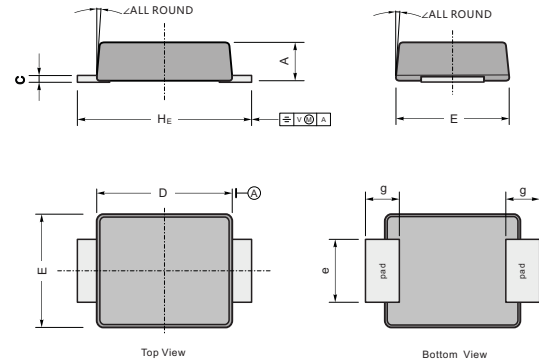


Surface Mount Schottky Barrier Rectifier
 Reverse Voltage - 20 to 200V
 Forward Current - 3.0A

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: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg / 0.002oz

| UNIT | | A | C | D | E | H _e | e | g | ∠ |
|------|-----|-----|------|-----|-----|----------------|-----|-----|----|
| mm | max | 1.3 | 0.26 | 4.4 | 3.7 | 5.5 | 2.2 | 1.0 | 9° |
| | min | 1.1 | 0.18 | 4.2 | 3.5 | 5.1 | 1.9 | | |
| mil | max | 51 | 10 | 173 | 146 | 216 | 86 | 40 | |
| | min | 43 | 7 | 165 | 138 | 200 | 75 | | |

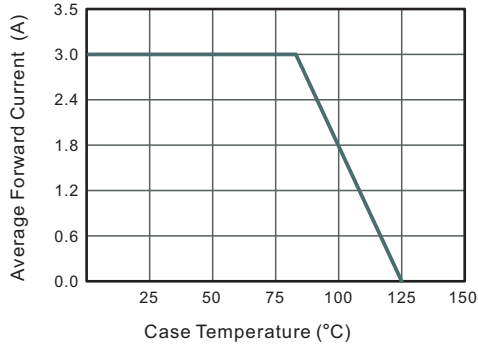
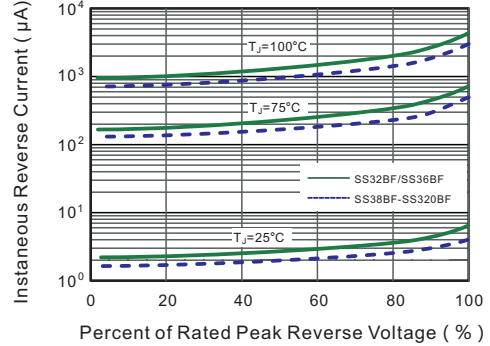
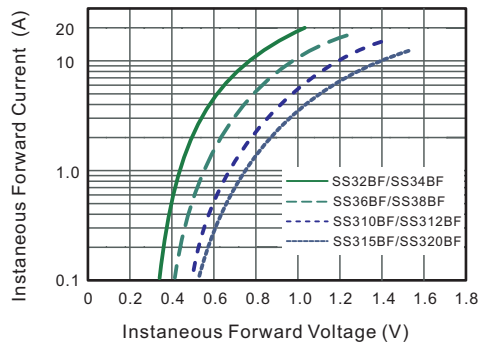
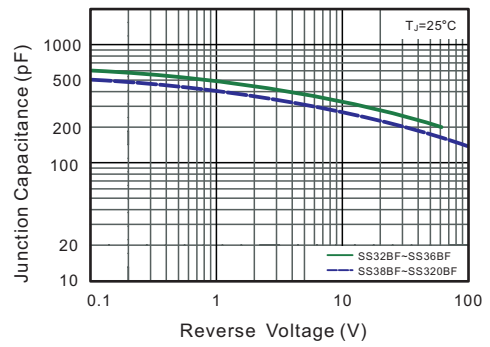
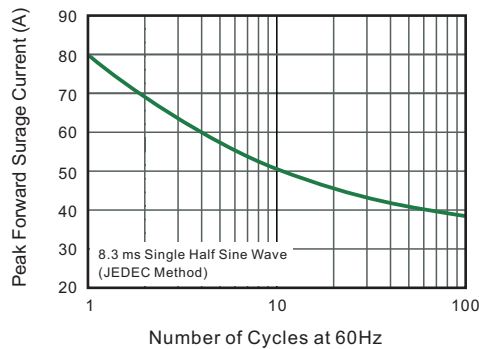
Absolute Maximum Ratings and Electrical characteristics

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

| Parameter | Symbols | SS32F | SS34F | SS36F | SS38F | SS310F | SS312F | SS315F | SS320F | 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 3 A | V _F | 0.55 | | 0.70 | | 0.85 | | 0.95 | | V |
| Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a = 100°C | I _R | 0.5 | | | 0.3 | | | | 5 | mA |
| | | 5 | | | 3 | | | | | |
| Typical Junction Capacitance ⁽¹⁾ | C _j | 450 | | | 400 | | | | pF | |
| Typical Thermal Resistance ⁽²⁾ | R _{θJA} | 65 | | | | | | | | °C/W |
| Operating Junction Temperature Range | T _j | -55 ~ +125 | | | | | | | | °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
