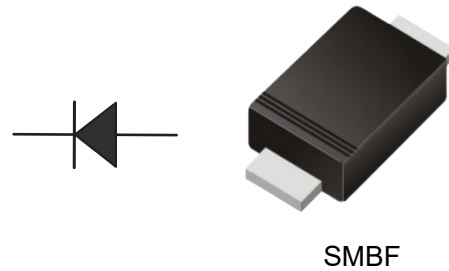


Surface Mount Schottky Barrier Rectifier

| Parameter | Value | Unit |
|-------------|--------|------|
| V_{RRM} | 20~200 | V |
| $I_{F(AV)}$ | 3.0 | A |



SMBF

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 (Ta=25°C unless otherwise noted)

| Parameter | Symbol | SS32BF | SS34BF | SS36BF | SS38BF | SS310BF | SS312BF | SS315BF | SS320BF | 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 | $I_{F(AV)}$ | 3.0 | | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 80 | | | | | | | | A |
| Max Instantaneous Forward Voltage at 3A | V_F | 0.55 | | 0.70 | | 0.85 | | 0.95 | | V |
| Maximum DC Reverse Current Ta=25°C at Rated DC Reverse Voltage Ta=100°C | I_R | 0.5 5 | | | 0.3 3 | | | | | mA |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 450 | | | 400 | | | | | 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.

