

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 3 A

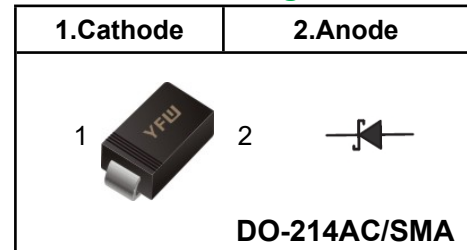
### FEATURES

- ◆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
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- ◆Case: DO-214AC/SMA
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.07g/0.002oz

### Pinning



### Marking Code

|              |              |
|--------------|--------------|
| <b>SS32</b>  | <b>SS32</b>  |
| <b>SS34</b>  | <b>SS34</b>  |
| <b>SS36</b>  | <b>SS36</b>  |
| <b>SS38</b>  | <b>SS38</b>  |
| <b>SS310</b> | <b>SS310</b> |
| <b>SS312</b> | <b>SS312</b> |
| <b>SS315</b> | <b>SS315</b> |
| <b>SS320</b> | <b>SS320</b> |

#### Absolute Maximum Ratings and Electrical characteristics

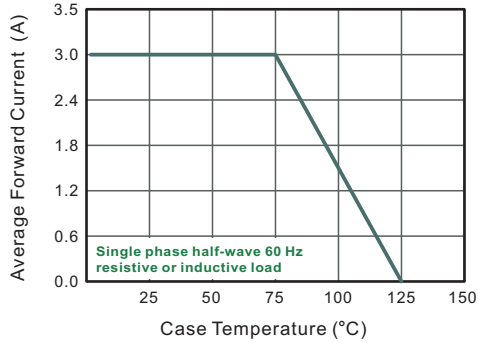
Ratings at 25 ° ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

| Parameter  | Symbols         | SS32       | SS34 | SS36 | SS38     | SS310 | SS312 | SS315 | SS320 | 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     |
| Maximum Instantaneous Forward Voltage at 3 A   | $V_F$           | 0.55       | 0.70 |      | 0.85     |       | 0.90  |       |       | V     |
| Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage<br><small><math>T_A = 25^{\circ}C</math><br/><math>T_A = 100^{\circ}C</math></small> | $I_R$           | 0.5<br>5   |      |      | 0.3<br>3 |       |       |       |       | mA    |
| Typical Junction Capacitance <sup>(1)</sup>  | $C_j$           | 450        |      |      | 400      |       |       |       |       | pF    |
| Typical Thermal Resistance <sup>(2)</sup>  | $R_{\theta JA}$ | 70         |      |      |          |       |       |       |       | °C/W  |
| Operating Junction Temperature Range   | $T_j$           | -55 ~ +150 |      |      |          |       |       |       |       | °C    |
| Storage Temperature Range  | $T_{stg}$       | -55 ~ +150 |      |      |          |       |       |       |       | °C    |

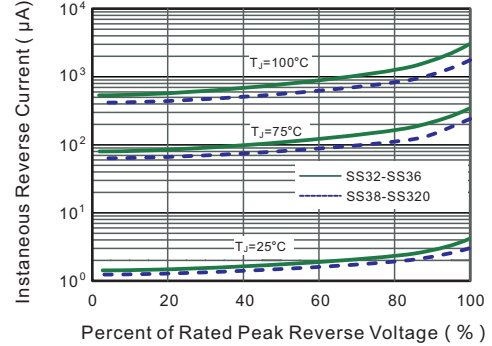
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

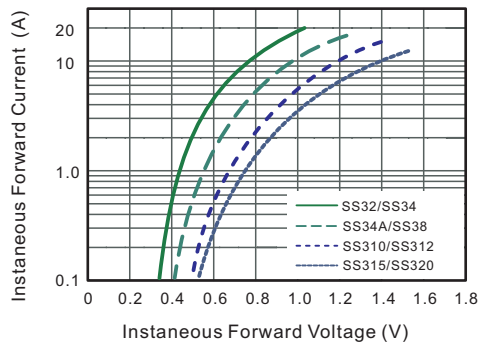
**Fig.1 Forward Current Derating Curve**



