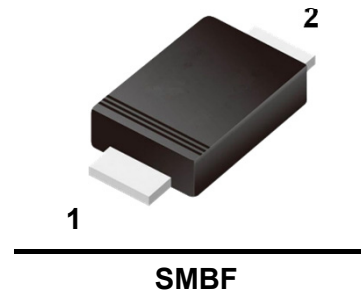


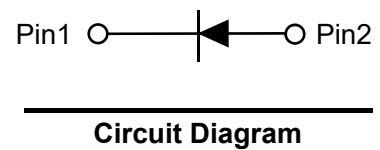
Feature

- 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



Mechanical Characteristics

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



Absolute maximum rating@25°C

Parameter	Symbol	Value	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V	
Maximum RMS voltage	V_{RMS}	700	V	
Maximum DC Blocking Voltage	V_{DC}	1000	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	4.0	A	
Non-repetitive Peak Forward Surge Current @ $t < 8.3ms$	I_{FSM}	120	A	
Maximum Forward Voltage at 4 A	V_F	1.3	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a = 25^\circ C$	10	μA
		$T_a = 125^\circ C$	150	
Typical Junction Capacitance @ $V_R=4V, f=1MHz$	C_J	35	pF	
Maximum Reverse Recovery Time ¹⁾	t_{rr}	500	ns	
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	40	$^\circ C/W$	
	$R_{\theta JL}$	12		
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150	$^\circ C$	

Notes:

1) Measured with $I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A$

2) P.C.B. mounted with 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.

