

SS52GF~SS520GF

ROHS

Surface Mount Schottky Barrier Rectifier



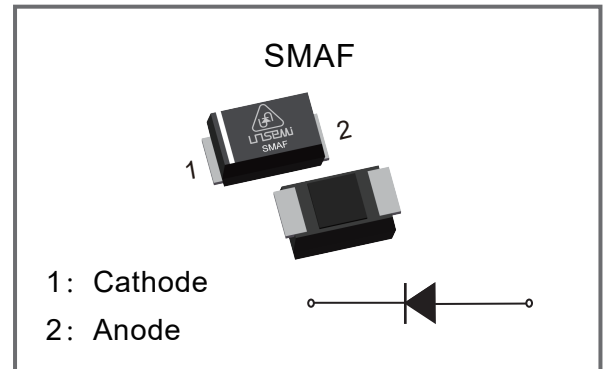
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Features

- ◆ 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

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°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbol	SS 52GF	SS 54GF	SS 56GF	SS 58GF	SS 510GF	SS 512GF	SS 515GF	SS 520GF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	VRMS	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	VDC	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	IF(AV)	5.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	120								A
Max Instantaneous Forward Voltage at 5A	VF	0.55	0.70		0.85				V	
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25°C	IR	1.0							mA
	Ta=100°C	IR	50							
Typical Junction Capacitance ⁽¹⁾	Cj	500	300							pF
Typical Thermal Resistance ⁽²⁾	R _{θJA}	60							°C/W	
Operating Junction Temperature Range	TJ	-55 ~ +150								°C
Storage Temperature Range	Tstg	-55 ~ +150								°C

