



GBU601 - GBU607
Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers

GBU

Features

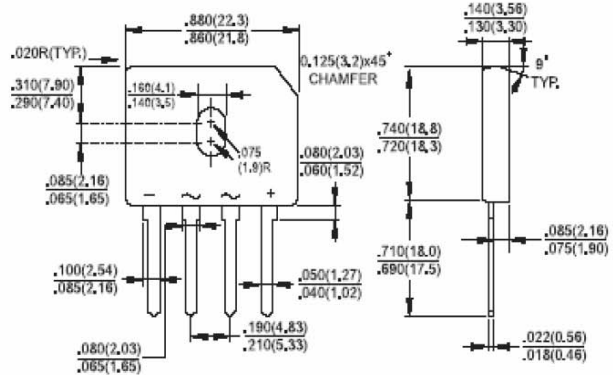
- ◇ UL Recognized File # E-326243
- ◇ Glass passivated junction
- ◇ Ideal for printed circuit board
- ◇ High case dielectric strength of 1500Vrms
- ◇ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ◇ Typical IR less than 0.1uA
- ◇ High surge current capability
- ◇ High temperature soldering guaranteed:
260 C / 10 seconds at 5 lbs., (2.3 kg) tension
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ◇ Case : Molded plastic body
- ◇ Terminal : Pure tin plated , Lead free. Leads solderable per MIL-STD-202 Method 208
- ◇ Weight : 0.141 ounce ,4 grams
- ◇ Mounting Torque : 5 in lbs max.

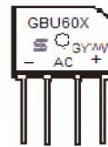
Maximum Ratings and Electrical Characteristics

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%



Dimension in inches and (millimeter)

Marking Diagram



- GBU60X = Specific Device Code
- G = Green Compound
- Y = Year Code
- WW = Week Code

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	260	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	600	1000	V	
Maximum Average Forward Rectified Current @ $T_C = 100^\circ C$	$I_{(AV)}$	6.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175							A	
Rating of fusing ($t < 8.3ms$)	I^2t	127.0							A ² S	
Maximum Instantaneous Forward Voltage @ 3.0A @ 6.0A	V_F	1.0 1.1							V	
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	5.0 500							uA	
Typical Junction Capacitance per leg (Note 1)	C_j	211			94				pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	21 2.0								oC/W
Operating Temperature Range	T_J	-55 to +150							oC	
Storage Temperature Range	T_{STG}	-55 to +150							oC	

Note 1 : Measured at 1MHz and applied Reverse bias of 4.0V DC.
2. Unit case mounted on 4" x 6" x 0.25" Al plate heat sink.

Rating and Characteristic Curves (GBU601 Thru GBU607)

FIG 1 Maximum Derating Curve for Output Current

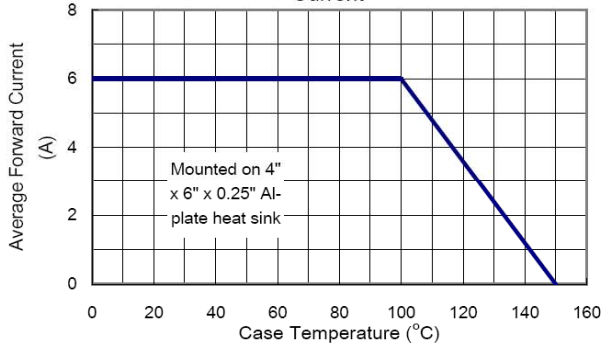


FIG 2 Maximum Forward Surge Current per Leg

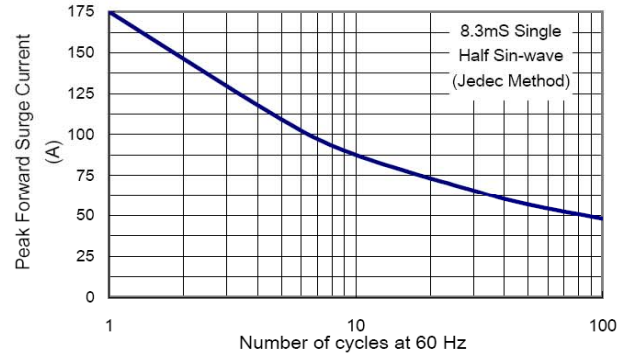


FIG 3 Typical Reverse Characteristics per Leg

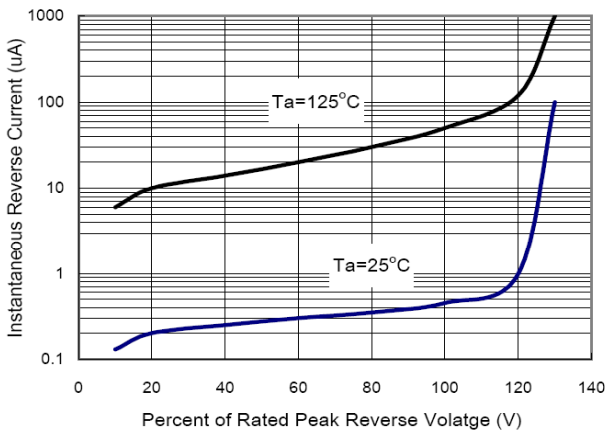


FIG 4 Typical Forward Characteristics per Leg

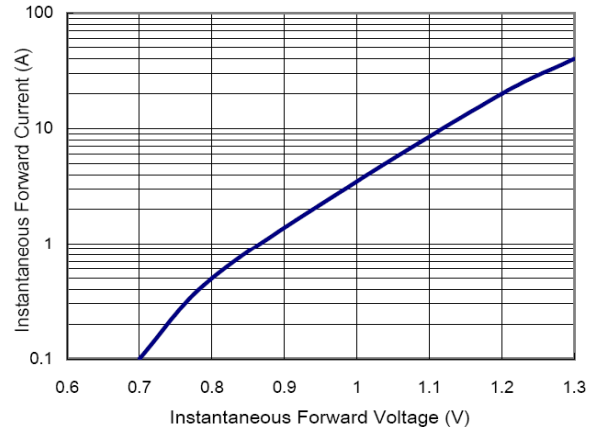


FIG 5 Typical Junction Capacitance

