



Low VF Glass Passivated Bridge Rectifiers

Reverse Voltage - 600 Volts
Forward Current - 6.0 Amperes

Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- Meet UL flammability classification 94V-0

Mechanical Data

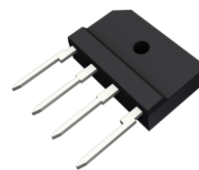
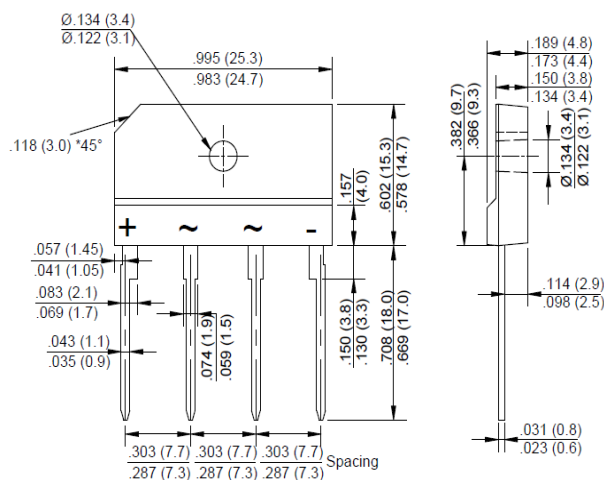
- Polarity: Symbol marked on body
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

4GBJ

RoHS
COMPLIANT

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%.

| Characteristics | Symbol | 4GBJ606U | Unit |
|--|-------------------|-------------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 600 | V |
| Maximum RMS Voltage | V _{RMS} | 420 | V |
| Maximum DC Blocking Voltage | V _{DC} | 600 | V |
| Maximum Average Forward (with heatsink Note 2) Rectified Current @ T _c =100°C (without heatsink) | I _(AV) | 6.0 2.8 | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I _{FSM} | 170 | A |
| I ² t Rating for Fusing (t<8.3mS) | I ² t | 120 | A ² s |
| Peak Forward Voltage per Diode at 3A DC | V _F | 0.9 | V |
| Maximum DC Reverse Current at Rated @T _J =25°C | I _R | 5.0 | μA |
| DC Blocking Voltage per Diode @T _J =125°C | | 120 | |
| Typical Junction Capacitance per Diode (Note1) | C _J | 55 | pF |
| Typical Thermal Resistance to case (with heatsink (Note2)) | R _{θJC} | 1.8 | °C/W |
| Operating Junction Temperature Range | T _J | -55 to +150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |

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

2.Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

3.The typical data above is for reference only .

