

GBU6005 - GBU610

6.0A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500 VRMS
- Low Reverse Leakage Current
- Surge Overload Rating to 175A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material: UL Flammability Classification Rating 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

Mechanical Data

· Case: Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

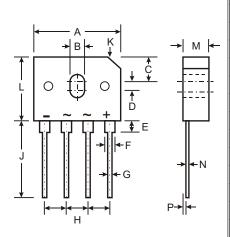
Polarity: Marked on Body

• Mounting: Through Hole for #6 Screw

• Mounting Torque: 5.0 Inch-pounds Maximum

Marking: Date Code and Type Number

Weight: 6.6 grams (approx.)



GBU							
Dim	Min	Max					
Α	21.8	22.3					
В	3.5	4.1					
С	7.4	7.9					
D	1.65	2.16					
E	2.25	2.75					
G	1.02	1.27					
Н	4.83	5.33					
J	17.5	18.0					
K	3.2 >	3.2 X 45°					
L	18.3	18.8					
М	3.30	3.56					
N	0.46	0.56					
Р	0.76	1.0					
All Dimensions in mm							

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

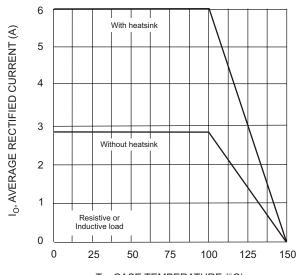
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	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 (Note 1) @ T _C = 100°C		6.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		175						А	
Forward Voltage (per element) @ I _F = 3.0A	V _{FM}	1.0					V		
Peak Reverse Current $@T_C = 25^{\circ}C$ at Rated DC Blocking Voltage $@T_C = 125^{\circ}C$		5.0 500						μА	
I ² t Rating for Fusing (t < 8.3ms) (Note 2)		127							A ² s
Typical Junction Capacitance per Element (Note 3)		100							pF
Typical Thermal Resistance Junction to Case (Note 1)		2.2						°C/W	
Operating and Storage Temperature Range		-55 to +150						°C	

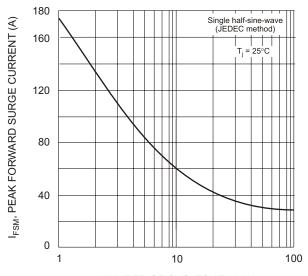
Notes: 1. Unit mounted on 50mm x 50mm x 1.6mm copper plate heatsink.

- 2. Non-repetitive, for t > 1.0ms and < 8.3ms.
- 3. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.





 $\mathsf{T}_\mathsf{C},$ CASE TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Non-Repetitive Surge Current

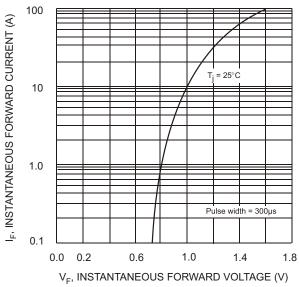


Fig. 2 Typical Forward Characteristics

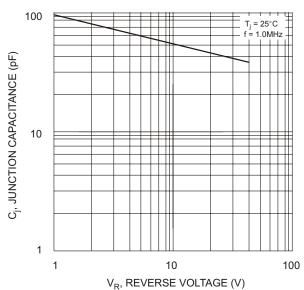


Fig. 4 Typical Junction Capacitance