

## GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **8.0** Amperes

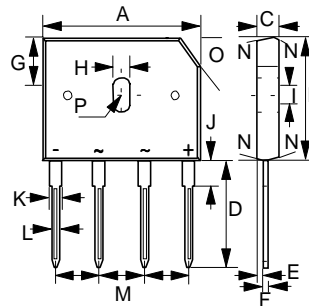
### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
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### MECHANICAL DATA

- Polarity : Symbols molded on body
- Weight : 0.15 ounces, 4.0 grams
- Mounting position : Any

### GBU



GBU		
DIM.	MIN.	MAX.
A	21.80	22.30
B	18.30	18.80
C	3.30	3.56
D	17.50	18.00
E	0.76	1.00
F	0.46	0.56
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	2.25	2.75
K	1.95	2.35
L	1.02	1.27
M	4.83	5.33
N	7.0° TYPICAL	
O	3.2 x 45°	
P	1.90 RADIUS	

All Dimensions in millimeter

### 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%

CHARACTERISTICS	SYMBOL	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward (with heatsink Note 2) Rectified Current @T <sub>c</sub> =100°C (without heatsink)	I <sub>(AV)</sub>	8.0						3.2		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	200								A
Maximum forward Voltage at 4.0A DC	V <sub>F</sub>	1.0								V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C	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 element (Note 1)	C <sub>J</sub>	60								pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>	2.2								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

Http: //www.gmsemi.com

# RATING AND CHARACTERISTIC CURVES

## GBU8005 thru GBU810

