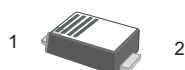


## SCHOTTKY BARRIER RECTIFIER

### SS5200AF SMAF



Cathode  Anode

### Features

- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

### Maximum ratings and electrical characteristics (TJ = 25°C unless otherwise noted)

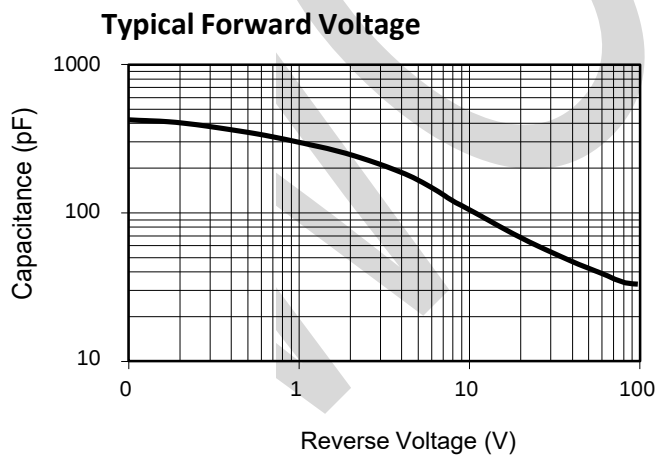
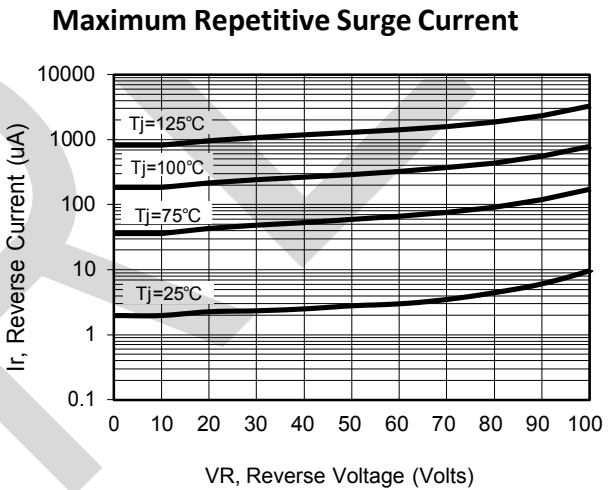
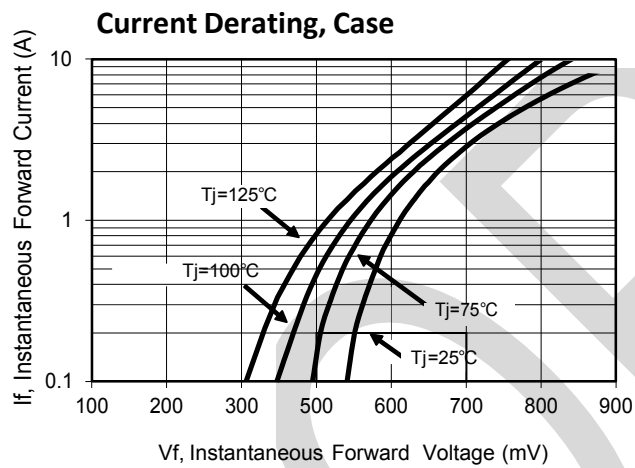
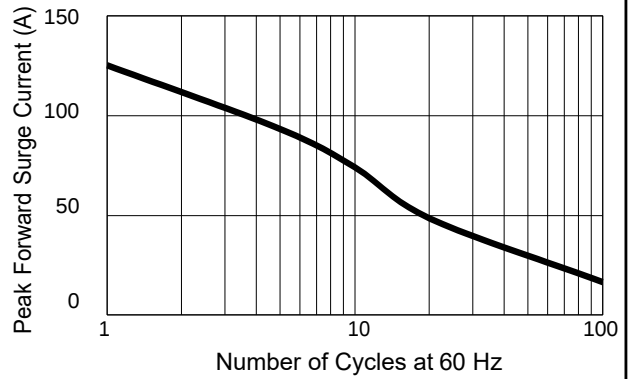
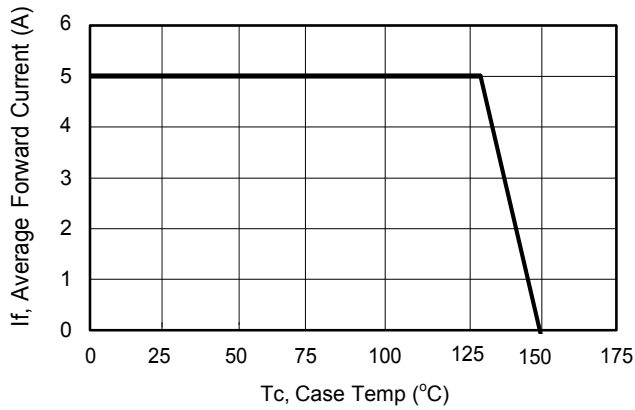
| Parameter                                                                          |       |          | Symbol   | Limit       |      | Unit |
|------------------------------------------------------------------------------------|-------|----------|----------|-------------|------|------|
| Maximum repetitive peak reverse voltage                                            |       |          | VRRM     | 200         |      | V    |
| Maximum average forward rectified current                                          |       |          | IF(AV)   | 5           |      | A    |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load |       |          | IFSM     | 125         |      | A    |
| Operating junction and storage temperature range                                   |       |          | TJ, TSTG | -50 to +150 |      | °C   |
| Typical thermal resistance                                                         |       |          | RθJA     | 55          |      | °C/W |
| Instantaneous forward voltage                                                      |       |          | VF(1)    | TYP.        | MAX. | V    |
|                                                                                    | IF=5A | TJ=25°C  |          | 0.85        | 0.90 |      |
|                                                                                    | IF=5A | TJ=125°C |          | 0.80        | -    |      |
| Instantaneous reverse current at rated reverse voltage                             |       | TJ=25°C  | IR(2)    | 1           | 200  | μA   |
|                                                                                    |       | TJ=125°C |          | 2           | -    | mA   |

