



# GBU4005G THRU GBU410G

Single Phase 4.0AMP Glass Passivated Bridge Rectifier

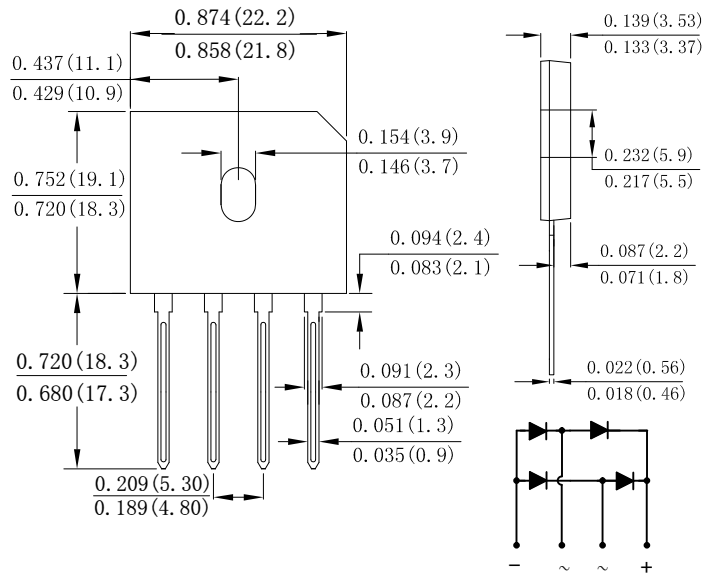
## Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Case: GBU

## Mechanical Data

- Case: GBU, molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version



dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@Tc=90°C	$I_{F(AV)}$	4.0							A
Non-Repetitive Peak Forward Surge Current @Tj=25°C 8.3ms Single half sine-wave superimposed @Tj=125°C on rated load (JEDEC Method)	$I_{FSM}$	130 104							A
Non-Repetitive Peak Forward Surge @Tj=25°C Current 1 ms Single half sine-wave @Tj=125°C superimpose on rated load (JEDEC Method)	$I_{FSM}$	260 208							A
Forward Voltage per element @IF=2.0A @IF=4.0A	$V_{FM}$	1.0 1.1							V
Peak Reverse Current @Tj=25°C At Rated DC Blocking Voltage Tj=125°C	$I_R$	5.0 200							uA
$I^2t$ Rating for fusing (t <8.3ms)	$I^2t$	70.135							A <sup>2</sup> s
Dielectric Strength	$V_{ids}$	2500							V
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance (Note 2)	$C_J$	30							pF
Typical Thermal Resistance	$R_{\theta JA}$	22							°C/W
	$R_{\theta JC}$	3.4							
	$R_{\theta JL}$	2.1							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							°C

