

**GBU4005G-GBU410G**

**Single-Phase 4.0A Glass Passivated Bridge Rectifier**

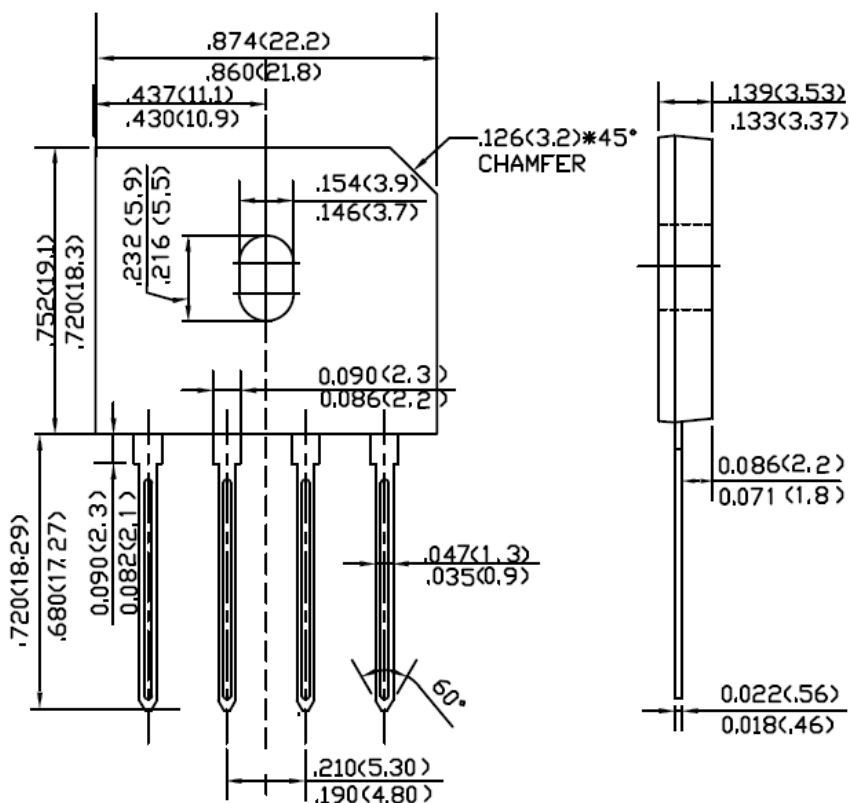
**Features:**

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

**Mechanical Data:**

- Case: GBU, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version

**Mechanical Dimensions: In Inches/mm**



**GBU**

**MARKING, MOLDING RESIN**

Marking for Type Number, 1<sup>st</sup> row SSG YYWWL, 2<sup>nd</sup> row Type Number  
Where YY is the manufacture year  
WW is the manufacture week code  
L is the wafer's Lot Number



## GBU4005G-GBU410G

Technical Data  
Data Sheet N1751, Rev. -

Green Products

**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%

### Maximum Ratings:

Type Number	Symbol	GBU 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average forward rectified output current (Note 1) @ $T_A = 40^\circ\text{C}$	$I_O$	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	120							A

