

# RS2ABF THRU RS2MBF

## Surface Mount Fast Recovery Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 2 A

### Features

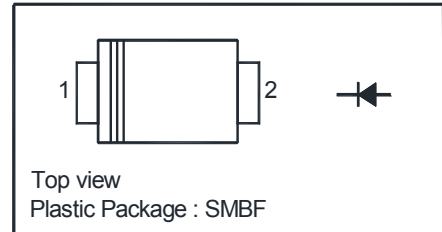
- Glass Passivated Chip Junction
- For surface mounted applications
- Low profile package
- Fast reverse recovery time

### Mechanical Data

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

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



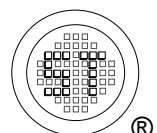
### Absolute Maximum Ratings and Characteristics

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	RS2ABF	RS2BBF	RS2DBF	RS2GBF	RS2JBF	RS2KBF	RS2MBF	Units
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 $T_C = 125^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50							A
Maximum Forward Voltage at 2 A	$V_F$	1.3							V
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	5 100							$\mu\text{A}$
Typical Junction Capacitance at $V_R = 4\text{ V}$ , $f = 1\text{ MHz}$	$C_j$	28							pF
Maximum Reverse Recovery Time at $I_F = 0.5\text{ A}$ , $I_R = 1\text{ A}$ , $I_{rr} = 0.25\text{ A}$	$t_{rr}$	150				250	500		ns
Typical Thermal Resistance <sup>1)</sup>	$R_{\theta JA}$ $R_{\theta JC}$	60 18							$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150							$^\circ\text{C}$

<sup>1)</sup> P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



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## Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

