

S5ABF~S5MBF

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: SMBF
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 57mg/0.002oz
- ◆ 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%.

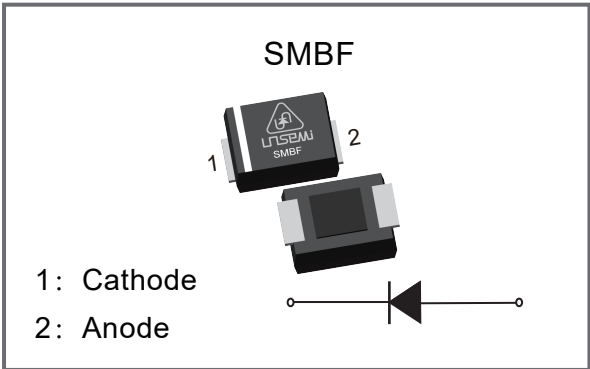
Parameter		Symbol	S5ABF	S5BBF	S5DBF	S5GBF	S5JBF	S5KBF	S5MBF	Units
Maximum Repetitive Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Tc=100℃		IF(AV)	5.0							A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load		IFSM	150							A
Maximum Forward Voltage at 5A		VF	1.1							V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25℃	IR	5.0							μA
	Ta=125℃	IR	150							
Typical Junction Capacitance ⁽¹⁾		Cj	45							pF
Typical Thermal Resistance ⁽²⁾		RθJA	40							℃/W
		RθJC	12							
Operating and Storage Temperature Range		TJ,Tstg	-55 ~ +150							℃

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

(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 Maximum Average Forward Current Rating