4GBJ606F-U-00-S003

Rev. 11, 18-May-2020



Fig. 1 - Forward Current Derating Curve

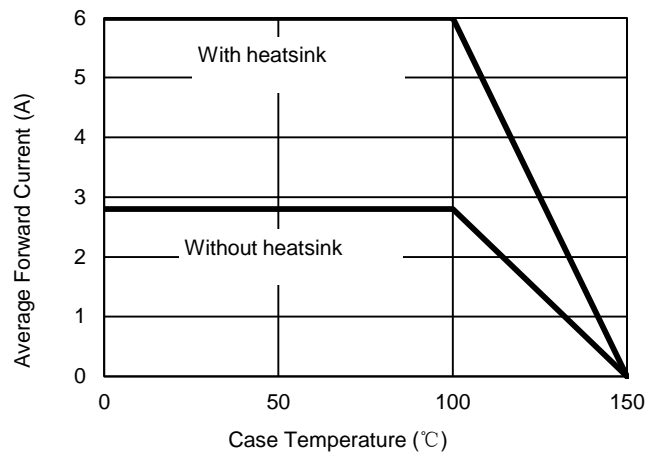


Fig. 2 - Maximum Non-Repetitive Surge Current

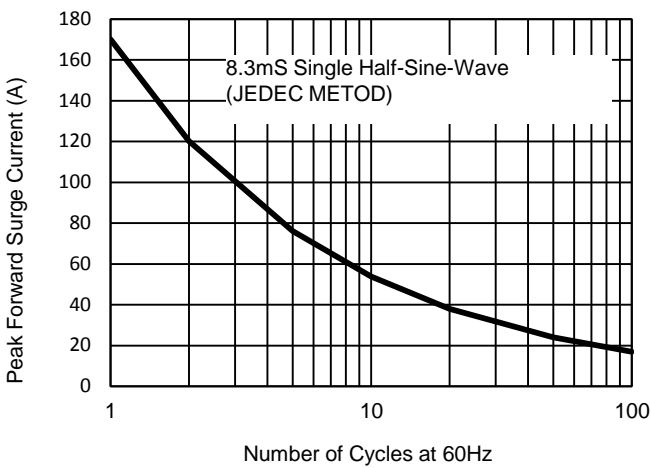


Fig. 3 - Typical Reverse Characteristics

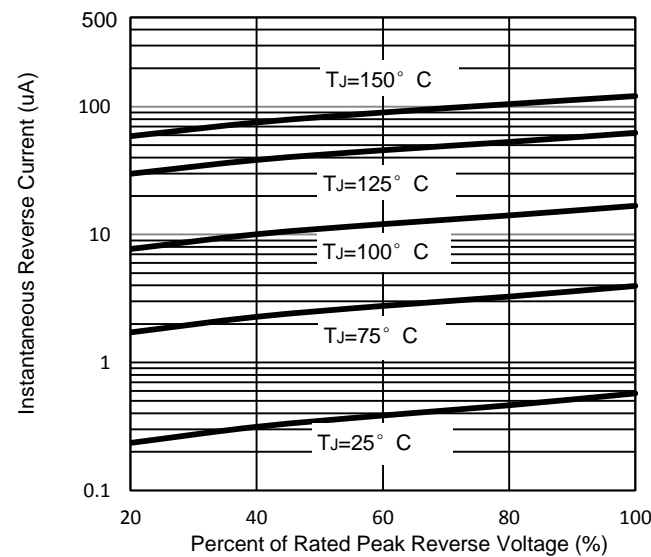


Fig. 4 - Typical Forward Characteristics

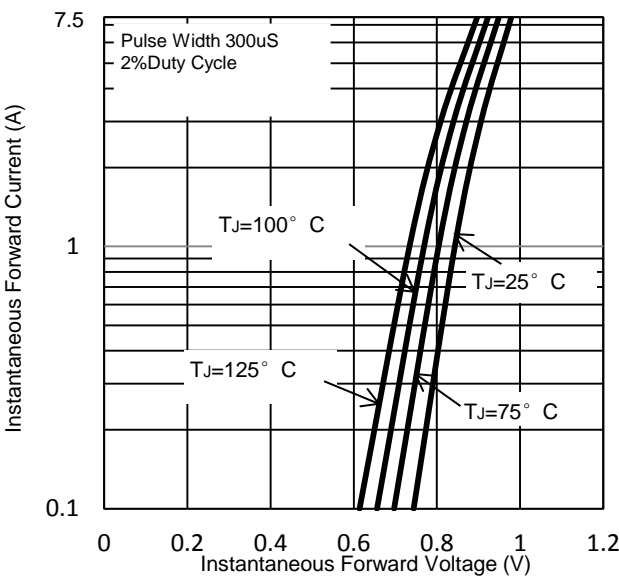
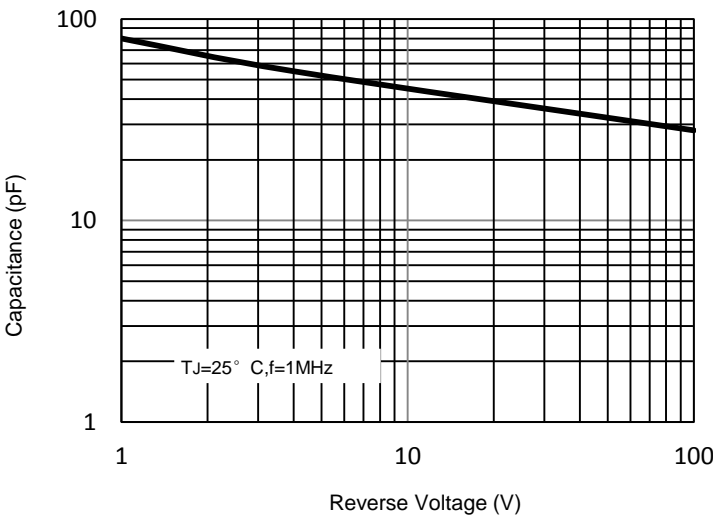


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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