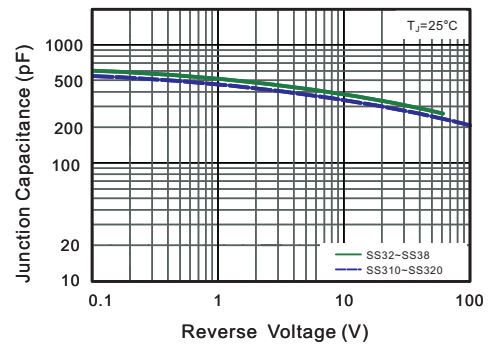
**Fig.2 Typical Reverse Characteristics**



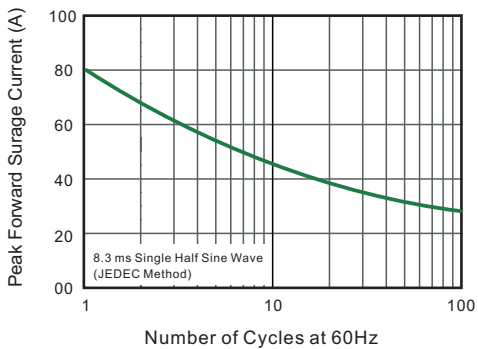
**Fig.3 Typical Forward Characteristic**



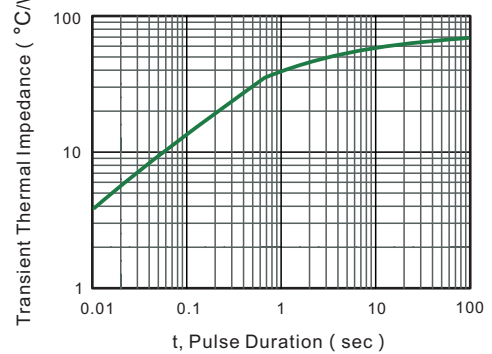
**Fig.4 Typical Junction Capacitance**



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

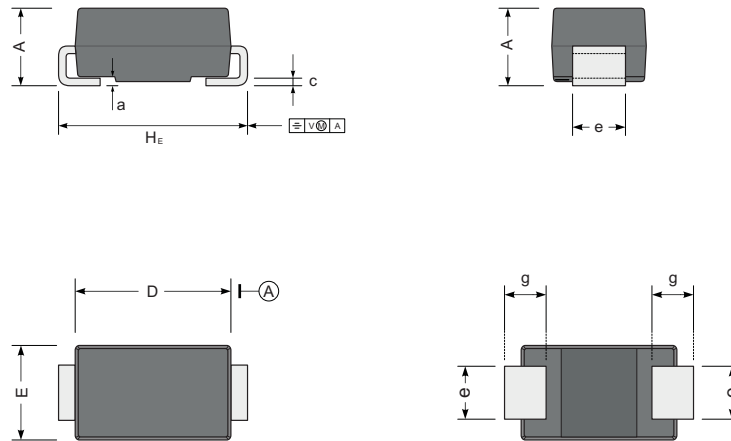


**Fig.5- Typical Transient Thermal Impedance**



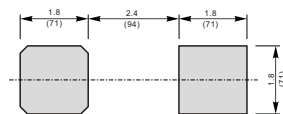
**Package Outline DO-214AC SMA**

Plastic surface mounted package; 2 leads



| UNIT |     | A    | D   | E    | H <sub>E</sub> | c    | e   | g   | a   |
|------|-----|------|-----|------|----------------|------|-----|-----|-----|
| mm   | max | 2.42 | 4.5 | 2.80 | 5.2            | 0.31 | 1.6 | 1.5 | 0.3 |
|      | min | 1.98 | 4.0 | 2.54 | 4.7            | 0.15 | 1.3 | 0.9 |     |
| mil  | max | 96   | 181 | 110  | 205            | 12   | 63  | 59  | 12  |
|      | min | 78   | 157 | 100  | 185            | 6    | 51  | 35  |     |

**The recommended mounting pad size**



Unit :  $\frac{\text{mm}}{\text{(mil)}}$

**Summary of Packing Options**

| Package      | Packing Description | Packing Quantity | Industry Standard |
|--------------|---------------------|------------------|-------------------|
| DO-214AC SMA | Tape/Reel, 11" reel | 5000             | EIA-481-1         |
|              | Tape/Reel, 7" reel  | 2000             | EIA-481-1         |

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)