

## 8A SURFACE MOUNT Super Fast Recovery BRIDGE RECTIFIER

### FEATURES:

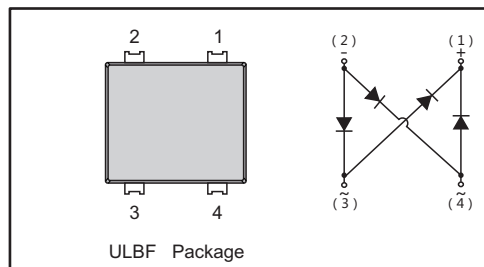
- Reverse Voltage - 300V to 600 V
- Forward Current - 8.0 A
- Super Fast reverse recovery time
- Designed for Surface Mount Application

### 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

Parameter	Symbols	ULBFE803	ULBFE806	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	300	600	V
Maximum RMS voltage	$V_{RMS}$	210	420	V
Maximum DC Blocking Voltage	$V_{DC}$	300	600	V
Max 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)	$I_{FSM}$	170		A
$I^2t$ Rating for Fusing( $t < 8.3ms$ )	$I^2t$	120		A <sup>2</sup> S
Maximum Forward Voltage Per diode at 8A	$V_F$	1.20	1.50	V
Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Blocking Voltage $T_a = 125^\circ C$	$I_R$	5 500		$\mu A$
Typical Junction Capacitance ( Note1 )	$C_j$	90	75	pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JC}$	60 6		$^\circ C/W$
Maximum Reverse Recovery Time ( Note3 )	$t_{rr}$	35		ns
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150		$^\circ C$

Note: 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  $I_f = 0.5 A$ ,  $I_a = 1 A$ ,  $I_r = 0.25 A$ .



Fig.1 Average Rectified Output Current Derating Curve

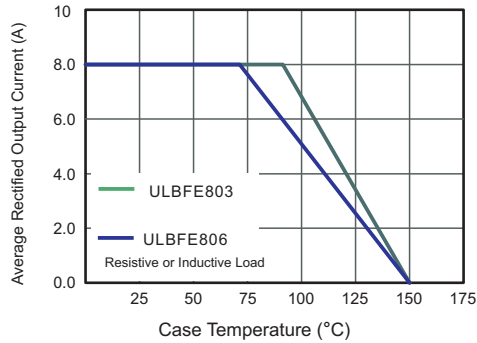


Fig.2 Typical Reverse Characteristics

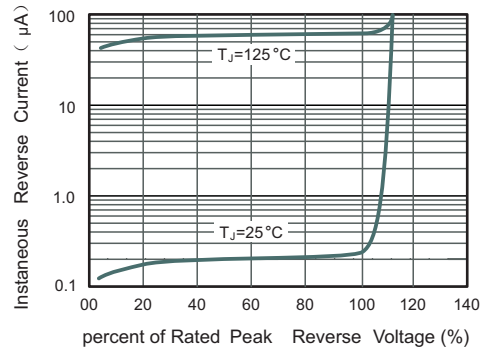


Fig.3 Typical Instantaneous Forward Characteristics

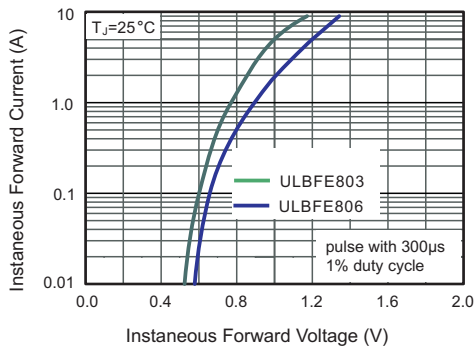


Fig.4 Typical Junction Capacitance

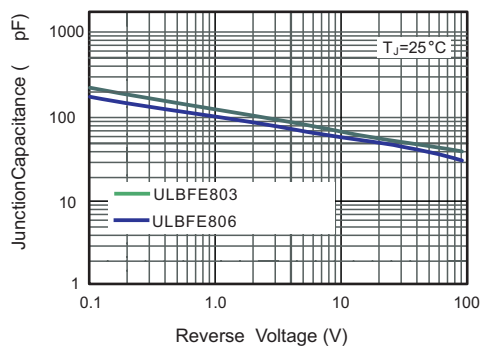
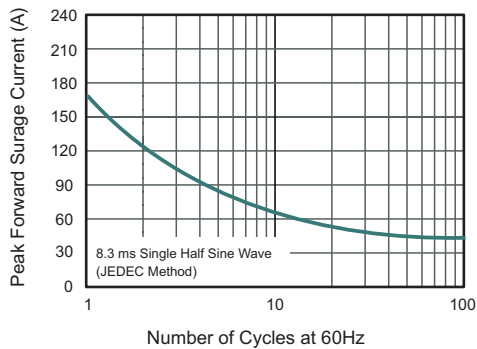


