5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER Reverse Voltage - 100 to 1000 V

Forward Current – 5.0A

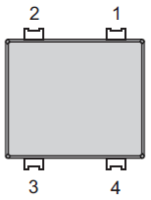
Pb lead-free ROHS

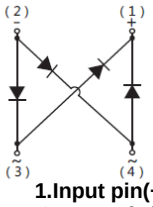
FEATURES

- High current capability
- Low forward voltage drop
- Glass Passivated Chip Junction
- Designed for Surface Mount Application
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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





1.Input pin(+)
2.Input pin(-)
3.Output Anode(~)
4.Output Cathode(~)

ULBF

Marking Code	
ULBF501	ULBF501
ULBF502	ULBF502
ULBF504	ULBF504
ULBF506	ULBF506
ULBF508	ULBF508
ULBF510	ULBF510

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	ULBF501	ULBF502	ULBF504	ULBF506	ULBF508	ULBF510	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	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
I2t Rating for Fusing	I^2t	134						A^2S
Forward Voltage per element at 1.0A	V_F	0.83(TYP)						V
Forward Voltage per element at 5.0A	V_F	1.0						V
Maximum DC Reverse Current @T_A=25°C at Rated DC Blocking Voltage @T_A=125°C	I_R	5 100						μA
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

(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.

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Fig.1 Average Rectified Output Current Derating Curve

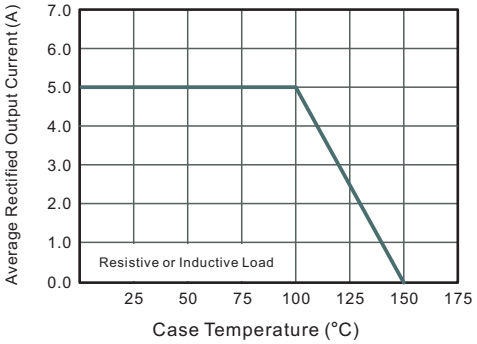


Fig.2 Typical Reverse Characteristics

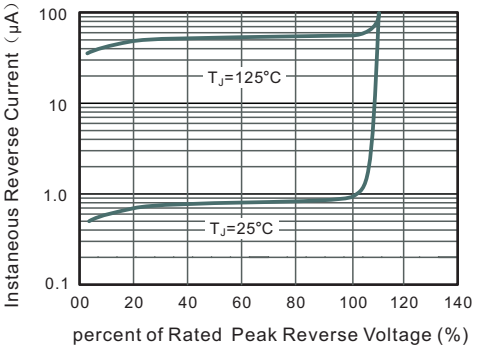


Fig.3 Typical Instaneous Forward Characteristics

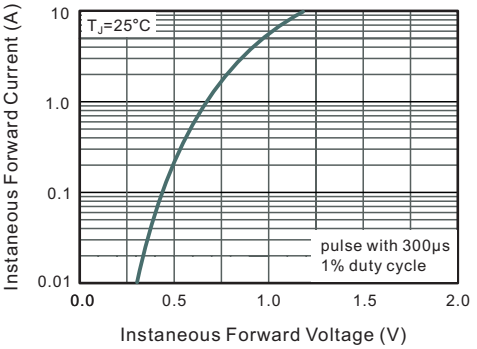


Fig.4 Typical Junction Capacitance

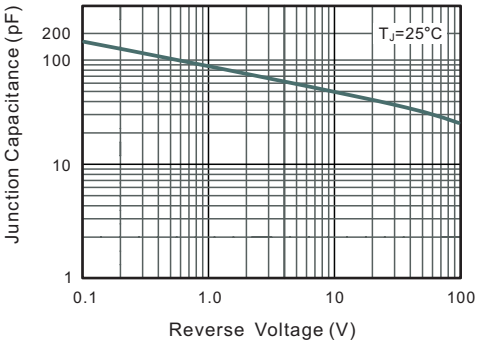


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

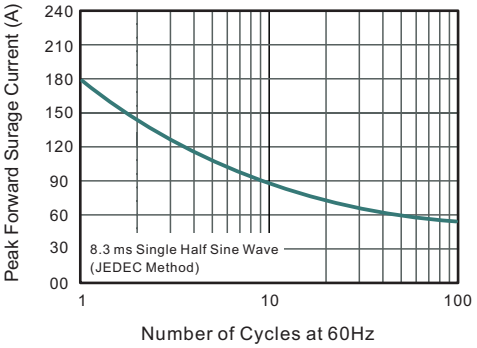
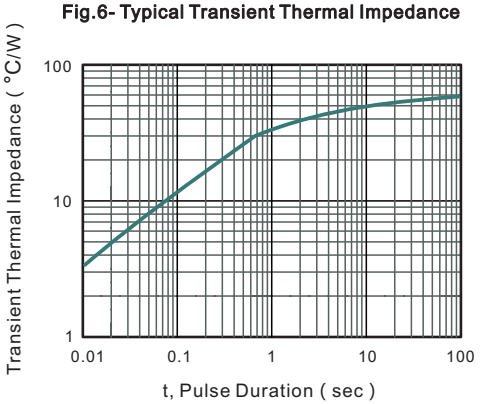


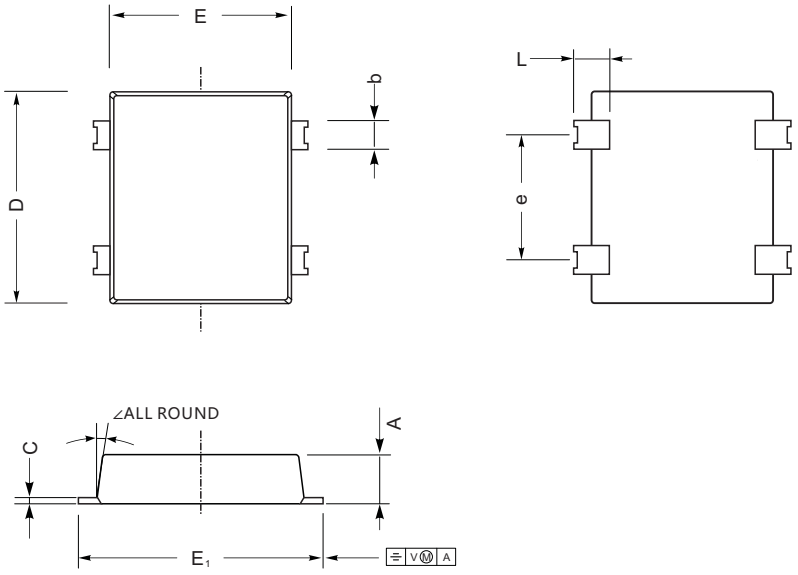
Fig.6- Typical Transient Thermal Impedance



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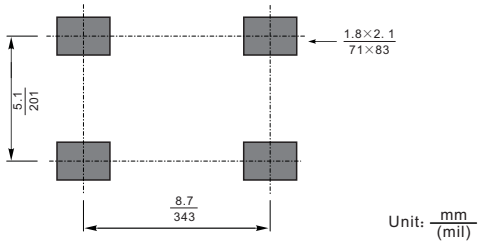
Package Outline ULBF

Plastic surface mounted package; 4 leads



UNIT		A	C	D	E	E_1	L	e	b	∠
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	
	min	53	9.8	370	330	385	33	193	49	

The recommended mounting pad size



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
ULBF	Tape/Reel,13"reel	3000	EIA-481-1

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