



# ULBF808 THRU ULBF810

## 8A SURFACE MOUNT BRIDGE RECTIFIER

### FEATURES:

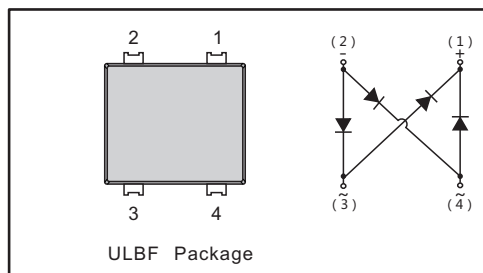
- Reverse Voltage - 800 & 1000 V
- Forward Current - 8.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

### 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	ULBF808	ULBF810	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	$I_O$	8.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	220		A
Peak Forward Surge Current 1.0ms Single Half Sine-wave Superimposed on Rated Load	$I_{FSM}$	350		A
$I^2t$ Rating for Fusing $1ms \leq t < 8.3ms$	$I^2t$	200		A <sup>2</sup> S
Maximum Forward Voltage at 1.0 A	$V_F$	0.83(typ)		V
Maximum Forward Voltage at 4.0 A	$V_F$	1.0		V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	5 100		$\mu A$
Typical Junction Capacitance ( Note1 )	$C_j$	100		pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12		$^\circ C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150		$^\circ C$

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.



Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

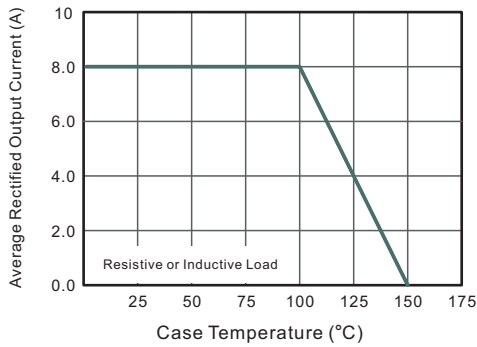


Fig.2 Typical Reverse Characteristics

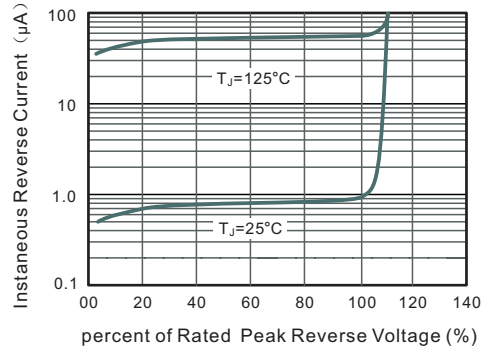


Fig.3 Typical Instantaneous Forward Characteristics

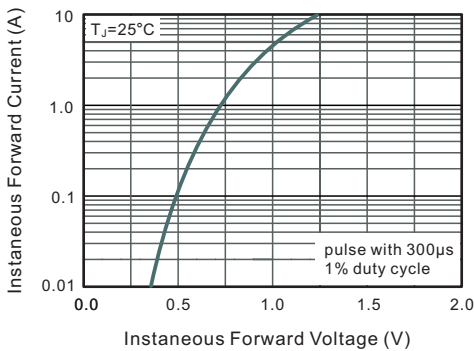


Fig.4 Typical Junction Capacitance

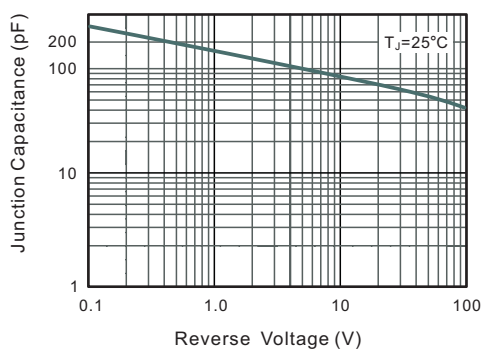


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

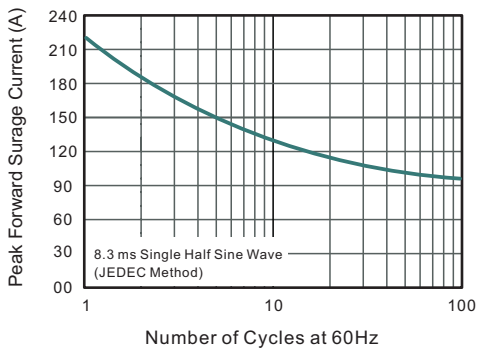
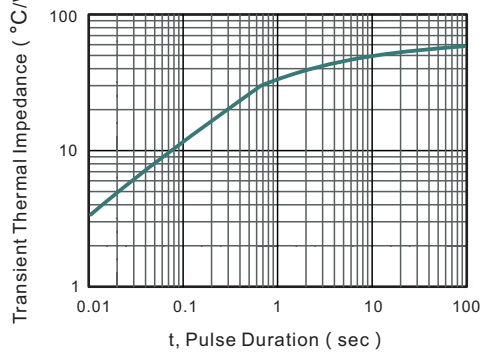


