



5A SURFACE MOUNT BRIDGE RECTIFIER

FEATURES:

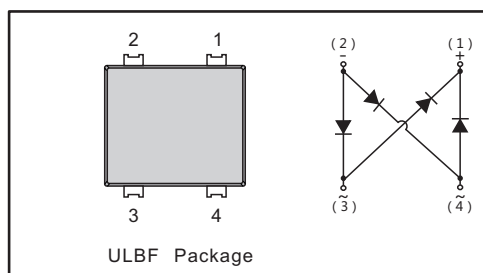
- Reverse Voltage - 800 & 1000 V
- Forward Current - 5.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

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

PINNING

PIN	DESCRIPTION
1	Output Anode (+)
2	Output Cathode (-)
3	Input Pin (~)
4	Input Pin (~)



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 current derate by 20 %.

Parameter	Symbols	ULBF508	ULBF510	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	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 ² S
Maximum Forward Voltage at 1.0 A	V_F	0.83 (typ.)		V
Maximum Forward Voltage at 5.0 A	V_F	1.0		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 100		μ A
Typical Junction Capacitance (Note1)	C_j	60		pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12		°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150		°C

Note: 1. Measured at 1MHz 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.



Fig.1 Average Rectified Output Current Derating Curve

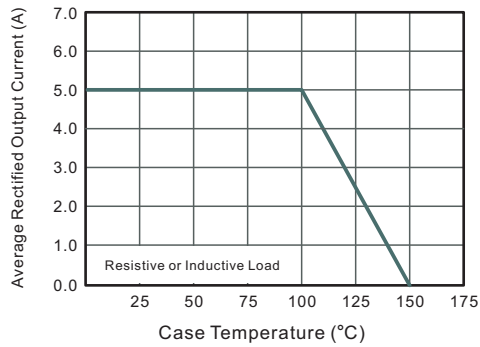


Fig.2 Typical Reverse Characteristics

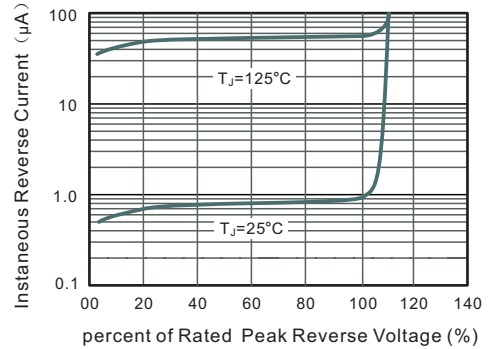


Fig.3 Typical Instantaneous Forward Characteristics

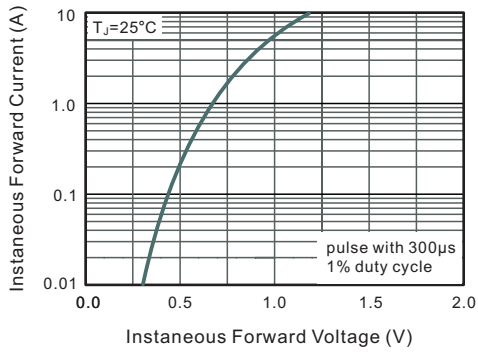


Fig.4 Typical Junction Capacitance

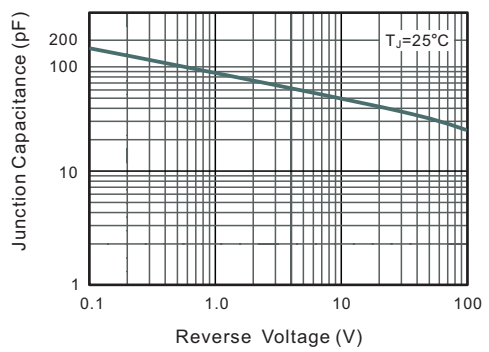


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

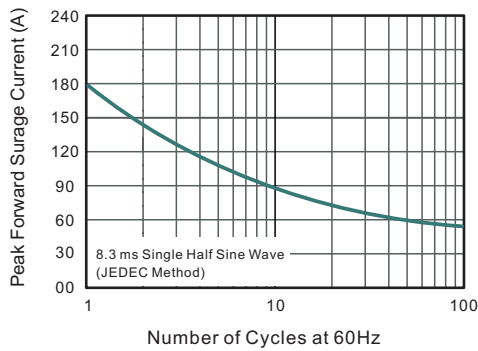
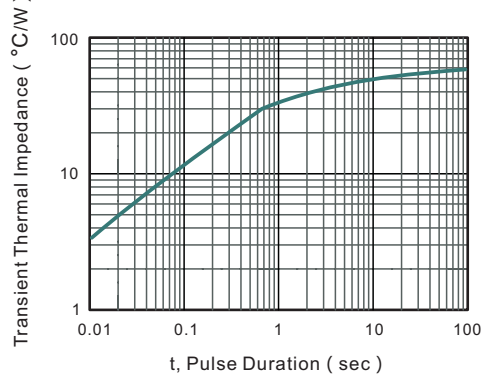