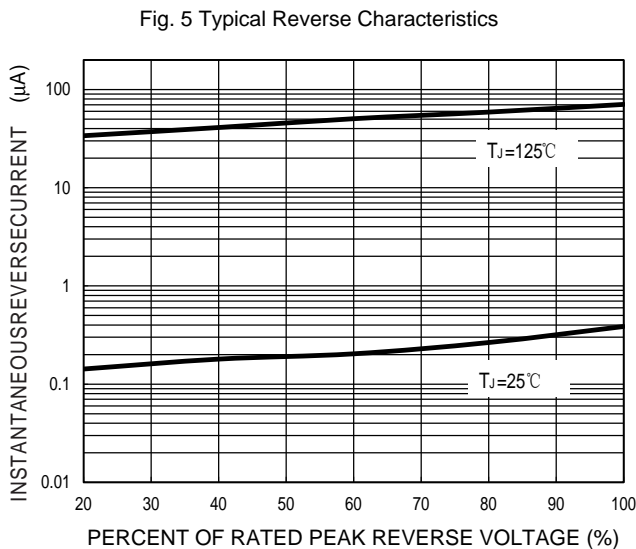
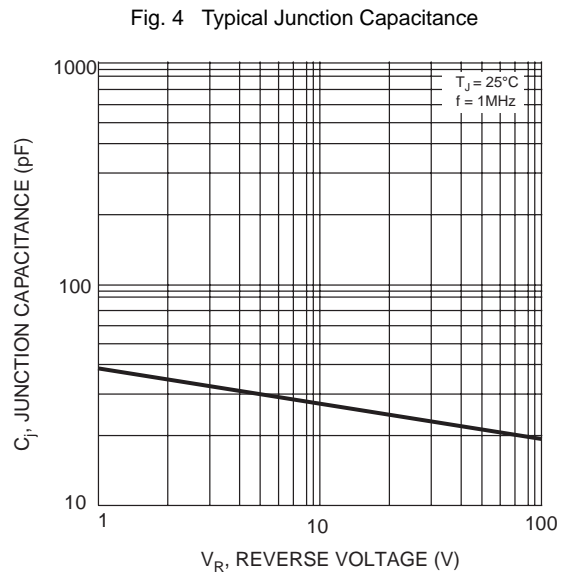
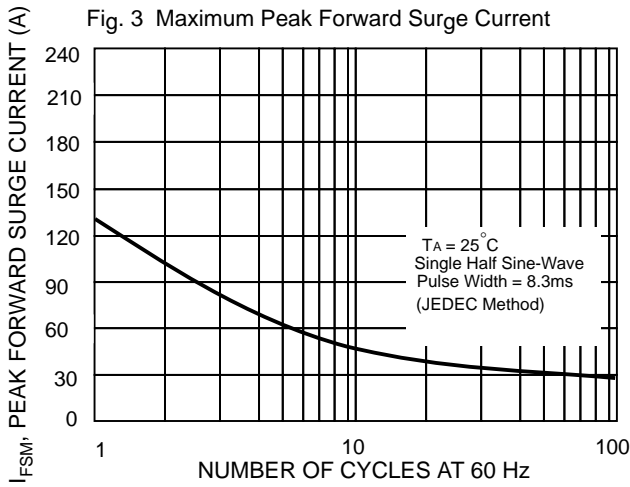
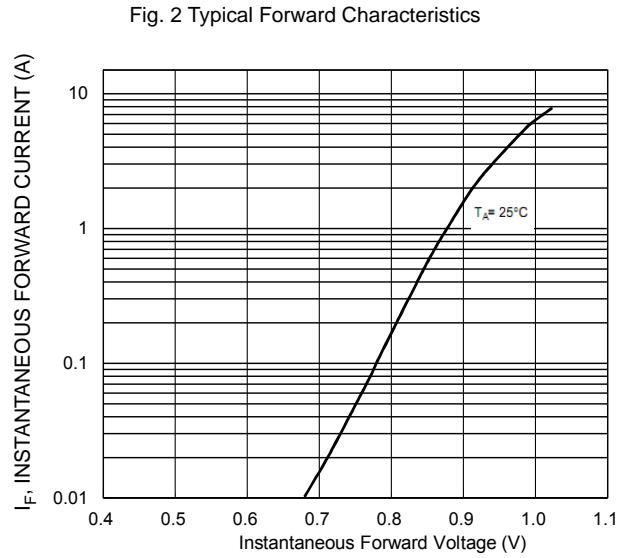
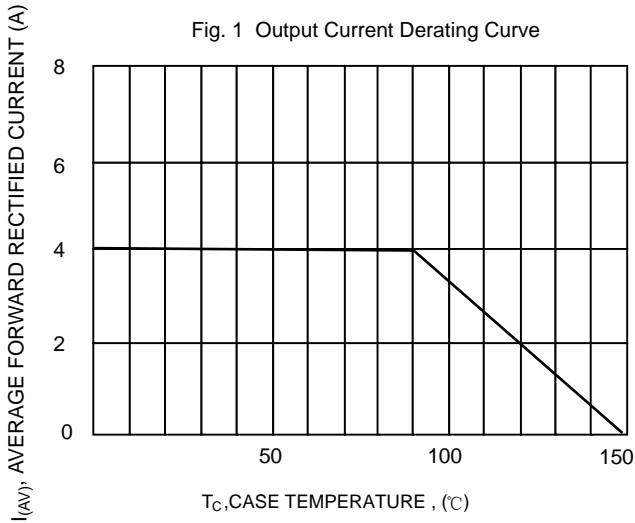
Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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