

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200V Forward Current - 5.0A

FEATURES

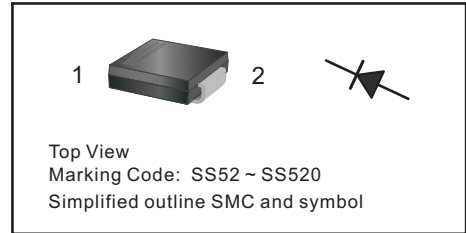
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

PINNING

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



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 | SS52CG | SS54CG | SS56CG | SS58CG | SS510CG | SS512CG | SS515CG | SS520CG | 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 | $I_{F(AV)}$ | 5.0 | | | | | | | | A | |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 175 | | | | | 150 | | | | A |
| Max Instantaneous Forward Voltage at 5 A | V_F | 0.45 | 0.55 | 0.70 | | 0.85 | | | | V | |
| Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$ | I_R | 1.0 | | | | | 50 | | | | mA |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 600 | | | 400 | | | | | pF | |
| Typical Thermal Resistance ⁽²⁾ | $R_{\theta JA}$ | 35 | | | | | | | | $^\circ\text{C}/\text{W}$ | |
| Operating Junction Temperature Range | T_j | -55 ~ +150 | | | | | | | | $^\circ\text{C}$ | |
| 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

