


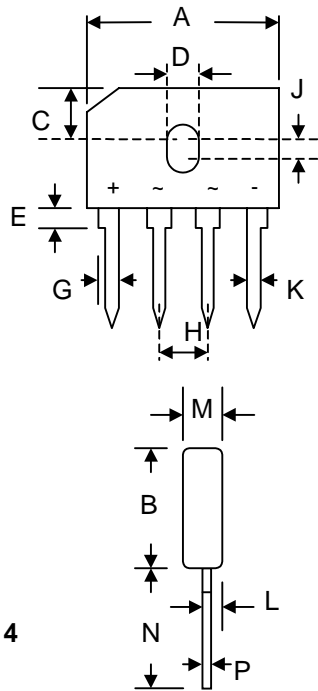
## 6.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
-  Recognized File # E157705

### Mechanical Data

- Case: GBU, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 10 cm·kg (8.8 in·lbs) Max.
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



GBU		
Dim	Min	Max
A	21.80	22.30
B	18.30	18.80
C	7.40	7.90
D	3.50	4.10
E	1.52	2.03
G	2.16	2.54
H	4.83	5.33
J	1.65	2.16
K	1.02	1.27
L	0.76	1.02
M	3.30	3.56
N	17.50	18.00
P	0.45	0.75
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$ (Note 1)	$I_O$	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	175							A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	127							$\text{A}^2\text{s}$
Forward Voltage per leg @ $I_F = 3.0\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	7.4							$^\circ\text{C/W}$
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JC}$	2.2							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: 1. Mounted on 65 x 35 x 1.5mm Al. plate.  
2. Mounted on PCB at 9.5mm lead length with 12mm<sup>2</sup> copper pad.

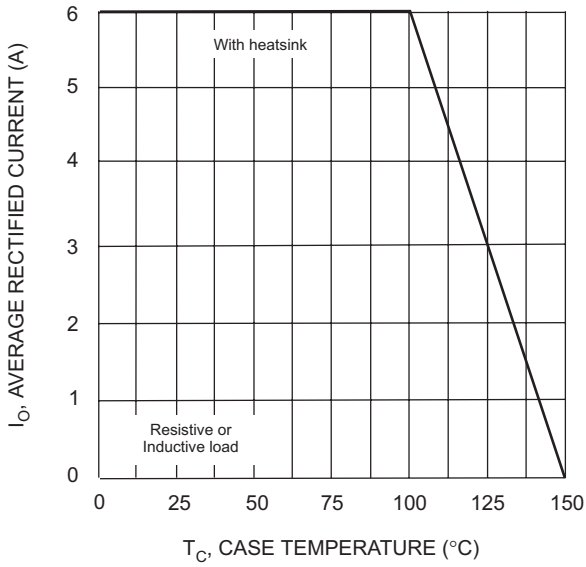


Fig. 1 Forward Current Derating Curve

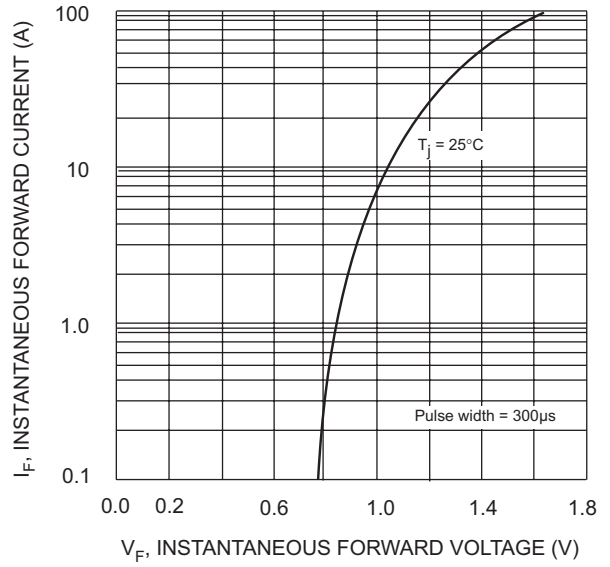


Fig. 2 Typical Forward Characteristics, per element

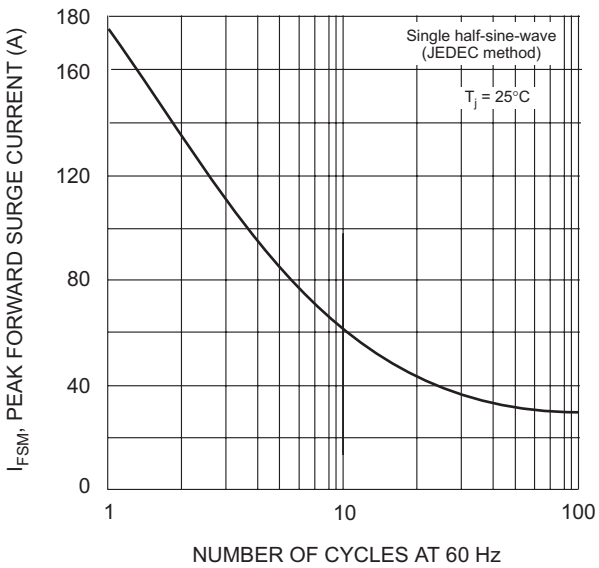


Fig. 3 Maximum Non-Repetitive Surge Current

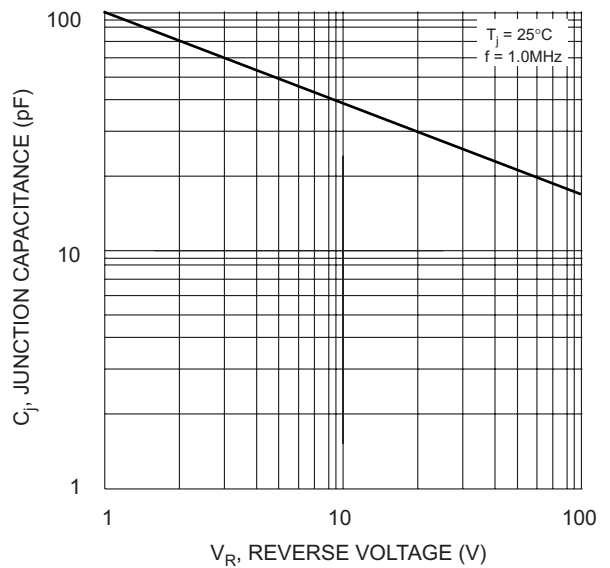
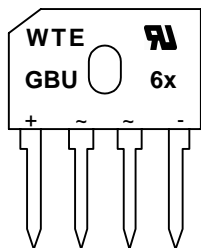


Fig. 4 Typical Junction Capacitance

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 GBU6x = Device Number  
 x = A, B, D, G, J, K or M  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
340 x 337 x 45	1,000	375 x 360 x 213	4,000	16.5

**Note:** 1. Paper box, white or brown color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBU6A	SIL Bridge	1000 Units/Box
GBU6B	SIL Bridge	1000 Units/Box
GBU6D	SIL Bridge	1000 Units/Box
GBU6G	SIL Bridge	1000 Units/Box
GBU6J	SIL Bridge	1000 Units/Box
GBU6K	SIL Bridge	1000 Units/Box
GBU6M	SIL Bridge	1000 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBU6A-LF.**

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