



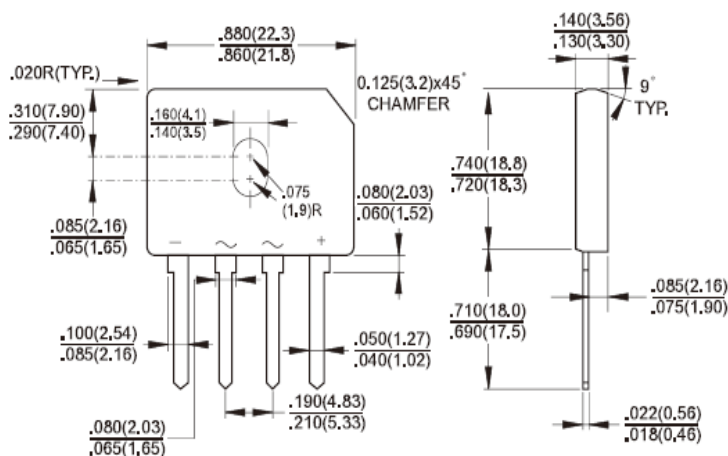
# GBU801 - GBU807

Single Phase 8.0AMPS. Glass Passivated Bridge Rectifiers

## GBU

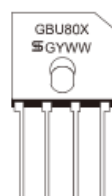
### Features

- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength of 1500 Vrms
- ✧ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ✧ Typical IR less than 0.1uA
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs.,(2.3kg) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



### Dimensions in inches and (millimeters)

#### Marking Diagram



- GBU80X = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

### Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ✧ Weight: 4 grams
- ✧ Mounting Torque : 5 in. lb. max

### 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	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TC=100°C	$I_{F(AV)}$	8							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	200							A
Rating of fusing ( t<8.3ms)	$I^2T$	166							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (Note 1) @ 4 A @ 8 A	$V_F$	1.0 1.1							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Block Voltage @ T <sub>A</sub> =125°C	$I_R$	5 500							uA uA
Typical Junction Capacitance per leg (Note 2)	C <sub>j</sub>	211				94			pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub> R <sub>θJC</sub>	21 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

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse bias of 4.0V DC

Note 3 : Unit case mounted on 4" x 6" x 0.25" Al plate heat sink

## RATINGS AND CHARACTERISTIC CURVES (GBU801 THRU GBU807)

FIG. 1- MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

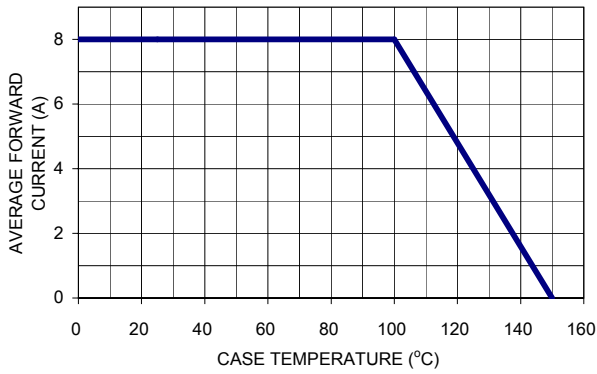


FIG. 2- MAXIMUM FORWARD SURGE CURRENT PER LEG

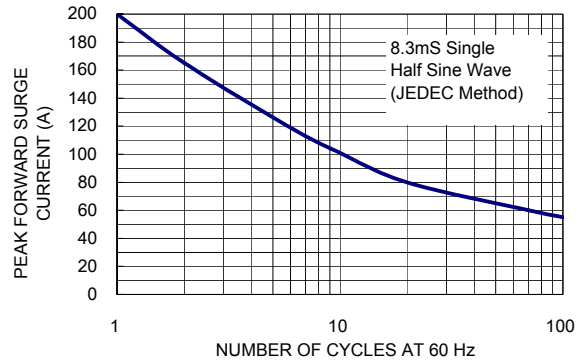


FIG. 3- TYPICAL REVERSE CHARACTERISTICS PER LEG

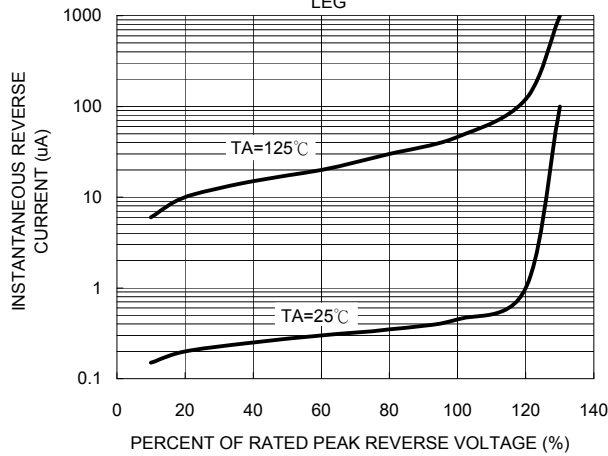


FIG. 4- TYPICAL FORWARD CHARACTERISTICS PER LEG

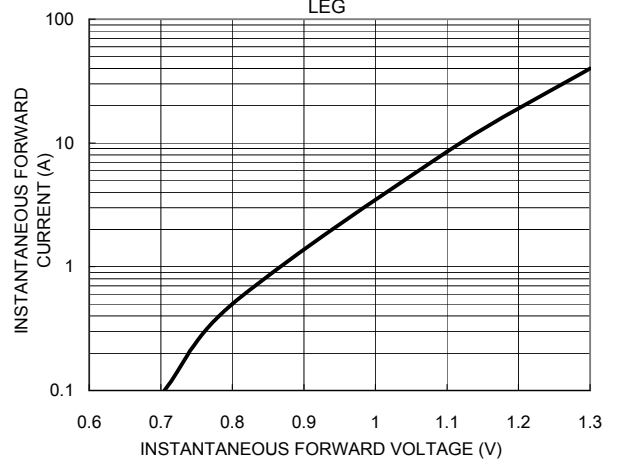


FIG. 5- TYPICAL JUNCTION CAPACITANCE

