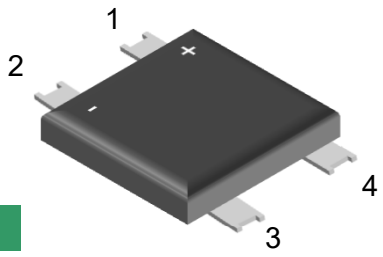
Prisemi®

PULBF508 THRU PULBF510

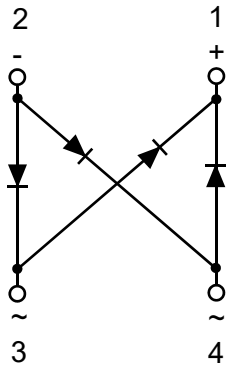
5A SURFACE MOUNT BRIDGE RECTIFIER

Feature

- Reverse Voltage - 800 to 1000 V
- Forward Current - 5.0 A
- High Surge Current Capability
- Designed for Surface Mount Application



Top View



Circuit Diagram

Mechanical Characteristics

- Package: ULBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.461g / 0.0163 oz

Absolute maximum rating@25℃

Parameter		Symbol	PULBF508	PULBF510	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	800	1000	V
Maximum RMS voltage		V_{RMS}	560	700	V
Maximum DC Blocking Voltage		V_{DC}	800	1000	V
Average Rectified Output Current at T_c = 115 °C		I_O	5.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	180		A
I^2t Rating for Fusing		I^2t	134		A^2S
Maximum Forward Voltage at	1.0A	V_F	0.83 (typ.)		V
	5.0A		1.0		
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_a = 25 °C T_a = 125 °C	I_R	5.0 100		μA
Typical Junction Capacitance[1)]		C_J	60		pF
Typical Thermal Resistance[2)]		$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12		℃/W
Operating and Storage Temperature Range		T_J,T_{STG}	-55~+150		℃

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

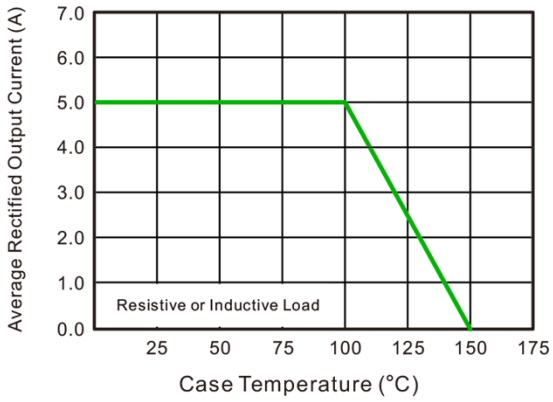


Fig.1 Average Rectified Output Current Derating Curve

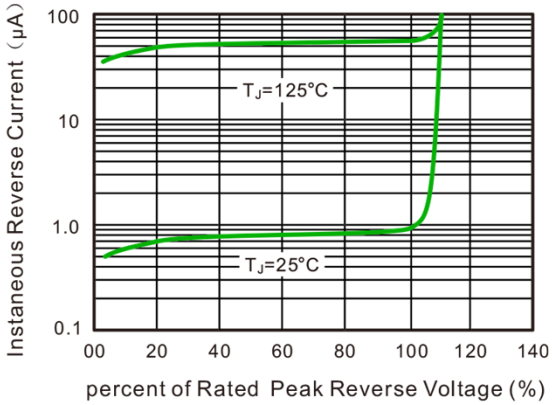


Fig.2 Typical Reverse Characteristics

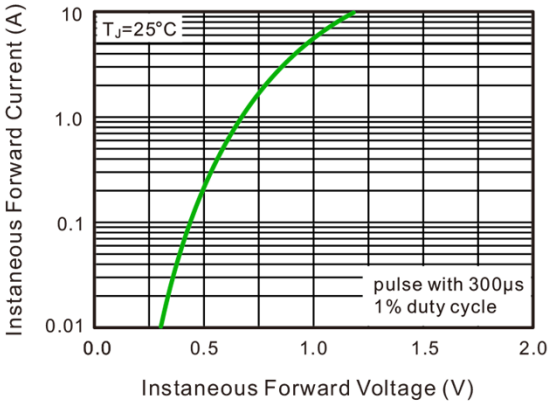


Fig.3 Typical Instaneous Forward Characteristics

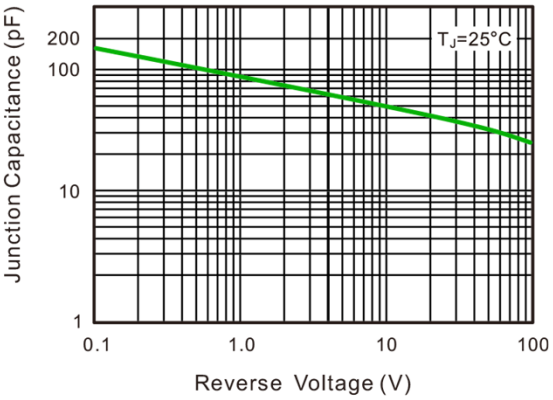


Fig.4 Typical Junction Capacitance

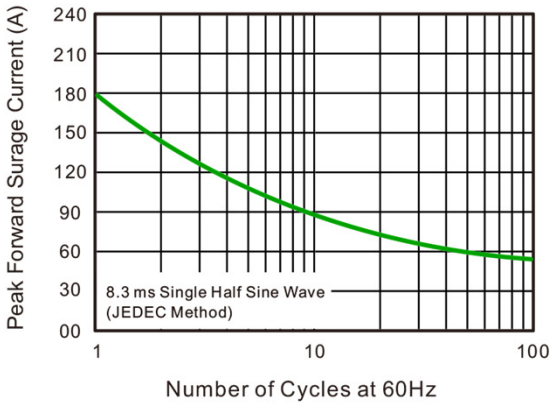


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

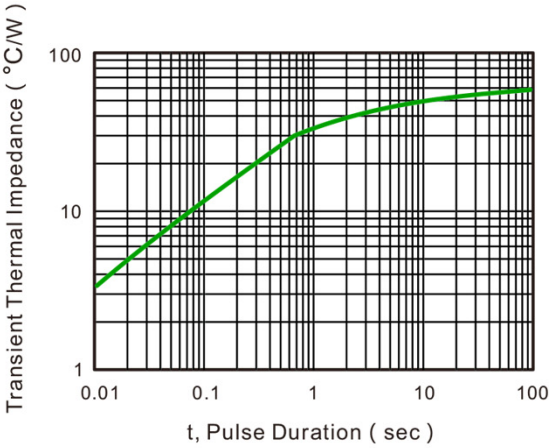
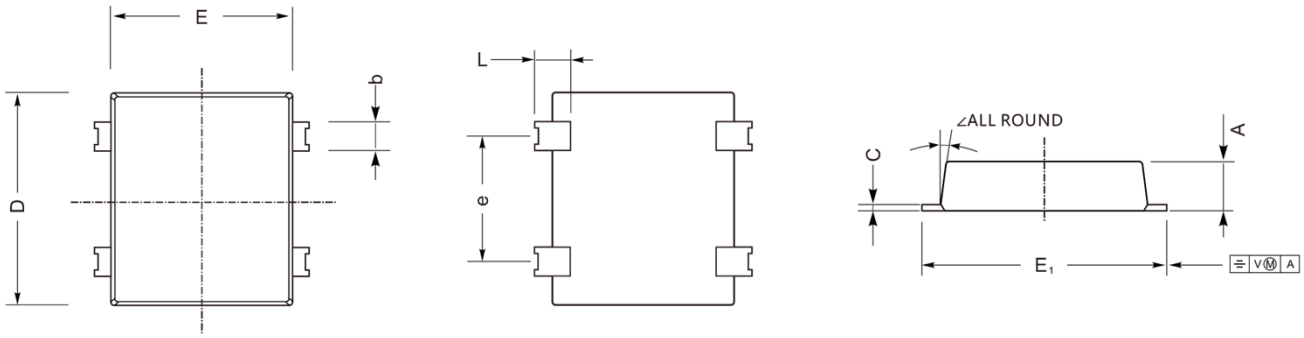
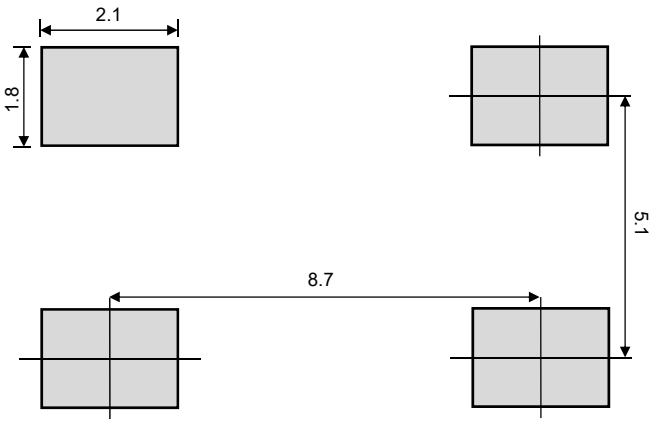


Fig.6- Typical Transient Thermal Impedance

Product dimension (ULBF)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	1.35	1.75	0.053	0.069
C	0.25	0.55	0.010	0.022
D	9.40	9.80	0.370	0.386
E	8.40	8.80	0.331	0.346
E_1	9.80	10.20	0.386	0.402
L	0.85	1.25	0.033	0.049
e	4.90	5.30	0.193	0.209
b	1.25	1.55	0.049	0.061
∠	10°		10°	



Unit:mm

Suggested PCB Layout

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