

# S2ABF THRU S2MBF

## SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage – 50 to 1000 V

Forward Current – 2 A

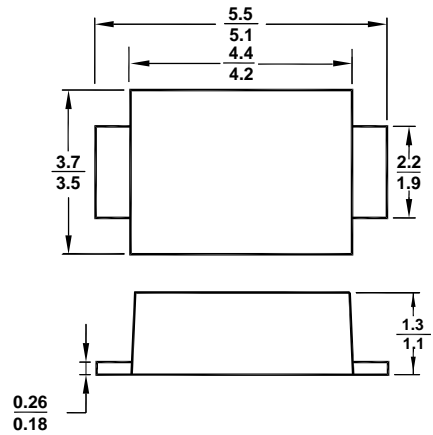
SMBF

### Features

- Glass Passivated Chip Junction
- For surface mount applications
- Low profile package
- Easy pick and place

### Mechanical Data

- **Case:** SMBF
- **Terminals:** Solderable per MIL-STD-750, method 2026



All Dimensions in mm

### 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
	Marking	S2AB	S2BB	S2DB	S2GB	S2JB	S2KB	S2MB	-
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_a = 65^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	60							A
Maximum Forward Voltage at 2 A	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5 100							$\mu\text{A}$
Typical Junction Capacitance at $V_R = 4\text{ V}$ , $f = 1\text{ MHz}$	$C_J$	30							pF
Typical Thermal Resistance <sup>1)</sup>	$R_{\theta JA}$	55							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150							$^\circ\text{C}$

<sup>1)</sup> P.C.B. mounted with 0.5 X 0.5" ( 12.7 X 12.7 mm) copper pad areas.

TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121505007  
 ISO 9001 : 2008 Certificate No. 52114012  
 OHSAS 18001 : 2007 Certificate No. 05191508008  
 IECQ QC 080000 Certificate No. E241000744M2

Dated: 06/05/2015 JD Rev: 01

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Fig.1 Forward Current Derating Curve

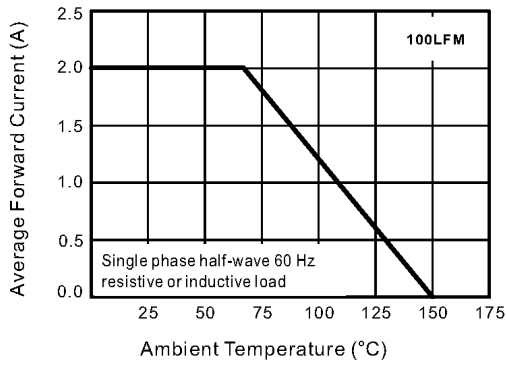


Fig.2 Typical Reverse Characteristics

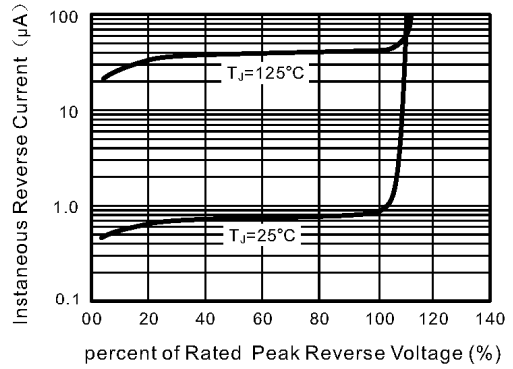


Fig.3 Typical Instantaneous Forward Characteristics

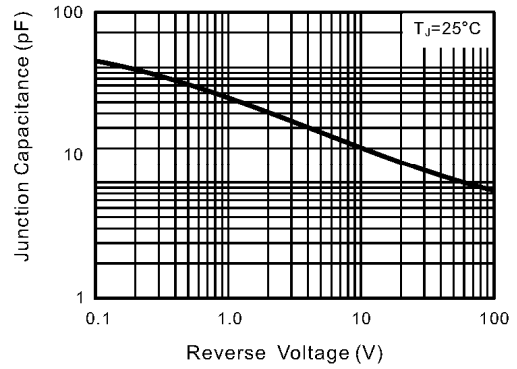
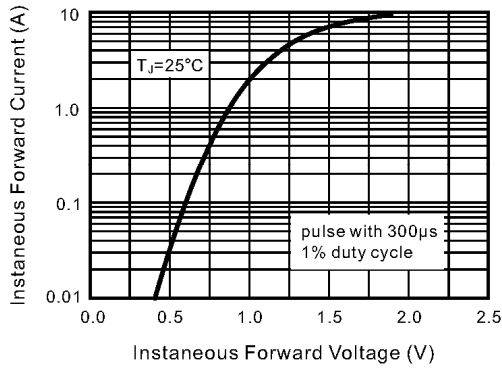
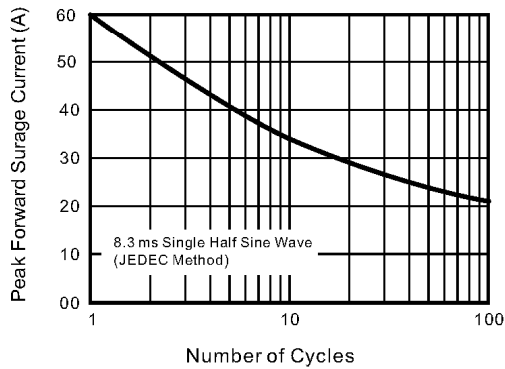


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



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