

### Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40 and 60 V

Forward Current - 2.0A

#### Features

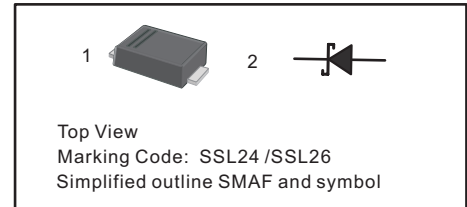
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

#### MECHANICAL DATA

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

#### PINNING

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



#### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

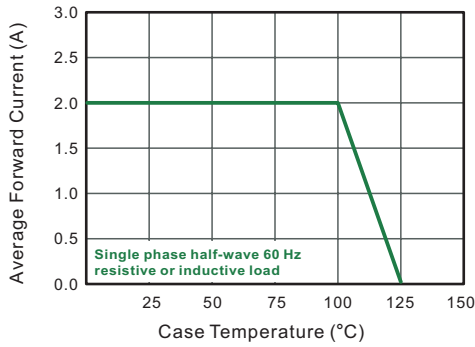
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter  | Symbols         | 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 at $T_c=100\text{ }^\circ\text{C}$   | $I_{F(AV)}$     | 2          |          | A                  |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load   | $I_{FSM}$       | 50         |          | A                  |
| Maximum Instantaneous Forward Voltage at 2 A   | $V_F$           | 0.45       | 0.52     | V                  |
| Maximum DC Reverse Current at Rated DC Blocking Voltage<br>$T_a=25\text{ }^\circ\text{C}$<br>$T_a=100\text{ }^\circ\text{C}$ | $I_R$           | 0.5<br>10  | 0.3<br>5 | mA                 |
| Typical Junction Capacitance <sup>(1)</sup>  | $C_j$           | 290        | 130      | pF                 |
| Typical Thermal Resistance <sup>(2)</sup>  | $R_{\theta JA}$ | 70         |          | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range   | $T_j$           | -55 ~ +125 |          | $^\circ\text{C}$   |
| Storage Temperature Range  | $T_{stg}$       | -55 ~ +150 |          | $^\circ\text{C}$   |

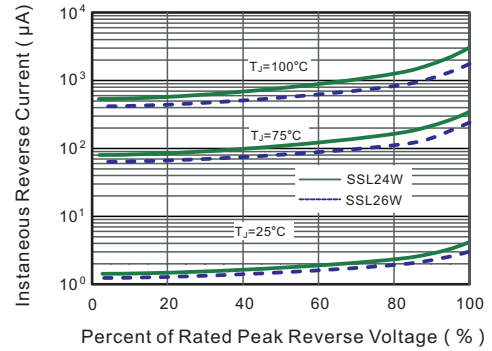
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

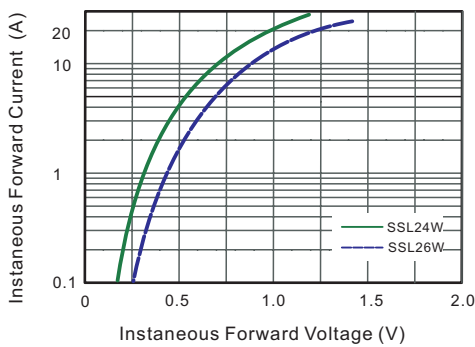
**Fig.1 Forward Current Derating Curve**



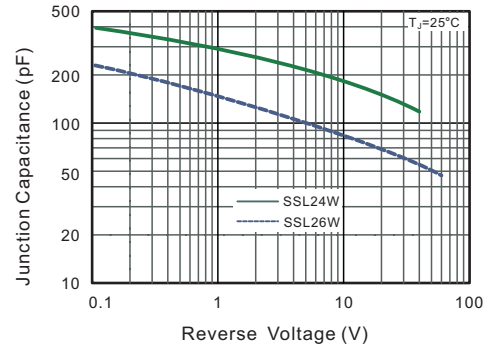
**Fig.2 Typical Reverse Characteristics**



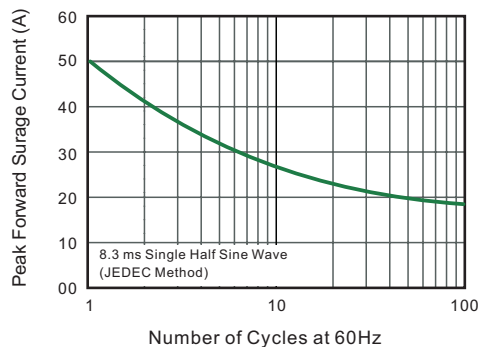
**Fig.3 Typical Forward Characteristic**



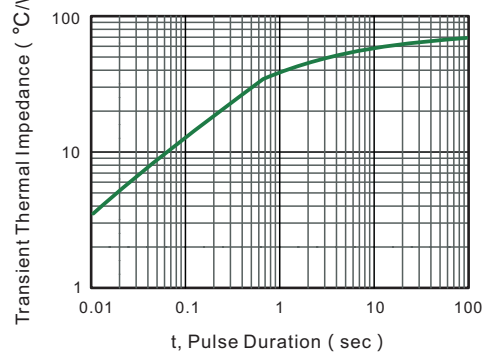
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