Typical Characteristics

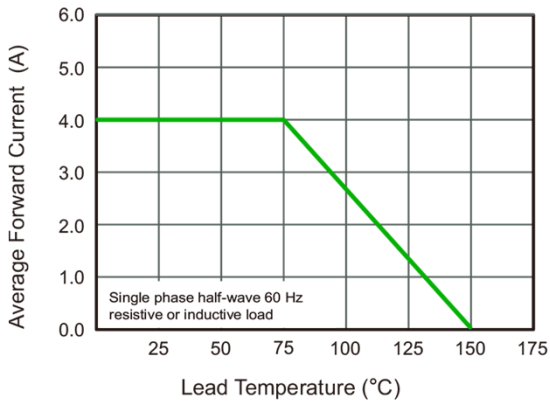


Fig.1 Maximum Average Forward Current Rating

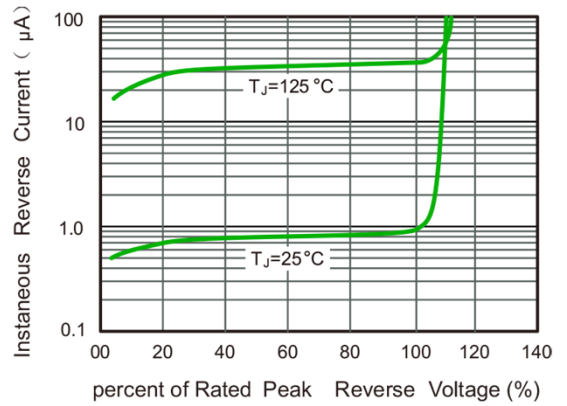


Fig.2 Typical Reverse Characteristics

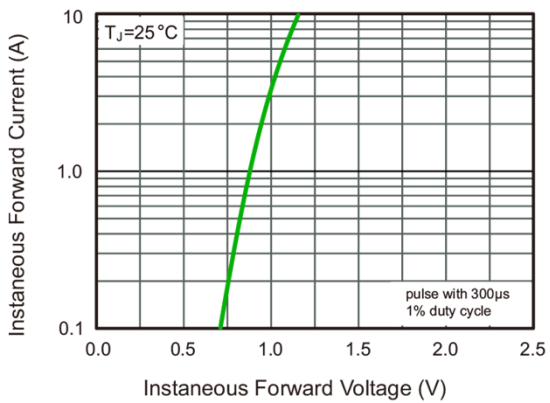


Fig.3 Typical Instantaneous Forward Characteristics

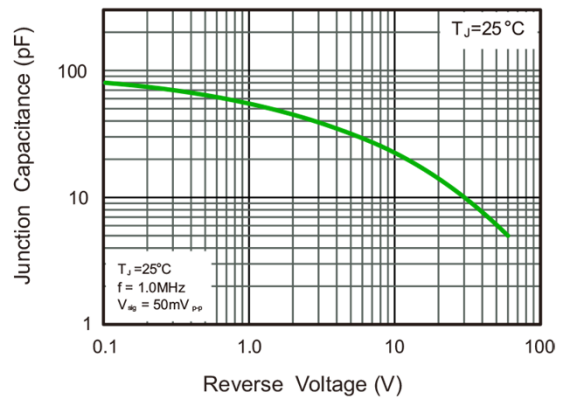


Fig.4 Typical Junction Capacitance

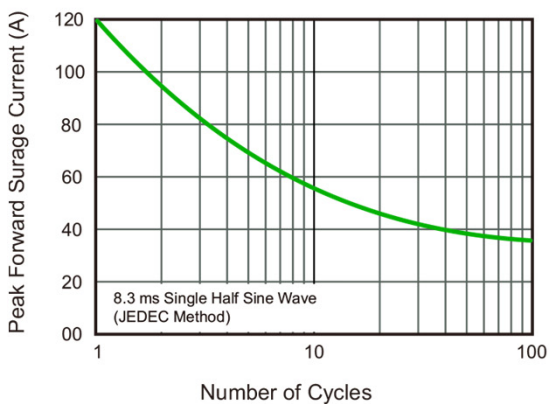
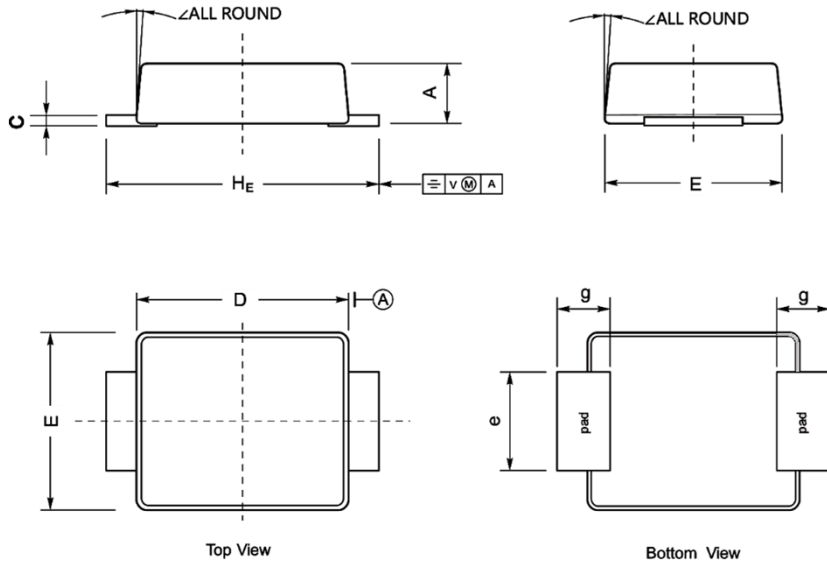


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

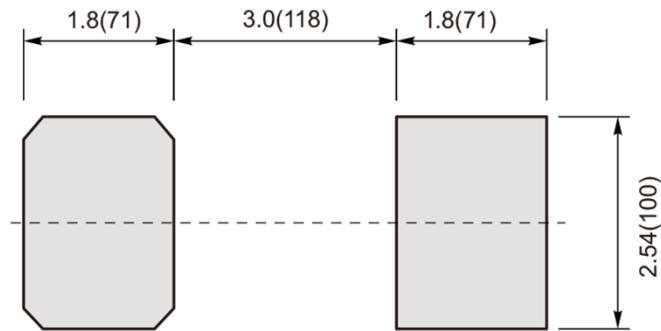
Switching Diode

PRS4MBF

Product dimension (SMBF)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	1.10	1.30	0.043	0.051
C	0.18	0.26	0.007	0.010
D	4.20	4.40	0.165	0.173
E	3.50	3.70	0.138	0.146
e	1.90	2.20	0.075	0.087
g	1.00		0.039	
H _E	5.10	5.50	0.201	0.217
∠	12°			




Unit: mm(mil)

Suggested PCB Layout

Marking information




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