

4.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current – 4.0A

FEATURES

- ◆ Surge overload rating-135 amperes peak
- ◆ Polarity:As marked on body
- ◆ Ideal for printed circuit board
- ◆ Plastic material has U/L



The flammability classification 94V-0

- ◆ Reliable low cost construction utilizing molded plastic technique

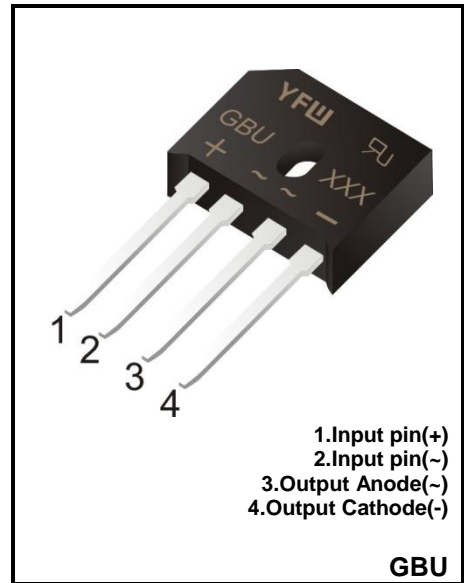
MECHANICAL DATA

- ◆ Case: GBU
- ◆ Terminals: Solderable per MIL-STD-202, Method 208
- ◆ Approx. Weight: 3.9g / 0.138oz

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 | GBU401 | GBU402 | GBU404 | GBU406 | GBU408 | GBU410 | Units |
|--|-----------------|------------|--------|--------|--------|--------|--------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current at $T_C=100^{\circ}C$ (Note 1) $T_A=40^{\circ}C$ (Note 2) | $I_{(AV)}$ | 4.0 2.4 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 135 | | | | | | A |
| Forward Voltage per element @ $I_F=2.0A$ DC | V_F | 1.0 | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_a=25^{\circ}C$ @ $T_a=125^{\circ}C$ | I_R | 5 500 | | | | | | μA |
| I2t Rating for Fusing(3ms≤t≤8.3ms) | I^2t | 75 | | | | | | A ² S |
| Typical Junction Capacitance (Note1) | C_j | 35 | | | | | | pF |
| Typical Thermal Resistance (Note2) | $R_{\theta JC}$ | 5.5 | | | | | | °C/W |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | | | | | | °C |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
(2) Device mounted on 150mm*150mm*16mm cu plate heatsink

