

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40 to 60 V

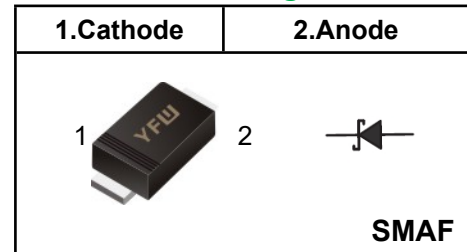
Forward Current - 2 A

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
- ◆Lead free in comply with EU RoHS 2011/65/EU directives



Pinning



Marking Code

| | |
|---------------|--------------|
| SSL24F | SSL24 |
| SSL26F | SSL26 |

MECHANICAL DATA

- ◆Case: SMAF
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 27mg / 0.00095oz

Absolute Maximum Ratings and Electrical characteristics

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

| Parameter | Symbols | SSL24F | SSL26F | Units |
|---|-----------------|------------|----------|-------|
| Maximum Repetitive 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 | $I_{F(AV)}$ | 2.0 | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method) | I_{FSM} | 50 | 40 | A |
| Maximum Instantaneous Forward Voltage at 2 A | V_F | 0.45 | 0.52 | V |
| Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage | I_R | 0.5 10 | 0.3 5 | mA |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 290 | 130 | pF |
| Typical Thermal Resistance ⁽²⁾ | $R_{\theta JA}$ | 65 | | °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

