

## 5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### FEATURES:

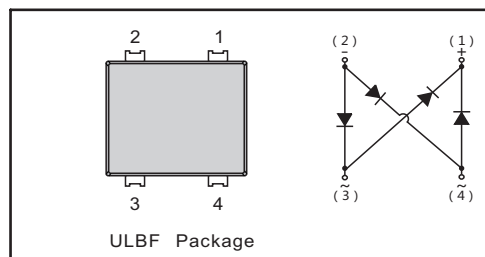
- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 5.0 A
- Fast reverse recovery time
- Designed for Surface Mount Application

### 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	SYMBOL	SLBF5M	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Average Rectified Output Current at $T_c = 100^\circ\text{C}$	$I_o$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	180	A
$I^2t$ Rating for Fusing	$I^2t$	134.46	$\text{A}^2\text{S}$
Typical Thermal Resistance <sup>(1)</sup>	$R_{\theta JA}$	60	$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	6	
	$R_{\theta JL}$	14	
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^\circ\text{C}$

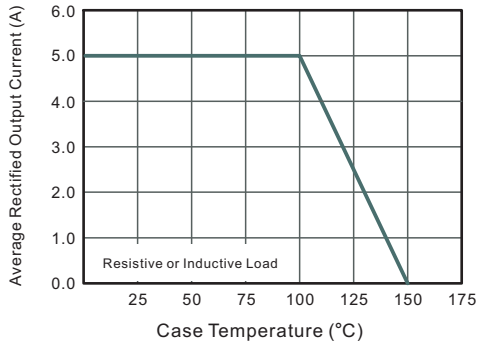
(1) Mounted on glass epoxy PC board with  $4 \times 1.5'' \times 1.5''$  (  $3.81 \times 3.81$  cm ) copper pad.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

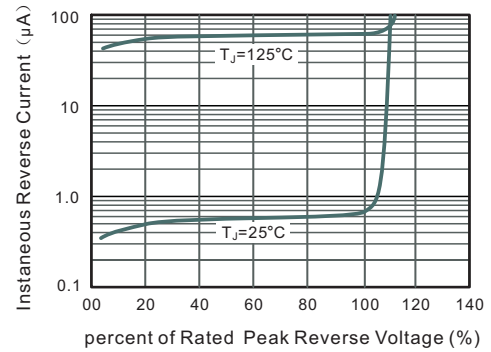
Ratings at 25°C ambient temperature unless otherwise specified

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	Units
Instantaneous forward voltage	$V_F$	$I_F = 1\text{A}$ $T_J = 25^\circ\text{C}$	—	0.83	—	V
		$I_F = 5\text{A}$ $T_J = 25^\circ\text{C}$	—	0.95	1.0	
		$I_F = 1\text{A}$ $T_J = 125^\circ\text{C}$	—	0.70	—	
		$I_F = 5\text{A}$ $T_J = 125^\circ\text{C}$	—	0.85	—	
Reverse current at DC blocking voltage	$I_R$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	— —	0.15 40	1 200	$\mu\text{A}$
Maximum Reverse Recovery Time	$t_{rr}$	Measured with $I_F = 0.5\text{A}$ , $I_R = 1\text{A}$ , $I_{rr} = 0.25\text{A}$ .	—	—	500	ns
Typical Junction Capacitance	$C_j$	$f = 1\text{MHz}$ , $V_R = 4\text{V DC}$ $T_j = 25^\circ\text{C}$	—	60	—	pF

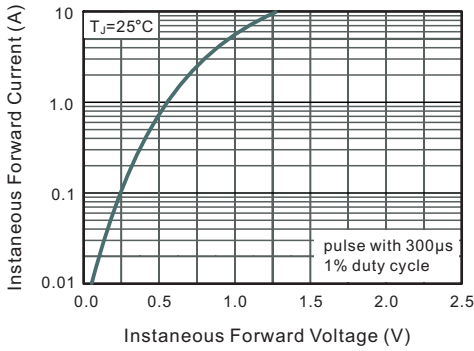
**Fig.1 Average Rectified Output Current Derating Curve**