Typical characteristics

Fig.1 Forward Current Derating Curve

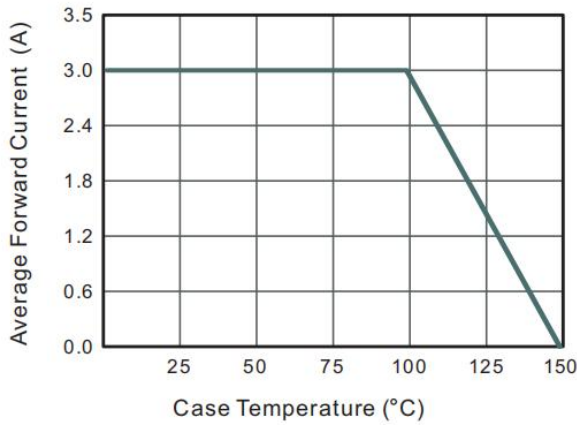


Fig.2 Typical Reverse Characteristics

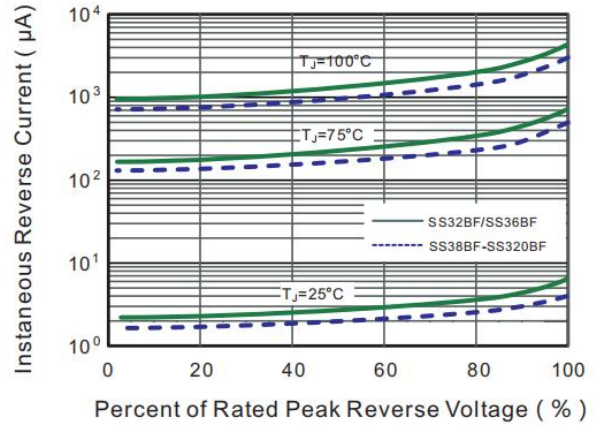


Fig.3 Typical Forward Characteristic

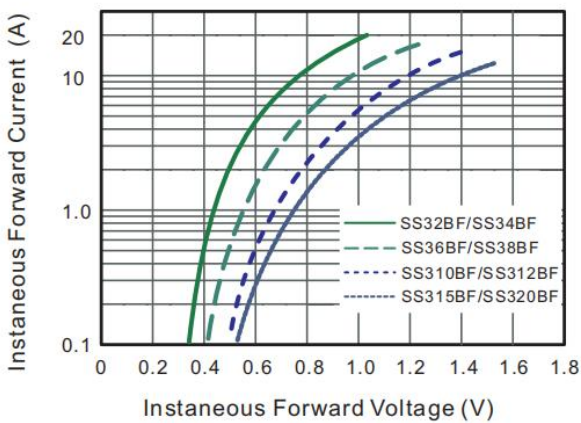


Fig.4 Typical Junction Capacitance

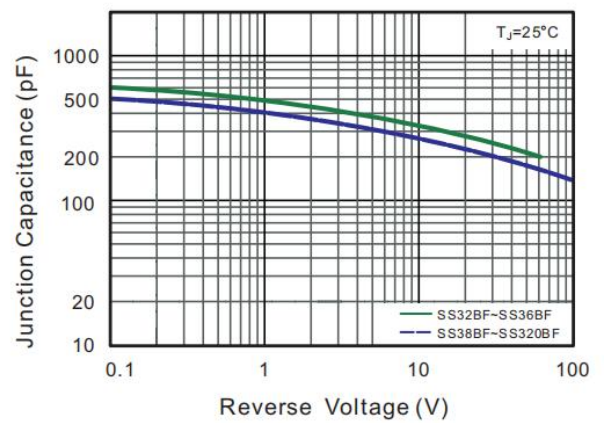


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

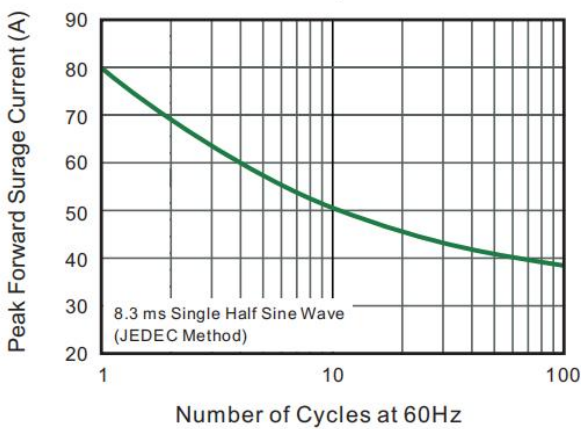
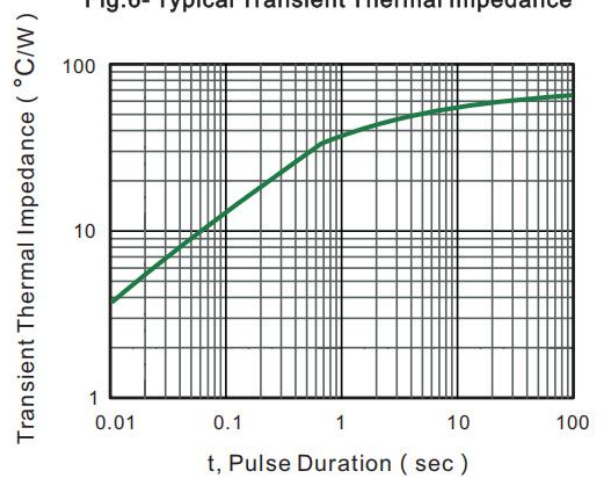
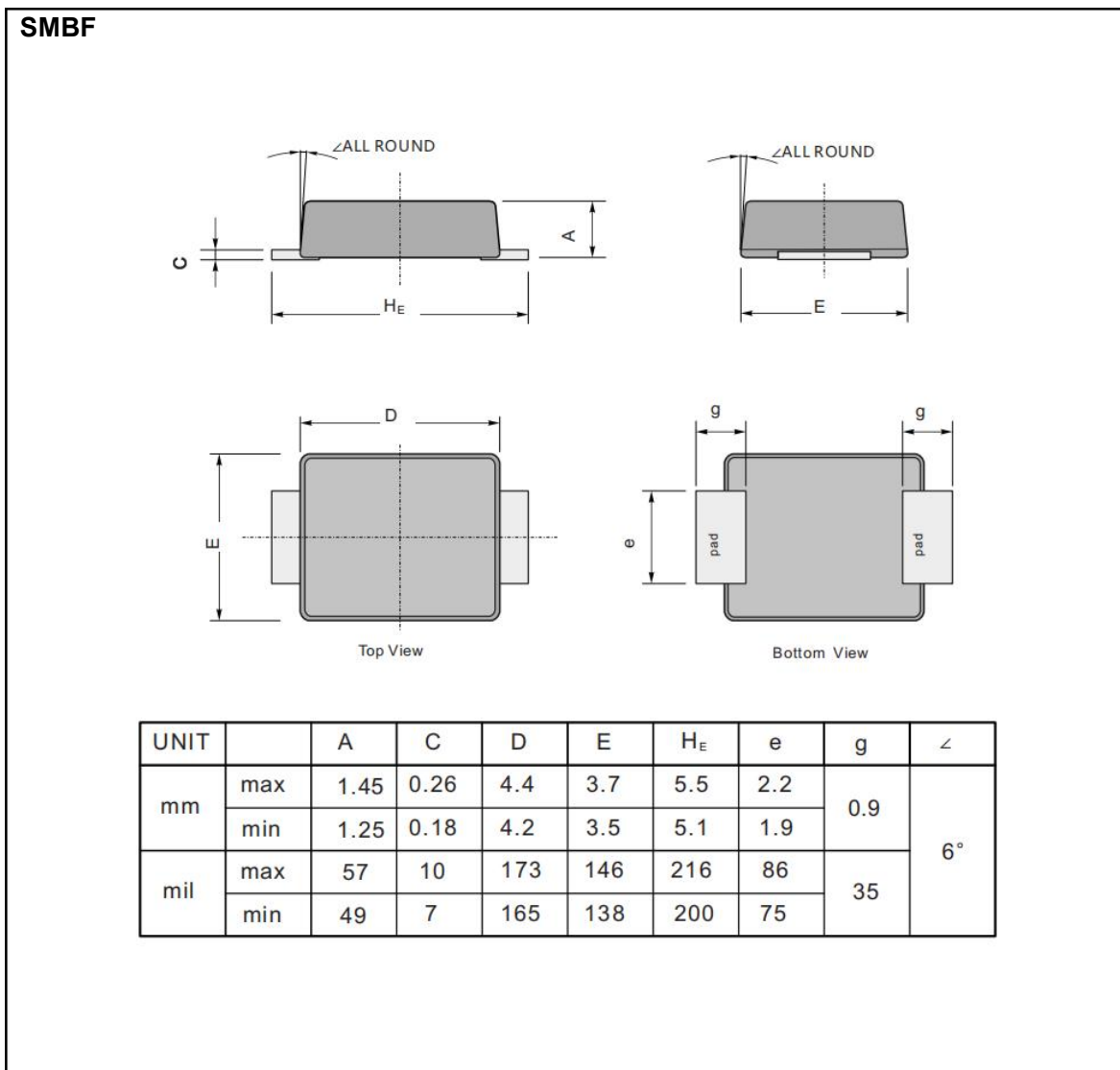


