



# GBU4005 THRU GBU410

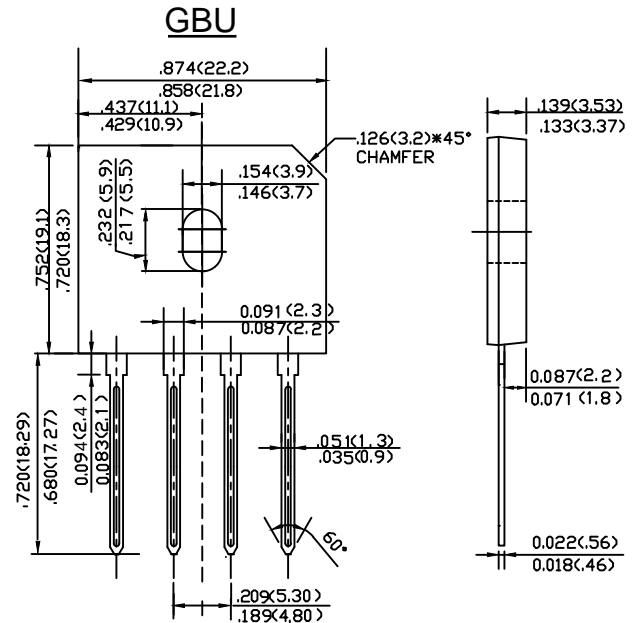
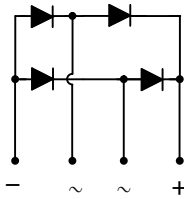
SINGLE PHASE 4.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

## Features

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

## Mechanical Data

- Case: G B U , 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%.

