

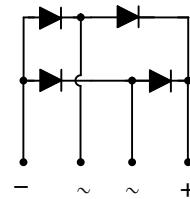
GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 10.0 Amperes

FEATURES

- Polarity:As marked on body
- Surge overload rating -240 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L
The flammability classification 94V-0
- Mounting position:Any
- Weight: 0.138 ounces , 3.9 grams

GBU



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| CHARACTERISTICS | SYMBOL | GBU 10005G | GBU 1001G | GBU 1002G | GBU 1004G | GBU 1006G | GBU 1008G | GBU 1010G | UNIT |
|--|-----------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @ $T_c=100^\circ\text{C}$ (with heatsink Note 2) @ $T_c=100^\circ\text{C}$ (without heatsink) | $I_{(AV)}$ | 10.0 3.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I_{FSM} | 240 | | | | | | | A |
| Maximum Forward Voltage at 5.0A DC | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $J=25^\circ\text{C}$ $J=125^\circ\text{C}$ | I_R | 5.0 500 | | | | | | | μA |
| I^2t Rating for Fusing ($t<8.3\text{ms}$) | I^2t | 200 | | | | | | | A^2s |
| Typical Junction Capacitance Per Element (Note1) | C_J | 86 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | $R_{\theta JC}$ | 2.0 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 150mm*150mm*1.6mm Cu Plate Heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

