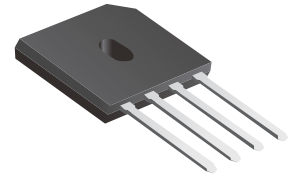


10A Ultrafast Recovery Bridge Rectifiers

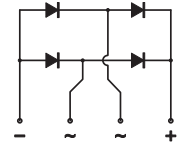
Features

- Ultrafast recovery
- Reverse Voltage - 1000 V
- Forward Current - 10 A
- High Surge Forward Current Capability
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case: GBU
- Epoxy meets UL 94V-0 flammability rating
- Terminals: Pure tin plated leads, solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test
- Polarity: As marked on body



Ordering Information

Part Number	Shipping	Packing Type
LTGR10100U	350PCS/Box	Box

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.
 For Capacitive load derate current by 20%.

Parameter	Symbol	LTGR10100U	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward	I_{AV}	10	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	150	A
I^2t Rating for Fusing ($T < 8.3ms$)	I^2t	93	A ² S
Maximum Forward Voltage at 5.0 A	V_F	1.45	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5	μA
$T_a=25^\circ C$ $T_a=100^\circ C$		100	
Typical Junction Capacitance (Note1)	C_j	100	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	22	$^\circ C/W$
	$R_{\theta JC}$	2	
Reverse Recovery Time (Note3)	trr	100	nS
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^\circ C$

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

(2) Products installed on the PCB, with heat sink

(3) $I_F=0.5A, I_R=1A, I_{RR}=0.25A$



Characteristics Curves (TA=25°C Unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

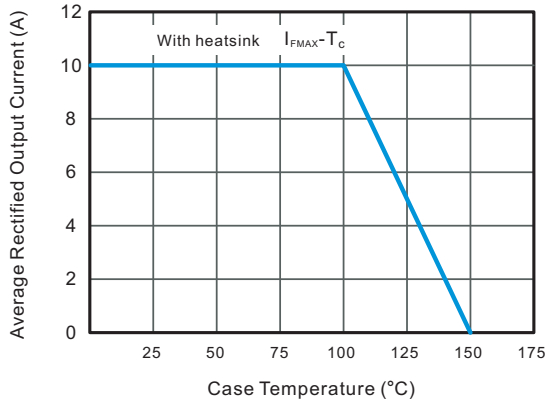


Fig.2 Typical Reverse Characteristics

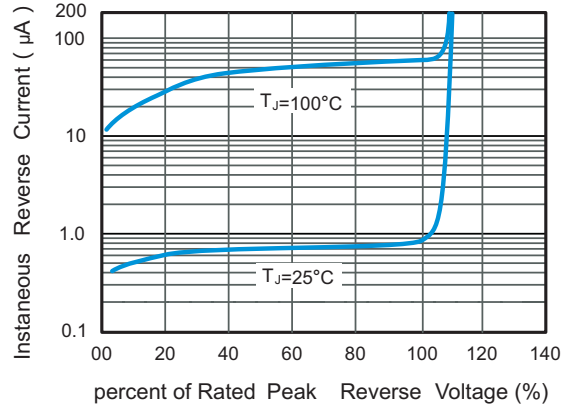


Fig.3 Typical Instantaneous Forward Characteristics

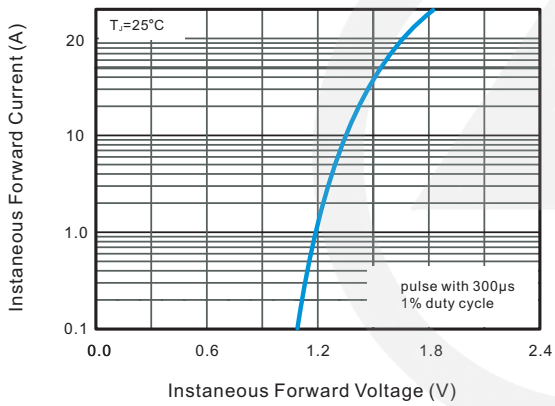
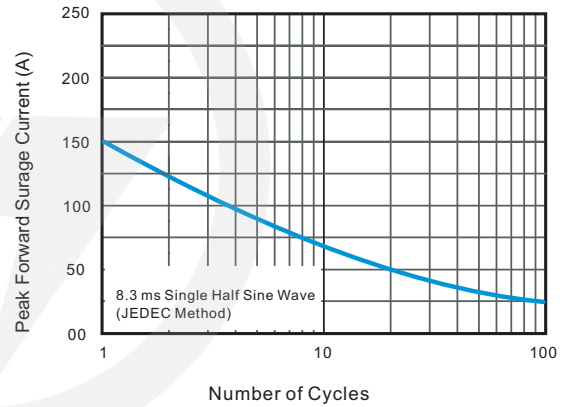
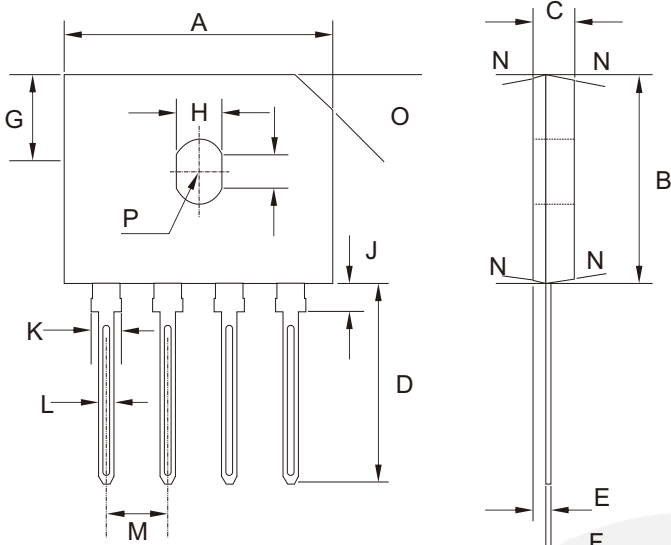


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



GBU Package Outline



Symbol	Dimensions In Millimeters	
	Min	Max
A	21.80	22.30
B	18.30	18.80
C	3.30	3.56
D	17.50	18.00
E	0.76	1.00
F	0.46	0.56
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	1.85	2.75
K	1.95	2.35
L	1.02	1.27
M	4.83	5.33
N	7°TYP.	
O	3.2x45°	
P	1.90	

Important Notice and Disclaimer

Leading-Tech reverses the right to make changes to this document and its products and specifications at any time without notice.

Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Leading-Tech makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, not does Leading-Tech assume any liability for application assistance or customer product design.

Leading-Tech does not warrant or accept any liability with products which are purchase or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Leading-Tech.

Leading-Tech products are not authorized for use as critical components in life support devices or systems without express written approval of Leading-tech.

Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision Content	Revision Reason	Revision Person	Note
01	2024.05.15	2024.05.15	3.0	New file	/	Ding	
02	2025.12.10	2025.12.10	3.1	Update packaging information	/	Ding	