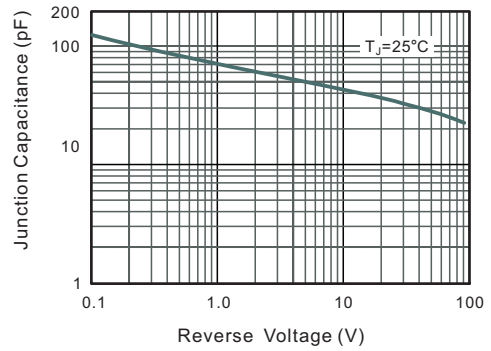
**Fig.2 Typical Reverse Characteristics**



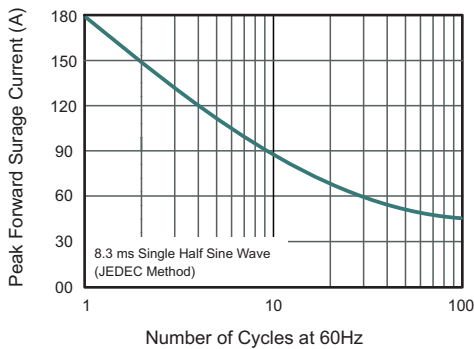
**Fig.3 Typical Instantaneous Forward Characteristics**



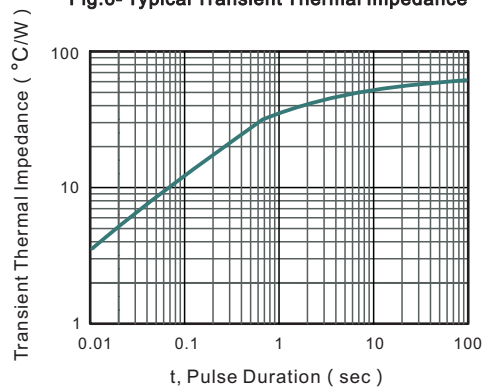
**Fig.4 Typical Junction Capacitance**



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



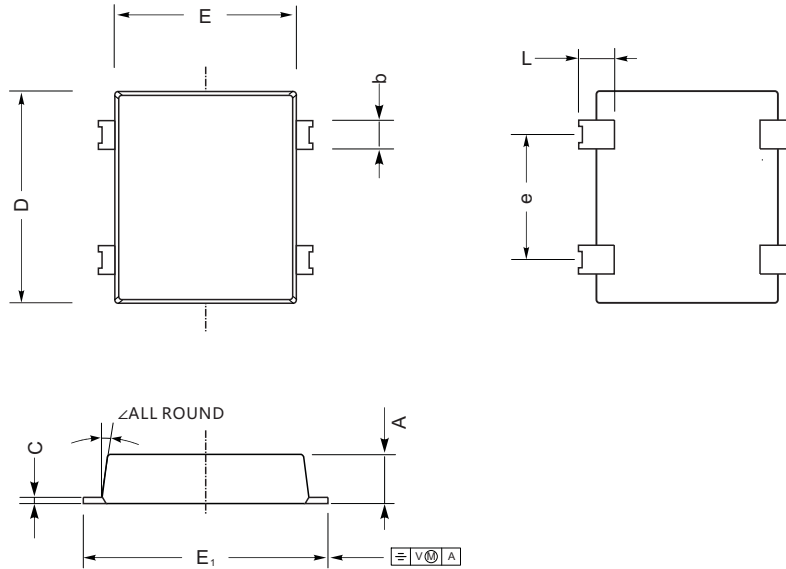
**Fig.6- Typical Transient Thermal Impedance**



## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

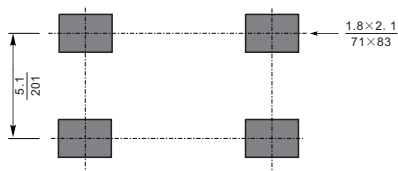
ULBF



ULBF mechanical data

UNIT		A	C	D	E	E <sub>1</sub>	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
SLBF5M	SLBF5M

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)