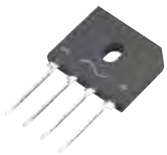
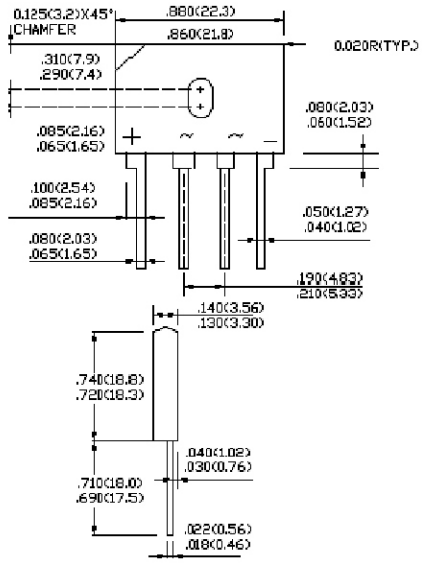
GBU6A-GBU6M

Single Phase 6.0AMP.Glass Passivated Bridge Rectifiers



GBU



Dimensions in inches and (millimeters)

Features

- ✧ 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.
- ✧ Weight: 0. 3 ounce, 8.0 grams
- ✧ Mounting torque: 5 in. lb. max.

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 6A	GBU 6B	GBU 6D	GBU 6G	GBU 6J	GBU 6K	GBU 6M	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	$I_{(AV)}$	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sne-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°C at Rated DC Blocking Voltage @ T_A=125°C	I_R	5.0 500							uA uA
Typical Junction Capacitance (Note 3)	Cj	211				94			pF
Typical Thermal Resistance (Note 1, 2)	$R_{\theta JA}$ $R_{\theta JC}$	7.0 2.0							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to + 150							°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.

http://www.luguang.cn **mail:lge@luguang.cn**

GBU6A-GBU6M

Single Phase 6.0AMP.Glass Passivated Bridge Rectifiers

RATINGS AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

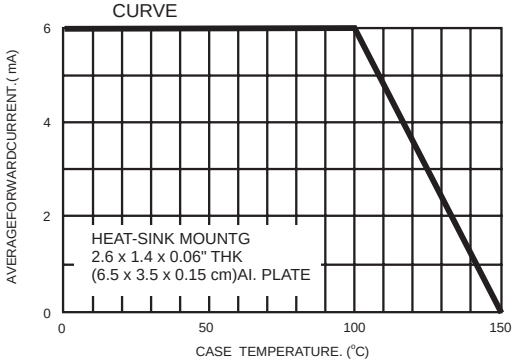


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

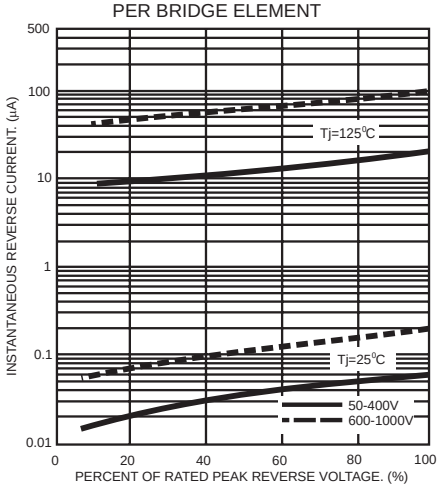


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

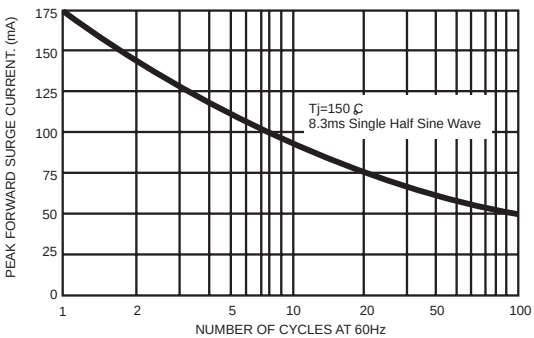


FIG.4- TYPICAL JUNCTION CAPACITANCE

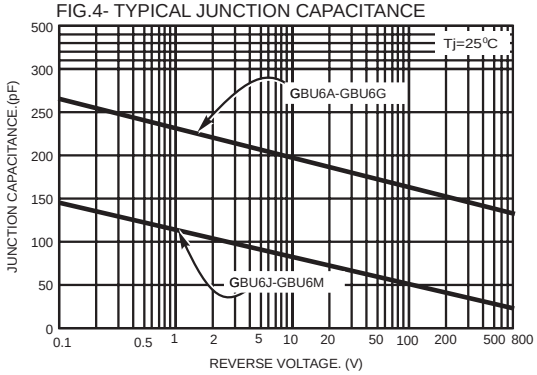


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT