

GBU801 THRU GBU807

Single Phase 8.0 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range
50 to 1000 Volts
Current
8.0 Amperes

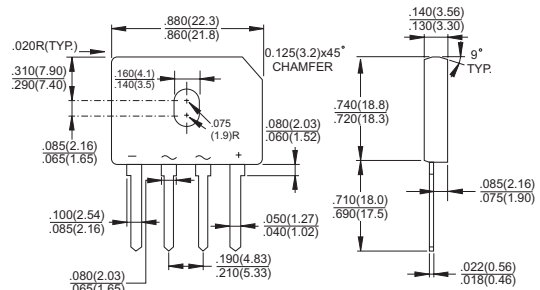
Features

- ✧ 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 _{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 @T _C = 100°C	I _(AV)	8.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	200							A
Maximum Instantaneous Forward Voltage @ 8.0A	V _F	1.0							V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	5.0 500							µA µA
Rating for fusing (t<8.3ms)	I ² t	166							A ² sec
Typical Thermal Resistance Per Leg (Note 1) (Note 2)	Rθ _{JA} Rθ _{JC}	21.0 2.0							°C/W
Typical Junction Capacitance (Note 3)	C _j	211				94			pF
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-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

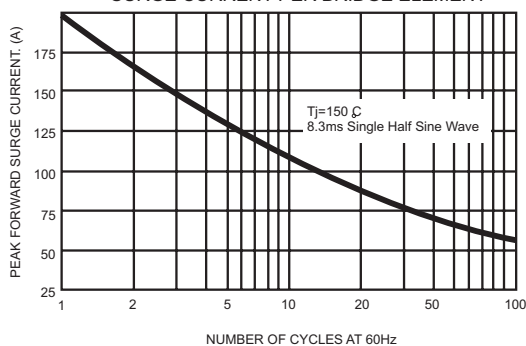


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

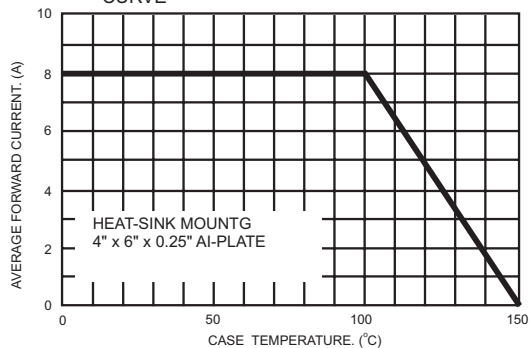


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

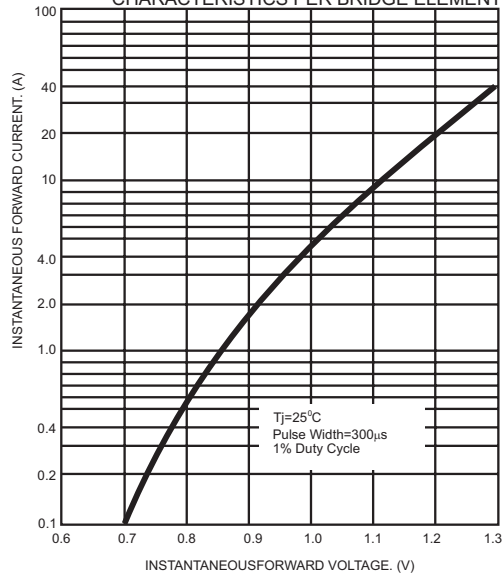


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