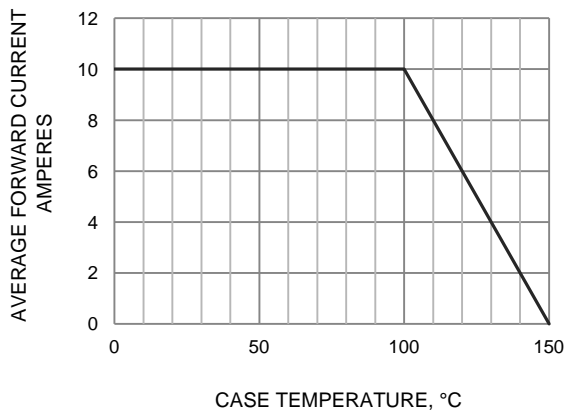


FIG.2-MAXIMUM FOWARD SURGE CURRENT

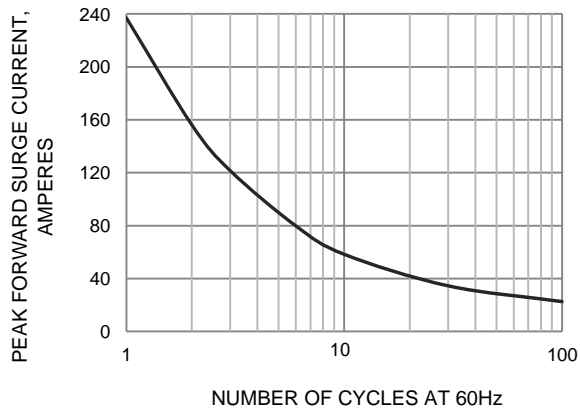


FIG.3-TYPICAL JUNCTION CAPACITANCE

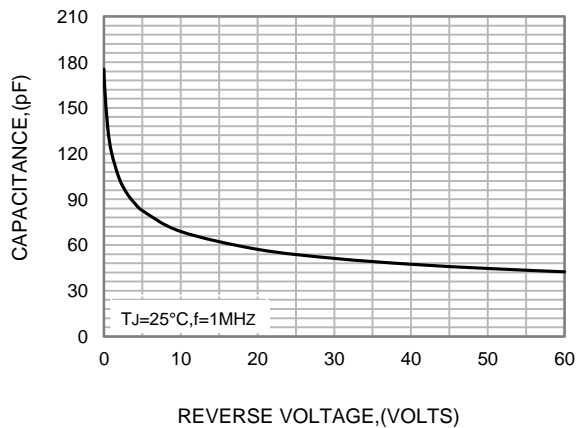


FIG.4-TYPICAL FORWARD CHARACTERISTICS

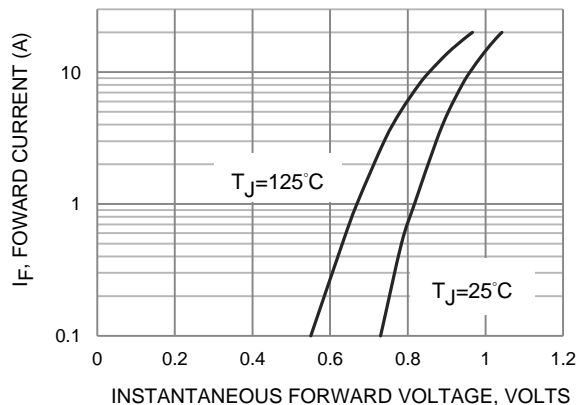
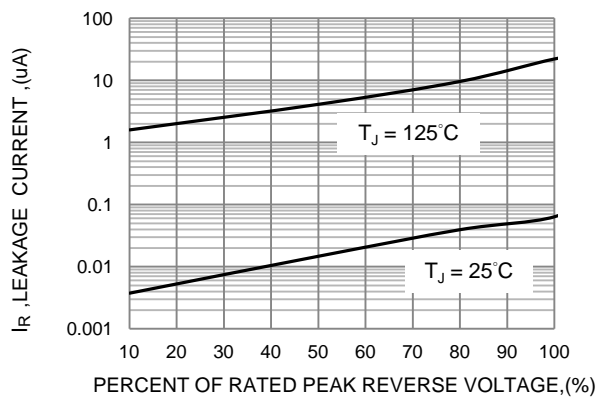
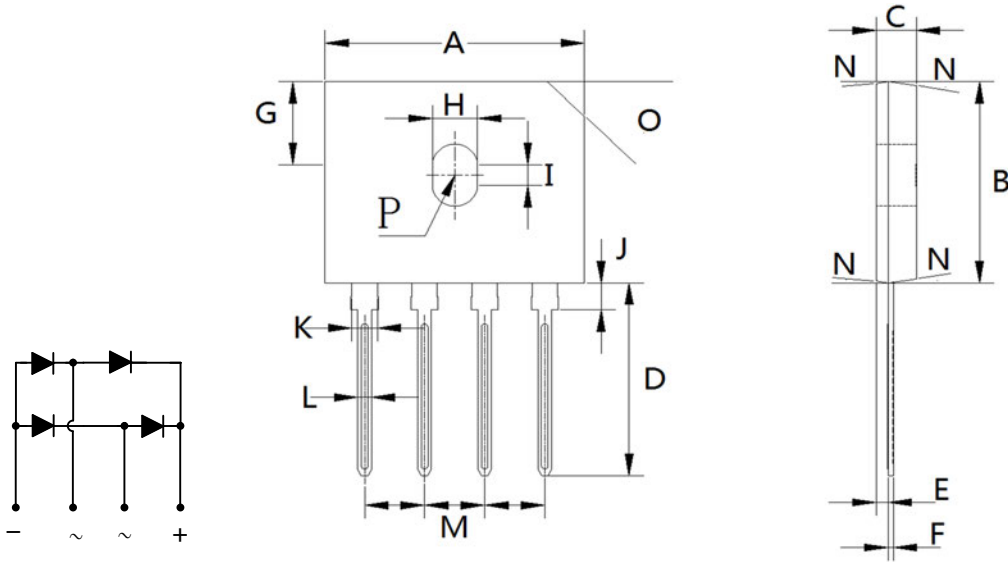


FIG.5-TYPICAL REVERSE CHARACTERISTICS



GBU Package Outline Dimensions



GBU mechanical data

| UNIT | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|------|-----|-------|-------|------|-------|------|------|------|------|------|------|------|------|------|-----------------|---------|----------------|
| mm | max | 22.30 | 18.80 | 3.56 | 18.00 | 1.00 | 0.56 | 7.90 | 4.10 | 2.16 | 2.75 | 2.35 | 1.27 | 5.33 | 7.0° TYPICAL | 3.2X45° | 1.90 RADIUS |
| | min | 21.80 | 18.30 | 3.30 | 17.50 | 0.76 | 0.46 | 7.40 | 3.50 | 1.65 | 1.85 | 1.95 | 1.02 | 4.83 | | | |
| mil | max | 878 | 740 | 140 | 709 | 39 | 22 | 311 | 161 | 85 | 108 | 93 | 50 | 210 | 7.0° TYPICAL | 126°45° | 75 RADIUS |
| | min | 858 | 720 | 130 | 689 | 30 | 18 | 291 | 138 | 65 | 73 | 77 | 40 | 190 | | | |

Important Notice and Disclaimer

Jingdao Microelectronics reserves 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.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Jingdao Microelectronics assume any liability for application assistance or customer product design. Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bridge Rectifiers](#) category:

Click to view products by [Jingdao](#) manufacturer:

Other Similar products are found below :

[MB2510](#) [MB252](#) [MB356G](#) [MB358G](#) [90MT160KPBF](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU4D-BP](#) [GBU6B-E3/45](#)
[DB101-BP](#) [DF01](#) [DF10SA-E345](#) [BU1508-E3/45](#) [BU1510-E3/45](#) [KBPC50-10S](#) [RS405GL-BP](#) [GBJ1502-BP](#) [GBU6M](#) [GSIB1520-E3/45](#)
[2KBB10](#) [36MB140A](#) [TB102M](#) [MB1510](#) [MB86](#) [TL401G](#) [MDA920A2](#) [TU602](#) [TU810](#) [MP5010W-BP](#) [MP501W-BP](#) [MP502-BP](#)
[BR84DTP204](#) [BU1508-E3/51](#) [KBPC25-02](#) [VS-110MT120KPBF](#) [VS-2KBB60](#) [VS-60MT120KPBF](#) [VS-60MT80KPBF](#) [DB105-BP](#) [DF1510S](#)
[VS-40MT160PAPBF](#) [VISKBU8K-E4/51](#) [36MT100](#) [GBU4G-BP](#) [GBU6B-E3/51](#) [DF15005S-E3/77](#) [GSIB15A80-E3/45](#) [DB104-BP](#)