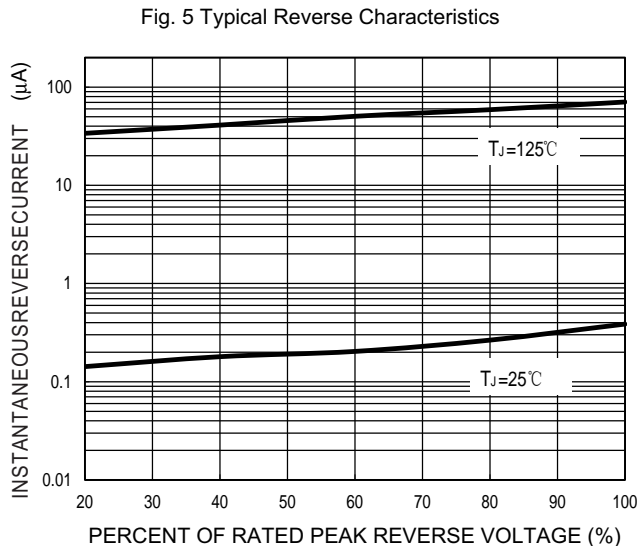
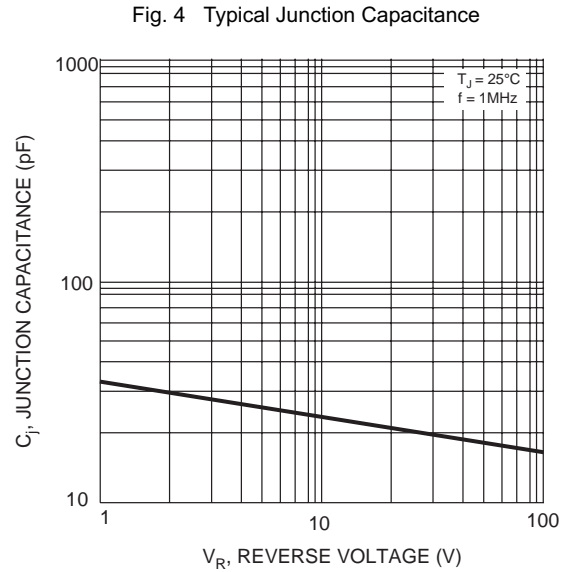
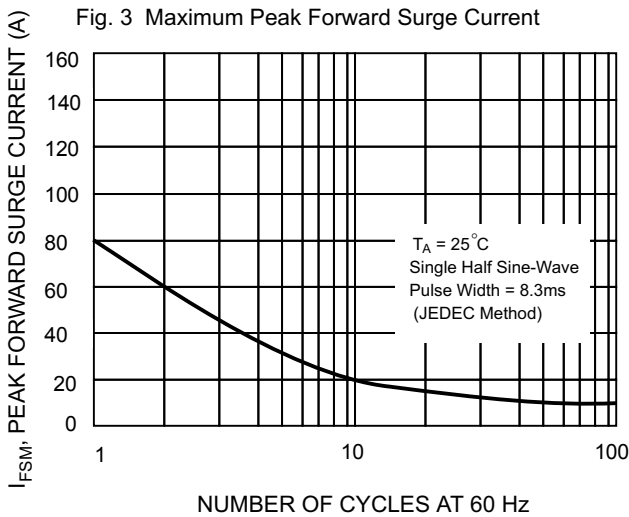
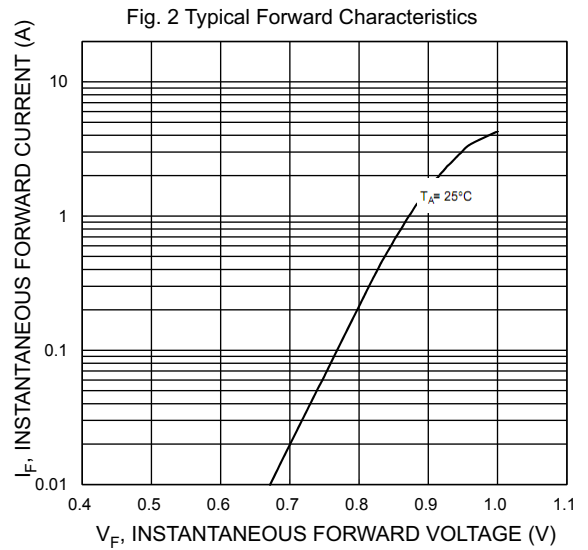
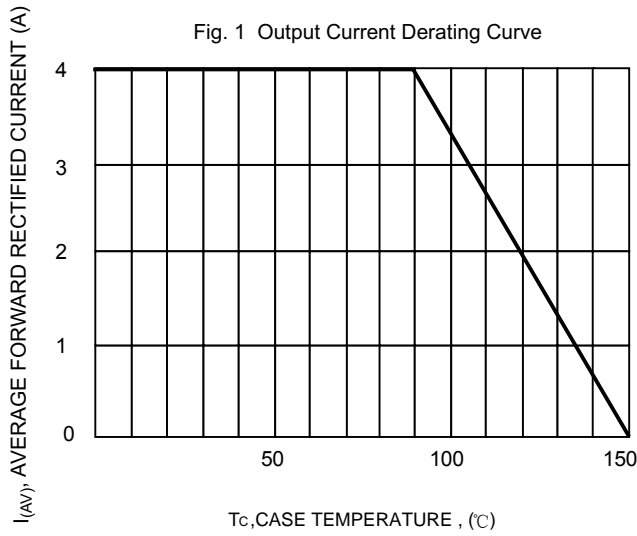
TYPE NUMBER	SYMBOL	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@ $T_c=90^\circ C$	$I_{F(AV)}$	4.0							A
Non-Repetitive Peak Forward Surge Current @ $T_J=25^\circ C$ 8.3ms Single half sine-wave superimposed @ $T_J=125^\circ C$ on rated load (JEDEC Method)	$I_{FSM}$	80 64							A
Non-Repetitive Peak Forward Surge Current 1 ms Single half sine-wave @ $T_J=125^\circ C$ superimpose on rated load (JEDEC Method)	$I_{FSM}$	160 128							A
Forward Voltage per element @ $I_F=2.0A$ @ $I_F=4.0A$	$V_{FM}$	1.0 1.1							V
Peak Reverse Current @ $T_J=25^\circ C$ At Rated DC Blocking Voltage $T_J=125^\circ C$	$I_R$	5.0 200							$\mu A$
$I^2t$ Rating for fusing ( $t < 8.3ms$ )	$I^2t$	26.56							$A^2s$
Dielectric Strength	$V_{ids}$	2500							V
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance (Note 2)	$C_J$	27							pF
Typical Thermal Resistance	$R_{\theta JA}$	25.7							$^\circ C/W$
	$R_{\theta JC}$	8.4							
	$R_{\theta JL}$	6.3							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							$^\circ C$

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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