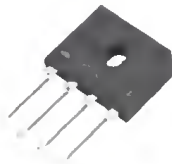


GBU601 - GBU607

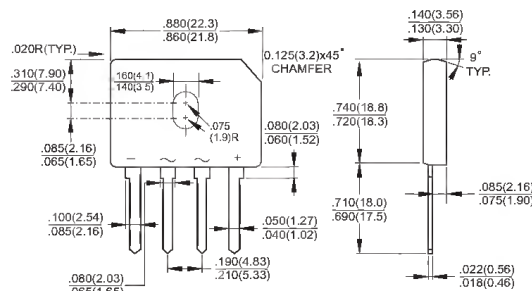
Single Phase 6.0 AMPS. Glass Passivated
Bridge Rectifiers

GBU



Features

- ✧ UL Recognized File # E-96005
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ High case dielectric strength of 1500VRMS
- ✧ Surge overload rating to 175 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: Plated leads solderable per MIL-STD-750, Method 2026.
- ✧ Weight: 0.3 ounce, 8.0 grams
- ✧ Mounting torque: 5 in. lb. max.

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 601	GBU 602	GBU 603	GBU 604	GBU 605	GBU 606	GBU 607	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 @ $T_c = 100^\circ\text{C}$	$I_{(AV)}$	6.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175							A	
Maximum Instantaneous Forward Voltage @ 3.0A @ 6.0A	V_F	1.0 1.1							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 Junction Capacitance (Note 3)	C_j	211				94			pF	
Typical Thermal Resistance (Note 1, 2)	$R_{\theta JA}$ $R_{\theta JC}$	7.0 2.0								$^\circ\text{C}/\text{W}$
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 Al. Plate Heatsink of 2" x 3" x 0.25".
 2. Bolt on Heatsink with silicone Thermal Compound for Maximum Heat Transfer with #6 Screws.
 3. Measured at 1.0 MHZ and Applied Reverse Voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES (GBU601 THRU GBU607)

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

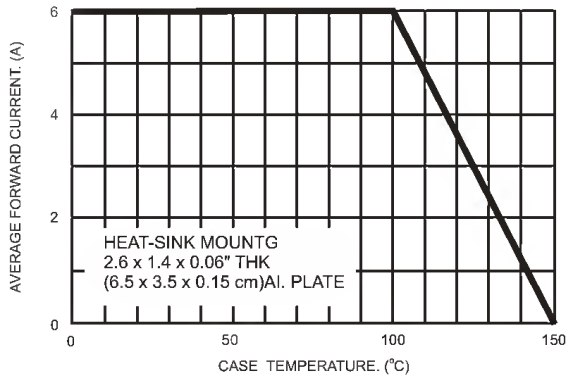


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

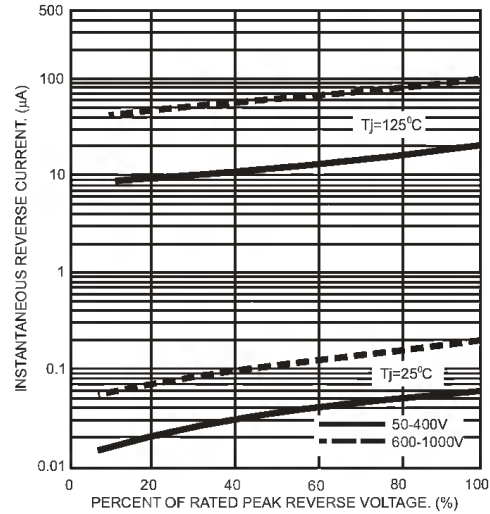


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

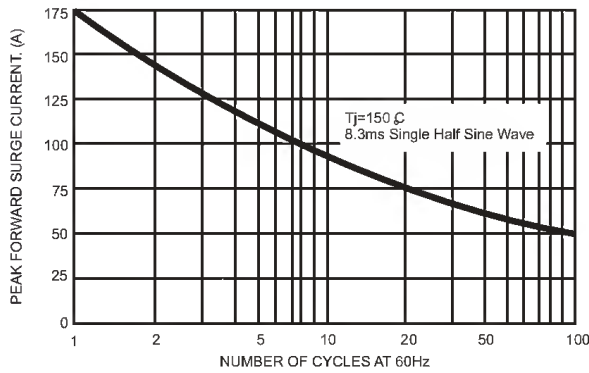


FIG.4- TYPICAL JUNCTION CAPACITANCE

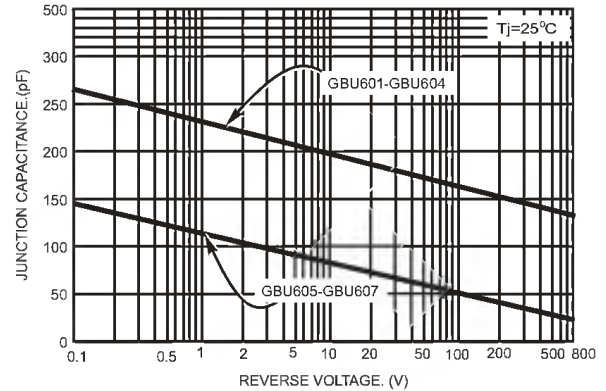


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

