

S2GF~S2MF

ROHS

Surface Mount General Purpose Silicon Rectifiers

Features

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Glass passivated chip junction
- ◆ Easy to pick and place
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

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%.

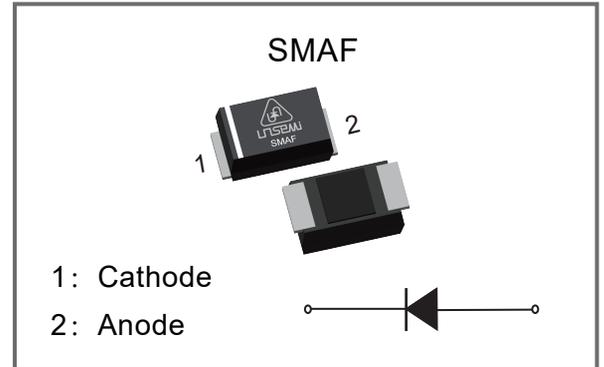
Parameter	Symbol	S2GF	S2JF	S2KF	S2MF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	400	600	800	1000	V
Maximum RMS Voltage	VRMS	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	400	600	800	1000	V
Maximum Average Forward Rectified Current at Tc =125°C	IF(AV)	2.0				A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load	IFSM	50				A
Max Instantaneous Forward Voltage at 2A	VF	1.1				V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25°C	IR	5.0			µA
	Ta=125°C	IR	100			
Typical Junction Capacitance ⁽¹⁾	Cj	22				pF
Typical Thermal Resistance ⁽²⁾	RθJA	65				°C/W
	RθJC	20				
Operating and Storage Temperature Range	TJ,Tstg	-55 ~ +150				°C

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

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



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Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

