

# ULBF608 THRU ULBF610

## 6A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

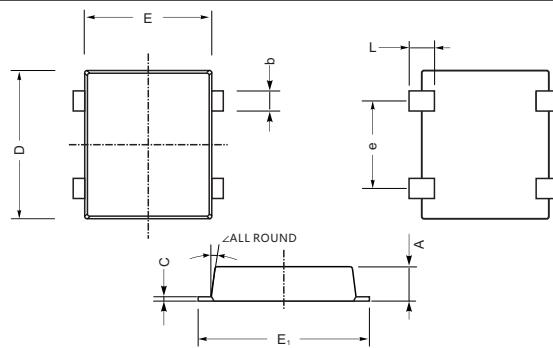
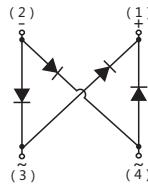
**FEATURES:**

- Glass Passivated Chip Junction
- Reverse Voltage - 800 & 1000 V
- Forward Current - 6.0 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

ULBF Package



UNIT		A	C	D	E	E <sub>1</sub>	L	e	b	$\angle$	
mm	max	1.75	0.55	9.8	8.8	10.2	1.25	5.3	1.55	10°	
	min	1.35	0.25	9.4	8.4	9.8	0.85	4.9	1.25		
mil	max	68	21.6	385	346	401	49	209	61	10°	
	min	53	9.8	370	330	385	33	193	49		

**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 %.

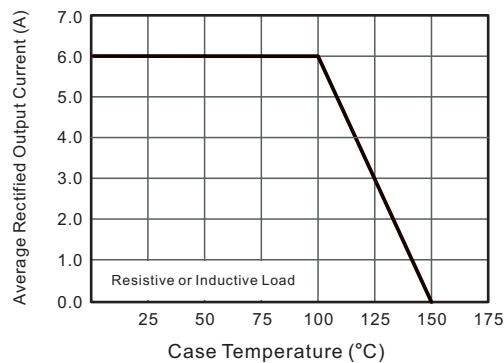
Parameter	Symbols	ULBF608	ULBF610	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	800	1000	V
Average Rectified Output Current	I <sub>O</sub>	6.0	6.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>		200	A
I <sup>2</sup> t Rating for Fusing	I <sup>2</sup> t	166		A <sup>2</sup> s
Maximum Forward Voltage at 1.0 A	V <sub>F</sub>	0.83 (typ.)		V
Maximum Forward Voltage at 3.0 A	V <sub>F</sub>	1.0		V
Maximum DC Reverse Current @T <sub>A</sub> =25 °C @T <sub>A</sub> =125 °C	I <sub>R</sub>	5 100		μA
Typical Junction Capacitance ( Note1 )	C <sub>j</sub>	60		pF
Typical Thermal Resistance ( Note2 )	R <sub>θJA</sub> R <sub>θJC</sub> R <sub>θCL</sub>	60 10 12		°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 ~ +150		°C

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

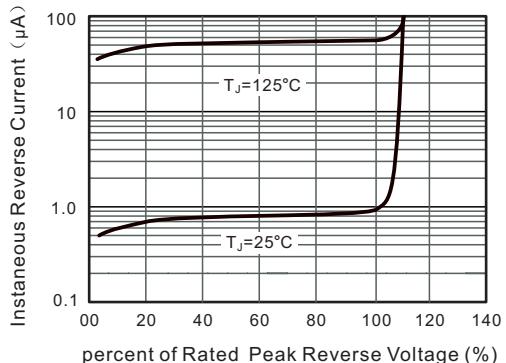
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

## RATING AND CHARACTERISTIC CURVES (ULBF608 THRU ULBF610)

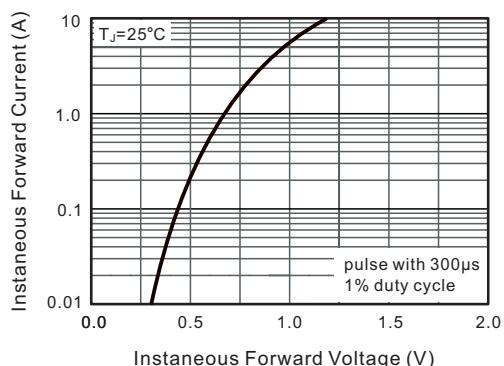
**Fig.1 Average Rectified Output Current Derating Curve**



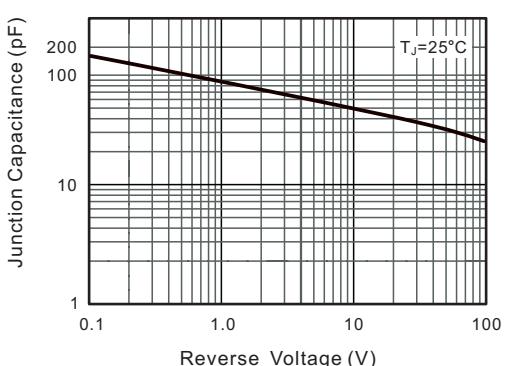
**Fig.2 Typical Reverse Characteristics**



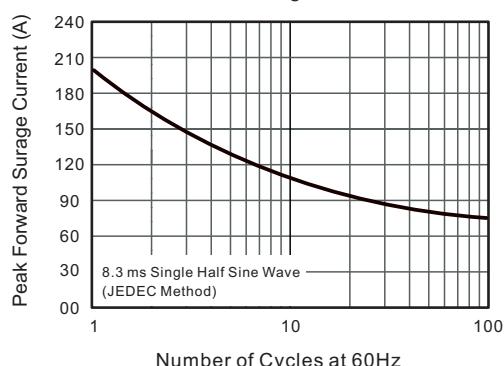
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



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



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