Fig.6- Typical Transient Thermal Impedance

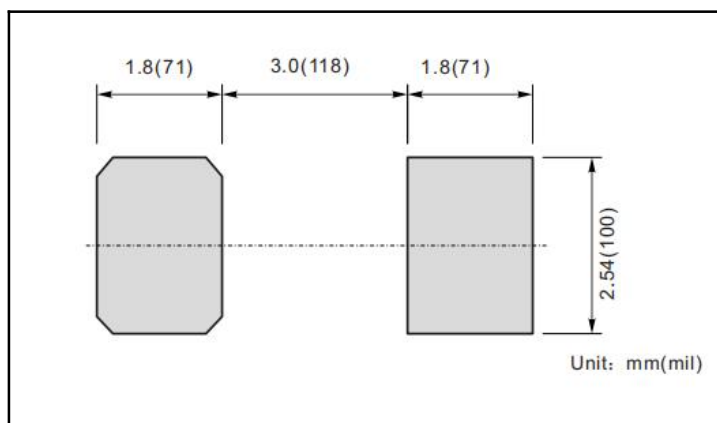


Package Outlines

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| SS32BF | SS32BF |
| SS34BF | SS34BF |
| SS36BF | SS36BF |
| SS38BF | SS38BF |
| SS310BF | SS310BF |
| SS312BF | SS312BF |
| SS315BF | SS315BF |
| SS320BF | SS320BF |

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