



# GBU801 THRU GBU807

Single Phase 8.0 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
8.0 Amperes

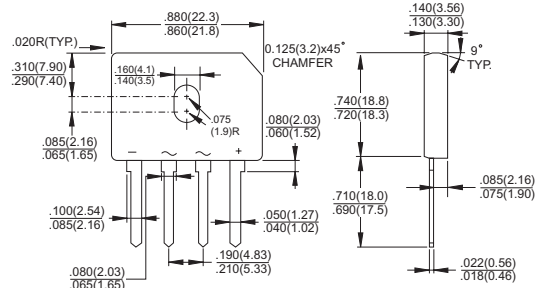
## Features

- ✧ UL Recognized File # E-96005
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Surge overload rating to 200 amperes peak
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths.

## Mechanical Data

- ✧ Case: Molded plastic body.
- ✧ Terminals: Plated leads solderable per MIL-STD-750, Method 2026.
- ✧ Weight: 0.3 ounce, 8.0 grams
- ✧ Mounting torque: 5 in. lb. Max.

## GBU



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	GBU 801	GBU 802	GBU 803	GBU 804	GBU 805	GBU 806	GBU 807	Units
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 Rectified Current @ T <sub>C</sub> = 100°C	I <sub>(AV)</sub>	8.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	200							A
Maximum Instantaneous Forward Voltage @ 8.0A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 500							µA µA
Rating for fusing (t<8.3ms)	I <sup>2</sup> t	166							A <sup>2</sup> sec
Typical Thermal Resistance Per Leg (Note 1) (Note 2)	R θ <sub>JA</sub> R θ <sub>JC</sub>	21.0 2.0							°C/W
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	211					94		pF
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C

Notes 1: Units Mounted In Free Air No Heat Sink On PCB 0.5x0.5 " (12x12mm) Copper Pads, 0.375"(9.5mm) Lead Length.

2: Units Case Mounted On 4" x 6" x 0.25" AL. Plate Heat Sink.

3. Measured at 1.0 MHZ and applied Reverse Voltage of 4.0V.

## RATINGS AND CHARACTERISTIC CURVES (GBU801 THRU GBU807)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

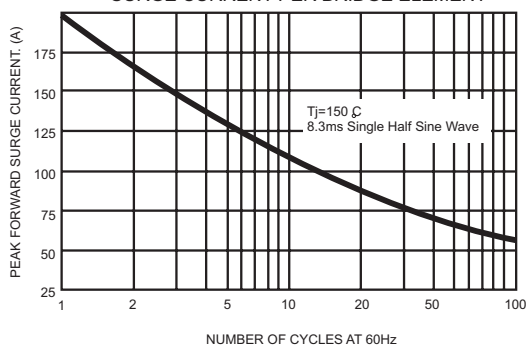


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

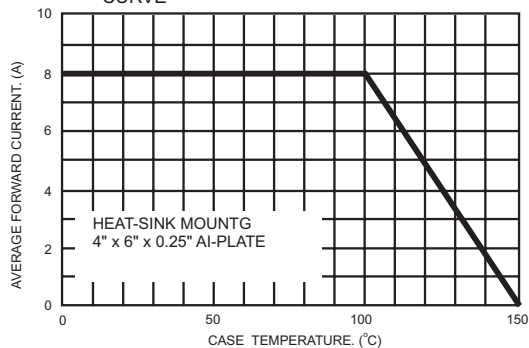


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

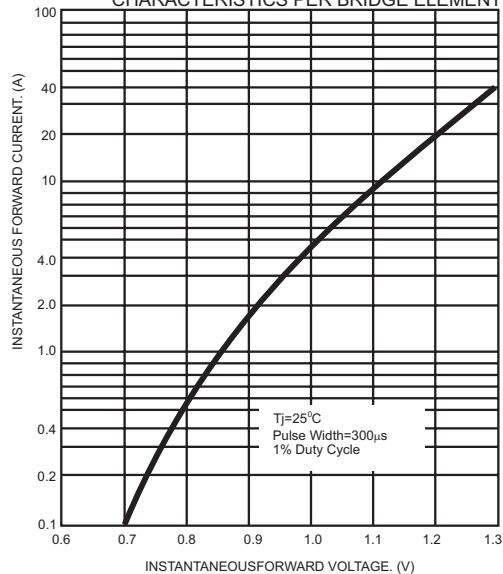


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

