



SS22F THRU SS220F

Surface Mount Schottky Rectifiers

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

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 at Rated DC Reverse Voltage T _a = 25°C T _a = 100°C T _a = 125°C	I _R		0.5		5		/	0.3		mA
Typical Junction Capacitance ¹⁾	C _j		220			80				pF
Typical Thermal Resistance ²⁾	R _{θJA}				70					°C/W
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.

2) P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.



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Characteristic Curves ($T = 25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

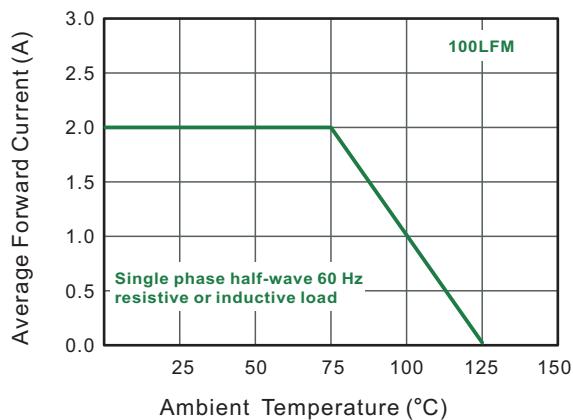


Fig.3 Typical Forward Characteristic

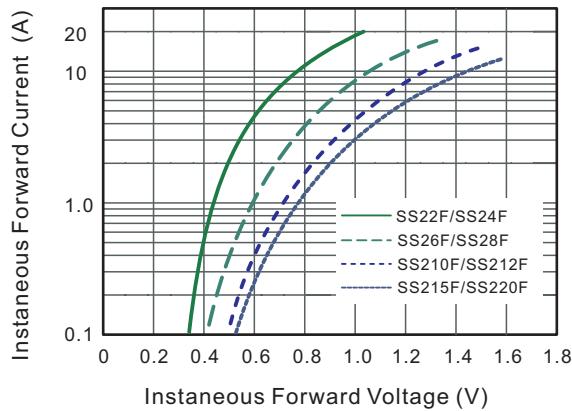


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

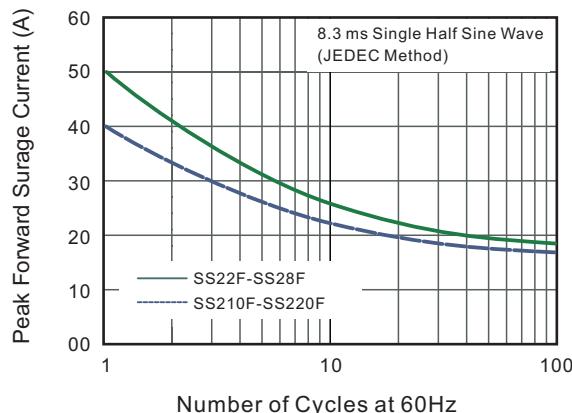


Fig.2 Typical Reverse Characteristics

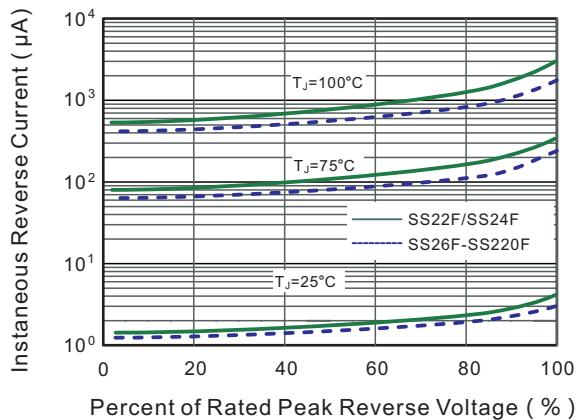
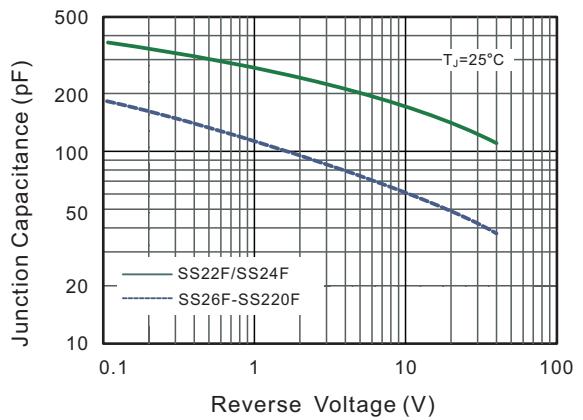


