

GBU8005 THRU GBU810

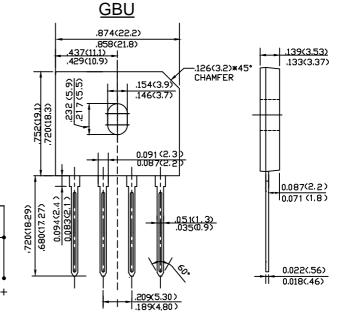
SINGLE PHASE 8.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

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: 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 8005 | GBU 801 | GBU 802 | GBU 804 | GBU 806 | GBU 808 | GBU 810 | UNITS |
|--|------------------|-------------|------------|------------|------------|------------|------------|------------|------------------|
| Peak Repetitive Reverse Voltage | Vrrm | | | | | | | | |
| Working Peak Reverse Voltage | VRWM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | VDC | | | | | | | | |
| RMS Reverse Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1)@Tc=90℃ | I F(AV) | 8.0 | | | | | | | Α |
| Non-Repetitive Peak Forward Surge Current @TJ=25℃ 8.3ms Single half sine-wave superimposed @TJ=125℃ on rated load (JEDEC Method) | Ігѕм | 175 140 | | | | | | | Α |
| Non-Repetitive Peak Forward Surge @TJ=25°C Current 1 ms Single half sine-wave @TJ=125°C superimpose on rated load (JEDEC Method) | Iғsм | 350 280 | | | | | | | Α |
| Forward Voltage per element @IF=4.0A @IF=8.0A | VFM | 1.0 1.1 | | | | | | | V |
| Peak Reverse Current @TJ=25℃ At Rated DC Blocking Voltage TJ=125℃ | lr | 5.0 200 | | | | | | | uA |
| I ² t Rating for fusing (t <8.3ms) | l ² t | 127.09 | | | | | | | A ² s |
| Dielectric Strength | Vids | 2500 | | | | | | | V |
| The proposed installation torque Max torque | Tor | 5.0 8.0 | | | | | | | Kgf.cm |
| Typical Junction Capacitance (Note 2) | Сл | 45 | | | | | | pF | |
| Typical Thermal Resistance | Rеја | 21 | | | | | | | °C/W |
| | Rелс | 3.4 | | | | | | | |
| | Rejl | 2.1 | | | | | | | |
| Operating and Storage Temperature Range | TJ,Tstg | -55to+150 | | | | | | | $^{\circ}$ |

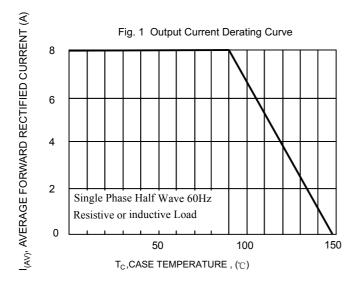
Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

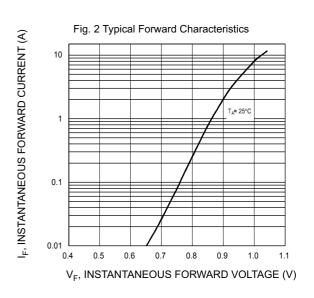
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

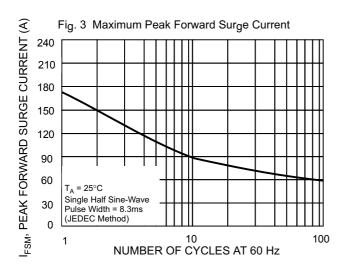
version:04 1 of 3 www.dyelec.com

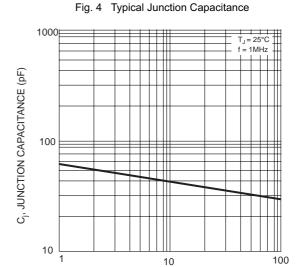


GBU8005 THRU GBU810



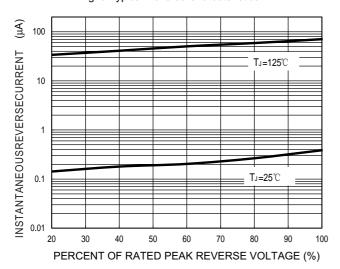






V_R, REVERSE VOLTAGE (V)

Fig. 5 Typical Reverse Characteristics





GBU8005 THRU GBU810

Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUOreserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- •XINNUOdisclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.
 - XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own ris k andagree to fully indemnifyXINNUOfor any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.

version:04 3 of 3 www.dyelec.com