

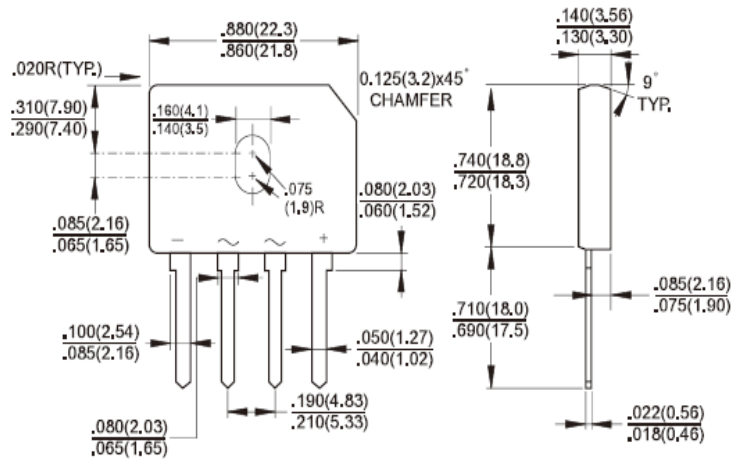


GBU1001 - GBU1007
Single Phase 10.0AMPS. Glass Passivated Bridge Rectifiers

GBU

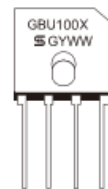
Features

- ✦ UL Recognized File # E-326243
- ✦ Glass passivated junction
- ✦ Ideal for printed circuit board
- ✦ High case dielectric strength of 1500 Vrms
- ✦ 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.,(2.3kg) tension
- ✦ Green compound with suffix "G" on packing code & prefix "G" on datecode



Dimensions in inches and (millimeters)

Marking Diagram



- GBU100X = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

Mechanical Data

- ✦ Case: Molded plastic body
- ✦ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ✦ Weight: 4 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 1001	GBU 1002	GBU 1003	GBU 1004	GBU 1005	GBU 1006	GBU 1007	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 @TC=100°C	$I_{F(AV)}$	10							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	220							A
Rating of fusing (t<8.3ms)	I^2T	200							A ² S
Maximum Instantaneous Forward Voltage (Note 1) @ 5 A @ 10 A	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	5 500							uA uA
Typical Junction Capacitance per leg (Note 2)	C_j	211				94			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	21 2							°C/W
Operating Temperature Range	T_J	- 55 to + 150							°C
Storage Temperature Range	T_{STG}	- 55 to + 150							°C

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse bias of 4.0V DC

Note 3 : Unit case mount on 4" x 6" x 0.25" Al plate heat sink

RATINGS AND CHARACTERISTIC CURVES (GBU1001 THRU GBU1007)

FIG.1 MAXIMUM DERATING CURVE OUTPUT CURRENT

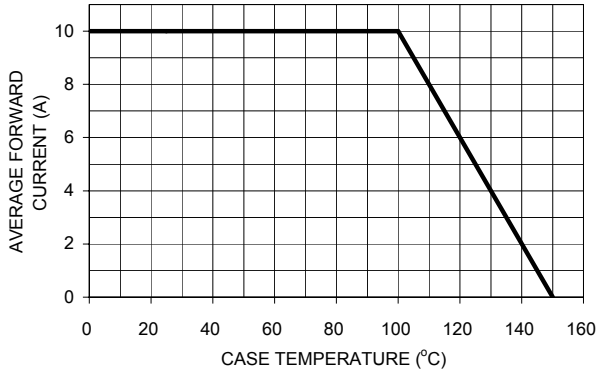


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

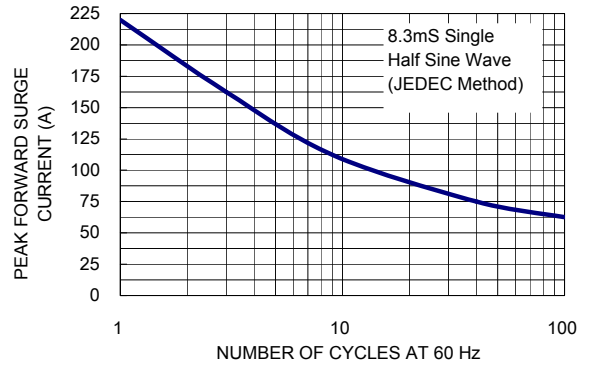


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

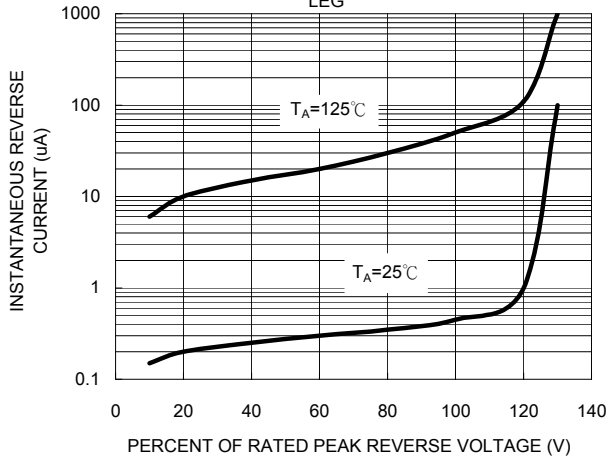


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

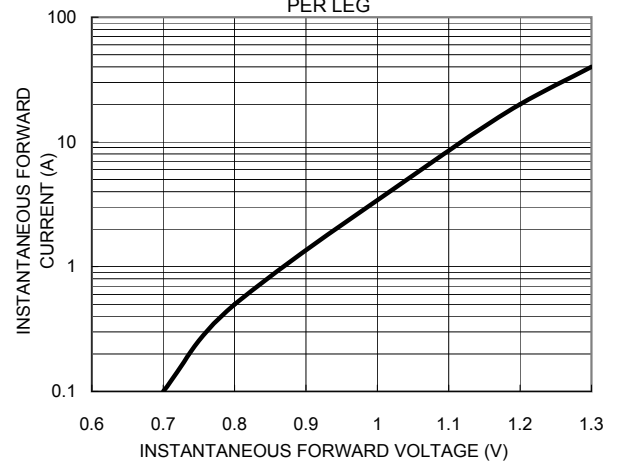


FIG. 5 TYPICAL JUNCTION CAPACITANCE