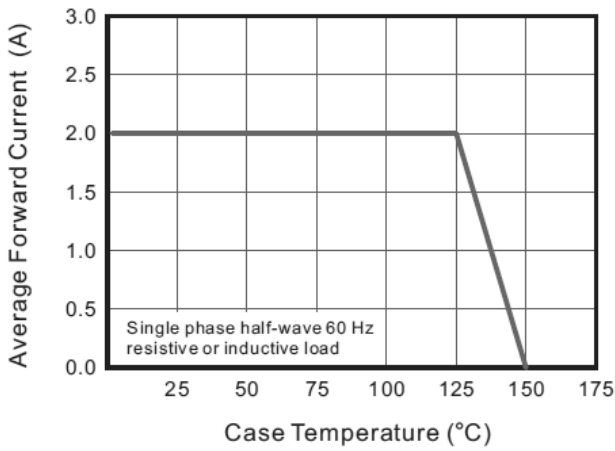


Fig.2 Typical Reverse Characteristics

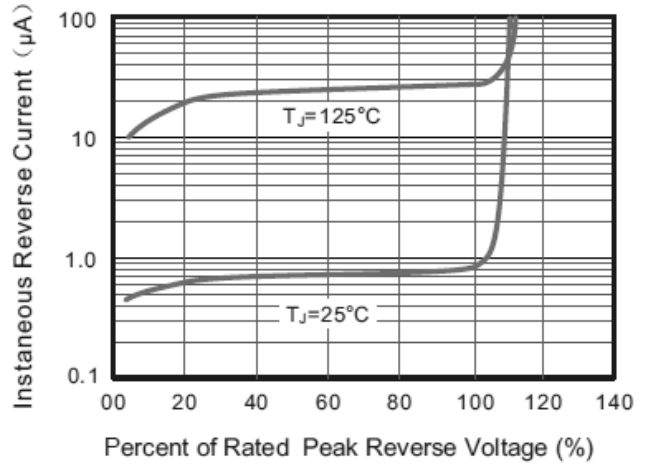


Fig.3 Typical Instantaneous Forward Characteristics

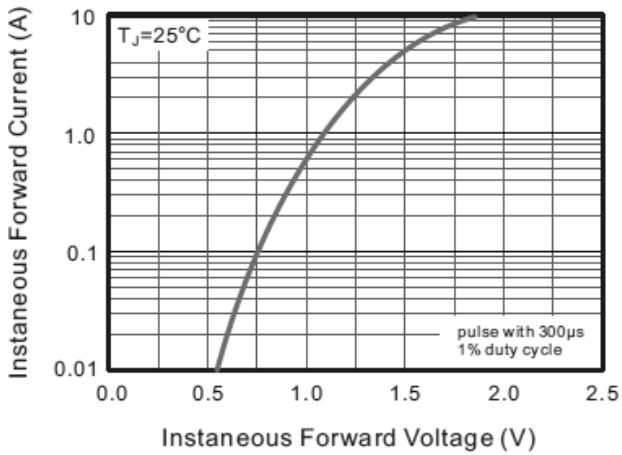


Fig.4 Typical Junction Capacitance

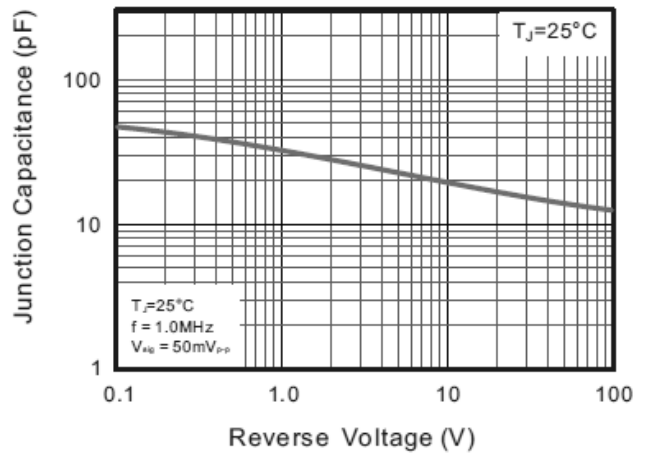
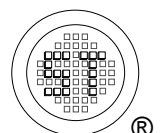
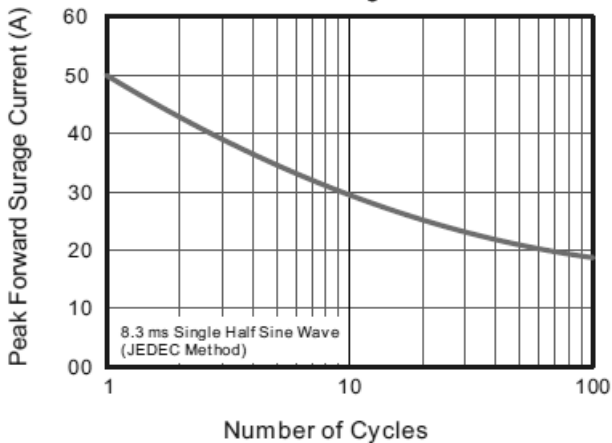


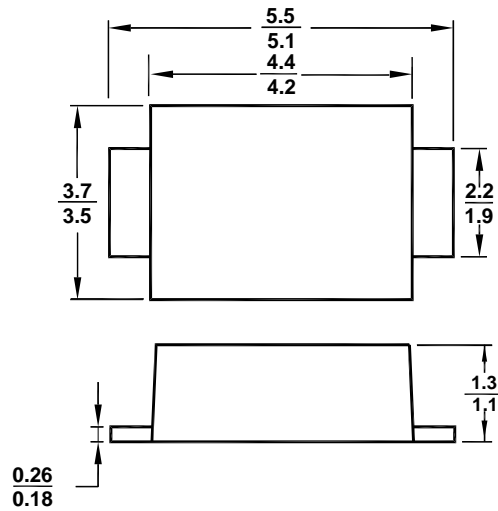
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



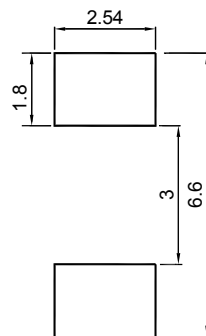
# RS2ABF THRU RS2MBF

Package Outline Dimensions (Units: mm)

SMBF



## Recommended Soldering Footprint



## Marking information

" R2\*B " = Part No.

Type	Marking	Type	Marking	Type	Marking	Type	Marking
RS2ABF	R2AB	RS2BBF	R2BB	RS2DBF	R2DB	RS2GBF	R2GB
RS2JBF	R2JB	RS2KBF	R2KB	RS2MBF	R2MB		

" III " = Cathode line

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