



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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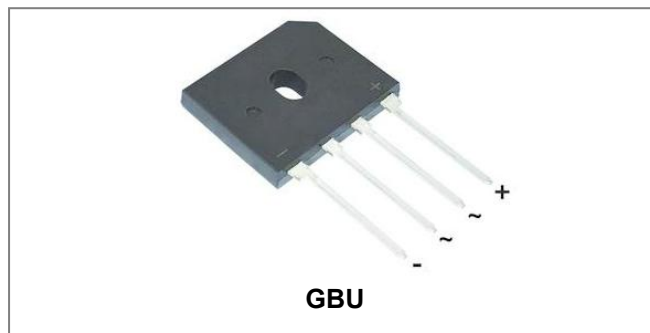
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



GBU6005G THRU GBU610G

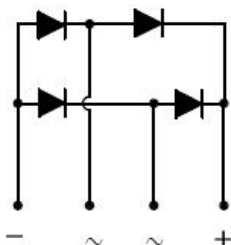
Single-Phase 6.0A Glass Passivated Bridge Rectifier



Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



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

Maximum Ratings: @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Type Number | Symbol | GBU 6005G | GBU 601G | GBU 602G | GBU 604G | GBU 606G | GBU 608G | GBU 610G | Units |
|---|---|-----------|----------|----------|----------|----------|----------|----------|-------|
| 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°C | I _O | 6.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 150 | | | | | | | A |

Electrical Characteristics: @T_A=25°C unless otherwise specified

| Type Number | Symbol | GBU 6005G | GBU 601G | GBU 602G | GBU 604G | GBU 606G | GBU 608G | GBU 610G | Units |
|---|-----------------|-----------|----------|----------|------------|----------|----------|----------|-------|
| Forward Voltage (per element) @I _F =3A @I _F =6A | V _F | | | | 1.0 1.1 | | | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C | I _{RM} | | | | 5.0 500 | | | | μA |
| Typical Junction Capacitance(per leg) (Note 2) | C _J | | | | 65 | | | | pF |

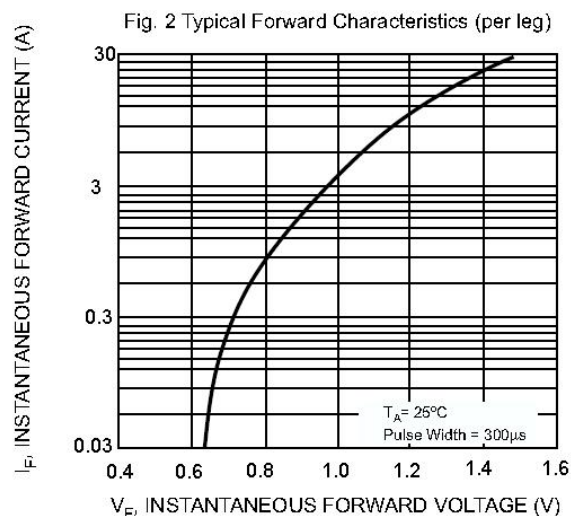
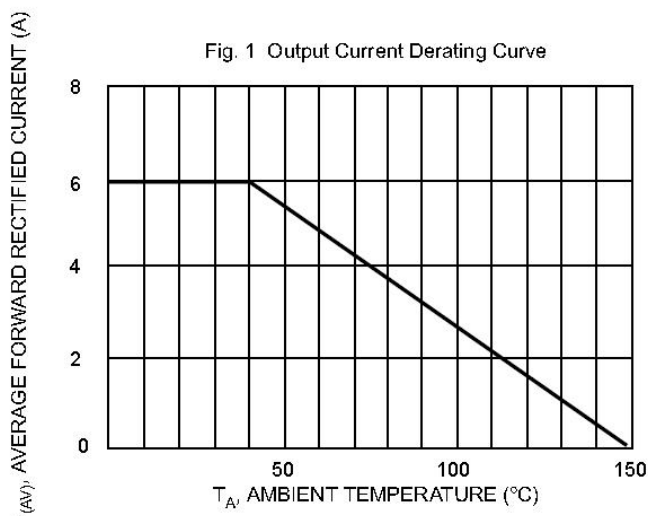
* Pulse width < 300 μs, duty cycle < 2%

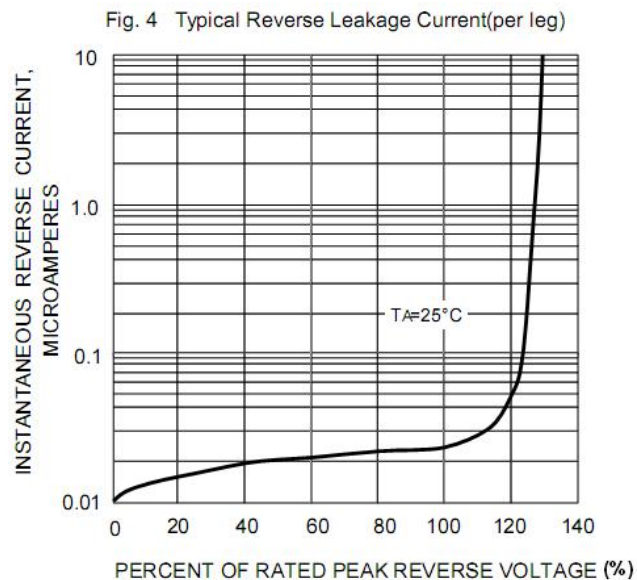
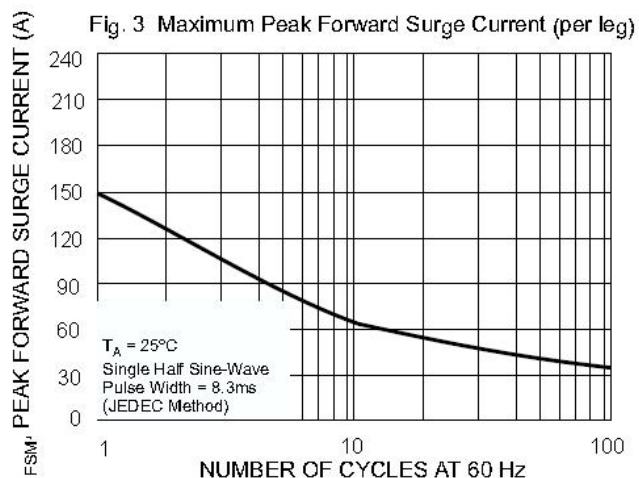
Thermal-Mechanical Specifications: @T_A=25°C unless otherwise specified

