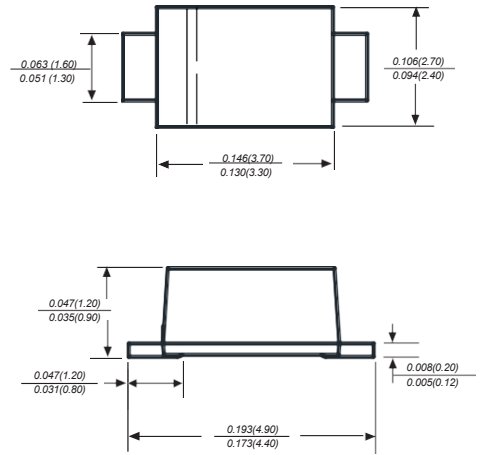


## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
260 °C/10 seconds at terminals

SMAF



Dimensions in inches and (millimeters)

### 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 current derate by 20%.

| Parameter                                                                                                 | SYMBOLS          | SS22F            | SS23F | SS24F | SS25F | SS26F | SS28F            | SS210F | SS2150F | SS2200F | UNITS |
|-----------------------------------------------------------------------------------------------------------|------------------|------------------|-------|-------|-------|-------|------------------|--------|---------|---------|-------|
| Marking Code                                                                                              |                  |                  |       |       |       |       |                  |        |         |         |       |
| Maximum repetitive peak reverse voltage                                                                   | V <sub>RRM</sub> | 20               | 30    | 40    | 50    | 60    | 80               | 100    | 150     | 200     | V     |
| Maximum RMS voltage                                                                                       | V <sub>RMS</sub> | 14               | 21    | 28    | 35    | 42    | 56               | 70     | 105     | 140     | V     |
| Maximum DC blocking voltage                                                                               | V <sub>DC</sub>  | 20               | 30    | 40    | 50    | 60    | 80               | 100    | 150     | 200     | V     |
| Maximum average forward rectified current                                                                 | I <sub>AV</sub>  | 2.0              |       |       |       |       |                  |        |         |         | A     |
| Peak forward surge current<br>8.3ms single half sine-wave<br>superimposed on rated load (JEDEC Method)    | I <sub>FSM</sub> | 50               |       |       |       |       |                  |        |         |         | A     |
| Maximum instantaneous forward voltage at 2.0A                                                             | V <sub>F</sub>   | 0.55             |       |       | 0.70  |       | 0.85             |        | 0.95    |         | V     |
| Maximum DC reverse current<br>T <sub>A</sub> =25℃<br>at rated DC blocking voltage<br>T <sub>A</sub> =100℃ | I <sub>R</sub>   | 0.5<br>5.0       |       |       |       |       | 0.3<br>3.0       |        |         | mA      |       |
| Typical junction capacitance (NOTE 1)                                                                     | C <sub>J</sub>   | 160              |       |       | 80    |       |                  |        |         |         | pF    |
| Typical thermal resistance (NOTE 2)                                                                       | R <sub>θJA</sub> | 80.0             |       |       |       |       |                  |        |         |         | ℃/W   |
| Operating junction temperature range                                                                      | T <sub>J</sub>   | - 5 5 to + 1 2 5 |       |       |       |       | - 5 5 to + 1 5 0 |        |         |         | ℃     |
| Storage temperature range                                                                                 | T <sub>STG</sub> | - 5 5 to + 1 5 0 |       |       |       |       |                  |        |         |         | ℃     |

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. P.C.B. mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas

## Typical Characteristics

Fig.1 Forward Current Derating Curve

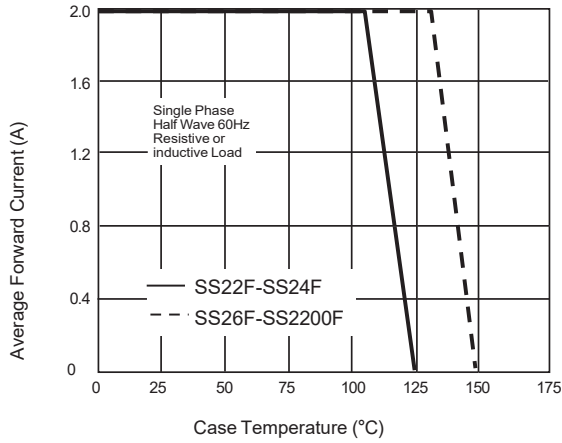


Fig.2 Typical Reverse Characteristics

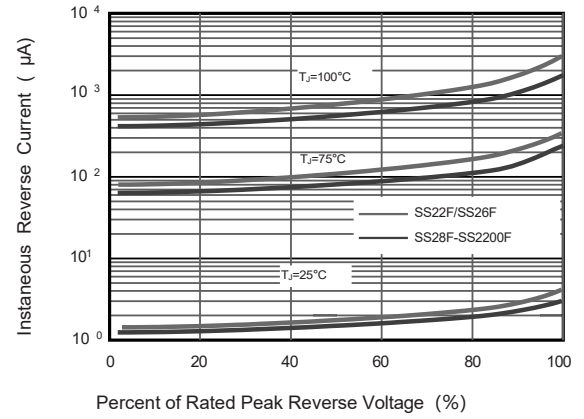


Fig.3 Typical Forward Characteristic

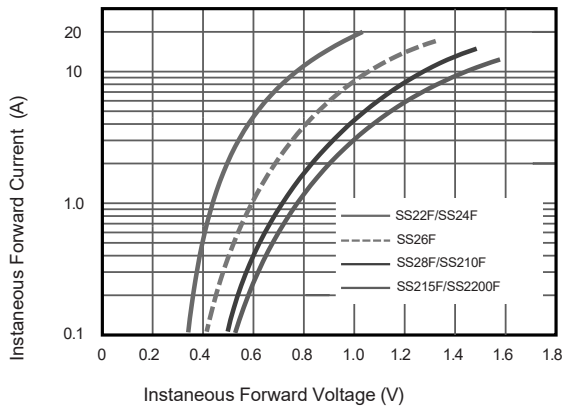


Fig.4 Typical Junction Capacitance

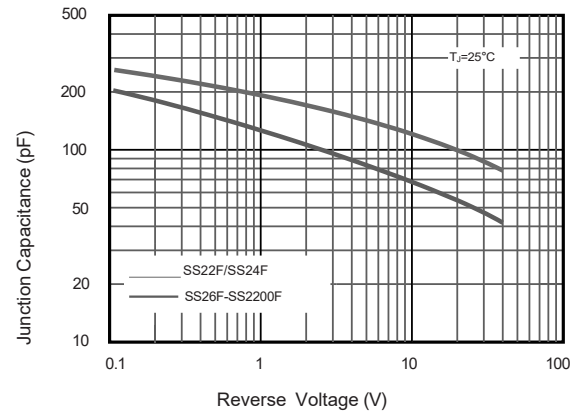


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

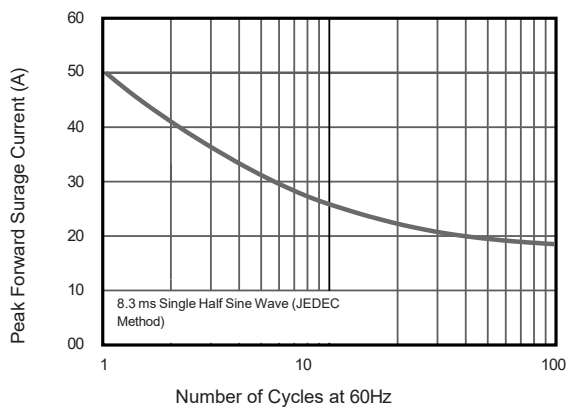
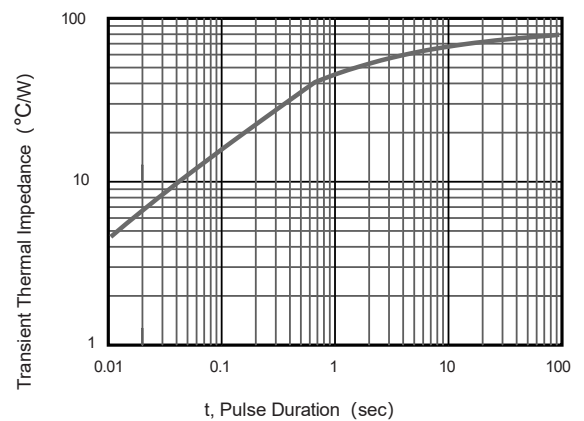


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.