### Electrical Characteristics:

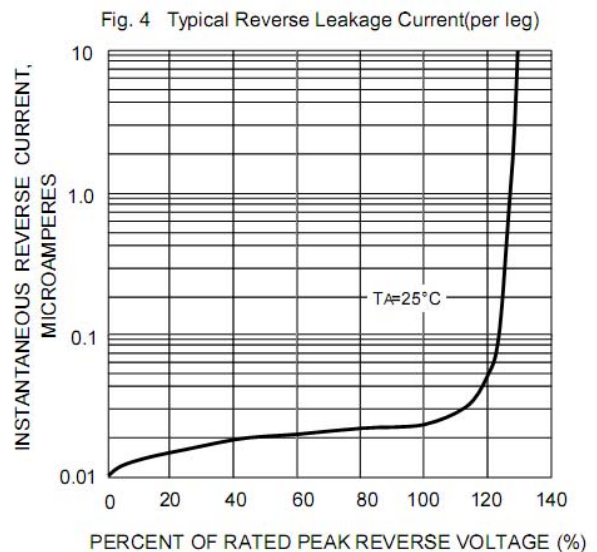
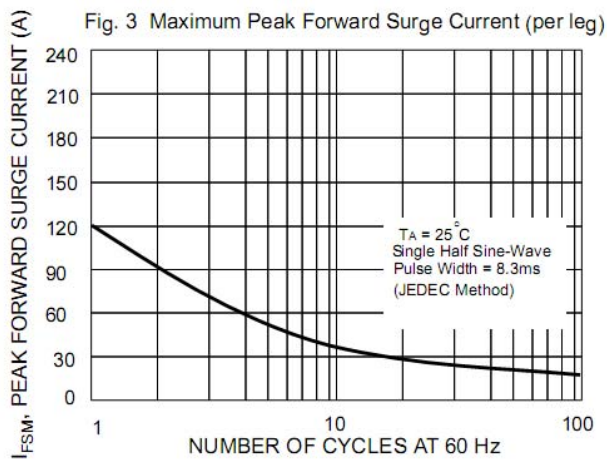
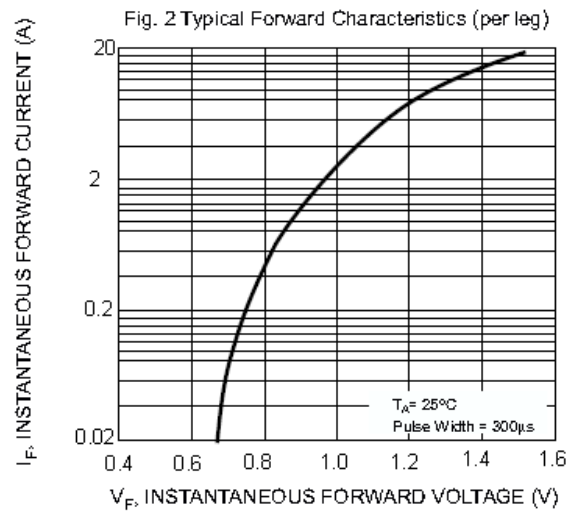
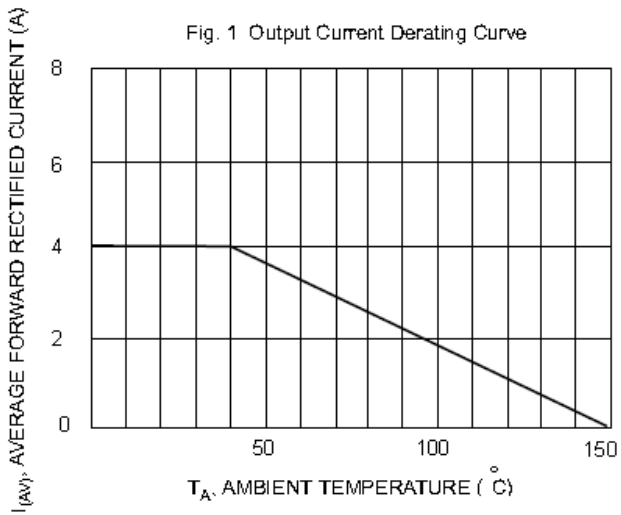
Type Number	Symbol	GBU 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	Unit
Forward Voltage (per element) @ $I_F = 2\text{A}$ @ $I_F = 4\text{A}$	$V_F$	1.0 1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	5.0 500							$\mu\text{A}$
Typical Junction Capacitance(per leg) (Note 2)	$C_J$	65							pF

### Thermal-Mechanical Specifications:

Type Number	Symbol	GBU 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	Unit
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	20							°C/W
Typical Thermal Resistance Junction to Lead (Note 1)	$R_{\theta JL}$	2.2							
Junction Temperature	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C
Case Style		GBU							

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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