

RoHS Compliant Product

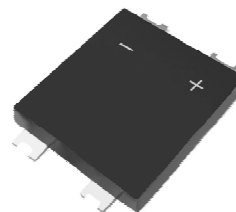
FEATURES

- Fast reverse recovery time
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: ULBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Mounting position: Any

ULBF

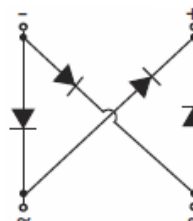


PACKAGE INFORMATION

Package	MPQ	Leader Size
ULBF	3K	13 inch

ORDER INFORMATION

Part Number	Type
ULBFR810	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Rating	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V	
Maximum RMS Voltage	V_{RMS}	700		
Maximum DC Blocking Voltage	V_{DC}	1000		
Average Rectified Output Current	I_O	8	A	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	220	A	
Maximum Forward Voltage @ $I_F=4A$	V_F	1.1	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_J=25^\circ C$	1	μA
		$T_J=125^\circ C$	200	
Maximum Reverse Recovery Time @ $I_F=0.5A, I_R=1A, I_{rr}=0.25A$	t_{rr}	500	nS	
Typical Junction Capacitance @ $f=1MHz, V_R=4V$	C_J	100	pF	
Typical Thermal Resistance ¹	$R_{\theta JA}$	60	$^\circ C/W$	
	$R_{\theta JC}$	6		
	$R_{\theta JL}$	14		
Operating & Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ C$	

Note:

1. Mounted on glass epoxy PC board with 4x1.5"x1.5" (3.81x3.81cm) copper pad.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Average Rectified Output Current Derating Curve

