

# GBU6005 - GBU610

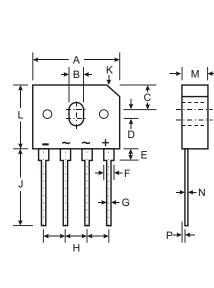
## 6.0A GLASS PASSIVATED BRIDGE RECTIFIER

#### 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						
к	3.2 >	<b>〈</b> 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<sub>A</sub> = 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 <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_C = 100^{\circ}C$		6.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		175						A	
Forward Voltage (per element) @ I <sub>F</sub> = 3.0A		1.0							V
Peak Reverse Current $@T_C = 25^{\circ}C$ at Rated DC Blocking Voltage $@T_C = 125^{\circ}C$		5.0 500						μA	
I <sup>2</sup> t Rating for Fusing (t < 8.3ms) (Note 2)		127							A <sup>2</sup> 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.