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

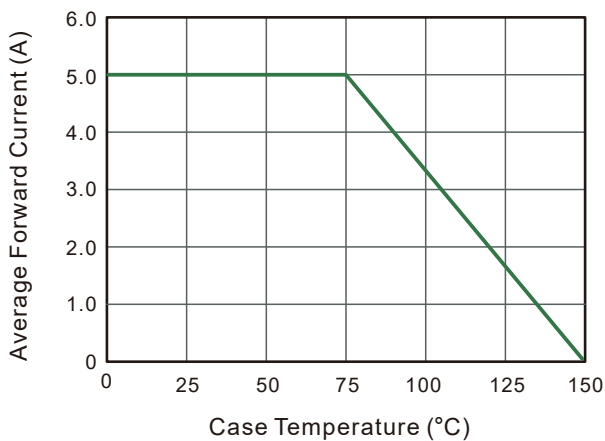


Fig. 2 Typical Reverse Characteristics

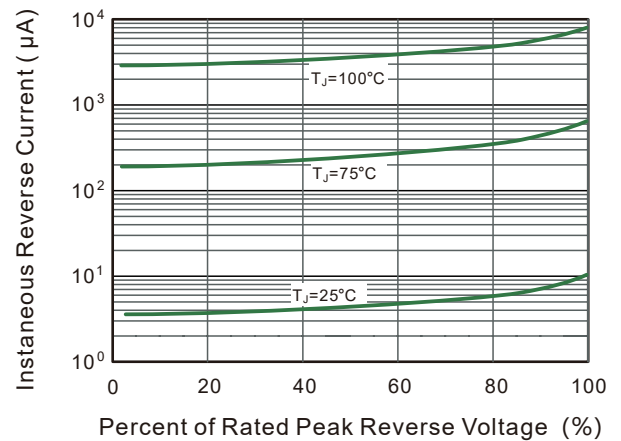


Fig.3 Typical Forward Characteristic

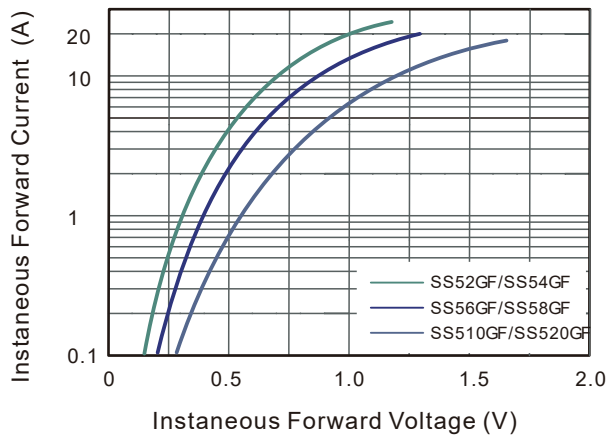


Fig. 4 Typical Junction Capacitance

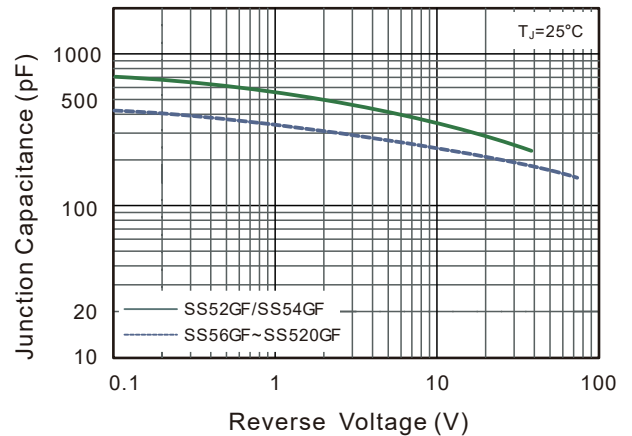


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

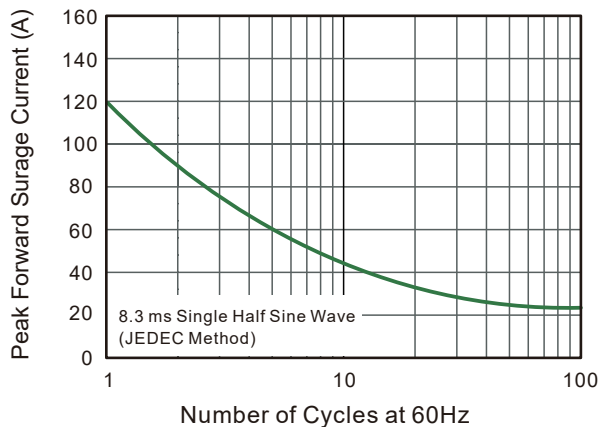
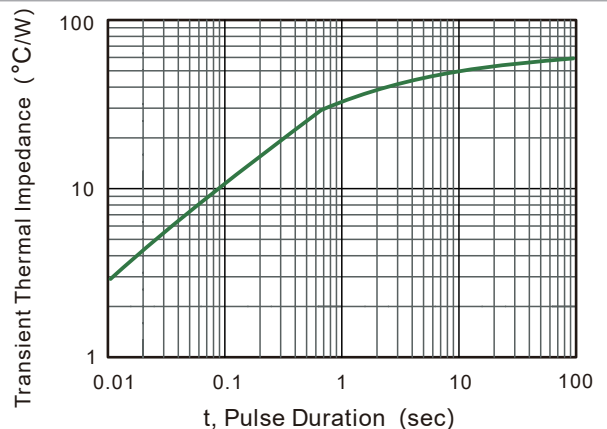
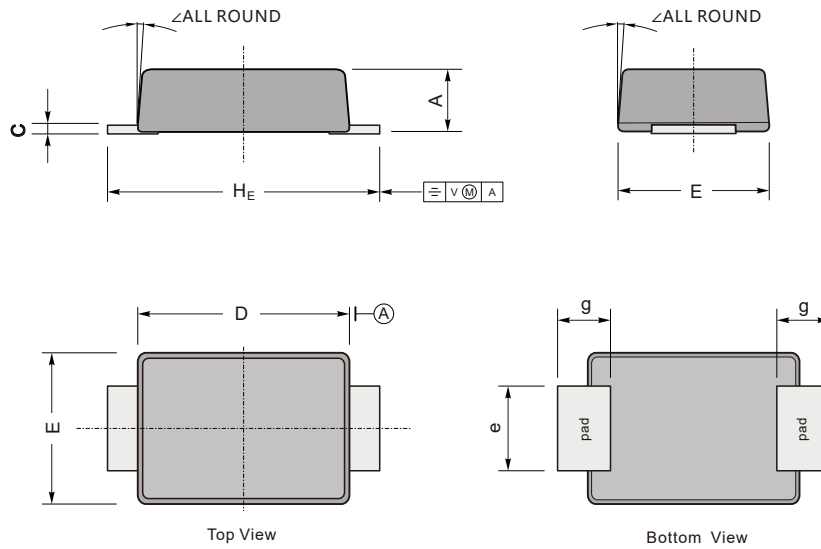


Fig. 6 Typical Transient Thermal Impedance



Package Outline & Dimensions



UNIT		A	C	D	E	e	g	HE	∠
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	SS52GF	SS54GF	SS56GF	SS58GF	SS510GF	SS512GF	SS515GF	SS520GF
Making	SS52	SS54	SS56	SS58	SS510	SS512	SS515	SS520

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