YFW 佑风微®

# SS22F THRU SS220F

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

**PINNING**

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




Top View
Marking Code: SS22 — SS220
Simplified outline SMAF and symbol

### 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: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

### 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 | SS22F | SS24F | SS26F | SS28F | SS210F | SS212F | SS215F | SS220F | 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 | $I_{F(AV)}$ | 2.0 | | | | | | | | A |
| Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$ | 50 | | | | 40 | | | | A |
| Max Instantaneous Forward Voltage at 2 A | $V_F$ | 0.55 | | 0.70 | | 0.85 | | 0.95 | | V |
| Maximum DC Reverse Current $T_a$ = 25°C<br>at Rated DC Reverse Voltage $T_a$ =100°C | $I_R$ | 0.5<br>10 | | | 0.3<br>5 | | | | | mA |
| Typical Junction Capacitance 1) | $C_j$ | 220 | | 80 | | | | | | pF |
| Operating Junction Temperature Range | $T_j$ | -55 ~ +125 | | | | | | | | °C |
| Storage Temperature Range | $T_{stg}$ | -55 ~ +150 | | | | | | | | °C |

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

**Fig.1 Forward Current Derating Curve**

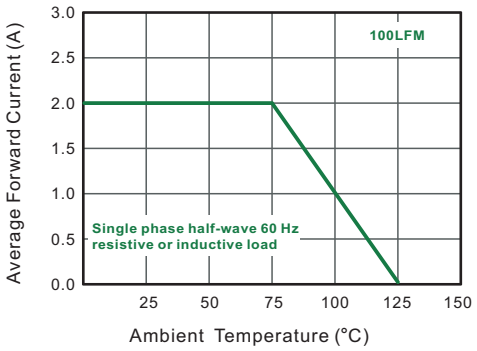



**Fig.2 Typical Reverse Characteristics**

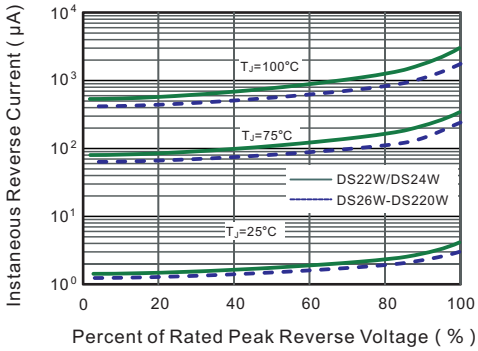



**Fig.3 Typical Forward Characteristic**

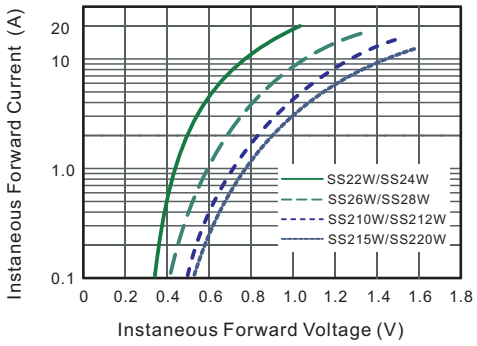



**Fig.4 Typical Junction Capacitance**

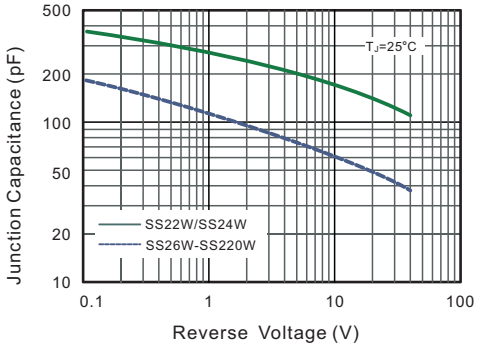
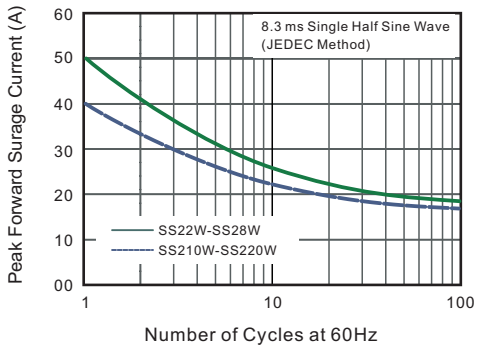
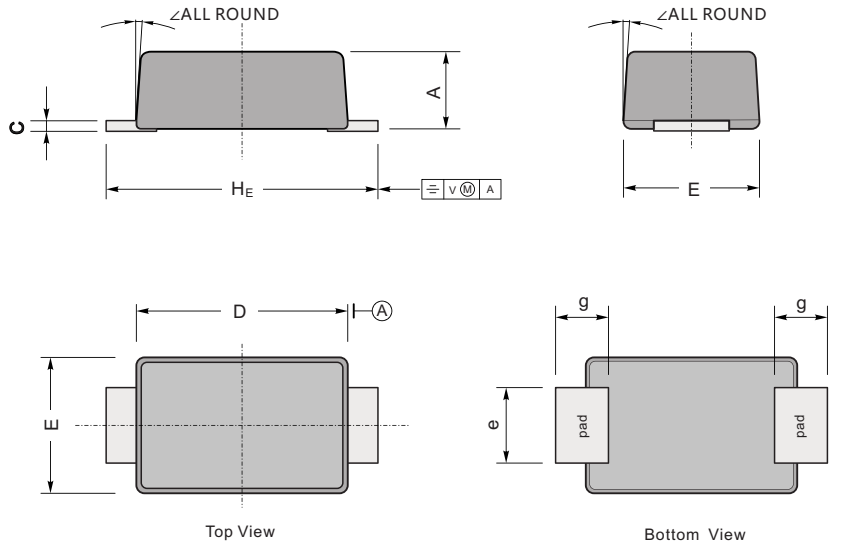



**Fig.5 Maximum Non-Repetitive Peak Forward Surage Current**



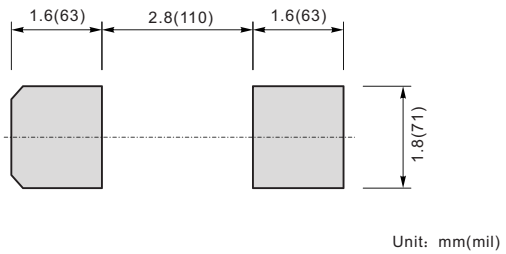
## PACKAGE OUTLINE

**Plastic surface mounted package; 2 leads** SMAF




| UNIT | | A | C | D | E | e | g | $H_E$ | ∠ |
|---|---|---|---|---|---|---|---|---|---|
| mm | max | 1.3 | 0.23 | 3.7 | 2.7 | 1.6 | 1.3 | 4.9 | 7° |
| | min | 1.1 | 0.18 | 3.3 | 2.4 | 1.3 | 1.0 | 4.4 | |
| mil | max | 51 | 9.1 | 146 | 106 | 63 | 51 | 193 | |
| | min | 43 | 7.1 | 130 | 94 | 51 | 39 | 173 | |

### The recommended mounting pad size




### Marking

| Type number | Marking code |
|---|---|
| SS22F | SS22 |
| SS24F | SS24 |
| SS26F | SS26 |
| SS28F | SS28 |
| SS210F | SS210 |
| SS212F | SS212 |
| SS215F | SS215 |
| SS220F | SS220 |