

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5 Amperes

Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board

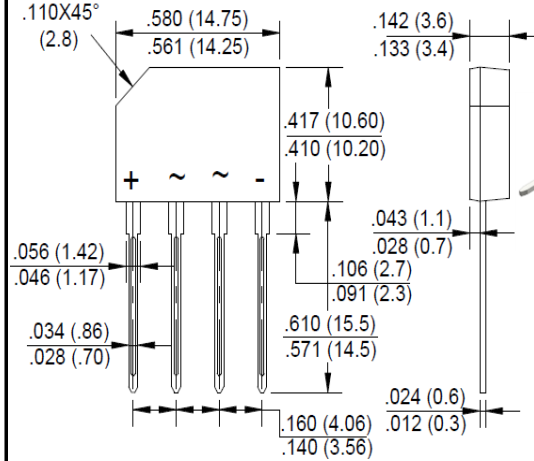
Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

Applications

- General purpose use in AC/DC bridge full wave rectification, for home appliances, office equipment, etc.

GBP



Package Outline Dimensions in Inches (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%.

| Characteristic | Symb | GBP005 | GBP01 | GBP02 | GBP04 | GBP06 | GBP08 | GBP10 | Unit |
|--|-------------------|-------------|-------|-------|-------|-------|-------|-------|------------------|
| Maximum Repetitive 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 _A =50 °C | I _(AV) | 1.5 | | | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I _{FSM} | 50 | | | | | | | A |
| I ² t Rating for Fusing (t<8.3mS) | I ² t | 10.4 | | | | | | | A ² s |
| Peak Forward Voltage per Diode at 1.5A DC | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated @T _J =25°C | I _R | 5 | | | | | | | μA |
| DC Blocking Voltage per Diode @T _J =125°C | | 500 | | | | | | | |
| Typical Thermal Resistance to Ambient (without heatsink) | R _{θJA} | 80 | | | | | | | °C/W |
| Operating Junction Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C |

Note: The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

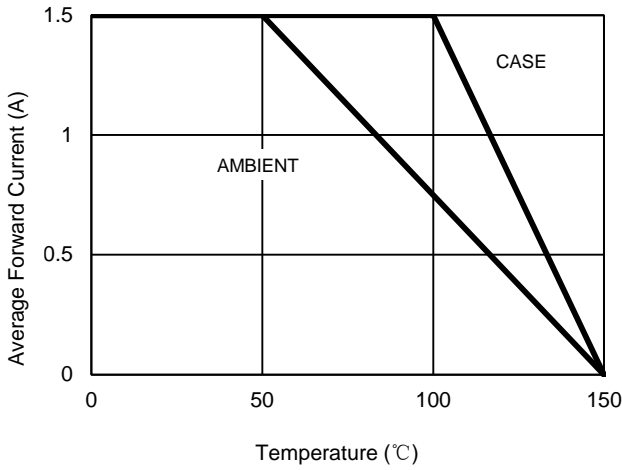


Fig. 2 - Maximum Non-Repetitive Surge Current

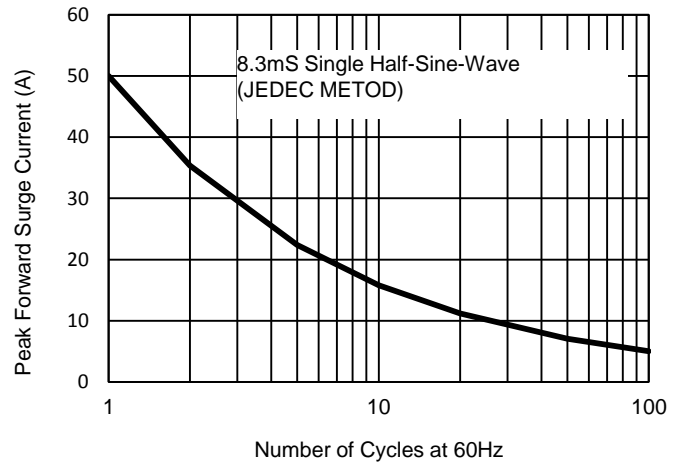


Fig. 3 - Typical Reverse Characteristics

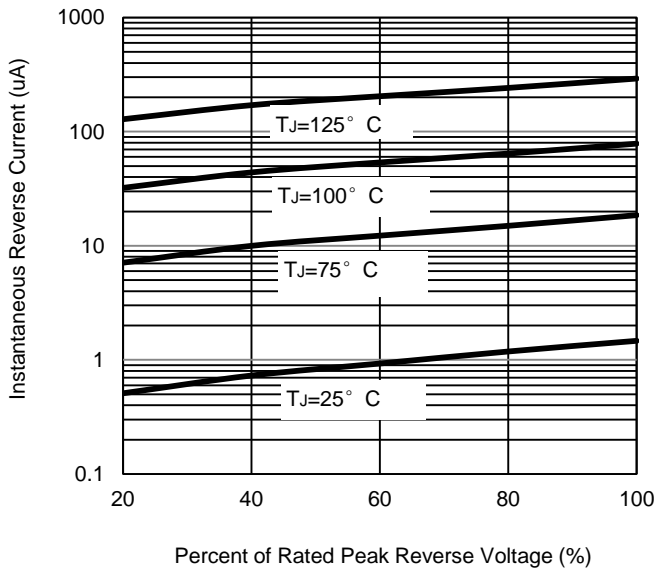
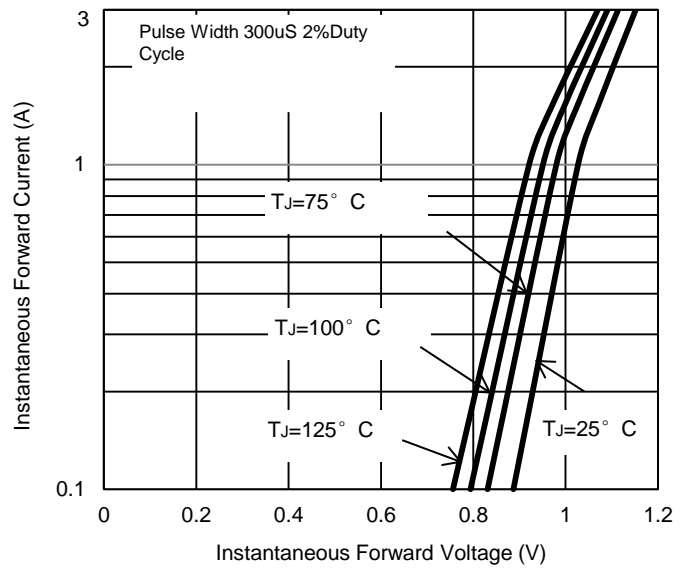


Fig. 4 - Typical Forward Characteristics





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