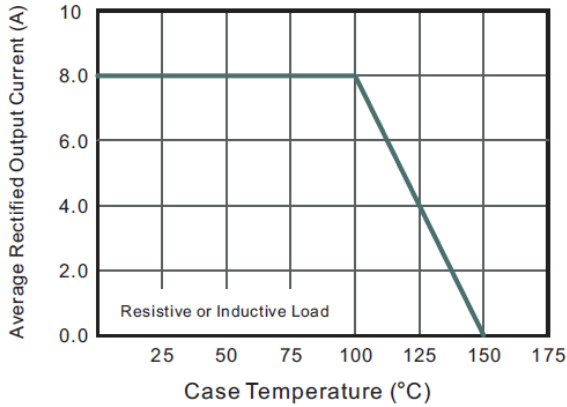


Fig.2 Typical Reverse Characteristics

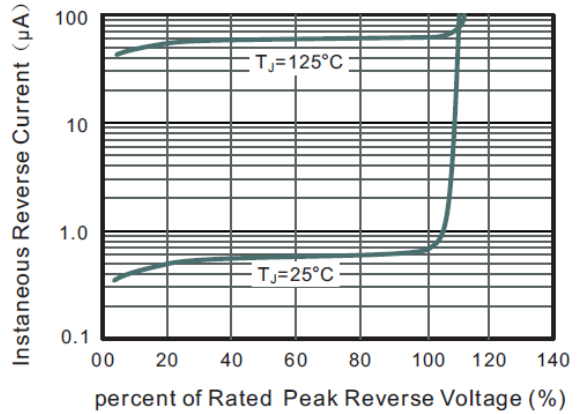


Fig.3 Typical Instantaneous Forward Characteristics

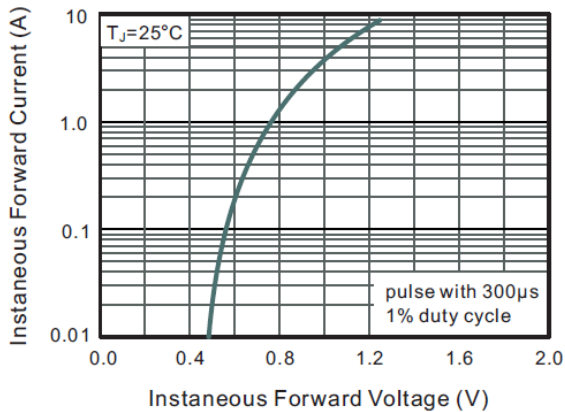


Fig.4 Typical Junction Capacitance

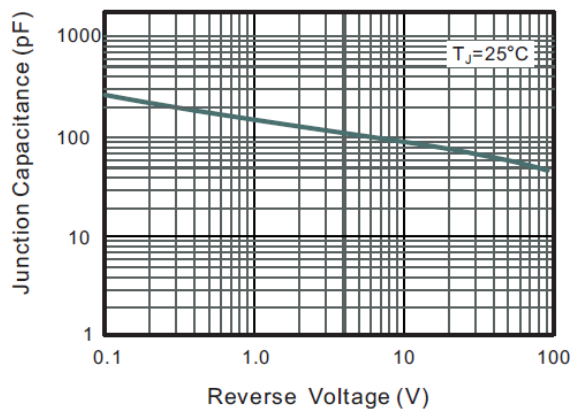


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

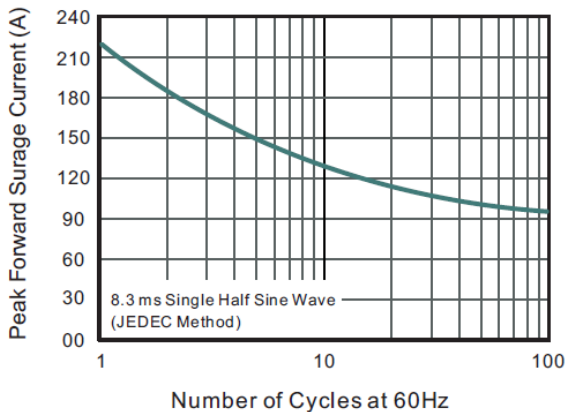
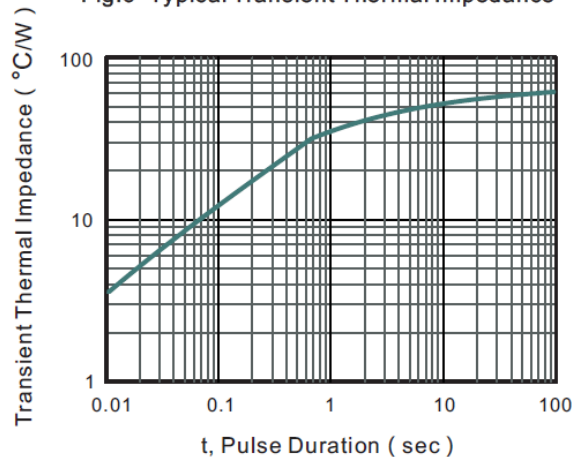
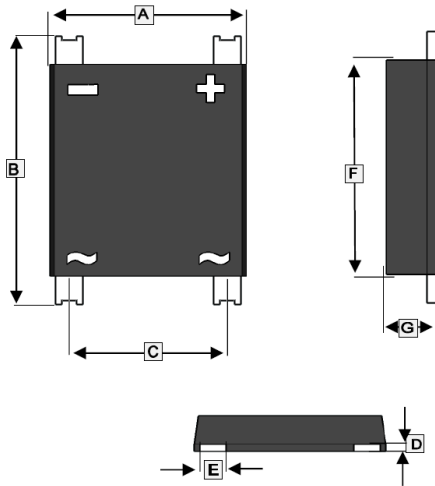


Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE DIMENSIONS

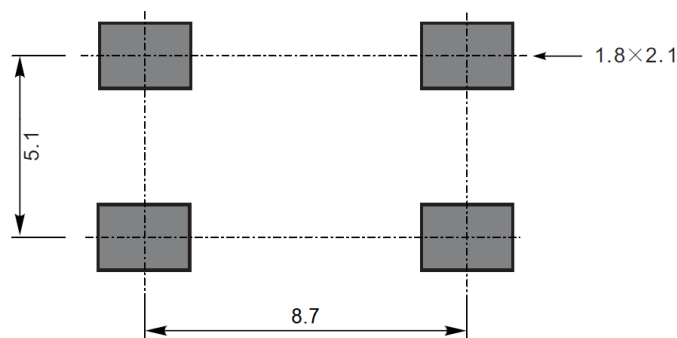
ULBF



REF.	Millimeter	
	Min.	Max.
A	9.4	9.8
B	9.8	10.2
C	4.9	5.3
D	0.25	0.55
E	1.25	1.55
F	8.4	8.8
G	1.35	1.75

MOUNTING PAD LAYOUT

ULBF



*Dimensions in millimeters