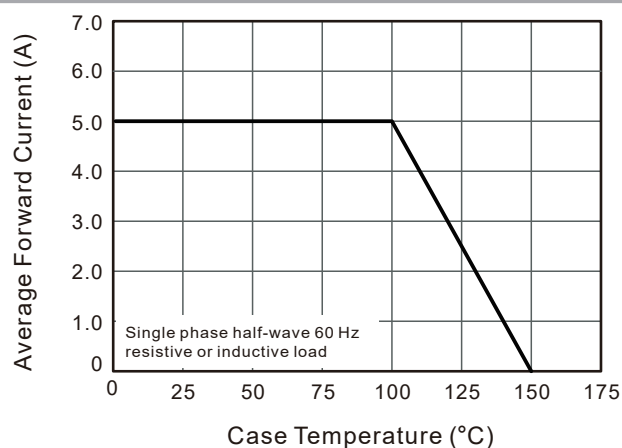


Fig. 2 Typical Reverse Characteristics

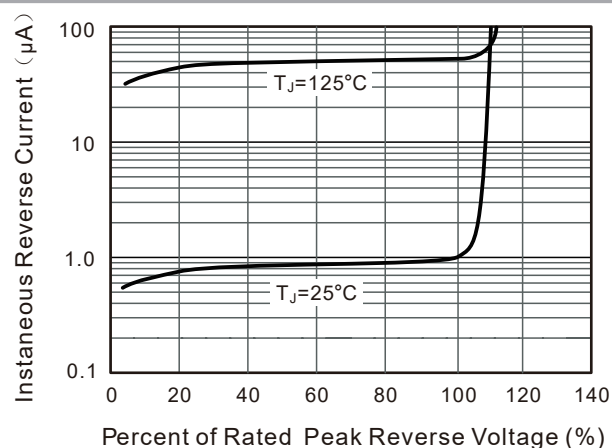


Fig.3 Typical Forward Characteristics

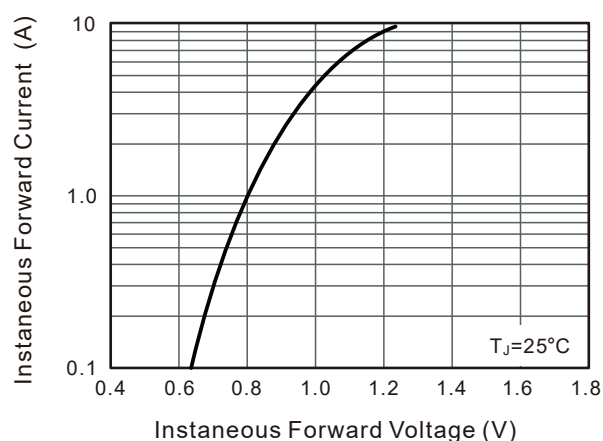


Fig. 4 Typical Junction Capacitance

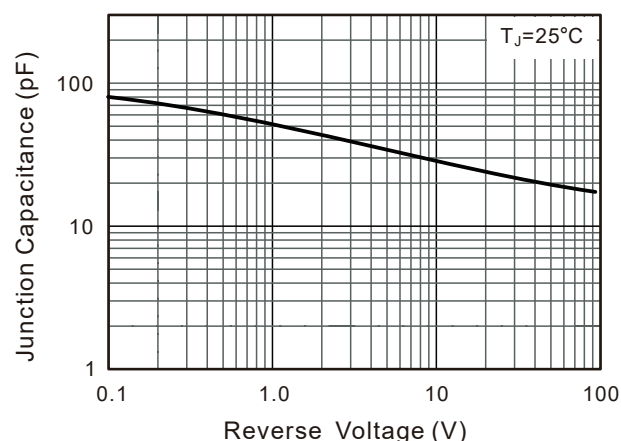
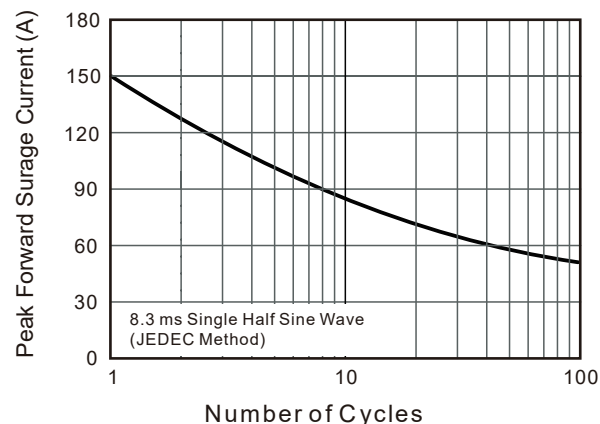
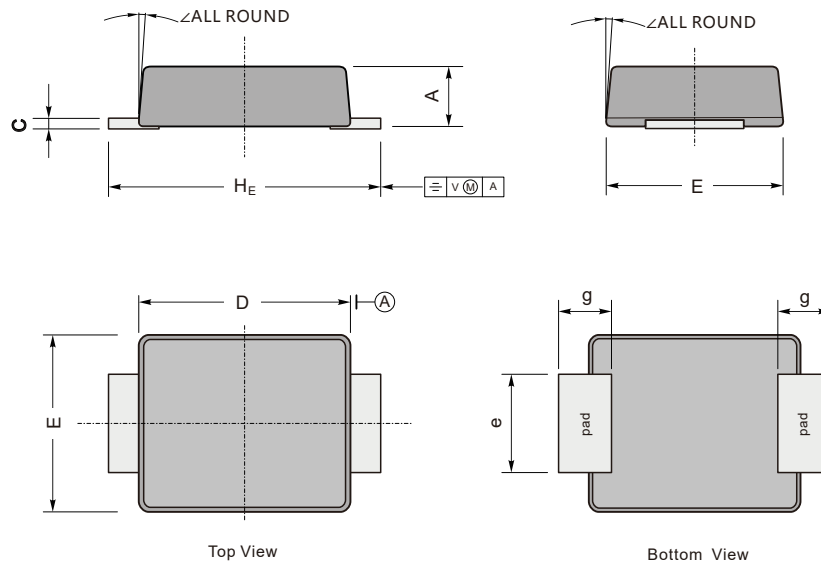


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline & Dimensions



UNIT		A	C	D	E	H _E	e	g	∠
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		

Marking

Type Number	S5ABF	S5BBF	S5DBF	S5GBF	S5JBF	S5KBF	S5MBF
Making	S5AB	S5BB	S5DB	S5GB	S5JB	S5KB	S5MB

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