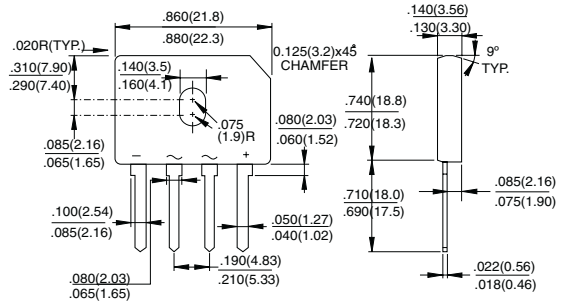
8.0 Amp. Glass Passivated Bridge Rectifiers

Dimensions in mm. **GBU**



Voltage	Current
400 V to 1000 V	8.0 A

- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit board
- Reliable low cost construction
- High case dielectric strength of 1500VRMS
- High temperature soldering guaranteed: 260 °C / 10 seconds / .375", (9.5mm) lead lengths at 5 lbs., (2.3Kg) tension
- Surge overload rating to 200 amperes peak

MECHANICAL DATA

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

Maximum Ratings and Electrical Characteristics at 25 ºC

		GBU 804G	GBU 805G	GBU 806G	GBU 807G
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	400	600	800	1000
$I_{F(AV)}$	Maximum Average Forward Rectified Current @ T_C = 60 °C (Note 1) @ TA = 25 °C (Note 2)	8.0 A 3.0 A			
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	200 A			
Cj	Typical Junction capacitance per leg (Note 3)	211pF	94pF		
T_j	Operating Temperature Range	-55 to +150 °C			
T_{stg}	Storage Temperature Range	-55 to +150 °C			

Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage drop per leg @ = 4.0 A	1.0 V
I_R	Maximum DC Reverse Current @ T_A = 25 °C at Rated DC Blocking Voltage @ T_A =125°C	5.0 µA 500 µA
$R_{th\ (j-a)}$ $R_{th\ (j-c)}$	Typical Thermal Resistance per leg (Note1) (Note 2)	21 °C/W 4.0 °C/W

Notes: 1. Mounted on P.C.B. with 0.5" x 0.5" (13mm x 13mm) Copper Pads and 0.375" 9.5mm) Lead Lenght.
2. Mounten on Al. Plate of 2" x 3" x 0.25" Al-Plate Heatsink.
3. Measured at 1.0MHZ and Applied Reverse Voltage of 4.0 Volts.

Rating And Charasteristic Curves

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

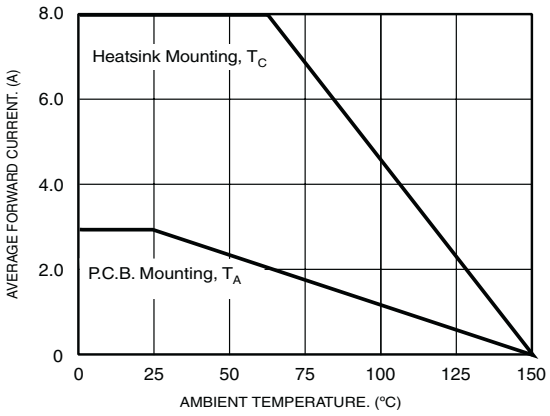


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

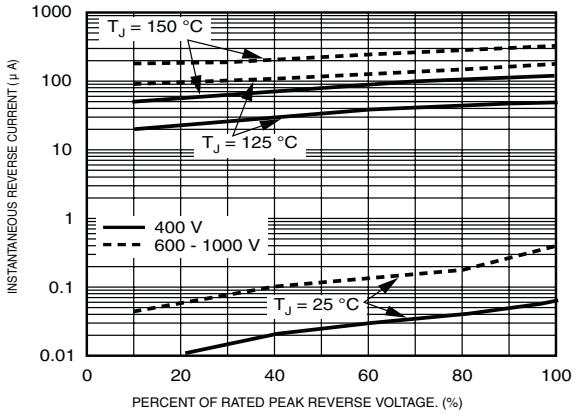


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

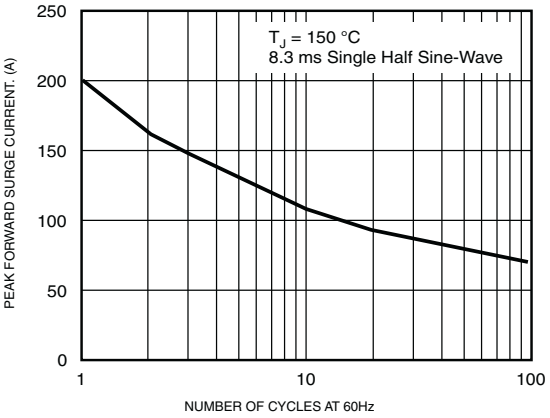


FIG.4- TYPICAL JUNCTION CAPACITANCE

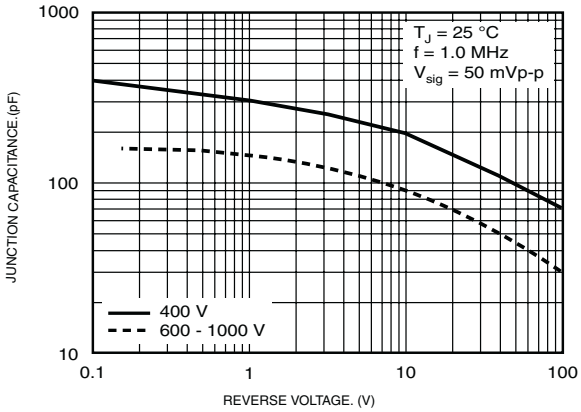
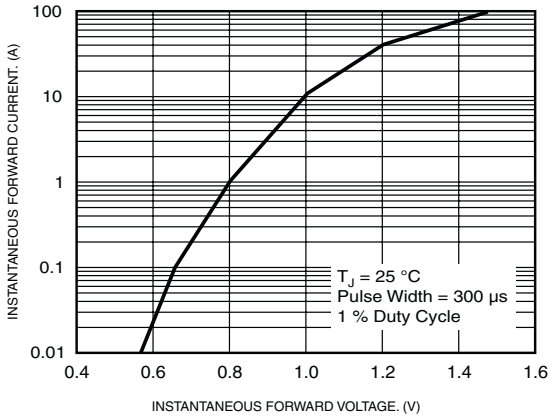



FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT