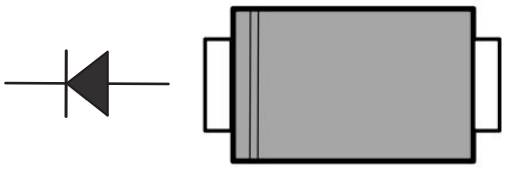
## Surface Mount Schottky Barrier Rectifier

| Parameter | Value | Unit |
|---|---|---|
| $V_{RRM}$ | 20~200 | V |
| $I_{F(AV)}$ | 2.0 | A |



SMAF

### Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability

### Applications

- For use in low-voltage, high-frequency inverters, free-wheeling applications, DC/DC converters, and polarity protection circuits.

### Absolute Maximum Ratings and Characteristics (at TJ = 25°C unless otherwise specified)

| Parameter | | Symbol | SS22F | SS24F | SS26F | SS28F | SS210F | SS212F | SS215F | SS220F | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | | $V_{RRM}$ | 20 | 40 | 60 | 80 | 100 | 120 | 150 | 200 | V |
| Maximum RMS voltage | | $V_{RMS}$ | 14 | 28 | 42 | 56 | 70 | 84 | 105 | 140 | V |
| Maximum DC Blocking Voltage | | $V_{DC}$ | 20 | 40 | 60 | 80 | 100 | 120 | 150 | 200 | 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 | | | | | | | | A |
| Max Instantaneous Forward Voltage at 2A | | $V_F$ | 0.55 | | 0.70 | | 0.85 | | 0.95 | | V |
| Maximum DC Reverse Current at Rated DC Reverse Voltage | Ta=25℃<br>Ta=100℃ | $I_R$ | 0.5<br>5 | | | 0.3<br>3 | | | | | mA |
| Typical Junction Capacitance(1) | | $C_j$ | 160 | | 80 | | | | | | pF |
| Typical Thermal Resistance(2) | | $R_{\theta JA}$ | 80 | | | | | | | | ℃/W |
| Operating Junction Temperature Range | | $T_j$ | -55 ~ +125 | | -55 ~ +150 | | | | | | ℃ |
| Storage Temperature Range | | $T_{stg}$ | -55 ~ +150 | | | | | | | | ℃ |

Notes:

（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 .