Fig.4 Typical Junction Capacitance





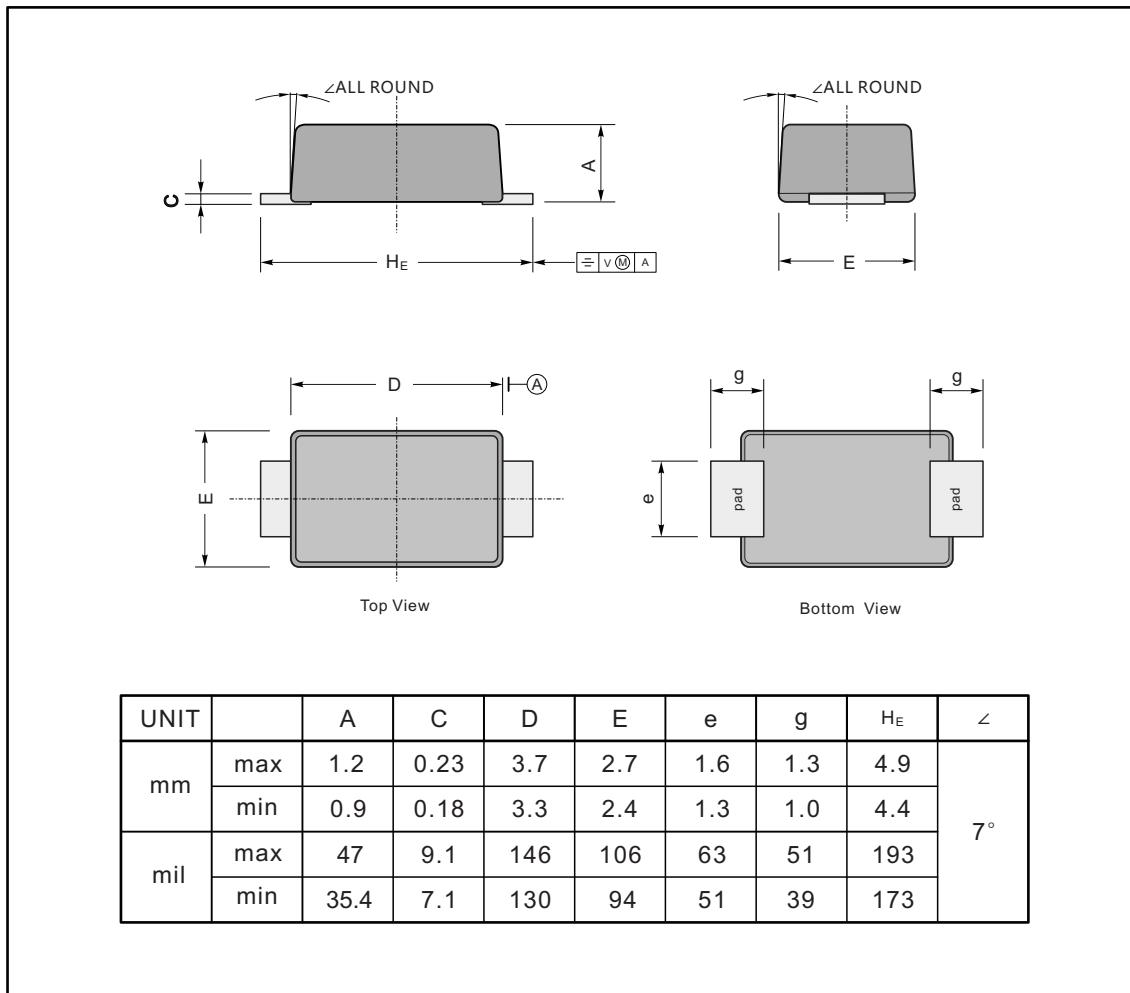
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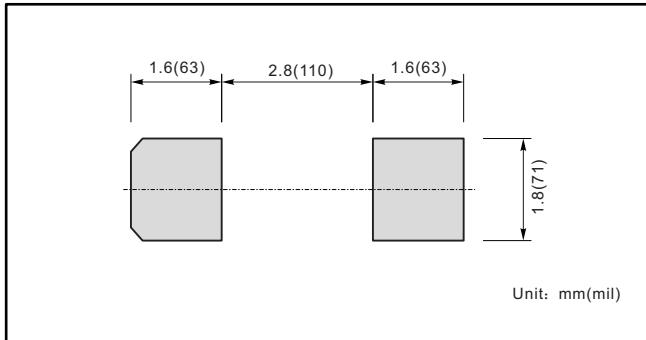
PACKAGE OUTLINE

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