Fig.6- Typical Transient Thermal Impedance

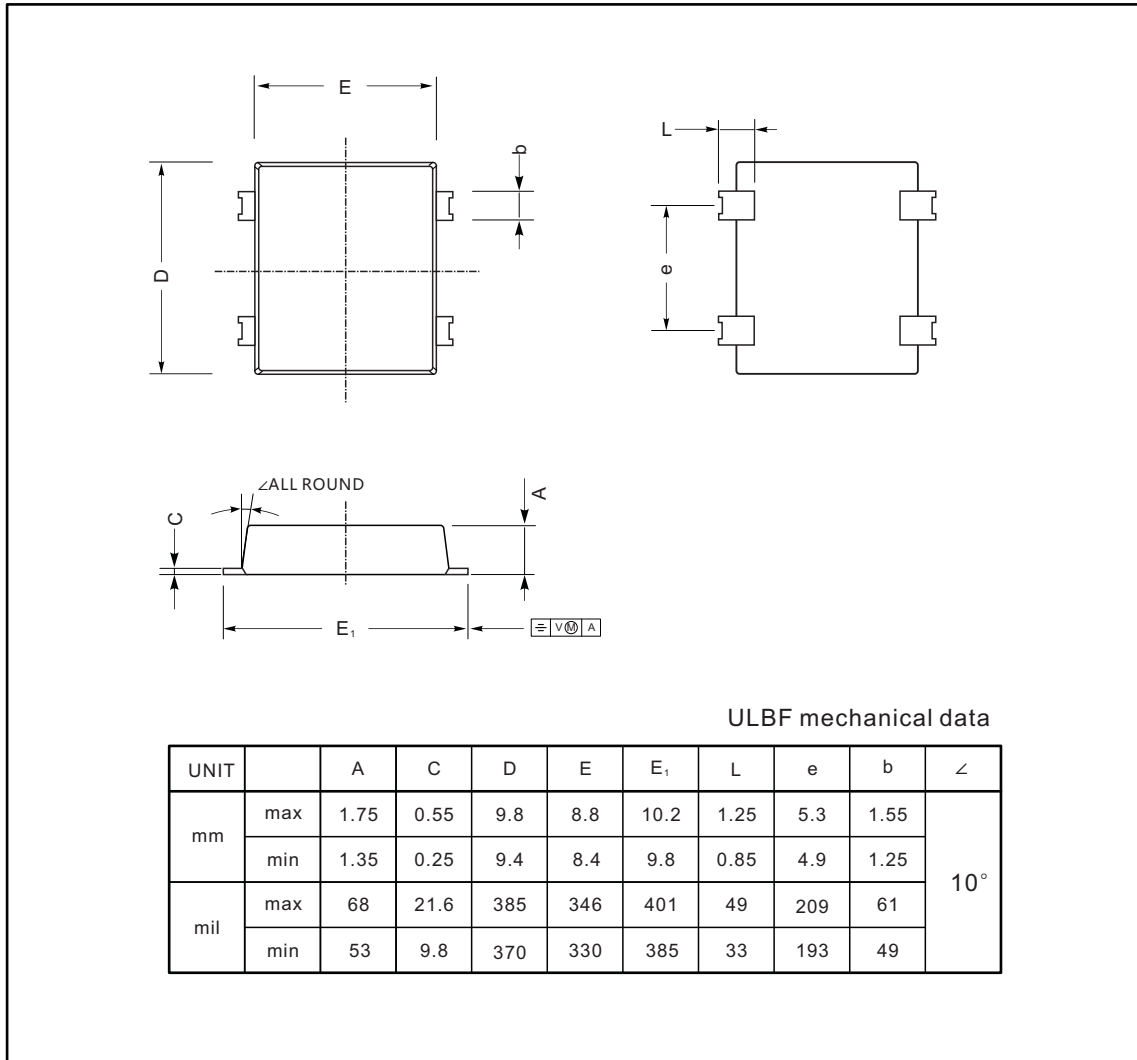




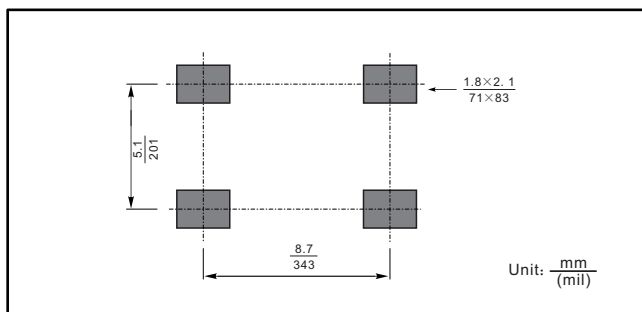
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ULBF



The recommended mounting pad size



Marking

Type number	Marking code
ULBF508	ULBF508
ULBF510	ULBF510