## Typical characteristics

Fig.1 Forward Current Derating Curve

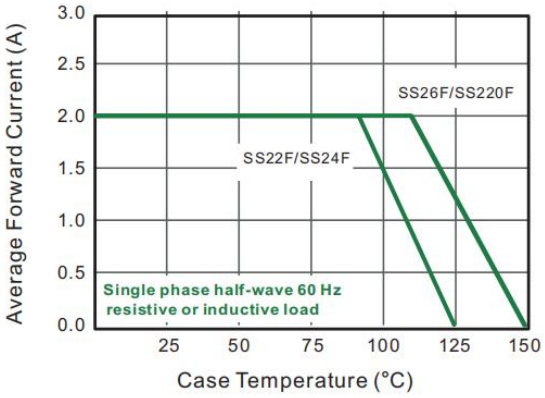



Fig.2 Typical Reverse Characteristics

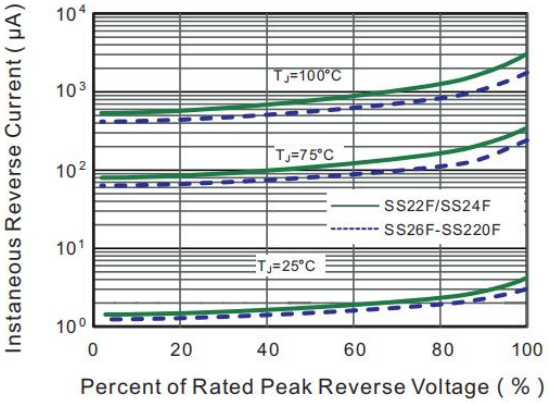



Fig.3 Typical Forward Characteristic

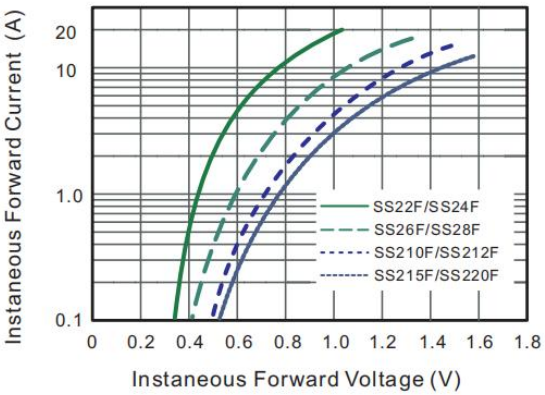



Fig.4 Typical Junction Capacitance

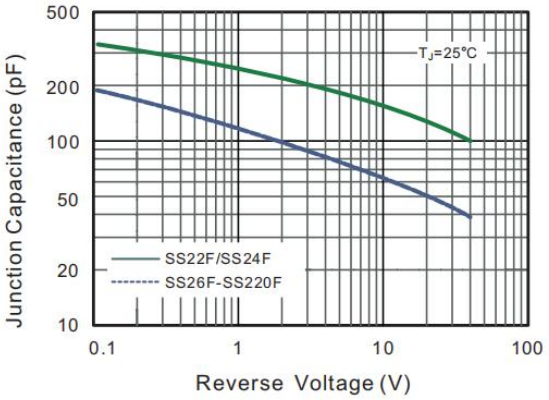



Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

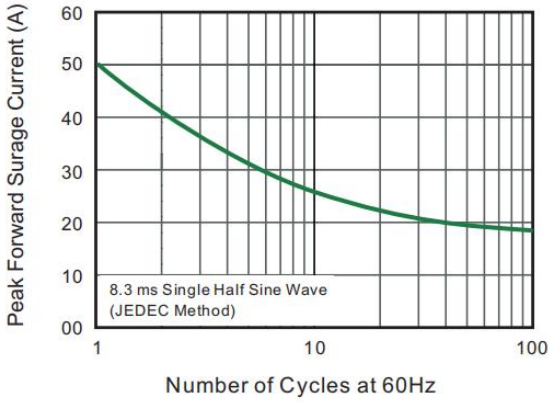
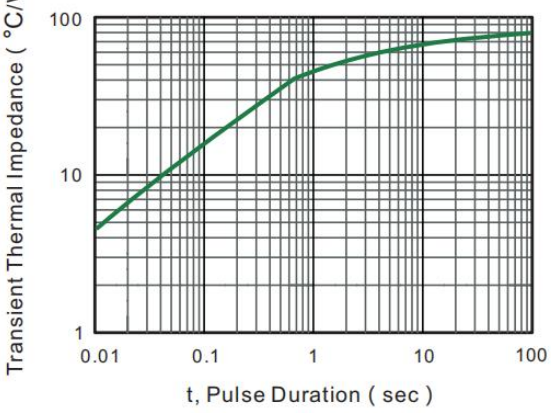



Fig.6- Typical Transient Thermal Impedance



## Package outlines

Plastic surface mounted package; 2 leads

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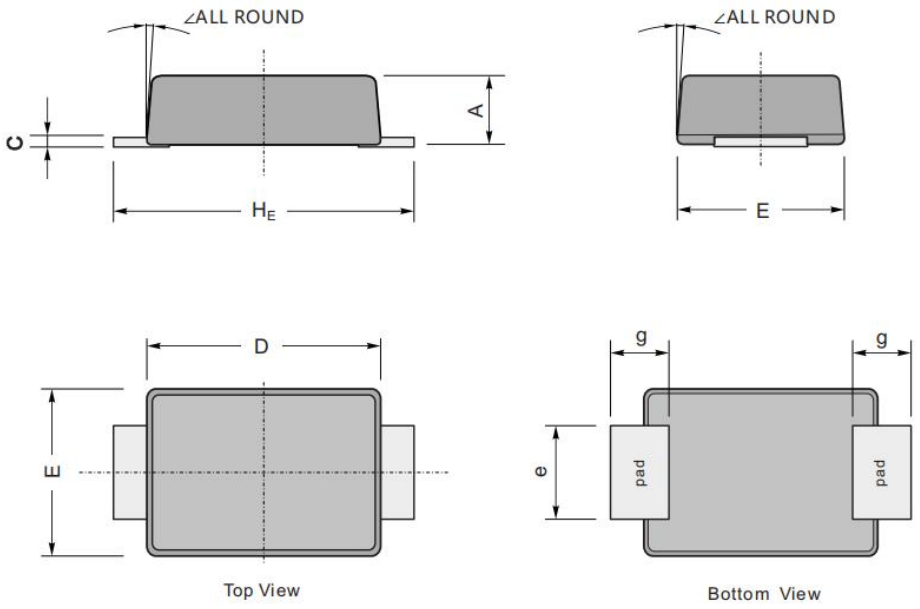
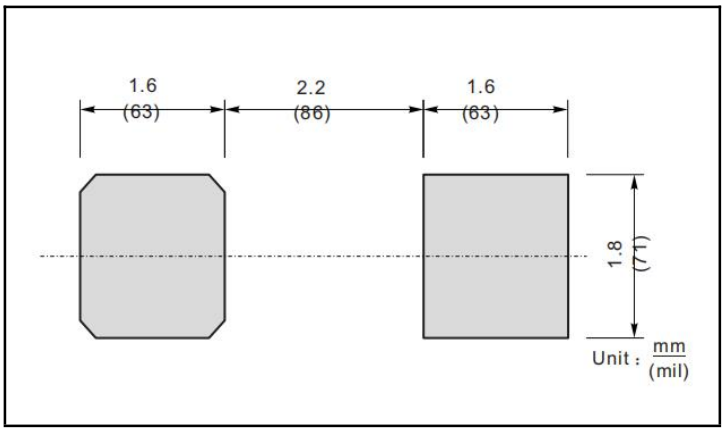



| UNIT | | A | C | D | E | e | g | $H_E$ | ∠ |
|---|---|---|---|---|---|---|---|---|---|
| mm | max | 1.2 | 0.20 | 3.7 | 2.7 | 1.6 | 1.2 | 4.9 | 5° |
| | min | 0.9 | 0.12 | 3.3 | 2.4 | 1.3 | 0.8 | 4.4 | |
| mil | max | 47 | 7.9 | 146 | 106 | 63 | 47 | 193 | |
| | min | 35 | 4.7 | 130 | 94 | 51 | 31 | 173 | |

### The recommended mounting pad size




### Marking

| Type number | Marking code |
|---|---|
| SS22F | SS22F |
| SS24F | SS24F |
| SS26F | SS26F |
| SS28F | SS28F |
| SS210F | SS210F |
| SS212F | SS212F |
| SS215F | SS215F |
| SS220F | SS220F |

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