



### 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: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg / 0.00095oz

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code: SS22 — SS220  
Simplified outline SMAF and symbol

#### 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 <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 Single Half Sine-wave Superimposed 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 at Rated DC Reverse Voltage T <sub>a</sub> = 100°C	I <sub>R</sub>	0.5 5		0.3 3						mA								
Typical Junction Capacitance <sup>(1)</sup>	C <sub>j</sub>	160		80						pF								
Typical Thermal Resistance <sup>(2)</sup>	R <sub>θJA</sub>	80								°C/W								
Operating Junction Temperature Range	T <sub>j</sub>	-55 ~ +125								°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

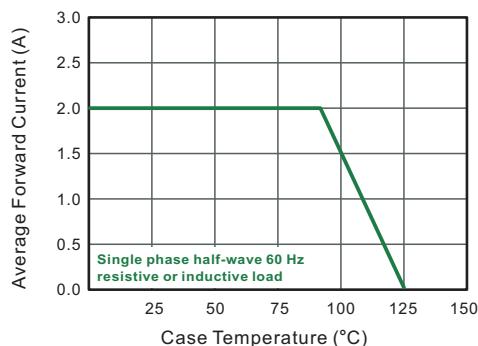


Fig.2 Typical Reverse Characteristics

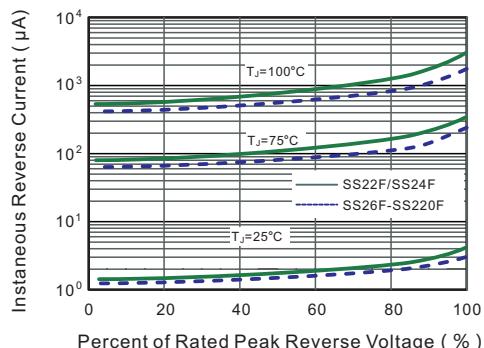


Fig.3 Typical Forward Characteristic

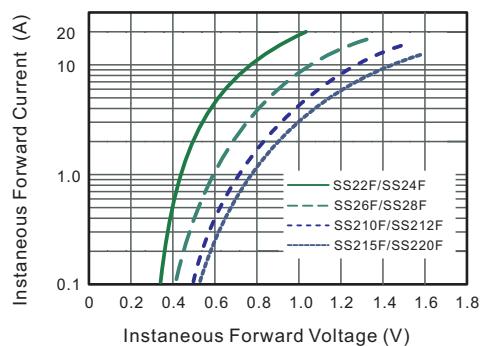


Fig.4 Typical Junction Capacitance

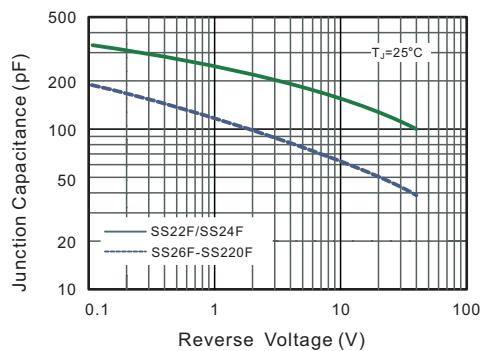


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

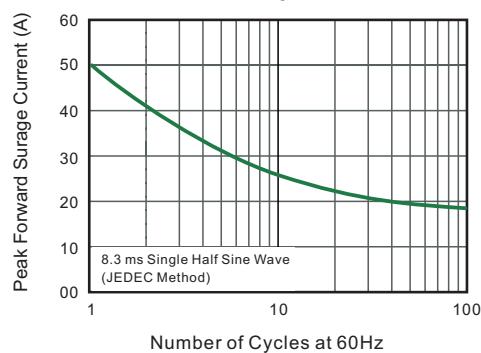
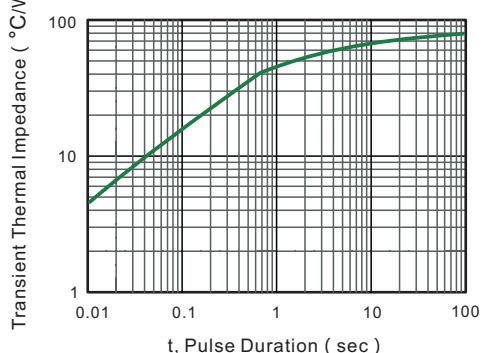


