

## Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 1000 V    Forward Current - 2 A

### 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
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg / 0.002oz

### Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S2ABF	S2BBF	S2DBF	S2GBF	S2JBF	S2KBF	S2MBF	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta = 65 °C	I <sub>FAV</sub>					2			A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>					60			A
Maximum Instantaneous Forward Voltage at 2 A	V <sub>F</sub>				1.1				V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 125 °C	I <sub>R</sub>				5	100			µA
Typical Junction Capacitance <sup>1)</sup>	C <sub>j</sub>				30				pF
Typical Thermal Resistance <sup>2)</sup>	R <sub>θJA</sub>				55				°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>				-55 ~ +150				°C

1) , Measured at 1 MHz and applied reverse voltage of 4 V D.C

2) , P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code : S2AB-S2MB

Simplified outline SMBF and symbol

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Fig.1 Forward Current Derating Curve

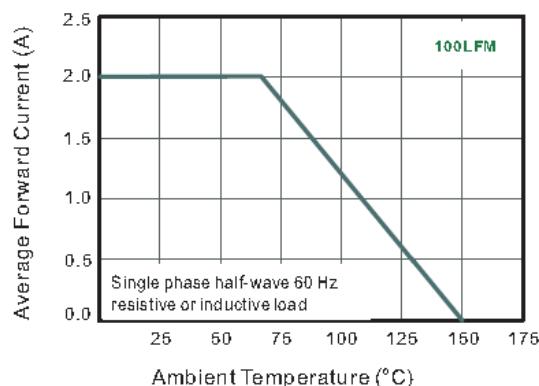
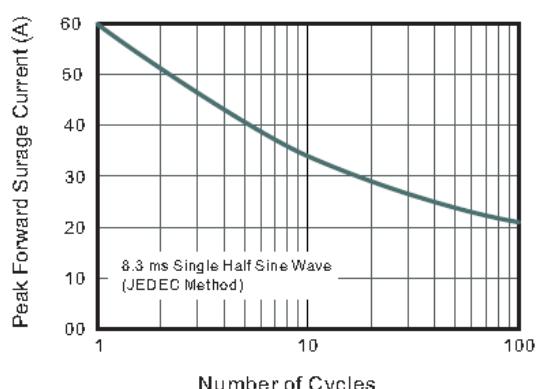
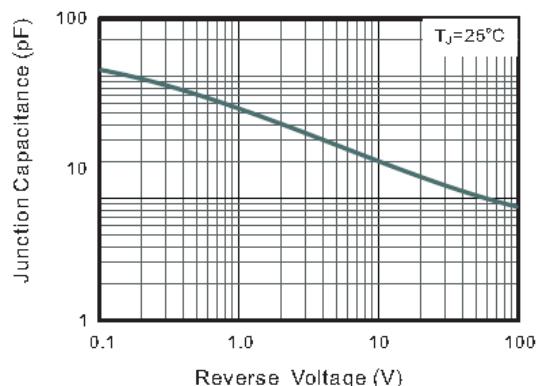
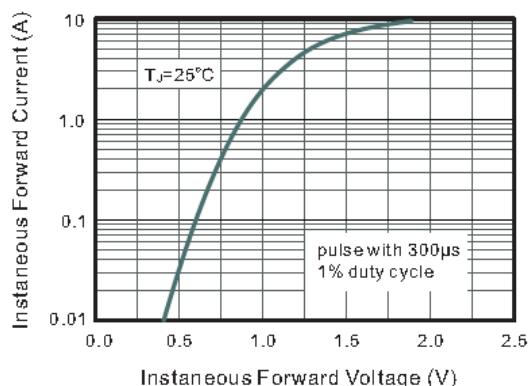
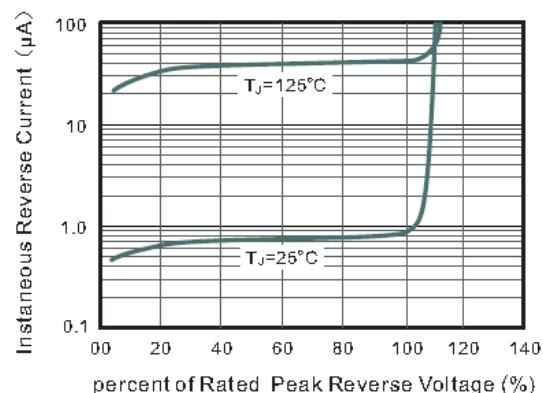


Fig.2 Typical Reverse Characteristics

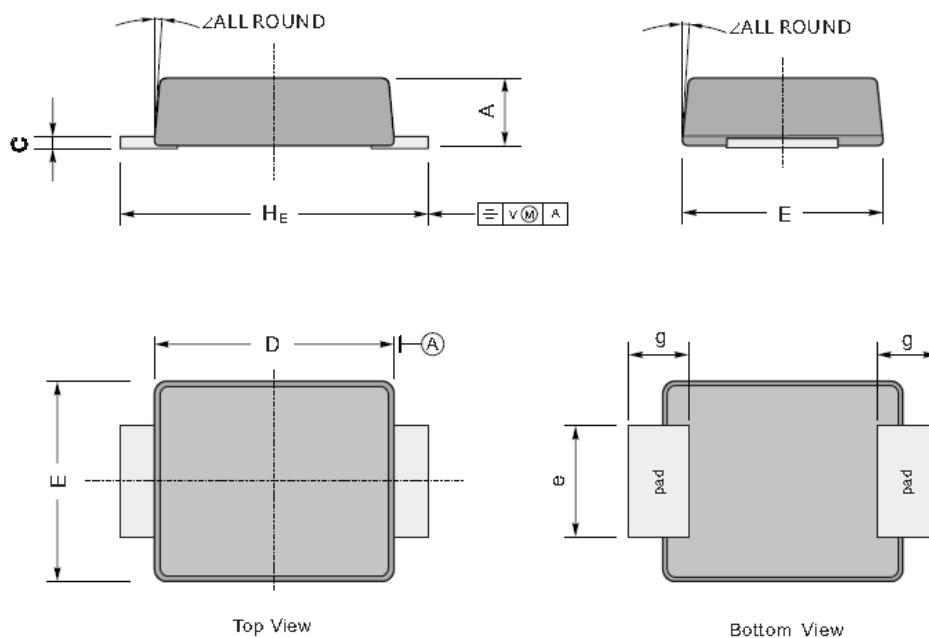


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## PACKAGE OUTLINE

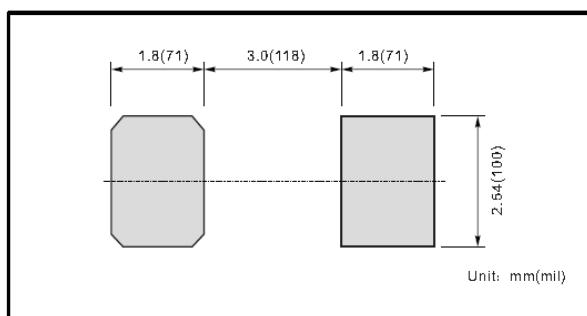
Plastic surface mounted package; 2 leads

SMBF



UNIT		A	C	D	E	H <sub>E</sub>	e	g	$\angle$
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	9°
	min	43	7	165	138	200	75		

### The recommended mounting pad size



### Marking

Type number	Marking code
S2ABF	S2AB
S2BBF	S2BB
S2DBF	S2DB
S2GBF	S2GB
S2JBF	S2JB
S2KBF	S2KB
S2MBF	S2MB

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