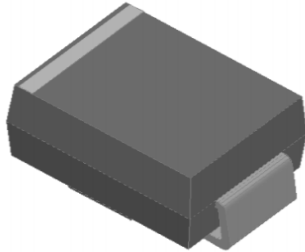


**Surface Mount Schottky Barrier Rectifier**  
**Reverse Voltage - 20 to 200 V**  
**Forward Current - 2.0A**



## 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: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 60mg / 0.0021oz

## Absolute Maximum Ratings and Electrical characteristics

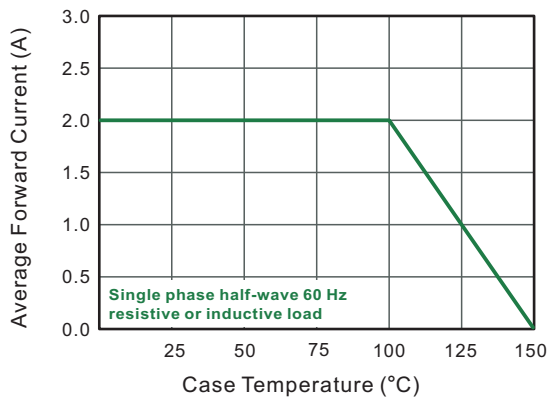
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

| Parameter                                                                                                   | Symbols            | SS22A      | SS24A | SS26A | SS28A    | SS210A | SS212A | SS215A | SS220A | Units |
|-------------------------------------------------------------------------------------------------------------|--------------------|------------|-------|-------|----------|--------|--------|--------|--------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                                     | V <sub>RRM</sub>   | 20         | 40    | 60    | 80       | 100    | 120    | 150    | 200    | V     |
| Maximum RMS voltage                                                                                         | V <sub>RMS</sub>   | 14         | 28    | 42    | 56       | 70     | 84     | 105    | 140    | V     |
| Maximum DC Blocking Voltage                                                                                 | V <sub>DC</sub>    | 20         | 40    | 60    | 80       | 100    | 120    | 150    | 200    | V     |
| Maximum Average Forward Rectified Current                                                                   | I <sub>F(AV)</sub> | 2.0        |       |       |          |        |        |        |        | A     |
| Peak Forward Surge Current,8.3ms<br>Single Half Sine-wave Superimposed<br>on Rated Load (JEDEC method)      | I <sub>FSM</sub>   | 50         |       |       |          |        |        |        |        | A     |
| Max Instantaneous Forward Voltage at 2 A                                                                    | V <sub>F</sub>     | 0.55       | 0.70  |       | 0.85     |        | 0.95   |        | V      |       |
| Maximum DC Reverse Current    T <sub>a</sub> = 25°C<br>at Rated DC Reverse Voltage    T <sub>a</sub> =100°C | I <sub>R</sub>     | 0.5<br>5   |       |       | 0.3<br>3 |        |        |        | mA     |       |
| Typical Junction Capacitance <sup>(1)</sup>                                                                 | C <sub>j</sub>     | 220        | 80    |       |          |        |        |        |        | pF    |
| Typical Thermal Resistance <sup>(2)</sup>                                                                   | R <sub>θJA</sub>   | 80         |       |       |          |        |        |        |        | °C/W  |
| Operating Junction Temperature Range                                                                        | T <sub>j</sub>     | -55 ~ +150 |       |       |          |        |        |        |        | °C    |
| Storage Temperature Range                                                                                   | T <sub>stg</sub>   | -55 ~ +150 |       |       |          |        |        |        |        | °C    |

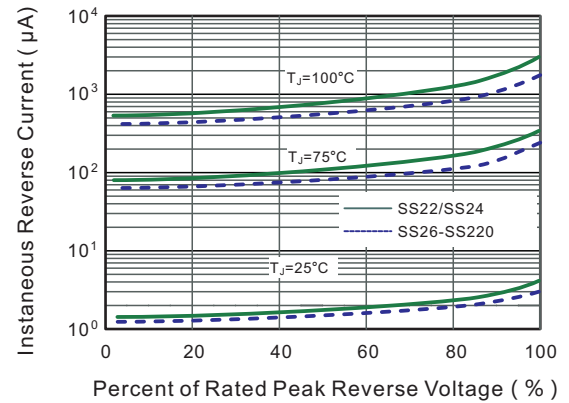
( 1 ) Measured at 1 MHz and applied reverse voltage of 4 V D.C

( 2 ) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

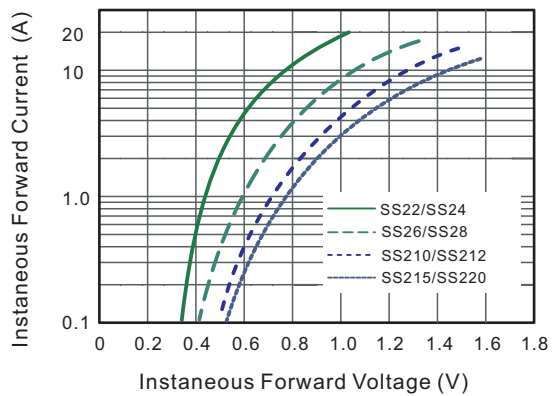
**Fig.1 Forward Current Derating Curve**



