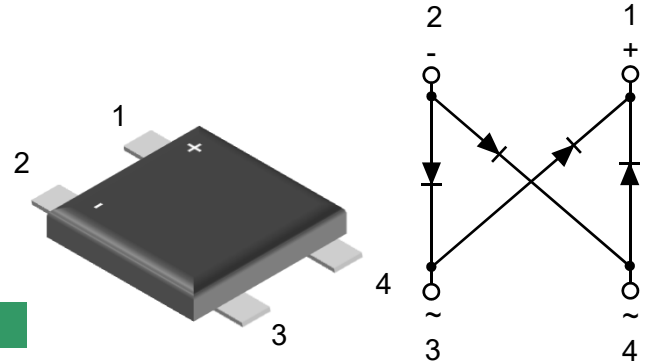


**3A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER**
**Feature**

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 3.0 A
- High Surge Current Capability
- Designed for Surface Mount Application


**Top View**
**Circuit Diagram**
**Mechanical Characteristics**

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

**Absolute maximum rating@25°C**

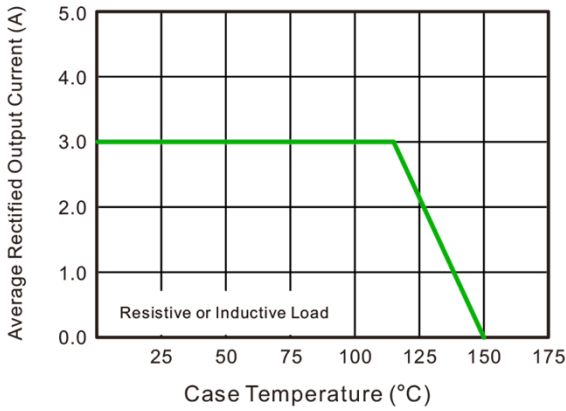
Parameter	Symbol	PMSB 30B	PMSB 30D	PMSB 30G	PMSB 30J	PMSB 30K	PMSB 30M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_c = 115\text{ }^\circ\text{C}$	$I_O$	3.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	80						A
Maximum Forward Voltage at 3.0 A	$V_F$	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a = 25\text{ }^\circ\text{C}$ : 5.0 $T_a = 125\text{ }^\circ\text{C}$ : 100						$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_J$	40						pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 25						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55~+150						$^\circ\text{C}$

Notes:

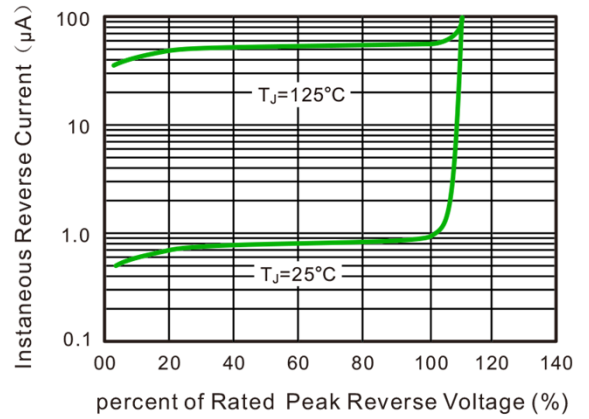
1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

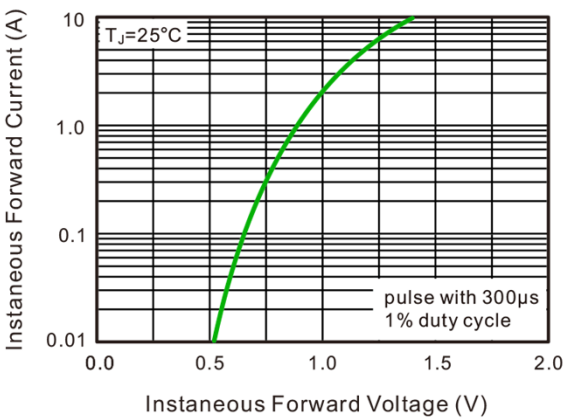
## Typical Characteristics



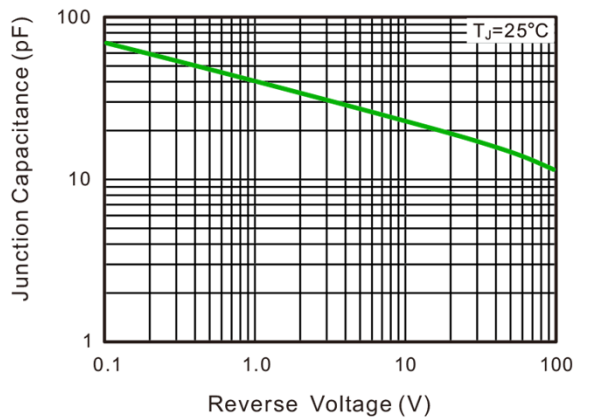
**Fig.1 Average Rectified Output Current Derating Curve**



