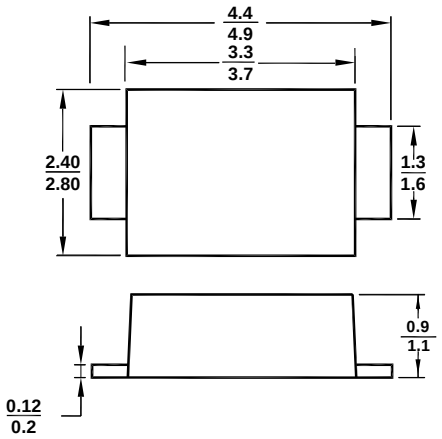
# SSL25F

## Surface Mount Schottky Barrier Rectifier
**Reverse Voltage - 50 V**
**Forward Current - 2 A**

**SMAF**




All Dimensions in mm

### 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

**Maximum Ratings and Electrical Characteristics**

Ratings at 25℃ 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 $T_a$ = 25℃<br>$T_a$ = 100℃ | $I_R$ | 0.4<br>10 | mA |
| Tyoical Junction Capacitance[1)] | $C_j$ | 290 | pF |
| Typical Thermal Resistance from junction to ambient [2)] | $R_{\theta JA}$ | 65 | ℃/W |
| Junction Temperature Range | $T_j$ | - 55 to + 125 | ℃ |
| Storage Temperature Range | $T_{stg}$ | - 55 to + 150 | ℃ |

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.

Fig.1 Forward Current Derating Curve

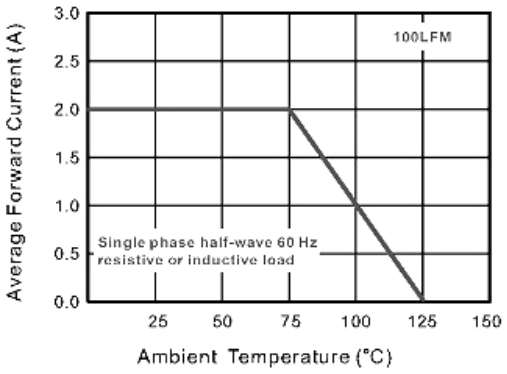



Fig.2 Typical Reverse Characteristics

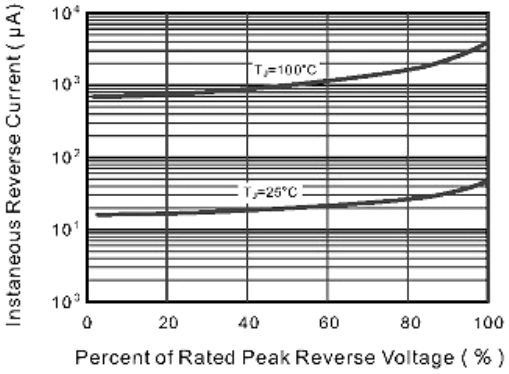



Fig.3 Typical Forward Characteristic

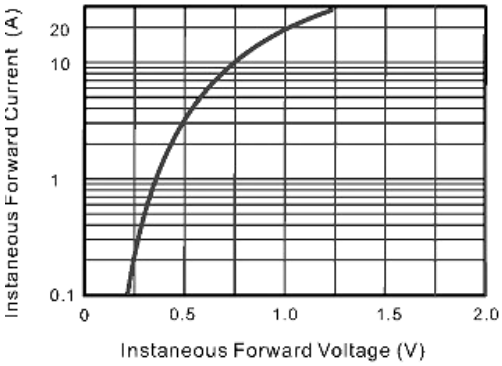



Fig.4 Typical Junction Capacitance

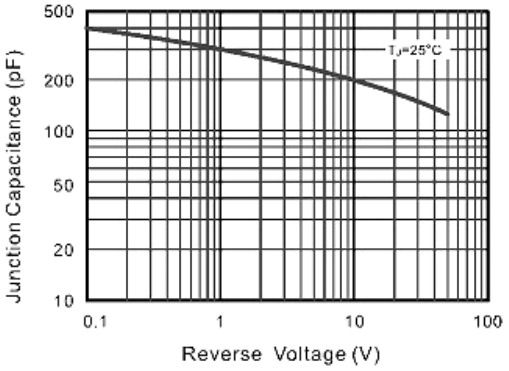



Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

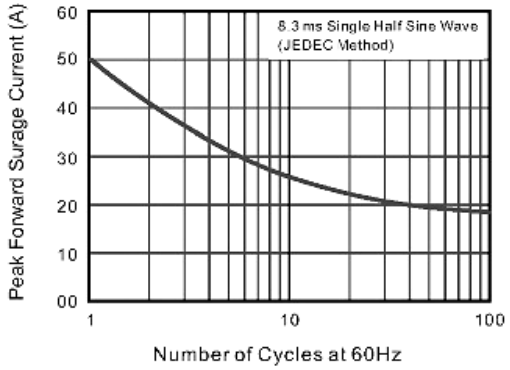



Fig.6- Typical Transient Thermal Impedance