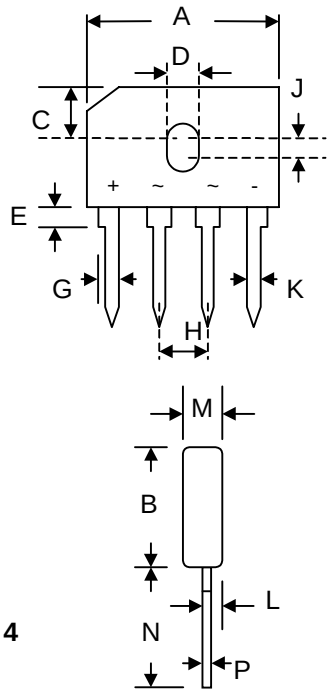
GBU4A – GBU4M

4.0A 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



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		

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**

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	GBU4M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_C = 100°C (Note 1)	I_O	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93							A^2s
Forward Voltage per leg @I_F = 2.0A	V_{FM}	1.0							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_R	5.0 500							µA
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	22							°C/W
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JC}$	4.2							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							°C

Note: 1. Mounted on 40 x 40 x 15mm Al. plate.
2. Mounted on PCB at 9.5mm lead length with 12mm^2 copper pad.

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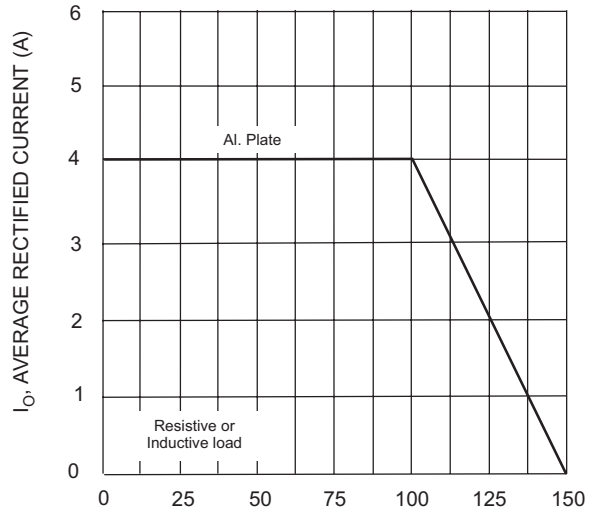


Fig. 1 Forward Current Derating Curve

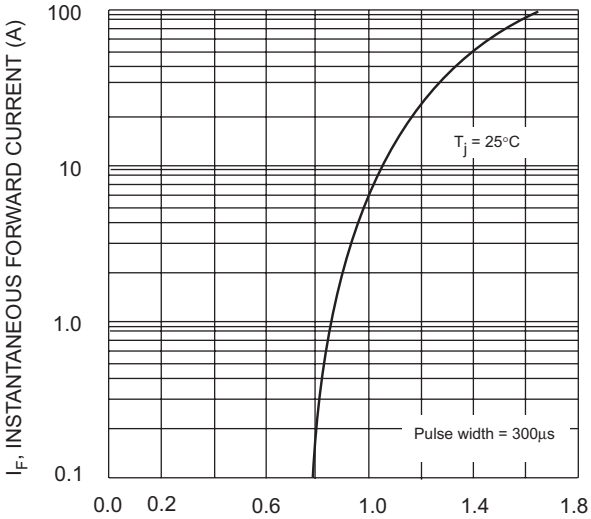


Fig. 2 Typical Fwd Characteristics, per element

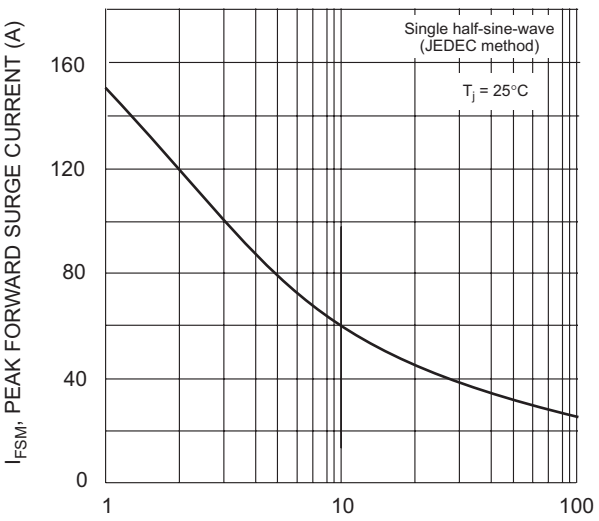


Fig. 3 Maximum Non-Repetitive Surge Current

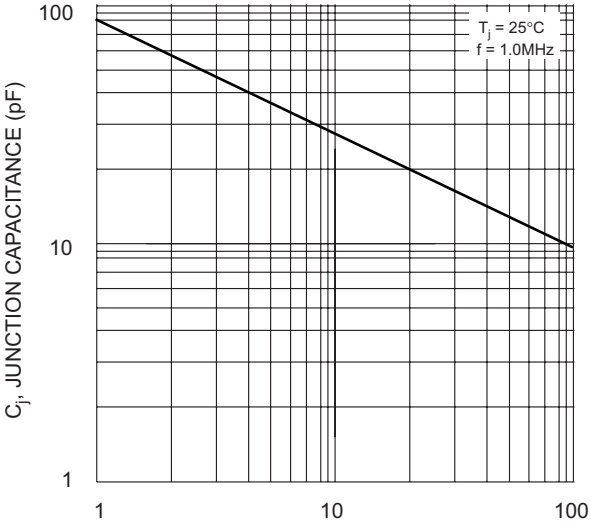
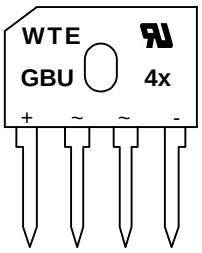


Fig. 4 Typical Junction Capacitance

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MARKING INFORMATION



WTE	= Manufacturer's Logo
GBU4x	= 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.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBU4A	SIL Bridge	1000 Units/Box
GBU4B	SIL Bridge	1000 Units/Box
GBU4D	SIL Bridge	1000 Units/Box
GBU4G	SIL Bridge	1000 Units/Box
GBU4J	SIL Bridge	1000 Units/Box
GBU4K	SIL Bridge	1000 Units/Box
GBU4M	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, GBU4A-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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