Notes:

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

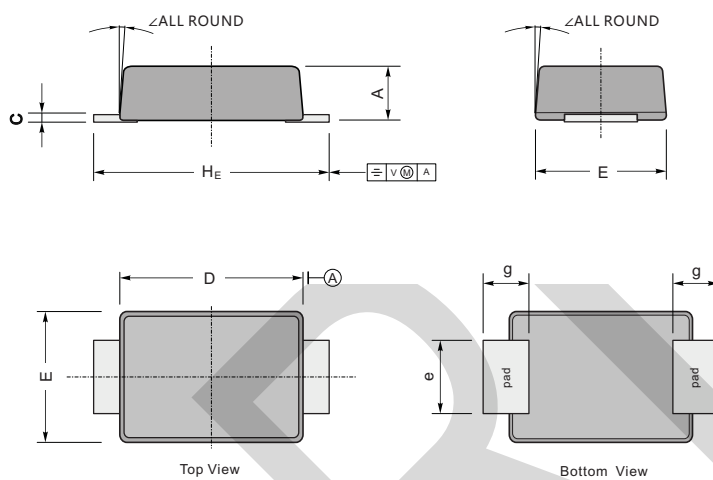


### Typical Reverse Current

### Typical Junction Capacitance

## PACKAGE OUTLINE DIMENSIONS

### SMAF



| UNIT |     | A   | C    | D   | E   | e   | g   | H <sub>E</sub> | ∠  |
|------|-----|-----|------|-----|-----|-----|-----|----------------|----|
| mm   | max | 1.2 | 0.20 | 3.7 | 2.7 | 1.6 | 1.2 | 4.9            | 7° |
|      | min | 0.9 | 0.12 | 3.3 | 2.4 | 1.3 | 0.8 | 4.4            |    |
| mil  | max | 47  | 7.9  | 146 | 106 | 63  | 47  | 193            |    |
|      | min | 35  | 4.7  | 130 | 94  | 51  | 31  | 173            |    |