

**Feature**

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

**Feature**

- 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, derate current by 20%.

Parameter	Sym bol	PRS2 ABF	PRS2 BBF	PRS2 DBF	PRS2 GBF	PRS2 JBF	PRS2 KBF	PRS2 MBF	Unit s
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>F(AV)</sub>	2							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	50							A
Maximum Instantaneous Forward Voltage at 2A	V <sub>F</sub>	1.3							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>	40							PF
Maximum Reverse Recovery Time <sup>2)</sup>	t <sub>rr</sub>	150				250	500		ns
Typical Thermal Resistance <sup>3)</sup>	R <sub>θJA</sub>	65							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>S</sub> T <sub>G</sub>	-55 to +150							°C

**Note:**

1. Measured at 1MHz and applied reverse voltage of 4V D.C
2. Measured with I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1 A, I<sub>rr</sub> = 0.25 A
3. P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

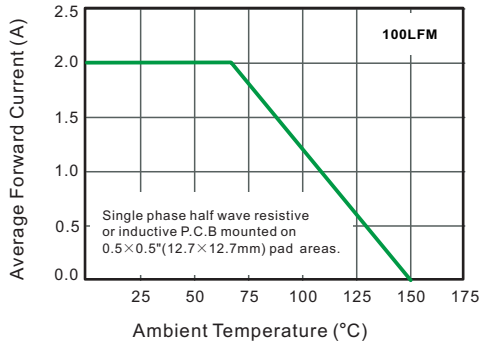


Fig.1 Forward Current Derating Curve

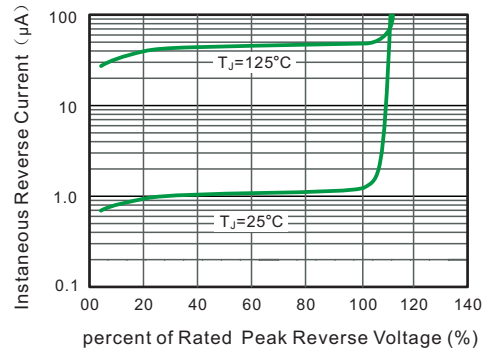


Fig.2 Typical Reverse Characteristics

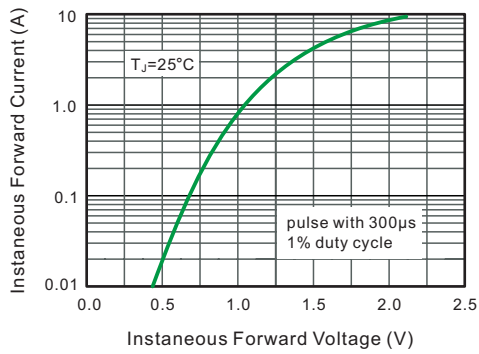


Fig.3 Typical Instantaneous Forward Characteristics

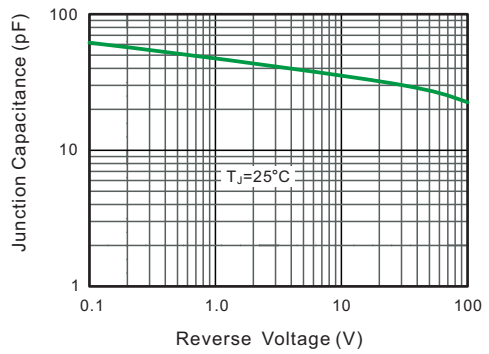


Fig.4 Typical Junction Capacitance

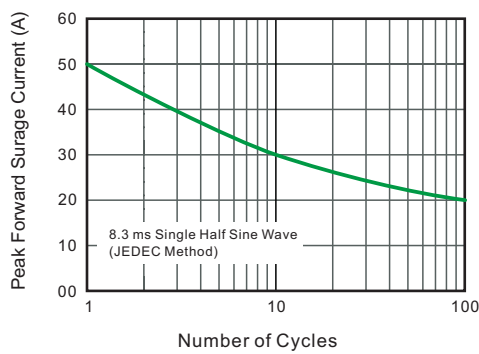
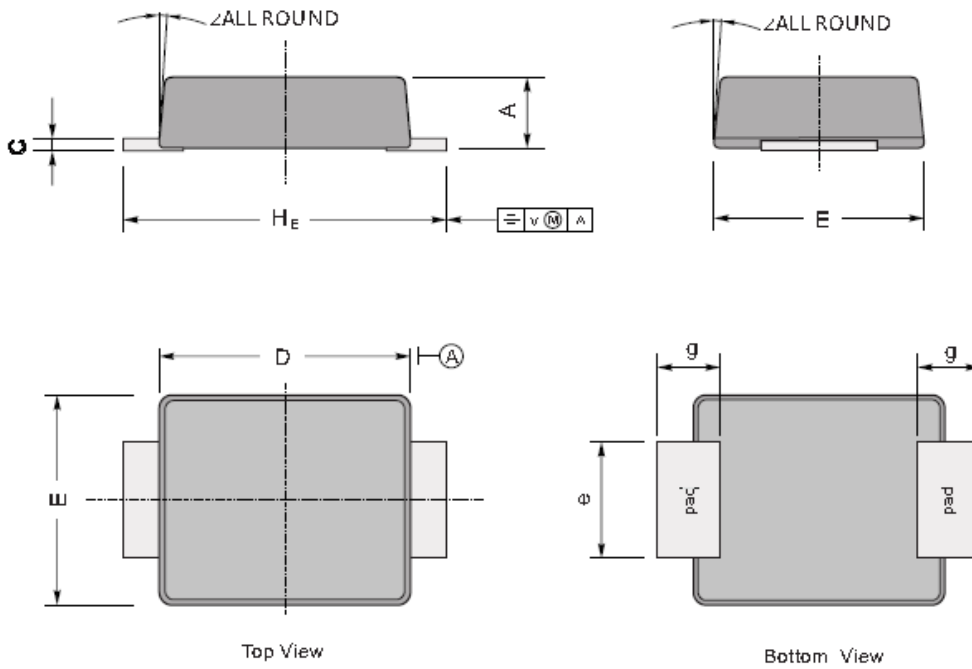


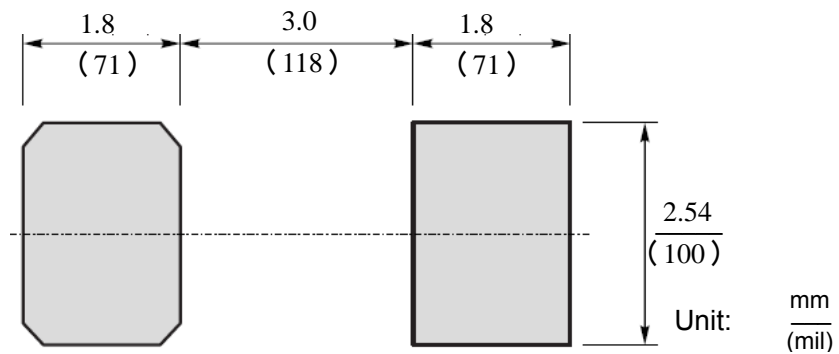
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

Product dimension (SMBF)



UNIT		A	C	D	E	$H_E$	e	g	$\angle$
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	$9^\circ$
	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		


The recommended mounting pad size



Ordering information

Device	Package	Shipping
PRS2ABF~PRS2MBF	SMBF (Pb-Free)	5000/ Tape & Reel

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