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

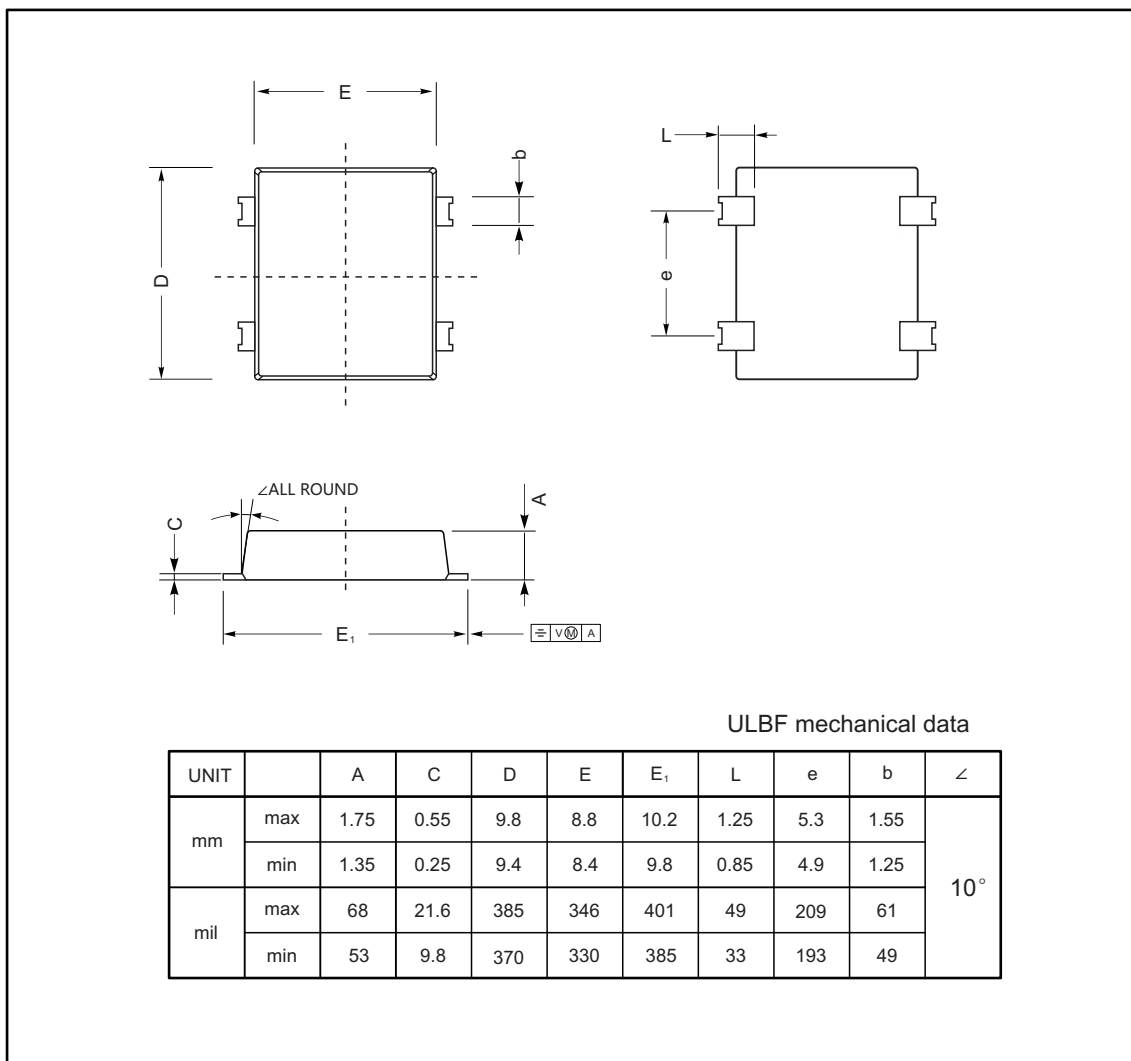




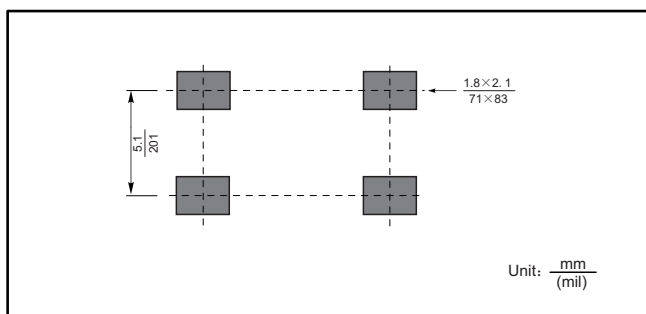
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ULBF



The recommended mounting pad size



Marking

Type number	Marking code
ULBFE803	ULBFE803
ULBFE806	ULBFE806





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