| Type Number | Symbol | GBU 6005G | GBU 601G | GBU 602G | GBU 604G | GBU 606G | GBU 608G | GBU 610G | Units |
|---|--------------------------------------|-----------|----------|----------|-------------|----------|----------|----------|-------|
| Typical Thermal Resistance (per leg) | R _{θJA} R _{θJL} | | | | 17 2.2 | | | | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | | | | -55 to +150 | | | | °C |

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.

Ratings and Characteristics Curves



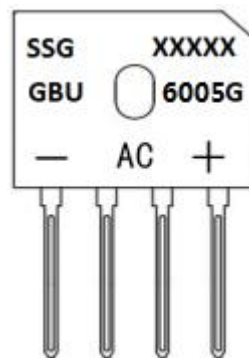


Ordering Information

| Device | Package | Plating | Shipping |
|-----------------------------|--------------|---------|--------------|
| GBU6005G THRU GBU610G | GBU(Pb-Free) | Pure Sn | 20pcs / tube |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

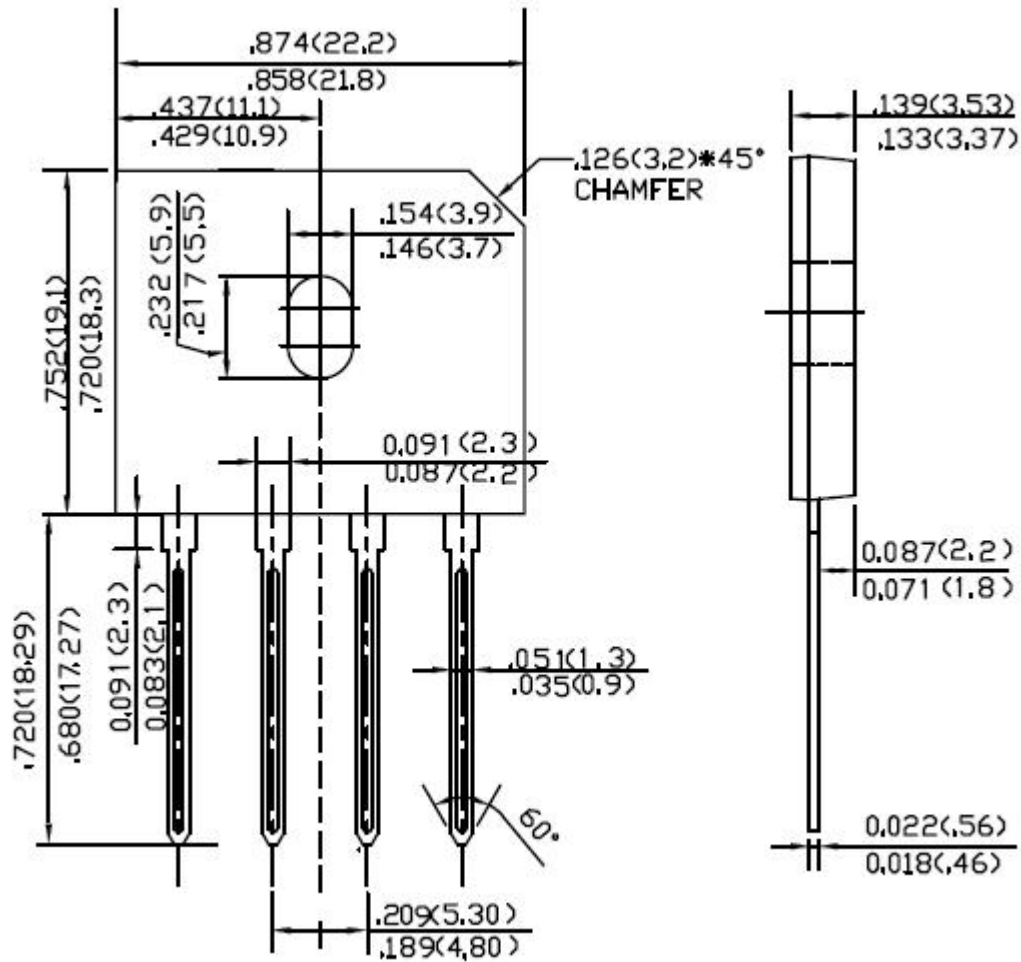


Where XXXXX is YYWWL

SSG = SSG
YY = Year
WW = Week
L = Lot Number
GBU6005G = Type Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Mechanical Dimensions GBU (Inches/Millimeters)



**Technical Data
Data Sheet N1799, Rev. A**



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