

GBU401 THRU GBU407

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range 50 to 1000 Volts Current

Features

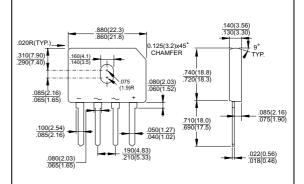
- UL Recognized File # E-96005
- Ideal for printed circuit board
- Reliable low cost construction
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Surge overload rating to 150 amperes peak
- High temperature soldering guaranteed: 250oC / 10 seconds / .375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension

Mechanical Data

- \diamond Case: Molded plastic body
- Terminals: Leads solderable per MIL-STD-750, Method 2026
- Weight: 0. 3 ounce, 8.0 grams
- Mounting torque: 5 in. lbs. Max.

4.0 Amperes





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	GBU	GBU	GBU	GBU	GBU	GBU	GBU	Units
Type Number	401	402	403	404	405	406	407	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $@T_C = 100^{\circ}C$	4.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sne-wave Superimposed on Rated Load (JEDEC method)	150							Α
Maximum Instantaneous Forward Voltage @ 4.0A	1.0							V
Maximum DC Reverse Current @ T _A =25℃	5.0							uA
at Rated DC Blocking Voltage @ T _A =125℃	500							uA
Typical Thermal Resistance (Note 1) R θ JA	20							°C/W
(Note 2) R θ JC	4.0							
Typical Junction Capacitance (Note 3)	100 45						pF	
Operating Temperature Range T _J	-55 to +150							$^{\circ}$
Storage Temperature Range T _{STG}	-55 to + 150							$^{\circ}$

Notes: 1. Mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) Copper Pads and 0.375" 9.5mm) Lead

- 2. Mounted on Al. Plate of 1.6 x 1.6 x 0.06" THK (4 x 4 x 0.15cm).
- 3. Measured at 1.0MHZ and Applied Reverse Voltage of 4.0 Volts.



RATINGS AND CHARACTERISTIC CURVES (GBU401 THRU GBU407)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT PEAK FORWARD SURGE CURRENT. (A) 175 150 Tj=150°C 8.3ms Single Half Sine Way 125 100 75 50 25 2 10 20 50 5 100 NUMBER OF CYCLES AT 60Hz

FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

5

HEAT-SINK MOUNTG
1.6 x 1.6 x 0.06" THK
(4.0 x 4.0 x 0.15 cm)Al. PLATE

0

CASE TEMPERATURE. (°C)

FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

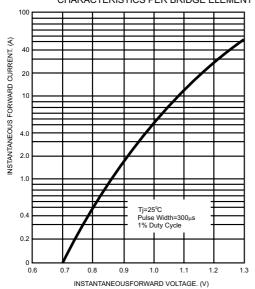


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

