



Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 1.0 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

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: SS12 — SS120

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	SS12F	SS14F	SS16F	SS18F	SS110F	SS112F	SS115F	SS120F	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)}	1.0							A						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	25							A						
Max Instantaneous Forward Voltage at 1 A	V _F	0.55		0.70		0.85		0.90		V					
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a = 100°C	I _R	0.3 10			0.2 5		0.1 2		mA						
Typical Junction Capacitance ⁽¹⁾	C _j	110		80											
Typical Thermal Resistance ⁽²⁾	R _{θJA}	95							°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

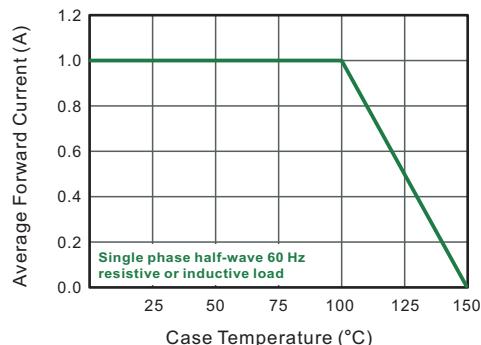


Fig.2 Typical Reverse Characteristics

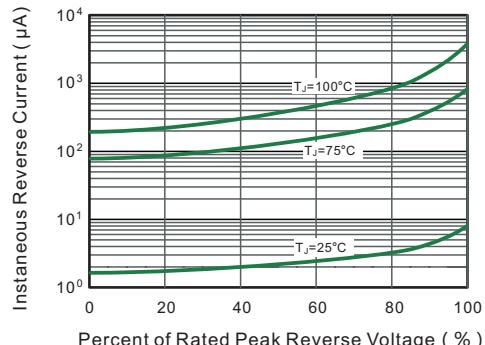


Fig.3 Typical Forward Characteristic

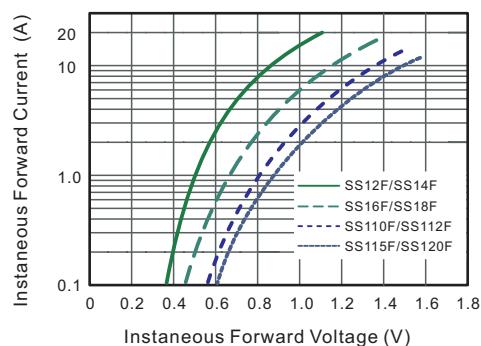


Fig.4 Typical Junction Capacitance

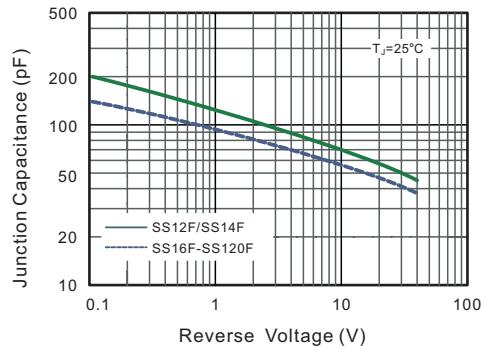


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

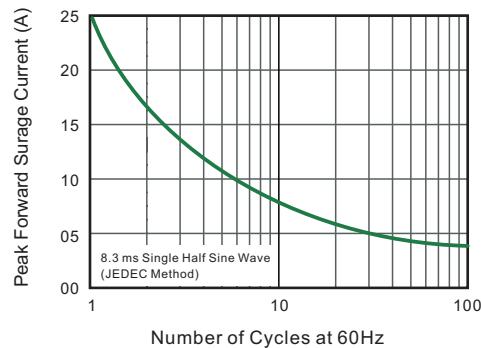
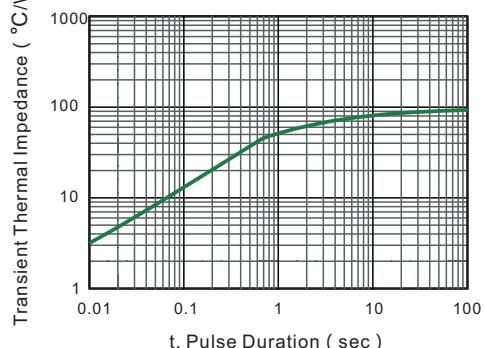