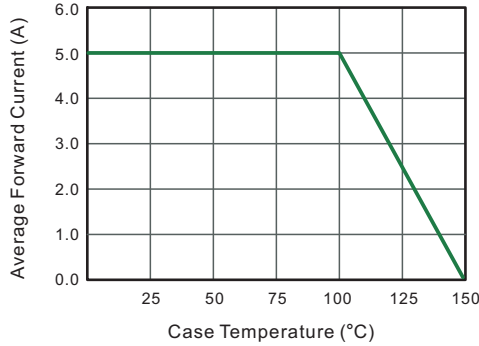


Fig.2 Typical Reverse Characteristics

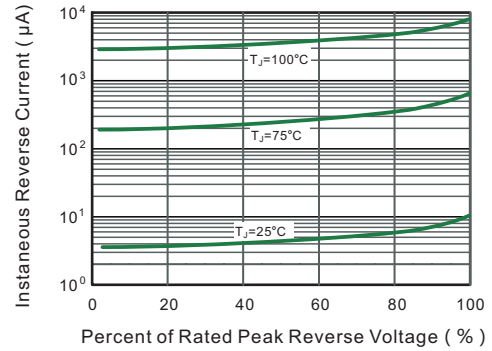


Fig.3 Typical Forward Characteristic

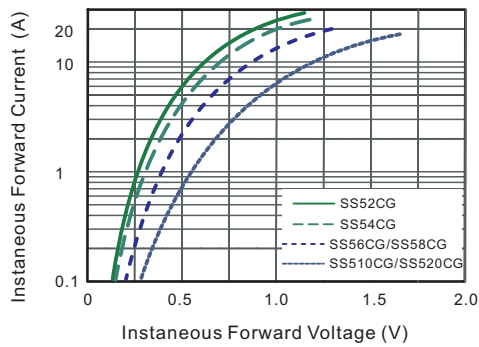


Fig.4 Typical Junction Capacitance

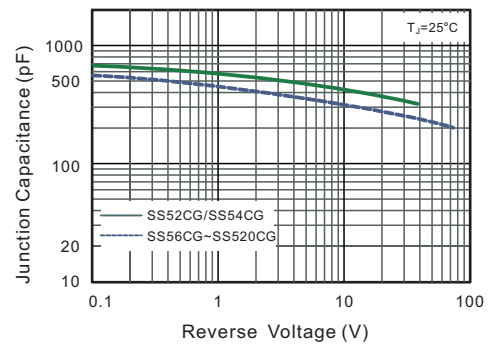


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

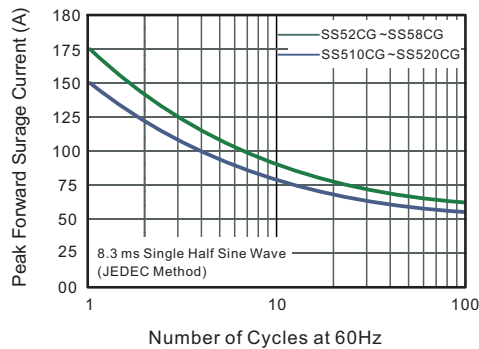
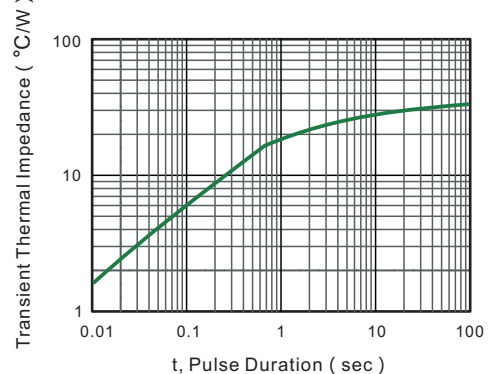


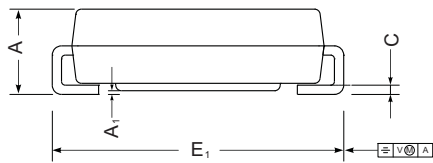
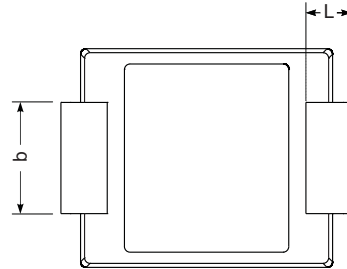
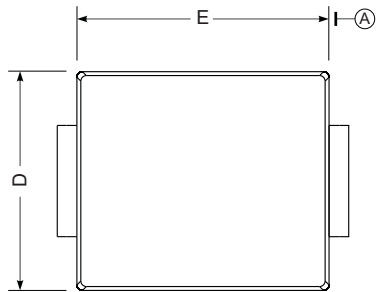
Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

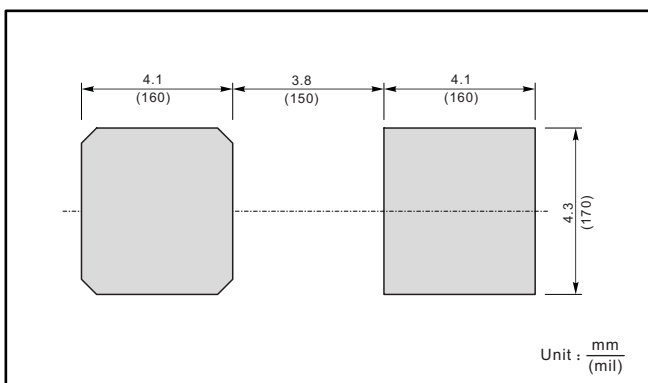
SMC



SMC mechanical data

| UNIT | | A | E | D | E ₁ | A ₁ | C | L | b |
|------|-----|------|-----|-----|----------------|----------------|------|-----|------|
| mm | max | 2.62 | 7.0 | 6.2 | 8.0 | 0.21 | 0.31 | 1.6 | 3.25 |
| | min | 2.00 | 6.5 | 5.6 | 7.6 | 0.05 | 0.15 | 0.9 | 2.75 |
| mil | max | 103 | 276 | 244 | 315 | 8.3 | 12 | 63 | 128 |
| | min | 79 | 256 | 220 | 299 | 2.0 | 5.9 | 35 | 108 |

The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| SS52CG | SS52 |
| SS54CG | SS54 |
| SS56CG | SS56 |
| SS58CG | SS58 |
| SS510CG | SS510 |
| SS512CG | SS512 |
| SS515CG | SS515 |
| SS520CG | SS520 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)