



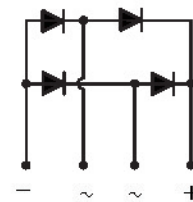
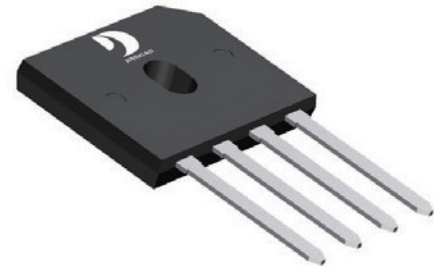
GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 4.0 Amperes

FEATURES

- Polarity:As marked on body
- Surge overload rating -150 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 4005G | GBU 401G | GBU 402G | GBU 404G | GBU 406G | GBU 408G | GBU 410G | 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°C (without heatsink) | I <sub(av)< sub=""></sub(av)<> | 4.0 | | | | | | | 2.4 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 150 | | | | | | | | A |
| Maximum Forward Voltage at 2.0A DC | V _F | 1.0 | | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | 5.0 | | | | | | | 500 | uA |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 93 | | | | | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | C _J | 39 | | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJC} | 4.0 | | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | | °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

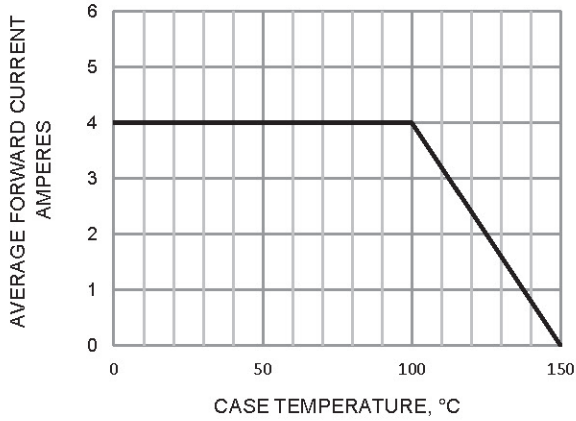


FIG.2-MAXIMUM FOWARD SURGE CURRENT

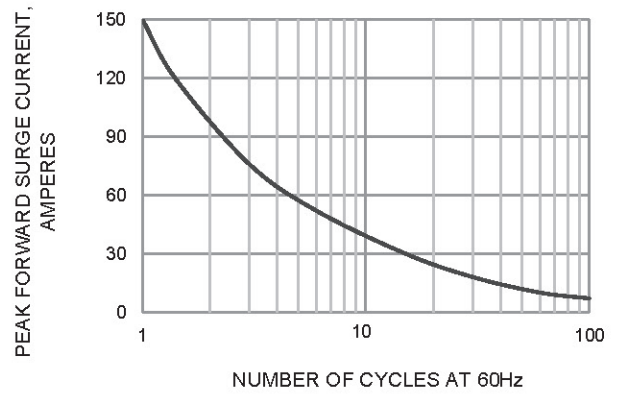


FIG.3-TYPICAL JUNCTION CAPACITANCE

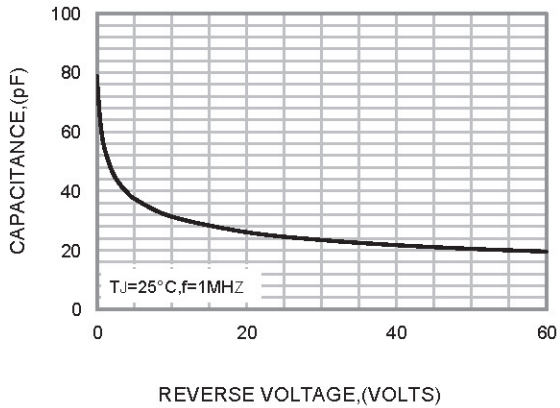


FIG.4-TYPICAL FORWARD CHARACTERISTICS

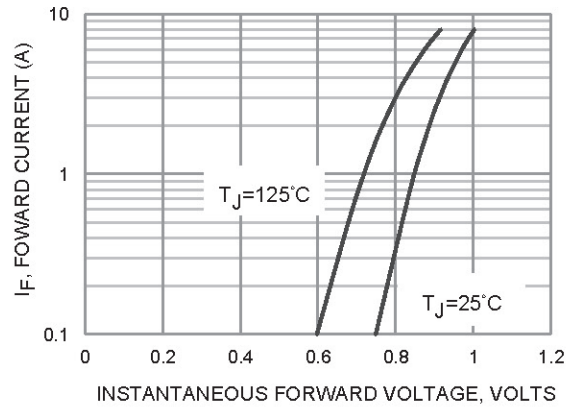
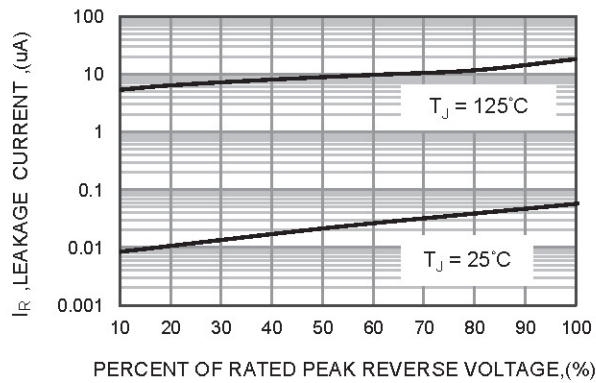
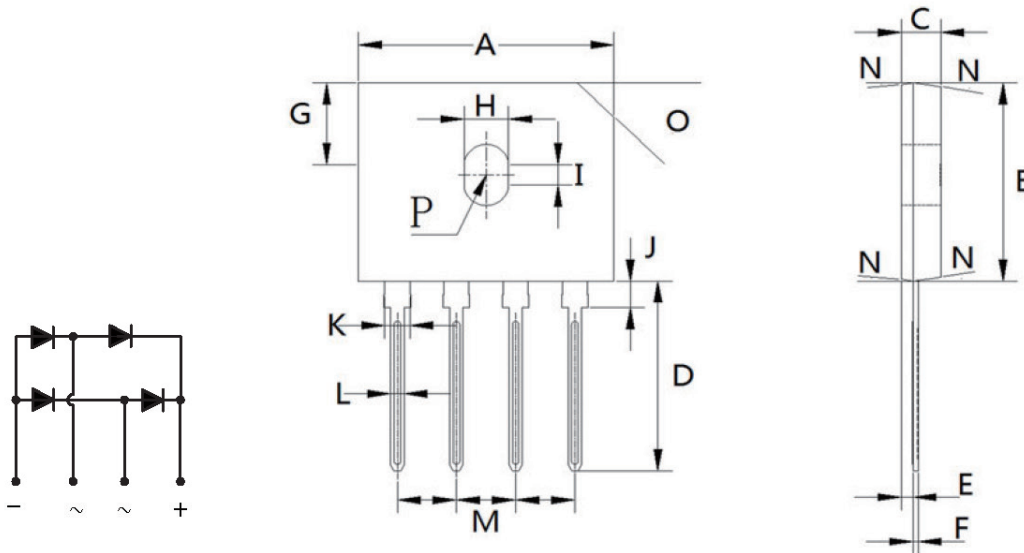


FIG.5-TYPICAL REVERSE CHARACTERISTICS





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 | | | |

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