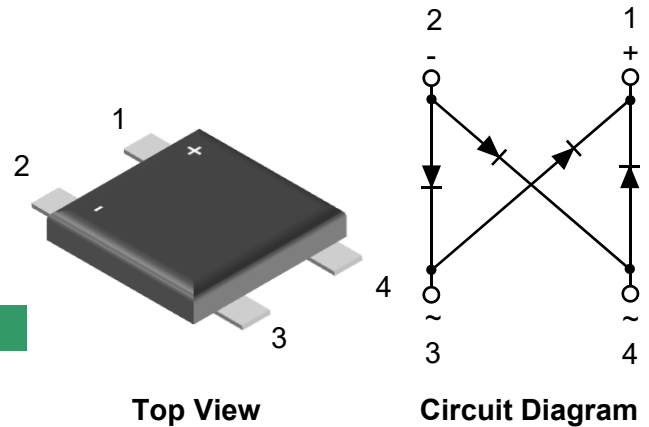


4A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER
Feature

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 4.0 A
- Fast reverse recovery time
- Designed for Surface Mount Application


Mechanical Characteristics

- Package: UMSB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.234g / 0.00825oz

Absolute maximum rating@25°C

Parameter	Symbol	PFMS B40B	PFMS B40D	PFMS B40G	PFMS B40J	PFMS B40K	PFMS B40M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_c = 115^\circ\text{C}$	I_O	4.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	95						A
Maximum Forward Voltage at 4.0 A	V_F	1.3						V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R	5.0 200						μA
Typical Junction Capacitance ¹⁾	C_J	50						pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	65 15 25						$^\circ\text{C/W}$
Maximum Reverse Recovery Time ³⁾	t_{rr}	150			250	500		ns
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150						$^\circ\text{C}$

Notes:

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

2) Mounted on glass epoxy PC board with 4×1.5"×1.5"(3.81×3.81 cm)copper pad.

