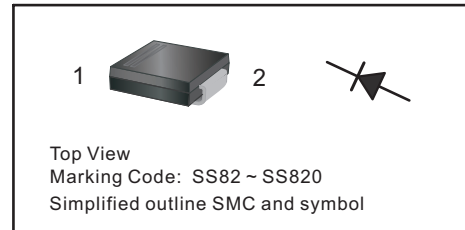


Surface Mount Schottky Barrier Rectifier  
Reverse Voltage - 20 to 200V Forward Current - 8.0A

## PINNING

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



## 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

## 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         | SS82CG     | SS84CG | SS86CG | SS88CG | SS810CG | SS812CG | SS815CG | SS820CG | 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   | $I_{F(AV)}$     | 8.0        |        |        |        |         |         |         |         | A                         |    |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)         | $I_{FSM}$       | 150        |        |        |        |         |         |         |         | A                         |    |
| Max Instantaneous Forward Voltage at 8 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 <sup>(1)</sup>   | $C_j$           | 600        |        |        | 400    |         |         |         |         | pF                        |    |
| Typical Thermal Resistance <sup>(2)</sup>   | $R_{\theta JA}$ | 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

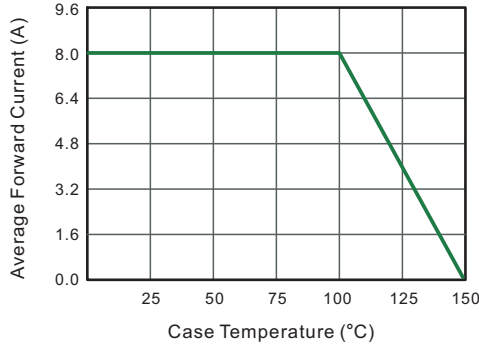


Fig.2 Typical Reverse Characteristics

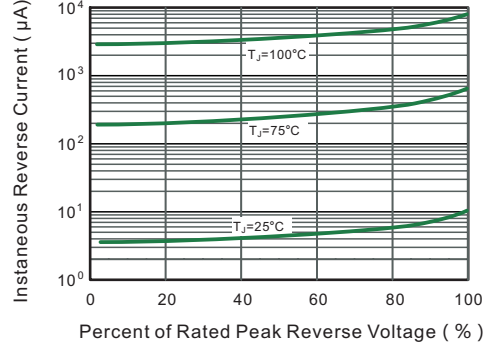


Fig.3 Typical Forward Characteristic

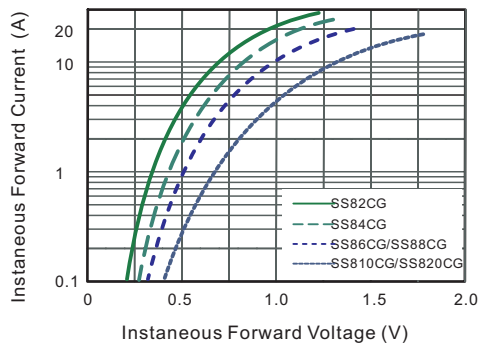


Fig.4 Typical Junction Capacitance

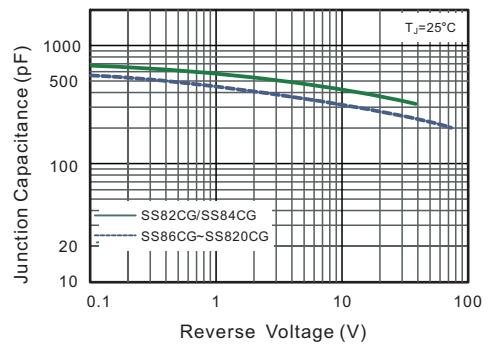


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

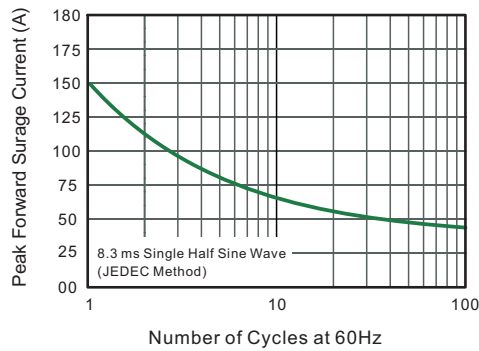
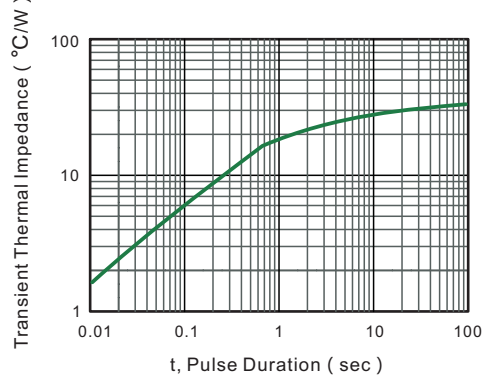


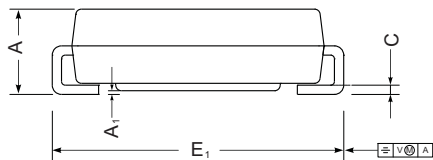
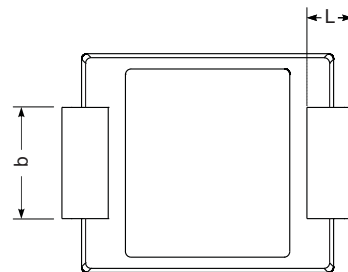
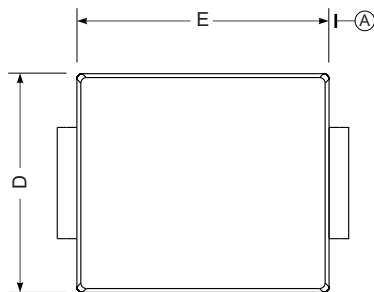
Fig.6- Typical Transient Thermal Impedance



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

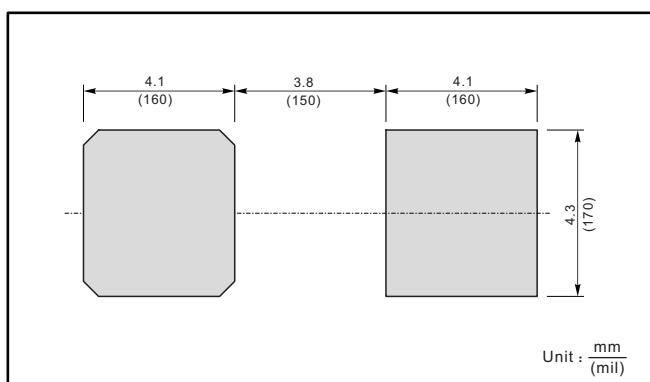
SMC



SMC mechanical data

| UNIT |     | A    | E   | D   | E <sub>1</sub> | A <sub>1</sub> | 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 |
|-------------|--------------|
| SS82CG      | SS82         |
| SS84CG      | SS84         |
| SS86CG      | SS86         |
| SS88CG      | SS88         |
| SS810CG     | SS810        |
| SS812CG     | SS812        |
| SS815CG     | SS815        |
| SS820CG     | SS820        |

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)