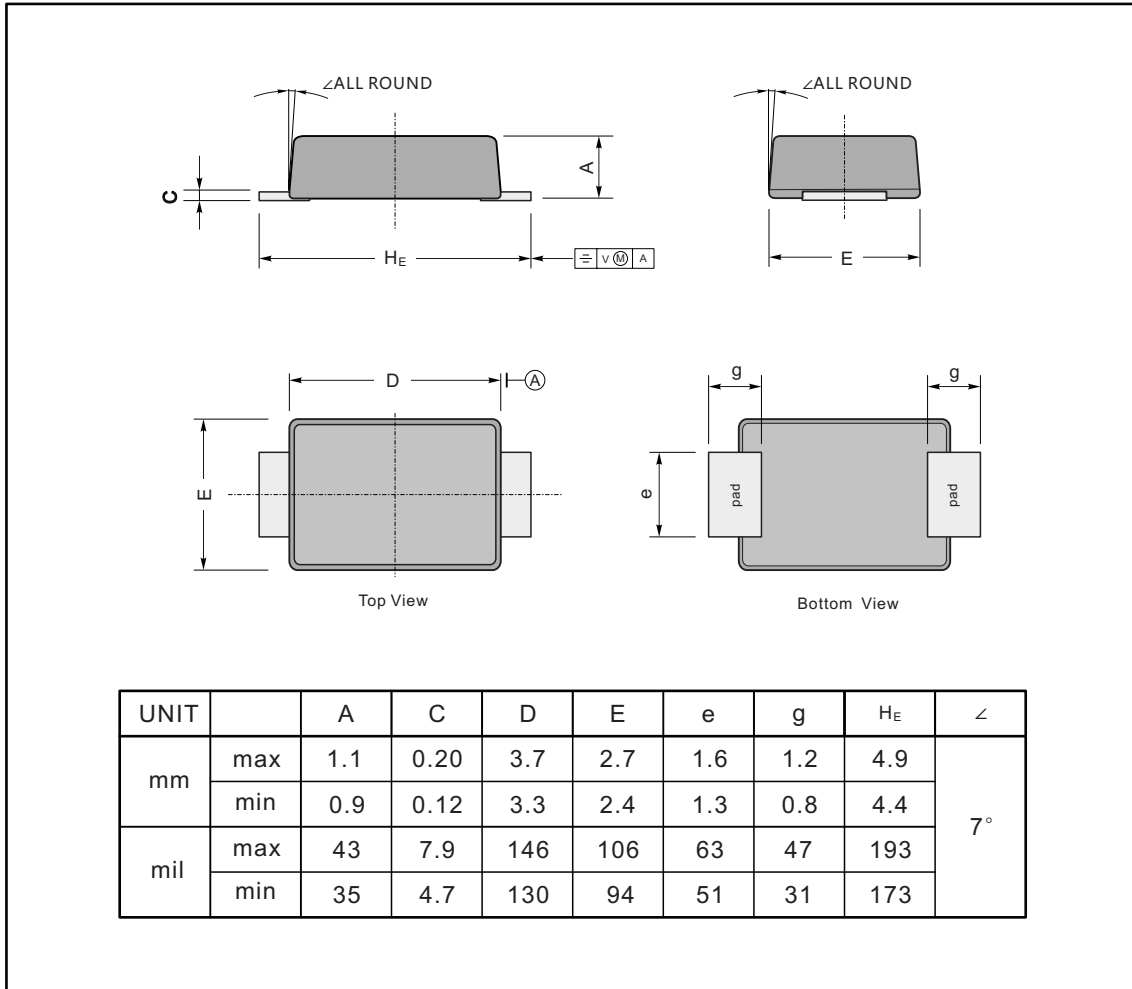
**Fig.6- Typical Transient Thermal Impedance**



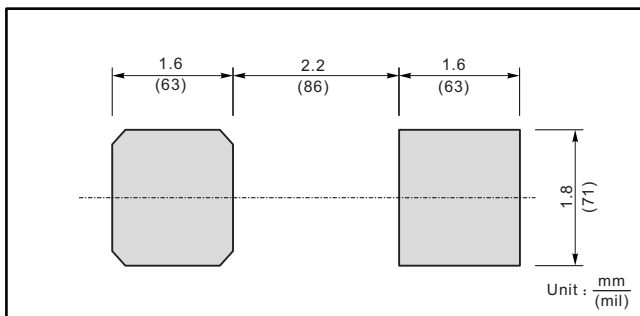
### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMAF



### The recommended mounting pad size



### Marking

| Type number | Marking code |
|-------------|--------------|
| SSL24F      | SSL24        |
| SSL26F      | SSL26        |