Fig.6- Typical Transient Thermal Impedance





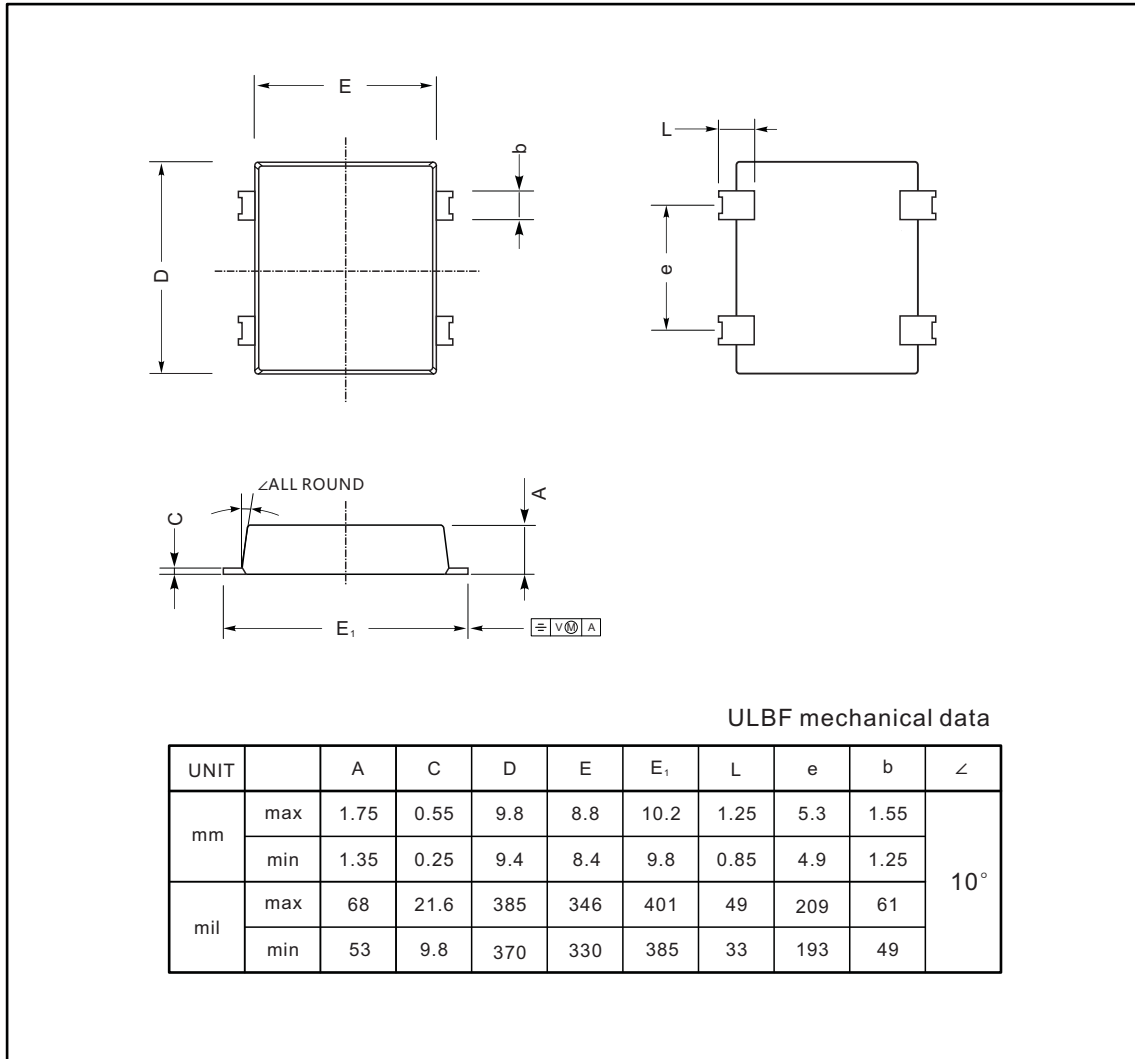
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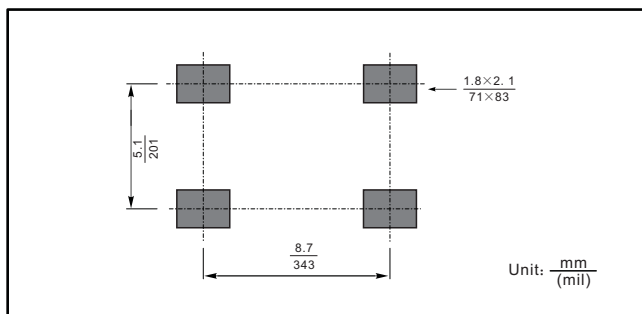
### PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ULBF



### The recommended mounting pad size



### Marking

Type number	Marking code
ULBF808	ULBF808
ULBF810	ULBF810