



# GBU10005G THRU GBU1010G

## BRIDGE RECTIFIERS

### FEATURES

- UL Recognized File #E469616
- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

### MECHANICAL DATA

Case: Molded plastic, GBU

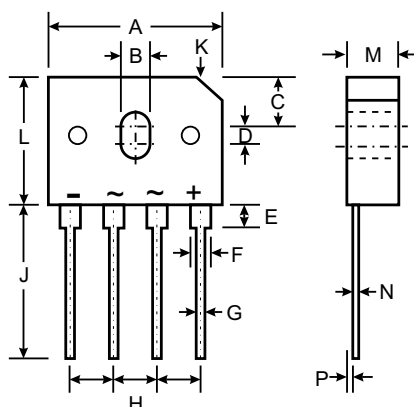
Epoxy: UL 94V-O rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

Weight: 0.15ounce, 4.0gram

### GBU



Dim	Min	Max
A	21.8	22.3
B	3.5	4.1
C	7.4	7.9
D	1.65	2.16
E	2.25	2.75
F	2.05	2.3
G	1.02	1.27
H	4.83	5.33
J	17.5	18.0
K	4.2 X 45°	
L	18.3	18.8
M	3.30	3.56
N	0.46	0.56
P	0.76	1.0

Dimensions in millimeters

### Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU10005G	GBU1001G	GBU1002G	GBU1004G	GBU1006G	GBU1008G	GBU1010G	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>								
DC Blocking Voltage	V <sub>DC</sub>								
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T <sub>C</sub> =90℃	I <sub>F(AV)</sub>	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	220							A
Forward Voltage per element @I <sub>F</sub> =5A @I <sub>F</sub> =10A	V <sub>FM</sub>	1.0 1.1							V
Peak Reverse Current @T <sub>A</sub> =25℃ At Rated DC Blocking Voltage @T <sub>A</sub> =125℃	I <sub>R</sub>	5.0 500							uA
I <sup>2</sup> t Rating for fusing (t <8.3ms)	I <sup>2</sup> t	166							A <sup>2</sup> s
Typical Junction Capacitance per leg (Note 2)	C <sub>J</sub>	70							pF
Typical Thermal Resistance per leg (Note 3)	R <sub>θJA</sub>	30.9							℃/W
	R <sub>θJL</sub>	7.3							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55to+150							℃

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.



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**Characteristic Curves** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

