



GBU401 THRU GBU407

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range
50 to 1000 Volts
Current
4.0 Amperes

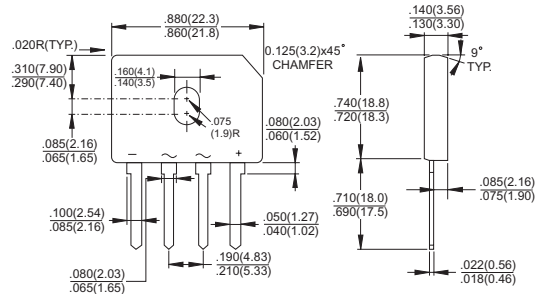
Features

- ✧ 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 150 amperes peak
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / .375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension

Mechanical Data

- ✧ 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.

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 401	GBU 402	GBU 403	GBU 404	GBU 405	GBU 406	GBU 407	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 @ $T_C = 100^\circ\text{C}$	$I_{(AV)}$	4.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150							A	
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	1.0							V	
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R	5.0 500							μA μA	
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$	20							$^\circ\text{C}/\text{W}$	
(Note 2)	$R\theta_{JC}$	4.0								
Typical Junction Capacitance (Note 3)	C_j	100				45				pF
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$	

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

2. Mounted on Al. Plate of 2" x 3" x 0.25"

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

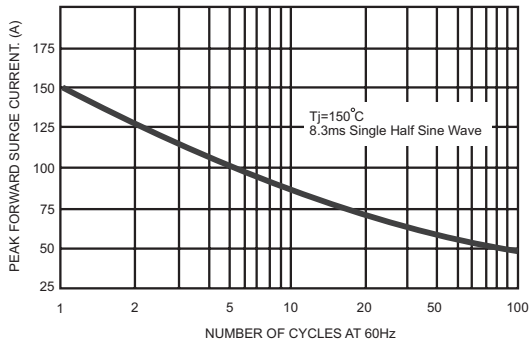


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

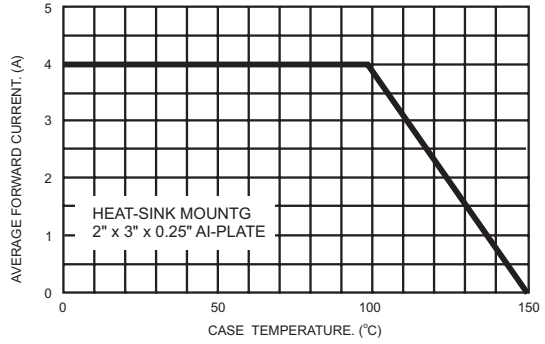


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

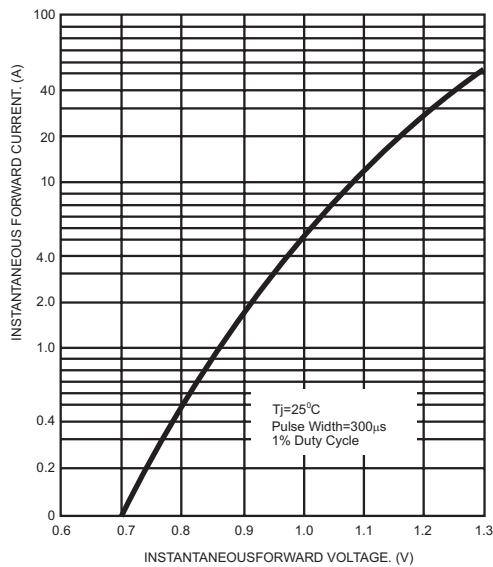


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