Fig.6-Typical Transient Thermal Impedance

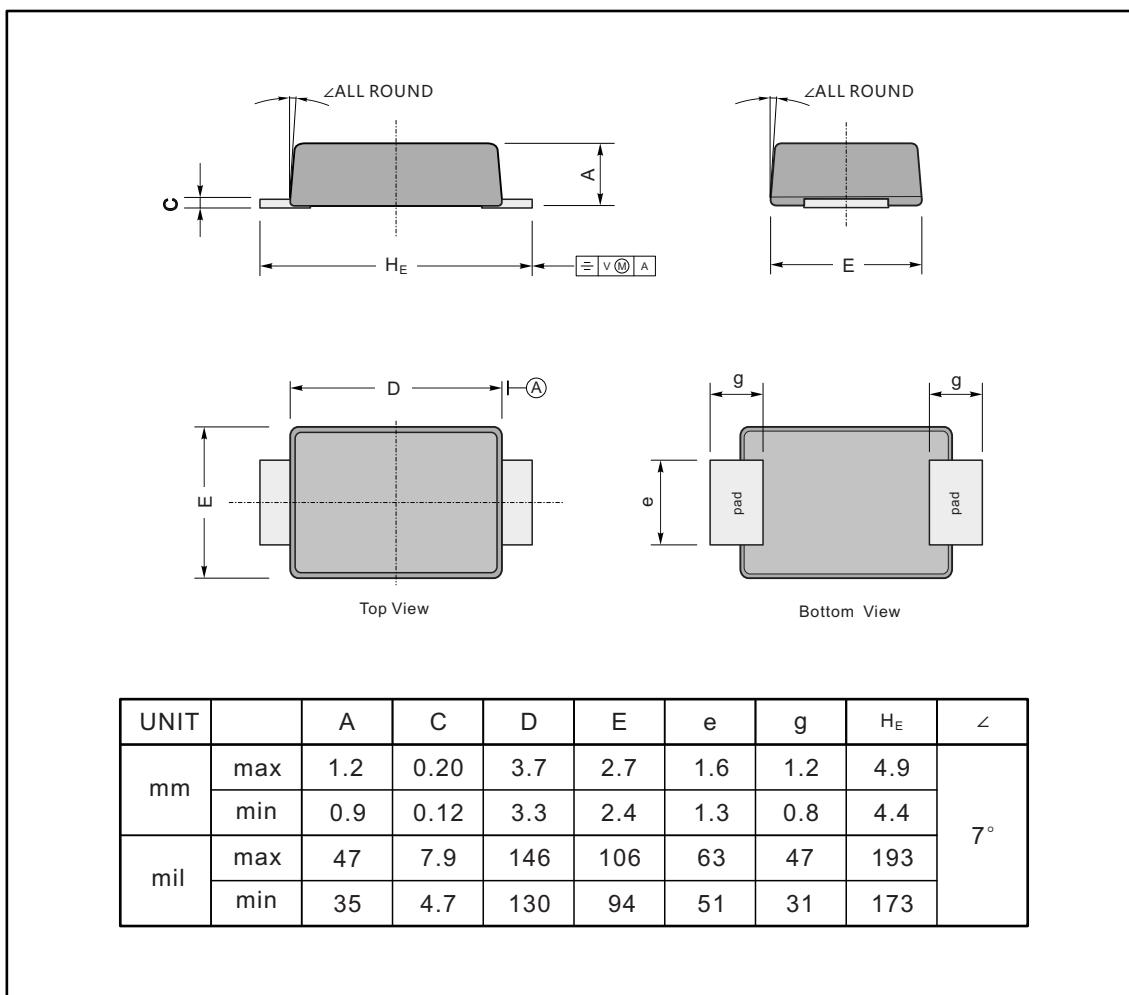




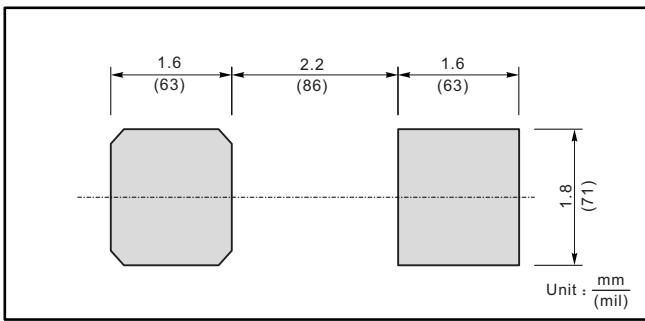
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMAF



The recommended mounting pad size



Marking

Type number	Marking code
SS12F	SS12
SS14F	SS14
SS16F	SS16
SS18F	SS18
SS110F	SS110
SS112F	SS112
SS115F	SS115
SS120F	SS120



电子元器件线上授权代理开拓者
原厂授权 · 正品现货 · 一件即发

单击下面可查看定价，库存，交付和生命周期等信息

[>> JINGDAO \(晶导\)](#)