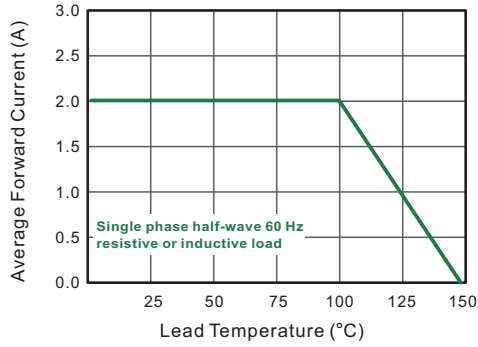


Fig.2 Typical Reverse Characteristics

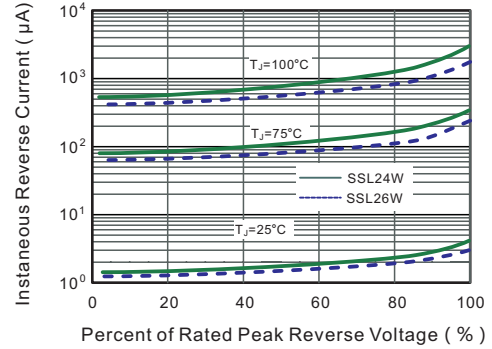


Fig.3 Typical Forward Characteristic

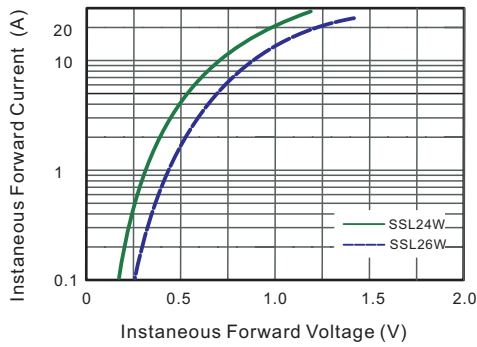


Fig.4 Typical Junction Capacitance

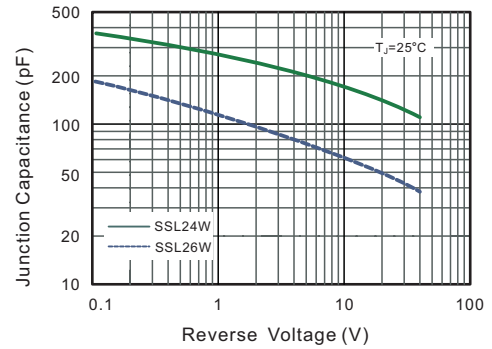


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

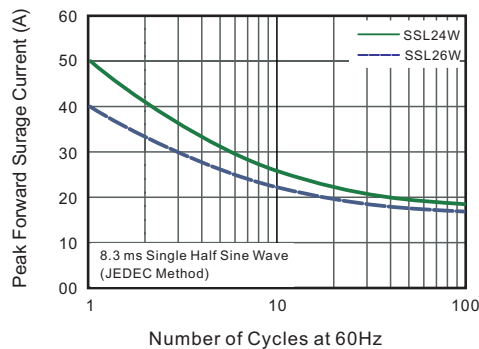
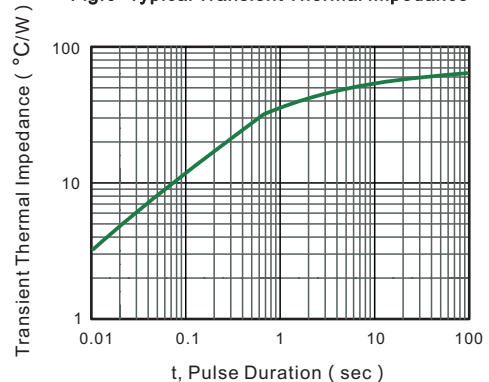
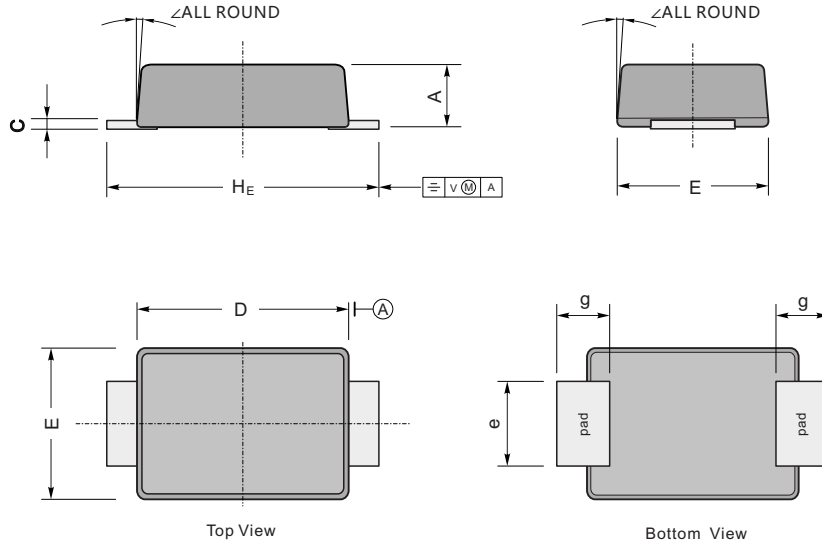


Fig.6- Typical Transient Thermal Impedance



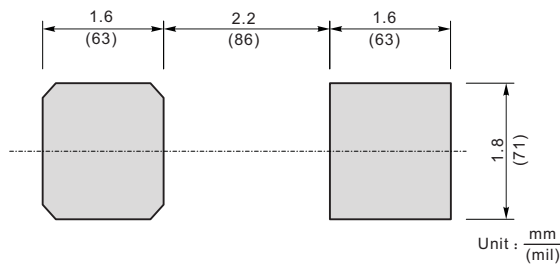
Package Outline SMAF

Plastic surface mounted package; 2 leads



| UNIT | | A | C | D | E | e | g | H _E | \angle |
|------|-----|-----|------|-----|-----|-----|-----|----------------|----------|
| mm | max | 1.1 | 0.20 | 3.7 | 2.7 | 1.6 | 1.2 | 4.9 | 7° |
| | min | 0.9 | 0.12 | 3.3 | 2.4 | 1.3 | 0.8 | 4.4 | |
| mil | max | 43 | 7.9 | 146 | 106 | 63 | 47 | 193 | |
| | min | 35 | 4.7 | 130 | 94 | 51 | 31 | 173 | |

The recommended mounting pad size



Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| SMAF | Tape/Reel, 13" reel | 10000 | EIA-481-1 |
| | Tape/Reel, 7" reel | 3000 | EIA-481-1 |