

# GBU10A – GBU10M

# **10A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER**

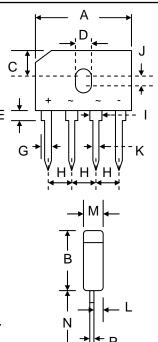


# **Features**

- **Glass Passivated Die Construction**
- Low Forward Voltage Drop
- **High Current Capability**
- **High Reliability**
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Plastic Material Has UL Flammability Classification 94V-0

# **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: 0.8 N.m Max.
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4



GBU					
Dim	Min	Max			
Α	21.80	22.30			
В	18.30	18.80			
С	7.40	7.90			
D	3.50	4.10			
Е	1.52	2.03			
G	2.16	2.54			
н	4.83	5.33			
I	1.65	2.03			
J	1.65	2.16			
к	1.02	1.27			
L	1.90	2.16			
М	3.30	3.56			
Ν	17.50	18.00			
Р	0.45	0.68			
All Dimensions in mm					

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

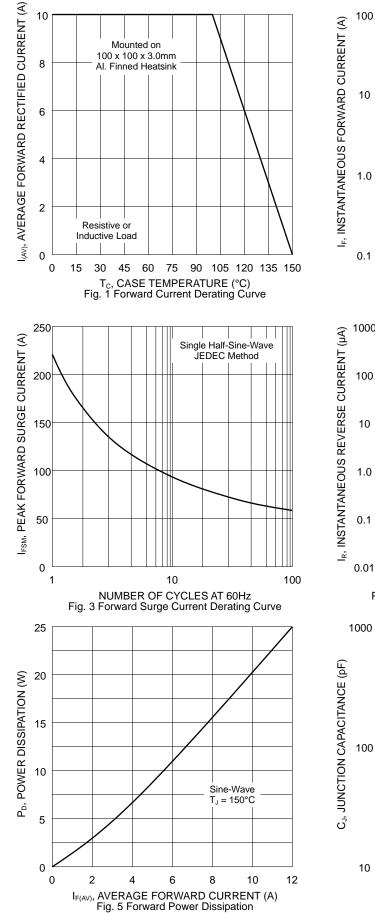
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

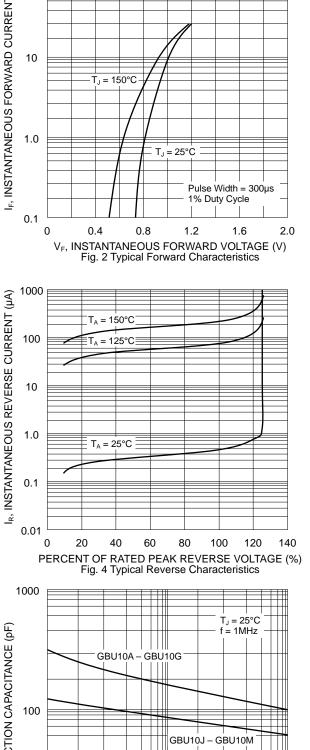
Characteristic	Symbol	GBU 10A	GBU 10B	GBU 10D	GBU 10G	GBU 10J	GBU 10K	GBU 10M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current $@T_c = 100^{\circ}C$ (Note 1)	lo	10					А		
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	220					A		
Forward Voltage per leg $@I_F = 5.0A$	Vfm	1.05				V			
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$	Irm	5.0 500						μA	
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	200						A <sup>2</sup> s	
Typical Junction Capacitance (Note 2)	Сл	211 94						pF	
Thermal Resistance Junction to Ambient (Note 3) Thermal Resistance Junction to Case (Note 1)	R JA R JC	20 2.2						°C/W	
RMS Isolation Voltage Terminals to Case, t = 1min	Viso	1500					V		
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150						°C	

Note: 1. Mounted on 100 x 100 x 3.0mm thick AI. heatsink.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Mounted on PCB with 12 x 12mm copper pads and measured at lead length 9.5mm from case.

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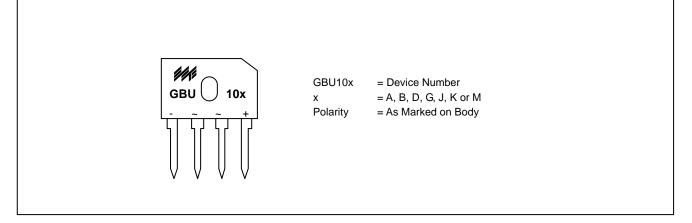




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### MARKING INFORMATION



# PACKAGING INFORMATION

#### BULK

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	(KG)
470 x 42 x 7	20	495 x 150 x 140	1,000	520 x 320 x 170	2,000	14.0

Note: 1. Anti-static tube, water clear color.



Product No.	Package Type	Shipping Quantity			
GBU10A	SIL Bridge	20 Units/Tube			
GBU10B	SIL Bridge	20 Units/Tube			
GBU10D	SIL Bridge	20 Units/Tube			
GBU10G	SIL Bridge	20 Units/Tube			
GBU10J	SIL Bridge	20 Units/Tube			
GBU10K	SIL Bridge	20 Units/Tube			
GBU10M	SIL Bridge	20 Units/Tube			

#### **ORDERING INFORMATION**

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

 To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBU10A-LF.

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Won-Top Electronics Co., Ltd. No. 44 Yu Kang North 3rd Road,

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung 806, Taiwan Phone: 886-7-822-5408 or 886-7-822-5410 Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com