Fig.6- Typical Transient Thermal Impedance

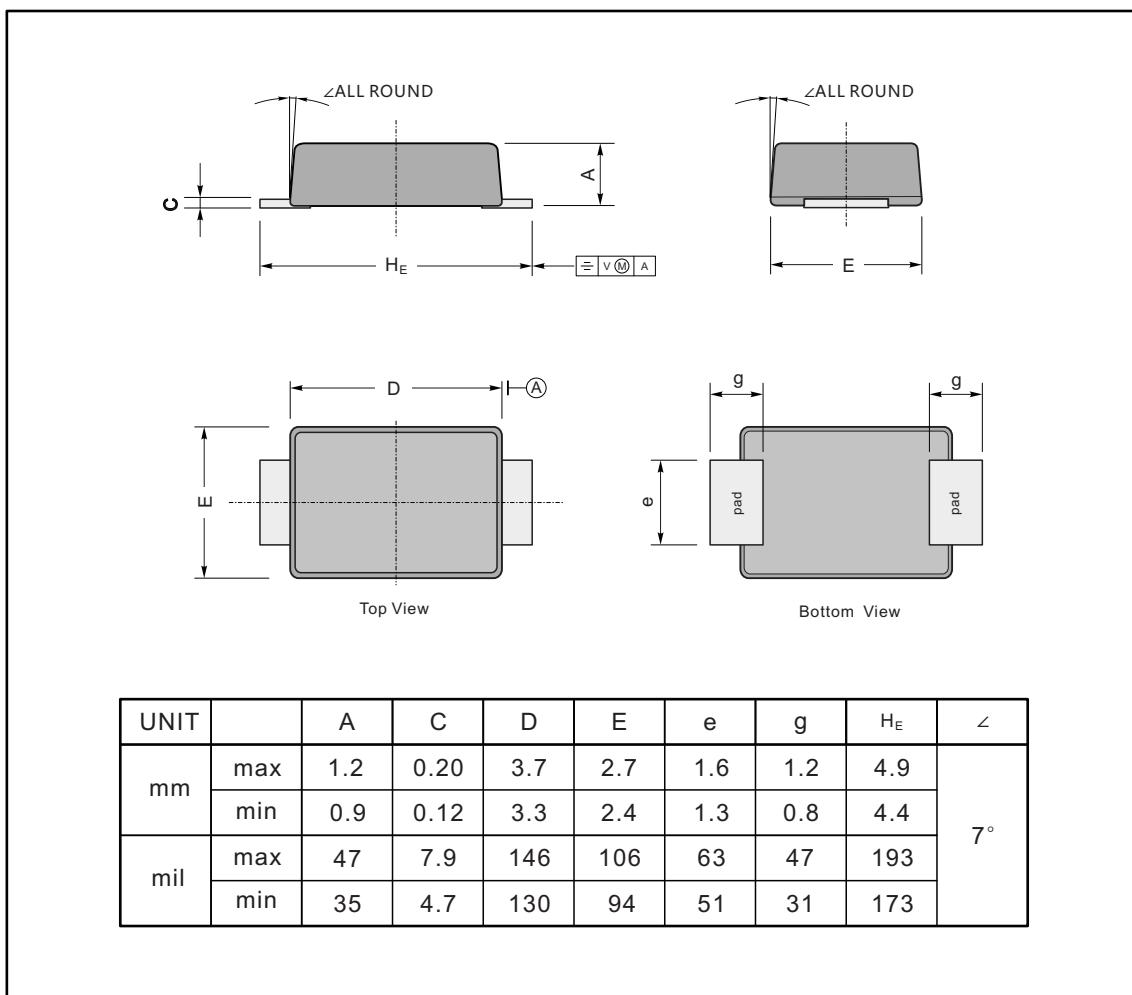




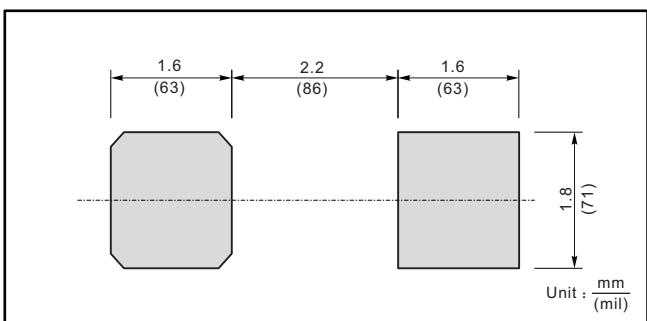
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMAF



### 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