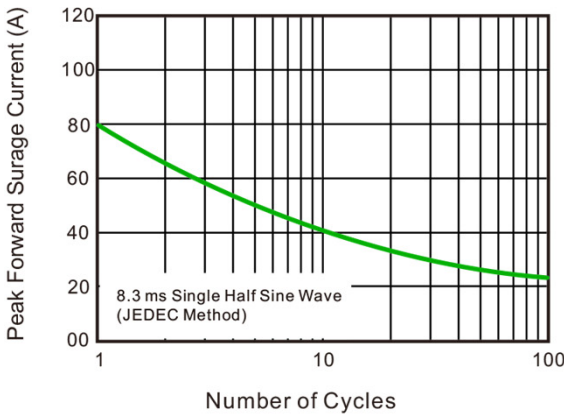
**Fig.2 Typical Reverse Characteristics**



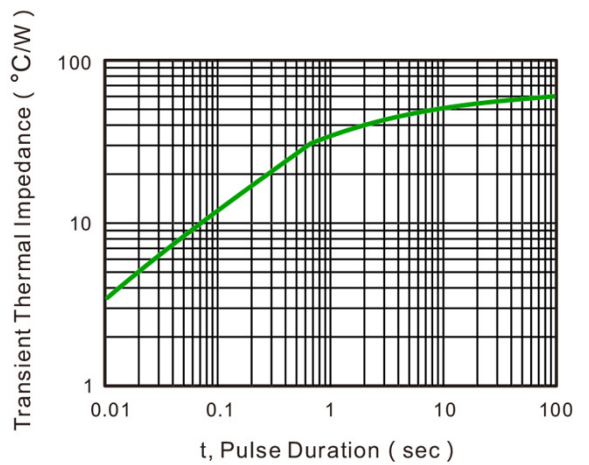
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**

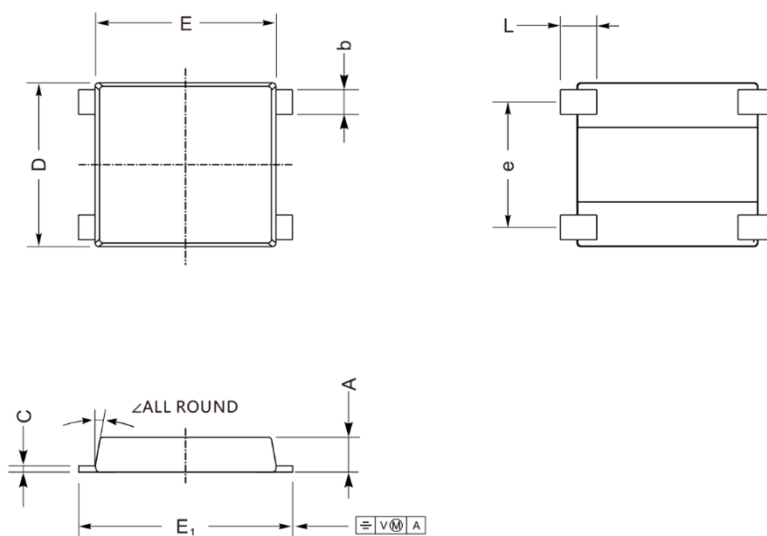


**Fig.6- Typical Transient Thermal Impedance**

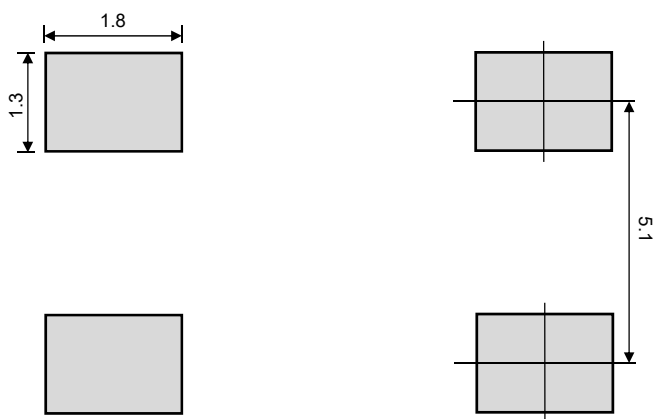
# BRIDGE RECTIFIER

# PMSB30B THRU PMSB30M

## 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 <sub>1</sub>	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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