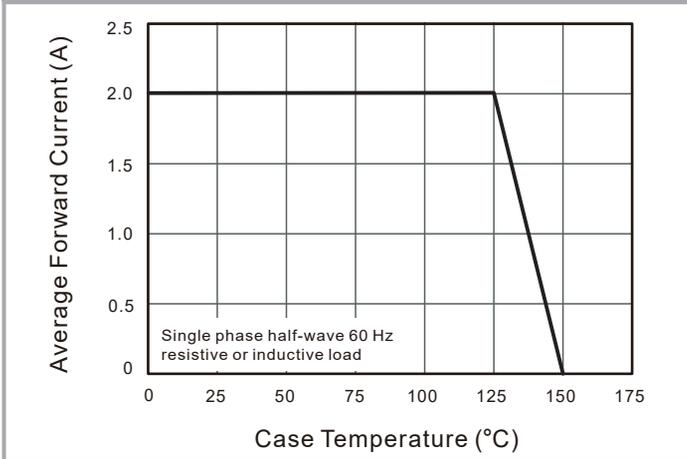


Fig. 2 Typical Instaneous Reverse Characteristics

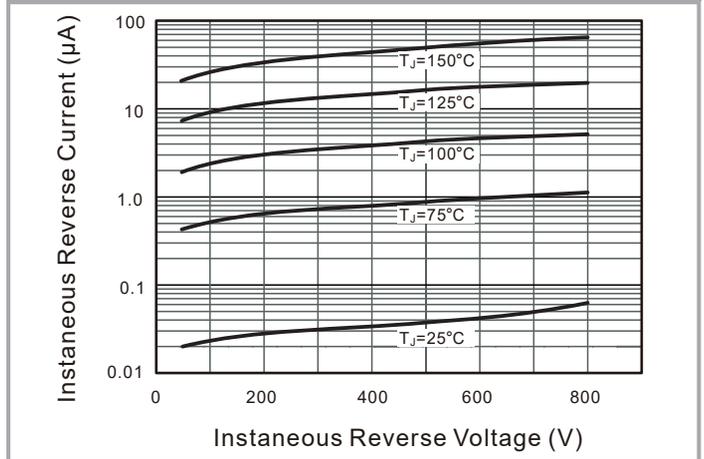


Fig.3 Typical Forward Characteristic

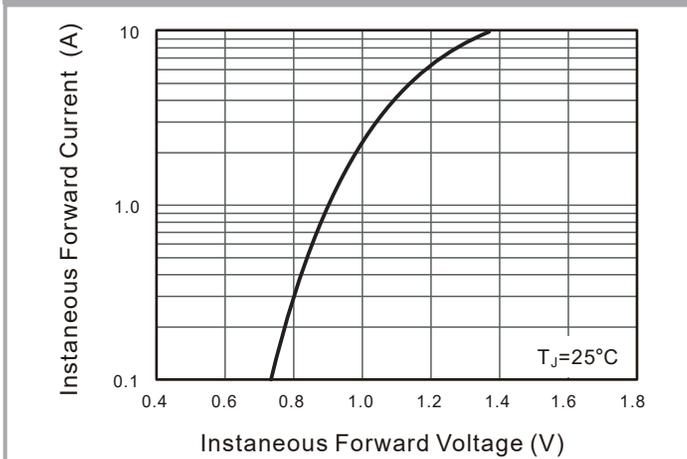


Fig. 4 Typical Junction Capacitance

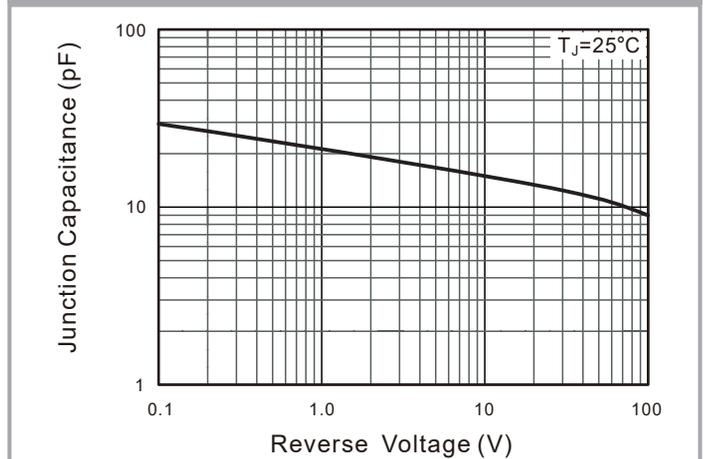
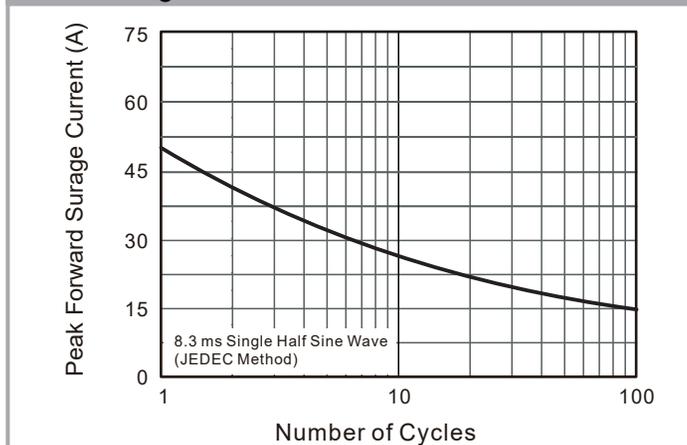
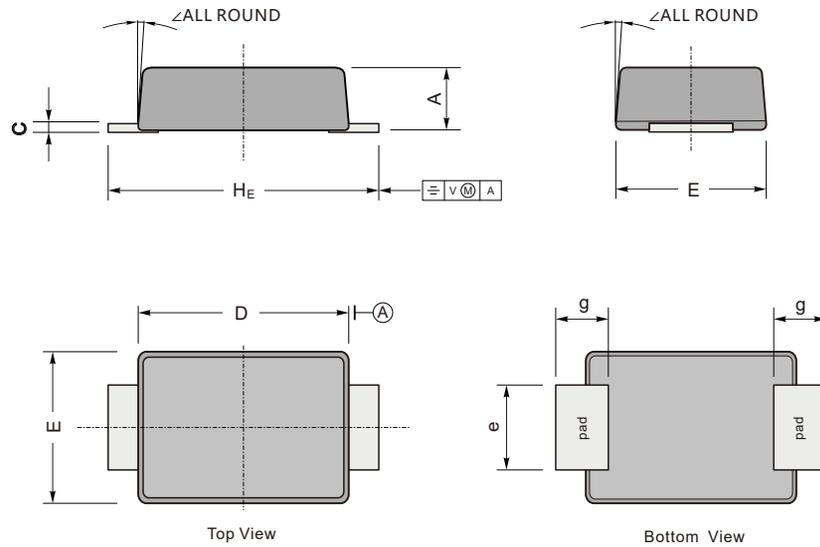


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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	S2GF	S2JF	S2KF	S2MF
Making	S2G	S2J	S2K	S2M

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