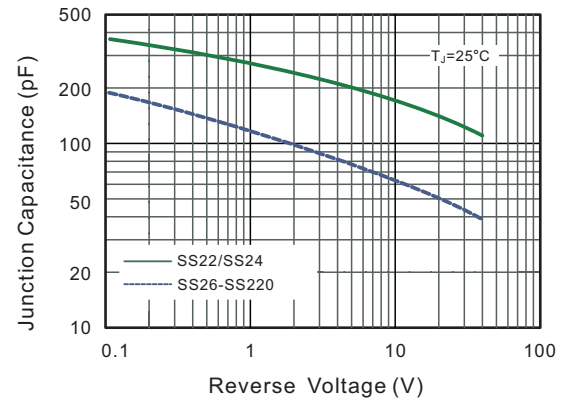
**Fig.2 Typical Reverse Characteristics**



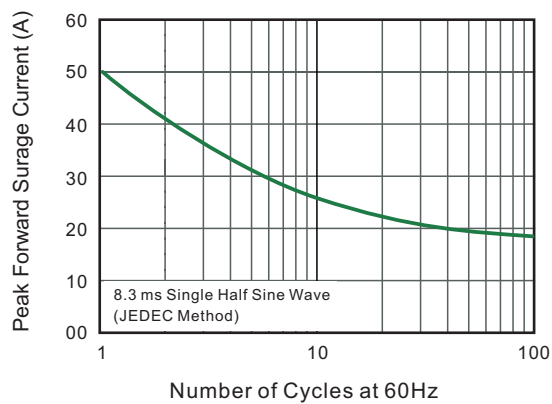
**Fig.3 Typical Forward Characteristic**



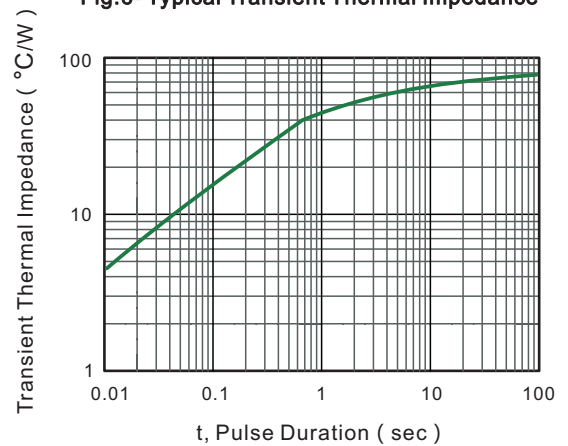
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



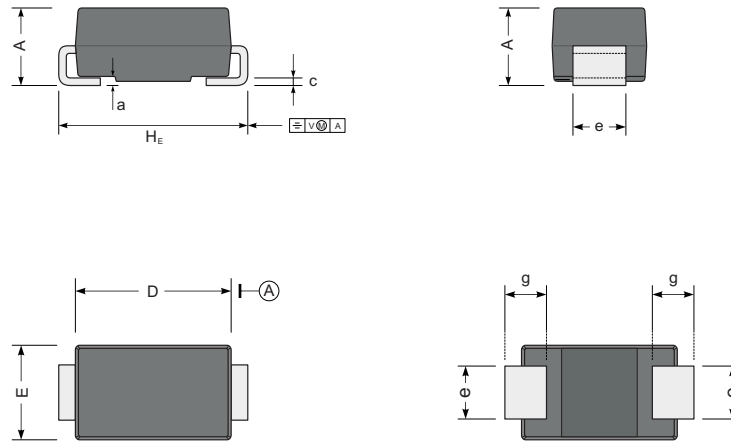
**Fig.6- Typical Transient Thermal Impedance**



## PACKAGE OUTLINE

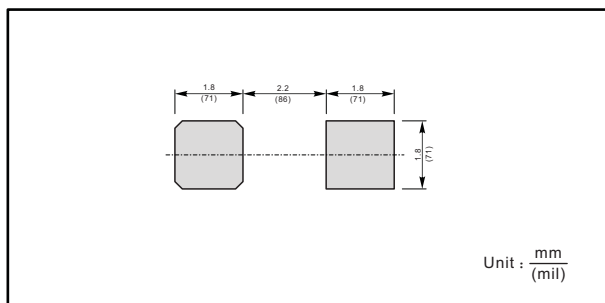
Plastic surface mounted package; 2 leads

SMA



| UNIT |     | A   | D   | E   | H <sub>E</sub> | c    | e   | g   | a   |
|------|-----|-----|-----|-----|----------------|------|-----|-----|-----|
| mm   | max | 2.2 | 4.5 | 2.7 | 5.2            | 0.31 | 1.6 | 1.5 | 0.3 |
|      | min | 1.9 | 4.0 | 2.3 | 4.7            | 0.15 | 1.3 | 0.9 |     |
| mil  | max | 87  | 181 | 106 | 205            | 12   | 63  | 59  | 12  |
|      | min | 75  | 157 | 91  | 185            | 6    | 51  | 35  |     |

## The recommended mounting pad size



## Marking

| Type number | Marking code |
|-------------|--------------|
| SS22A       | SS22         |
| SS24A       | SS24         |
| SS26A       | SS26         |
| SS28A       | SS28         |
| SS210A      | SS210        |
| SS212A      | SS212        |
| SS215A      | SS215        |
| SS220A      | SS220        |