



SLBF6K THRU SLBF6M

6A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

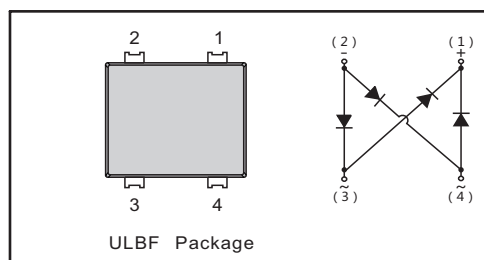
- Glass Passivated Chip Junction
- Reverse Voltage - 800 & 1000 V
- Forward Current - 6.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

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

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	SLBF6K	SLBF6M	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	6.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200		A
I^2t Rating for Fusing	I^2t	166		A ² S
Maximum Forward Voltage at 1.0 A	V_F	0.83 (typ.)		V
Maximum Forward Voltage at 6.0 A	V_F	1.0		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25\text{ }^{\circ}\text{C}$ @ $T_A=125\text{ }^{\circ}\text{C}$	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		$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150		$^{\circ}\text{C}$

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.



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Fig.1 Average Rectified Output Current Derating Curve

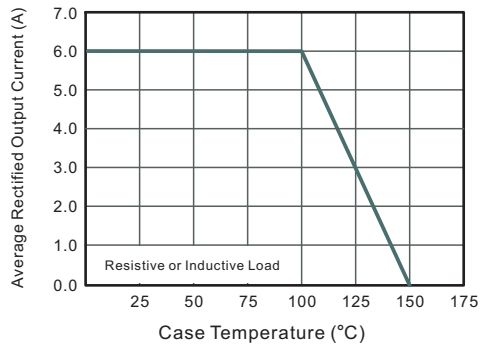


Fig.2 Typical Reverse Characteristics

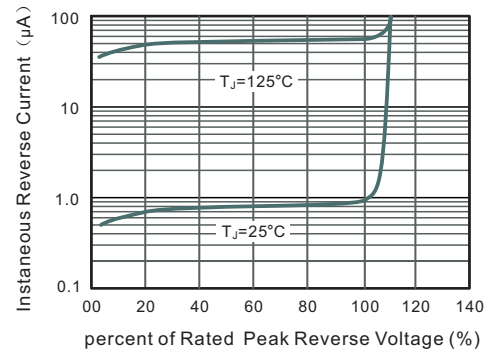


Fig.3 Typical Instantaneous Forward Characteristics

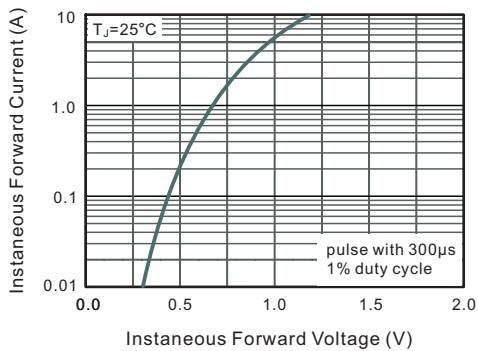


Fig.4 Typical Junction Capacitance

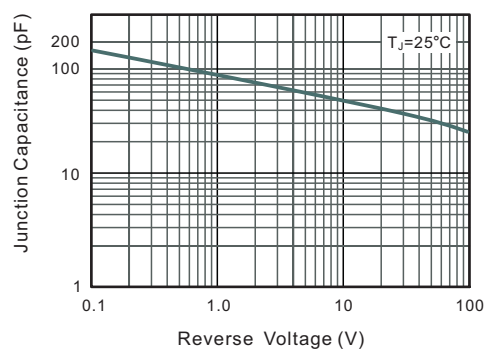


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

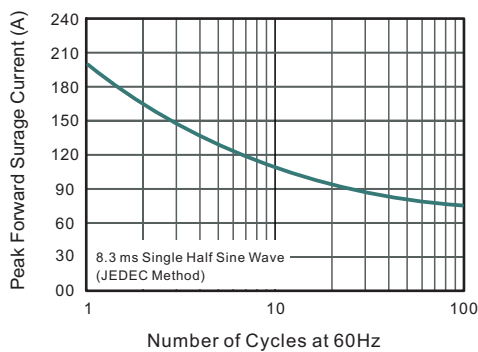
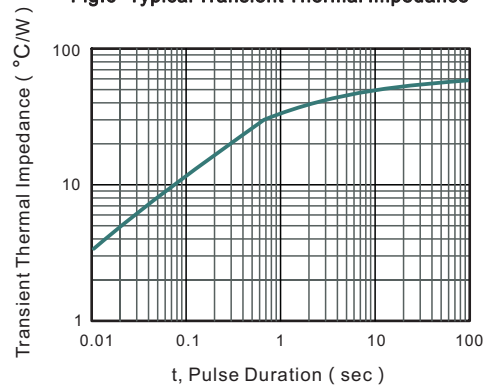


Fig.6- Typical Transient Thermal Impedance



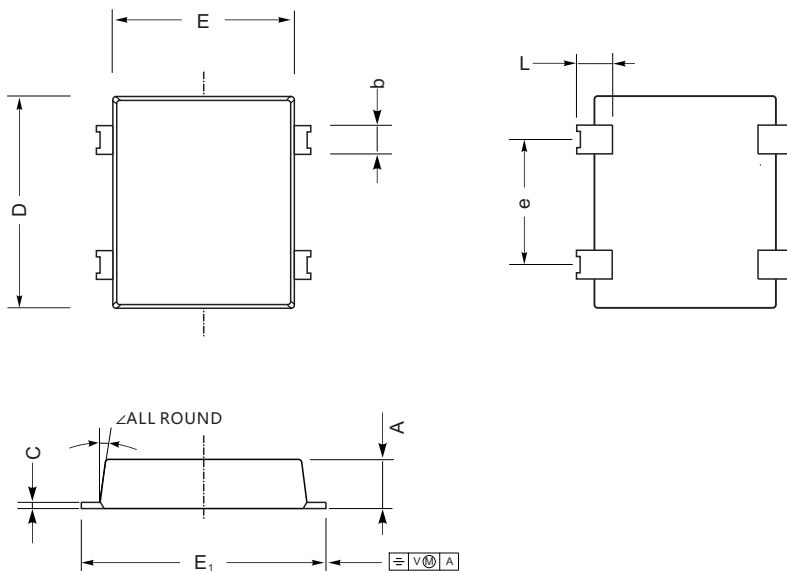


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PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

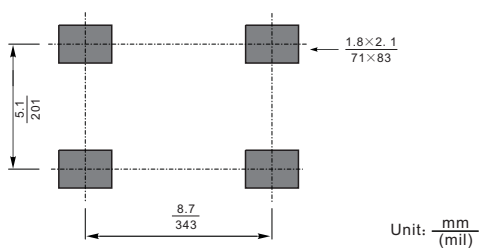
ULBF



ULBF mechanical data

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



Unit: $\frac{\text{mm}}{(\text{mil})}$

Marking

Type number	Marking code
SLBF6K	SLBF6K
SLBF6M	SLBF6M