



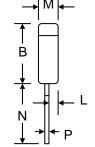
## 12A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER



## **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

# G



GBU					
Dim	Min	Max			
Α	21.80	22.30			
В	18.30	18.80			
С	7.40	7.90			
D	3.50	4.10			
E	1.52	2.03			
G	2.16	2.54			
Н	4.83	5.33			
ı	1.65	2.03			
J	1.65	2.16			
K	1.02	1.27			
L	1.90	2.16			
М	3.30	3.56			
N	17.50	18.00			
Р	0.45	0.68			
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: 0.8 N.m Max.

Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4

# 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%.

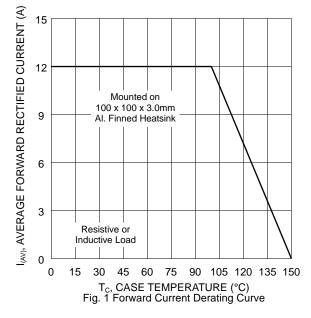
Characteristic	Symbol	GBU 12A	GBU 12B	GBU 12D	GBU 12G	GBU 12J	GBU 12K	GBU 12M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>C</sub> = 100°C (Note 1)	lo				12				Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM				220				А
Forward Voltage per leg @I <sub>F</sub> = 6.0A	VFM	1.05				V			
	lгм			5.0 500				μΑ	
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)	Cı	50						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						٧	
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150					°C		

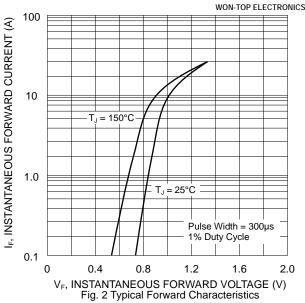
Note: 1. Mounted on 100 x 100 x 3.0mm thick Al. heatsink.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Mounted on PCB with 12 x 12mm copper pads and measured at lead length 9.5mm from case.

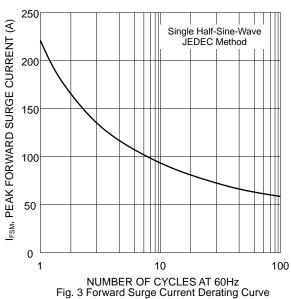
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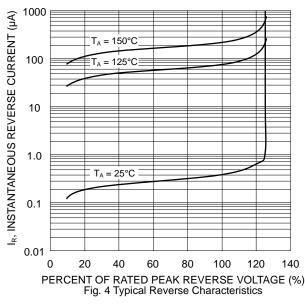
# GBU12A - GBU12M

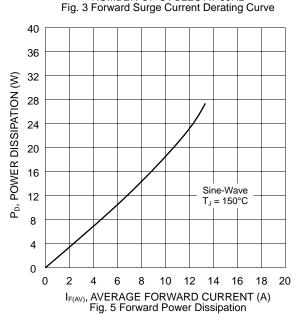


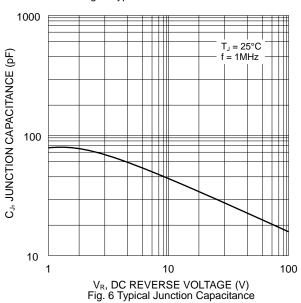






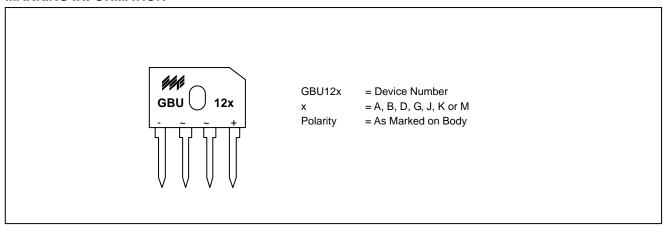








# **MARKING INFORMATION**



## **PACKAGING INFORMATION**

## **BULK**

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
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.



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity		
GBU12A	SIL Bridge	20 Units/Tube		
GBU12B	SIL Bridge	20 Units/Tube		
GBU12D	SIL Bridge	20 Units/Tube		
GBU12G	SIL Bridge	20 Units/Tube		
GBU12J	SIL Bridge	20 Units/Tube		
GBU12K	SIL Bridge	20 Units/Tube		
GBU12M	SIL Bridge	20 Units/Tube		

- 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, GBU12A-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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