SS12GF~SS120GF

ROHS

Surface Mount Schottky Barrier Rectifier

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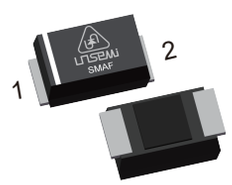
Features

- ◆ 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

SMAF



1: Cathode

2: Anode

Mechanical Data

- ◆ Case: SMAF
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 27mg/0.00095oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

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 current derate by 20%.

Parameter		Symbol	SS 12GF	SS 14GF	SS 16GF	SS 18GF	SS 110GF	SS 112GF	SS 115GF	SS 120GF	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 1A		V_F	0.55		0.70		0.85		0.90		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25℃	I_R	0.3				0.2		0.1		mA
	Ta=100℃	I_R	10				5.0		2.0		
Typical Junction Capacitance (1)		Cj	110		80						pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	95								℃/W
Operating Junction Temperature Range		T_J	-55 ~ +150								℃
Storage Temperature Range		Tstg	-55 ~ +150								℃

Note:(1) Measured at 1 MHz and applied reverse voltage of 4VDC.

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

Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

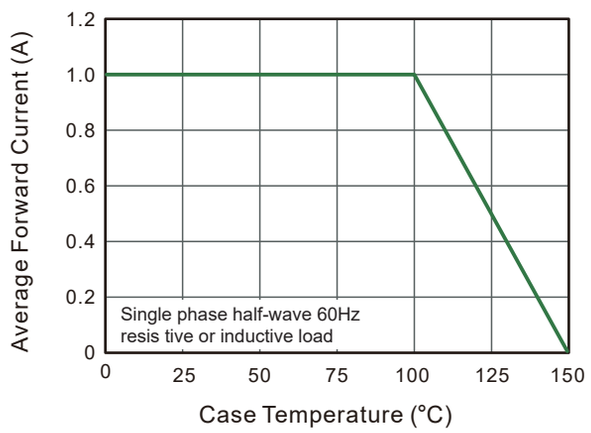


Fig. 2 Typical Reverse Characteristics

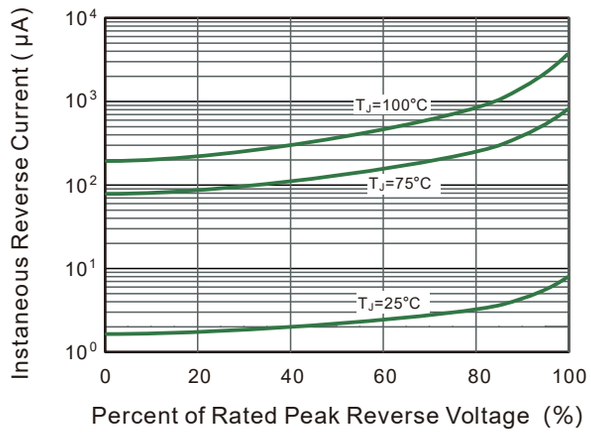


Fig.3 Typical Forward Characteristic

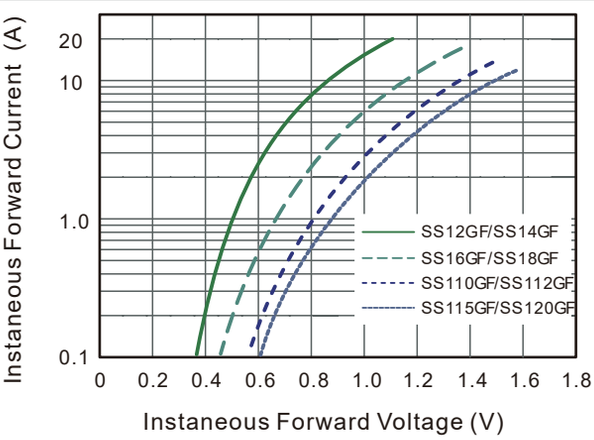


Fig. 4 Typical Junction Capacitance

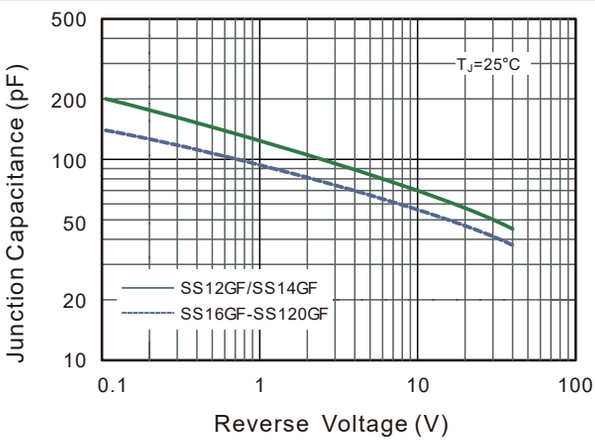


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

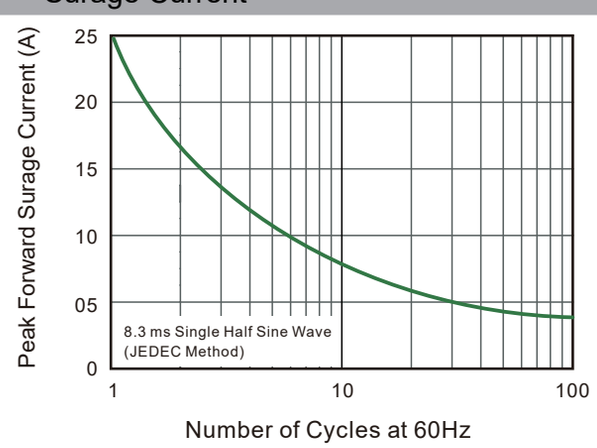
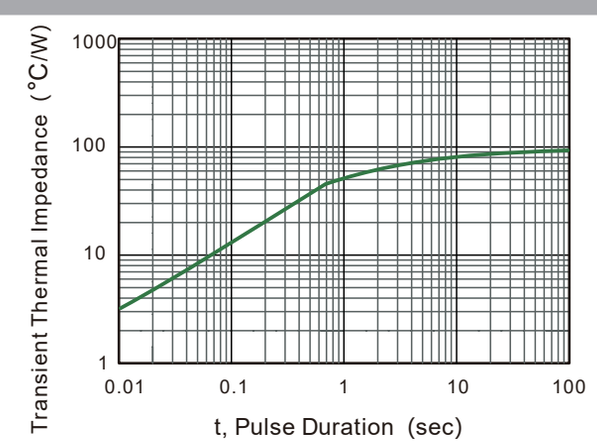
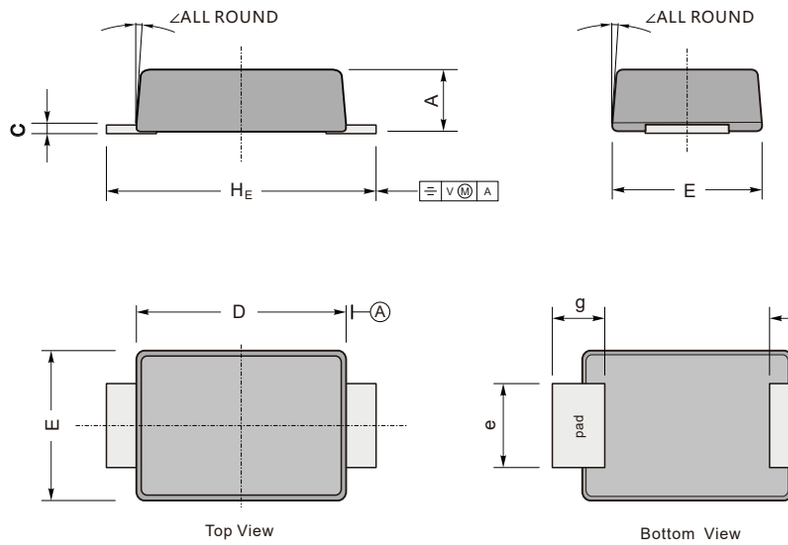


Fig. 6 Typical Transient Thermal Impedance



Package Outline & Dimensions



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	47	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

Marking

Type Number	SS12GF	SS14GF	SS16GF	SS18GF	SS110GF	SS112GF	SS115GF	SS120GF
Making	SS12	SS14	SS16	SS18	SS110	SS112	SS115	SS120

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