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

Typical Characteristics

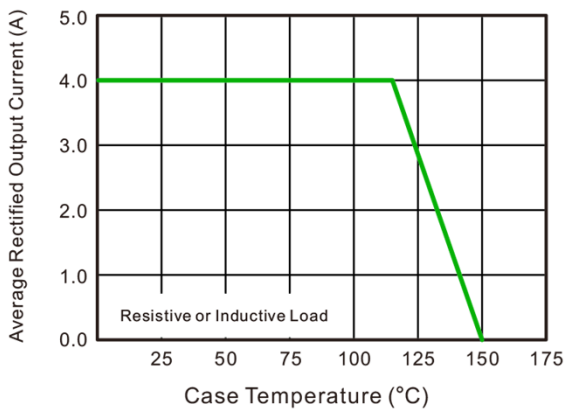


Fig.1 Average Rectified Output Current Derating Curve

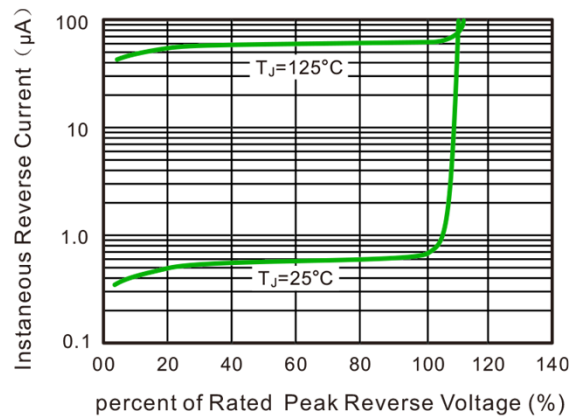


Fig.2 Typical Reverse Characteristics

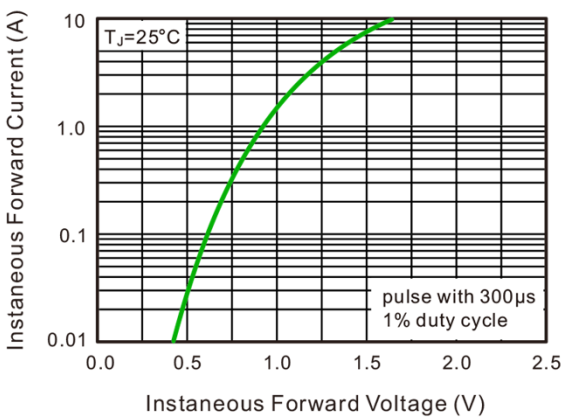


Fig.3 Typical Instantaneous Forward Characteristics

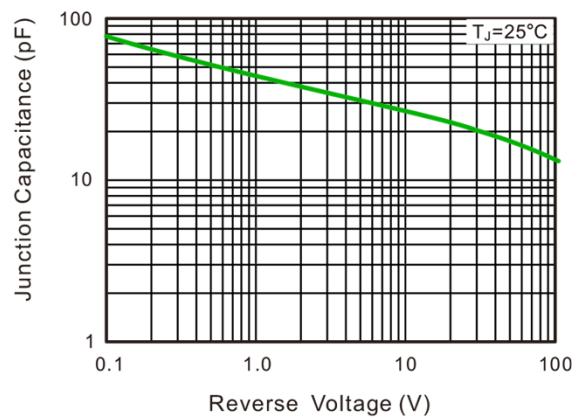


Fig.4 Typical Junction Capacitance

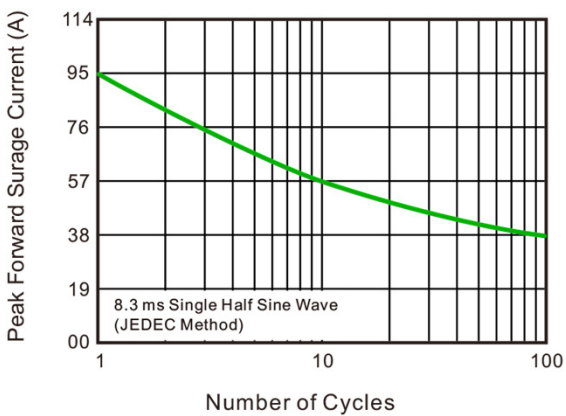


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

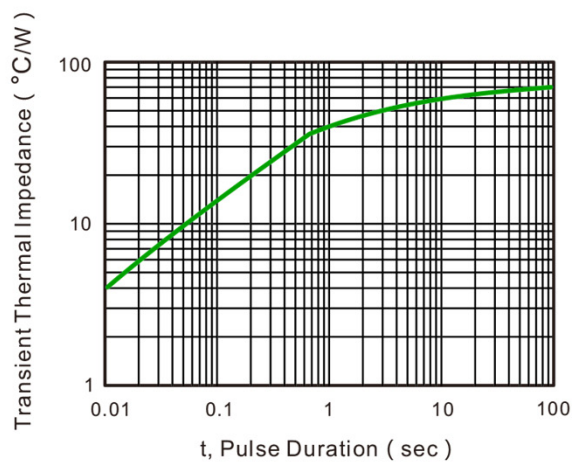
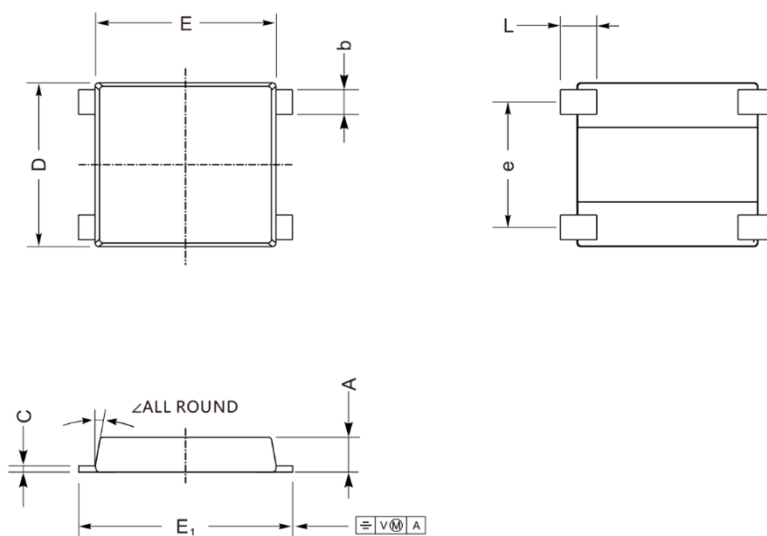


Fig.6- Typical Transient Thermal Impedance

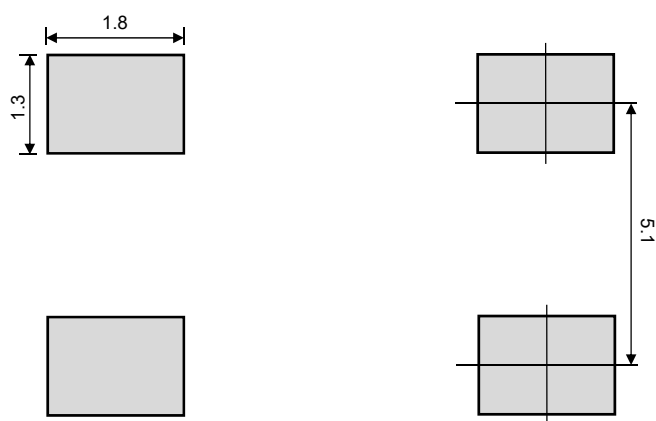
BRIDGE RECTIFIER

PFMSB40B THRU PFMSB40M

Product dimension (UMSB)




Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	1.30	1.50	0.051	0.059
C	0.17	0.29	0.007	0.012
D	6.20	7.00	0.244	0.276
E	7.10	7.60	0.280	0.299
E ₁	8.40	8.90	0.331	0.350
L	1.00	1.60	0.032	0.055
e	4.90	5.30	0.193	0.209
b	0.95	1.15	0.037	0.045
∠	10°		10°	



Suggested PCB Layout

Unit:mm


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