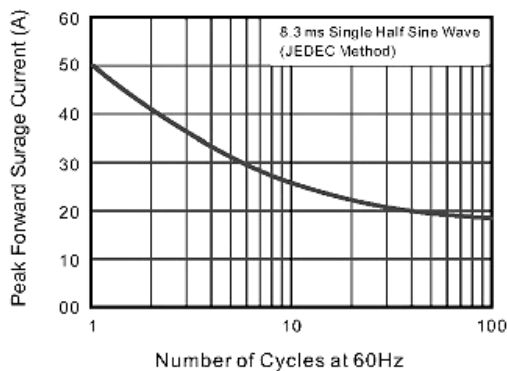


Fig.6- Typical Transient Thermal Impedance

