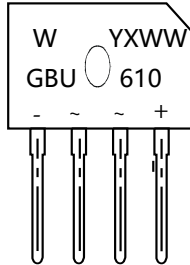


Glass Passivated Bridge Rectifiers



Note:Silk screen for GBU610

PINNING

| PIN | DESCRIPTION |
|-----|--------------------|
| 1 | Input Pin (~) |
| 2 | Input Pin (~) |
| 3 | Output Anode (+) |
| 4 | Output Cathode (-) |

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

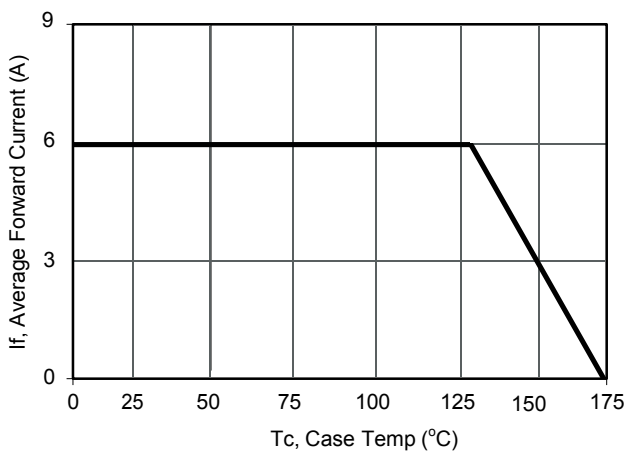
| Parameter | Symbols | GBU610G | Units |
|---|----------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage | VRRM | 1000 | V |
| Maximum RMS voltage | VRMS | 700 | V |
| Maximum DC Blocking Voltage | VDC | 1000 | V |
| Average Rectified Output Current | I_o | 6.0 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 175 | A |
| $I^2 t$ rating for fusing (1ms< t < 8.3ms) | $I^2 t$ | 153 | A ² S |
| Maximum Forward Voltage at 3.0 A | VF | 1.0 | V |
| Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C | IR | 5 500 | μA |
| Typical Junction Capacitance (Note1) | Cj | 60 | pF |
| Operating and Storage Temperature Range | Tj, Tstg | -55 ~ +175 | °C |
| Typical thermal resistance (Note 2) | RthJA RthJL | 10 3.0 | °C/W |

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

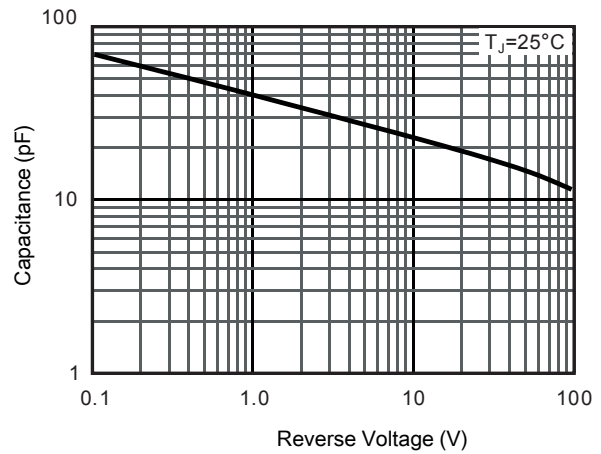
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

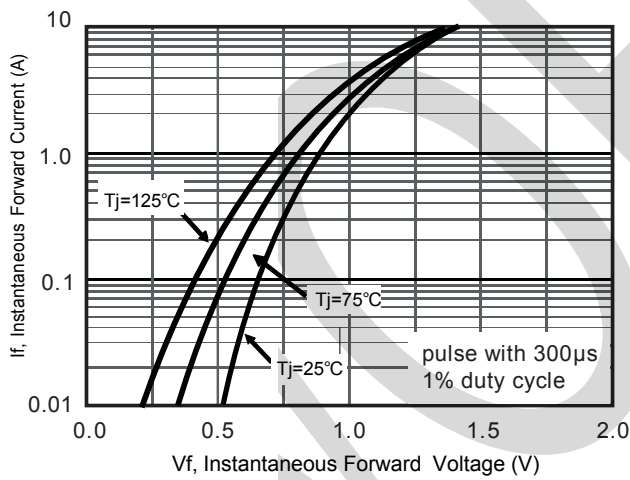
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



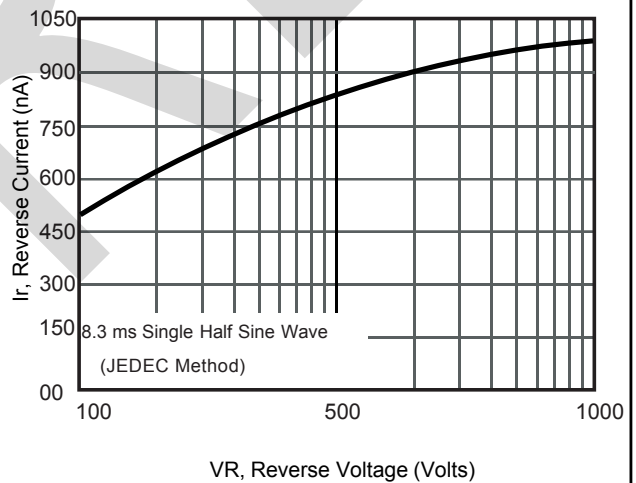
Current Derating, Case



Typical Junction Capacitance

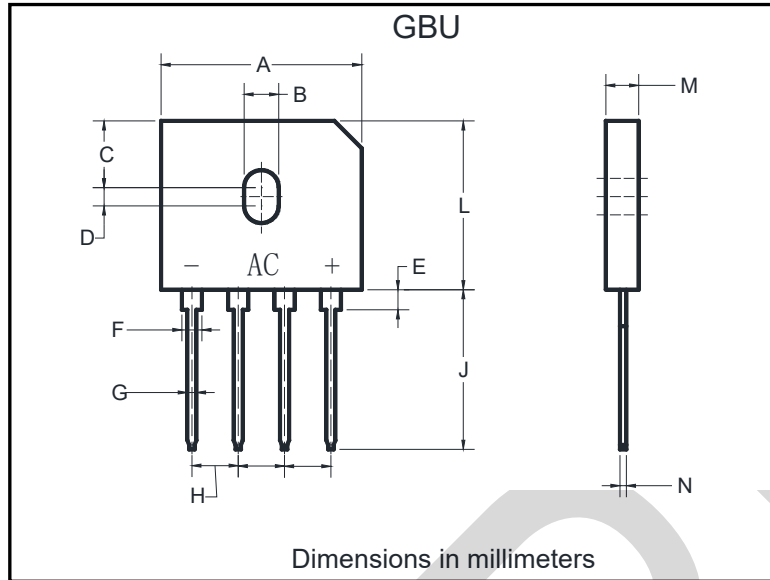


Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS



| GBU | | |
|-----|-------|-------|
| Dim | Min | Max |
| A | 21.70 | 22.50 |
| B | 3.40 | 4.10 |
| C | 7.40 | 8.00 |
| D | 1.65 | 2.26 |
| E | 2.25 | 2.85 |
| F | 2.05 | 2.4 |
| G | 1.02 | 1.37 |
| H | 4.83 | 5.43 |
| J | 17.0 | 18.6 |
| L | 18.3 | 18.9 |
| M | 3.30 | 3.66 |
| N | 0.46 | 0.66 |

