



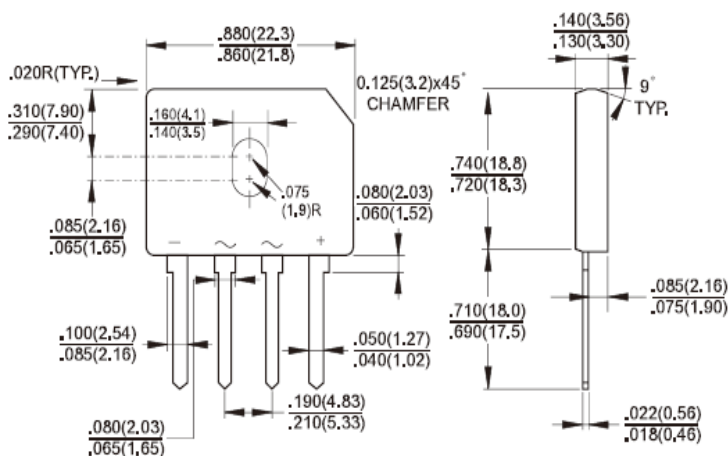
GBU401 - GBU407

Single Phase 4.0AMPS. Glass Passivated Bridge Rectifiers

GBU

Features

- ✧ UL Recognized File # E-326243
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ✧ High case dielectric strength of 1500 VRMS
- ✧ Surge overload rating to 150 amperes peak
- ✧ 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

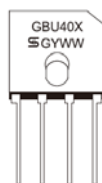


Mechanical Data

- ✧ 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

Dimensions in inches and (millimeters)

Marking Diagram



- GBU40X = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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	Unit
Maximum Repetitive 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 @ $T_C=100^\circ C$	$I_{F(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150							A
Rating of fusing ($t < 8.3ms$)	I^2T	93							A ² S
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A @ 4 A	V_F	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Block Voltage @ $T_A=125^\circ C$	I_R	5 500							uA
Typical Junction Capacitance per leg (Note 2)	C_j	100				45			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	20 4							°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 (GBU401 THRU GBU407)

FIG. 1 FORWARD CURRENT DERATING CURVE

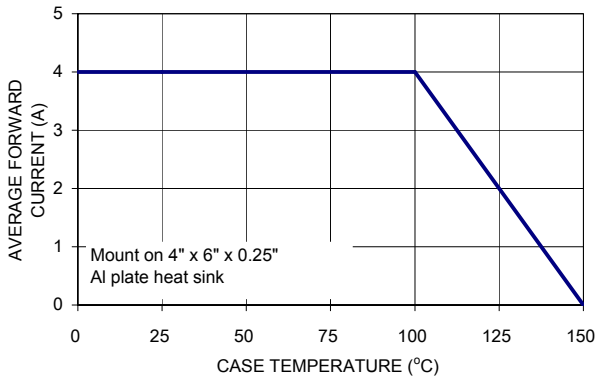


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

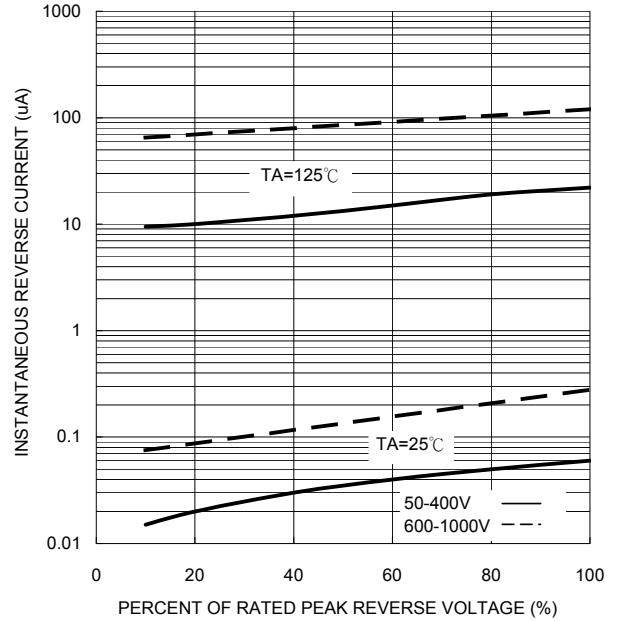


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

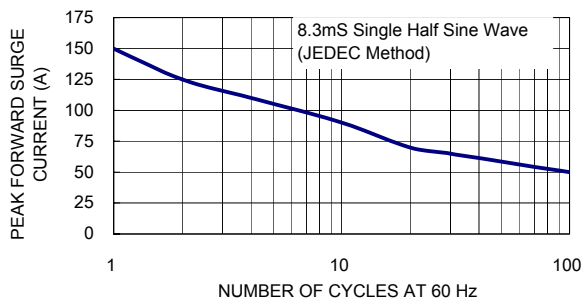


FIG. 5 TYPICAL JUNCTION CAPACITANCE

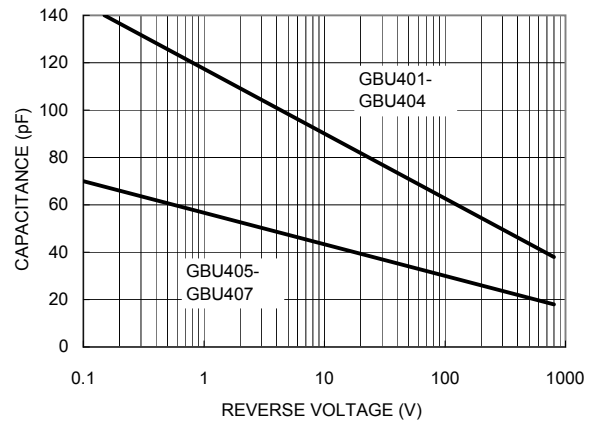


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