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

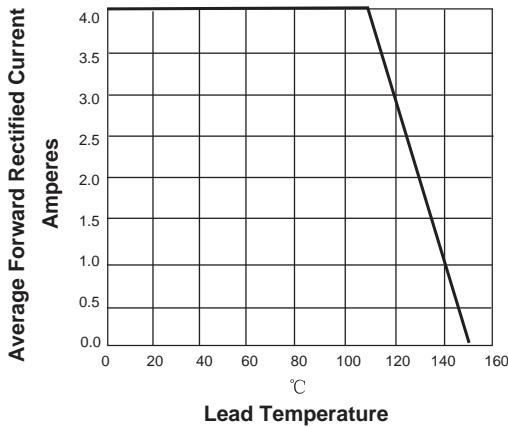


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

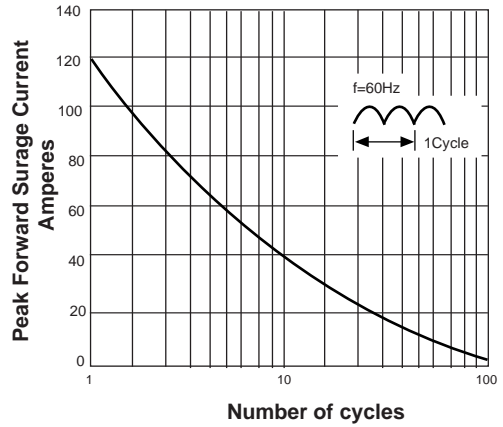


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

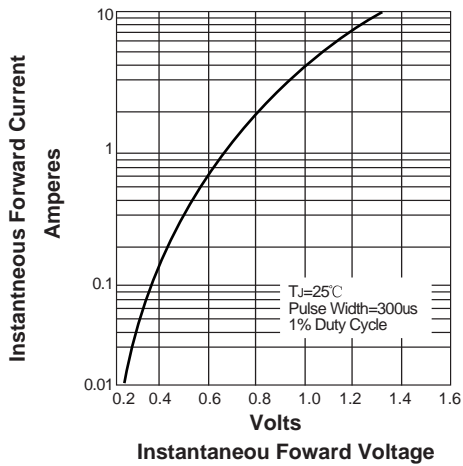
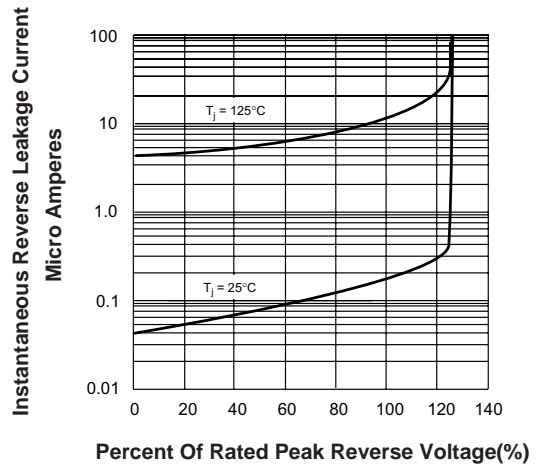
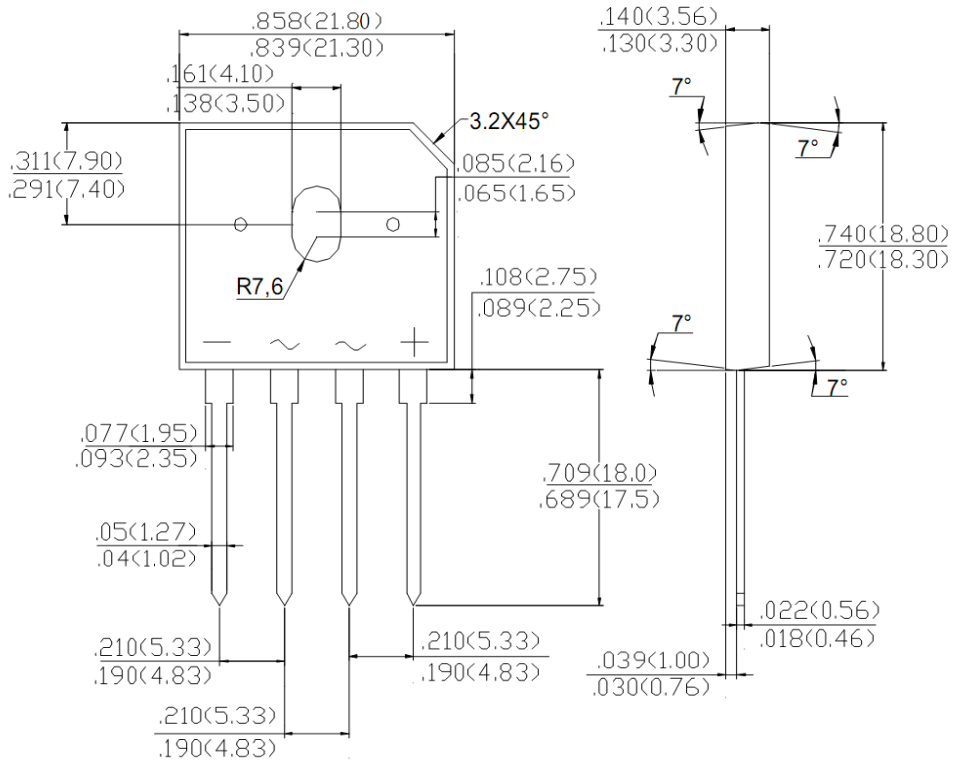


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Outline

GBU



Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| GBU | BOX | 350 | EIA-481-1 |