

## Features:

- Rating to 1,000V PRV
- Surge Overload Rating to 200A Peak
- Ideal for Printed Circuit Board
- Reliable Low Cost Construction Utilizing Moulded Plastic Technique Results in Inexpensive Product
- Lead Solderable per MIL-STD-202 Method 208
- Glass Passivated Junctions

## Maximum Ratings and Electrical Characteristics:

Ratings at 25°C ambient temperature unless otherwise specified.

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

| Characteristics                                                                                        | Symbol         | GBU810      | Units         |
|--------------------------------------------------------------------------------------------------------|----------------|-------------|---------------|
| Maximum recurrent peak reverse voltage                                                                 | $V_{RRM}$      | 1,000       | V             |
| Maximum RMS voltage                                                                                    | $V_{RMS}$      | 700         | V             |
| Maximum DC blocking voltage                                                                            | $V_{DC}$       | 1,000       | V             |
| Maximum average forward output current at $T_C=100^{\circ}C$                                           | $I_{F(AV)}$    | 8           | A             |
| Peak forward surge current 8.3ms single half-sine-wave Super imposed on rated load                     | $I_{FSM}$      | 200         | A             |
| Maximum instantaneous forward voltage at 4A                                                            | $V_F$          | 1           | V             |
| Maximum reverse current at $T_A = 25^{\circ}C$<br>At rated DC blocking voltage at $T_A = 100^{\circ}C$ | $I_R$          | 10<br>1     | $\mu A$<br>mA |
| Storage and Operating junction temperature range                                                       | $T_J, T_{STG}$ | -50 to +150 | $^{\circ}C$   |

FIG.5 – TYPICAL JUNCTION CAPACITANCE PER ELEMENT

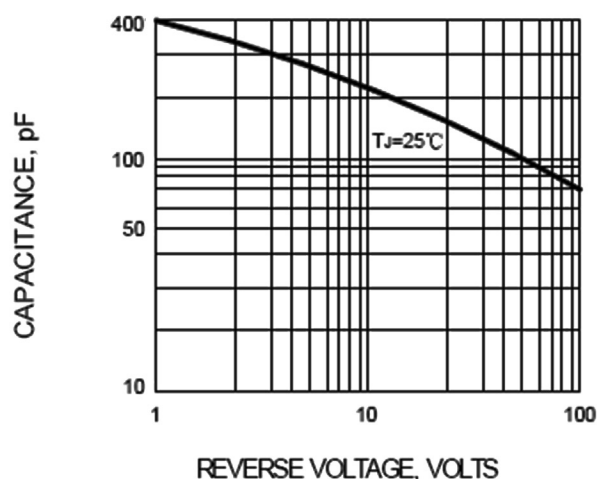


FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

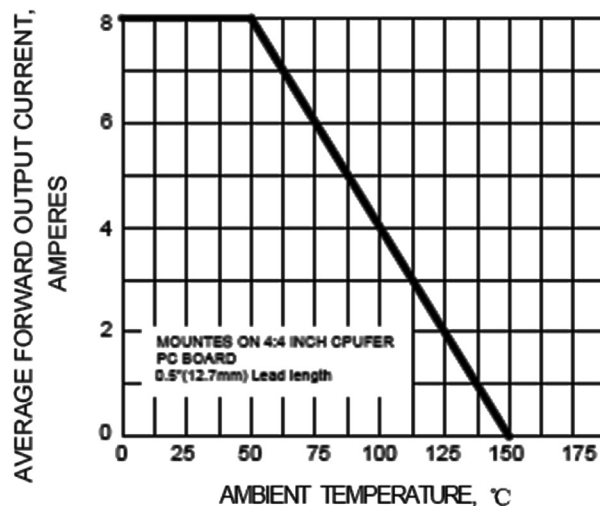


FIG.2 – MAXIMUM FORWARD SURGE CURRENT

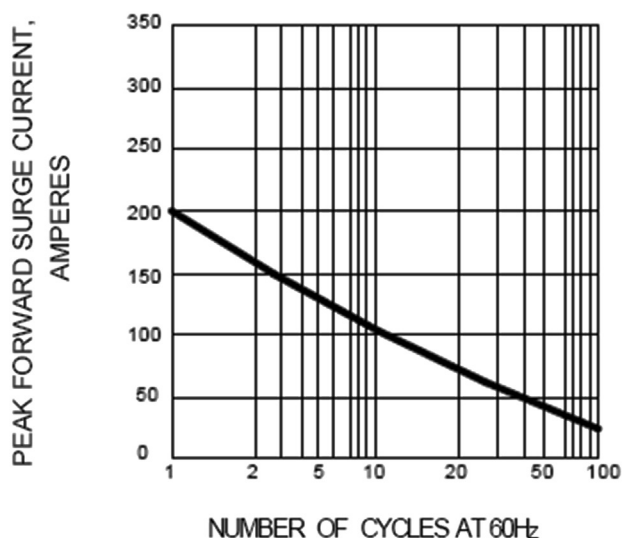


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

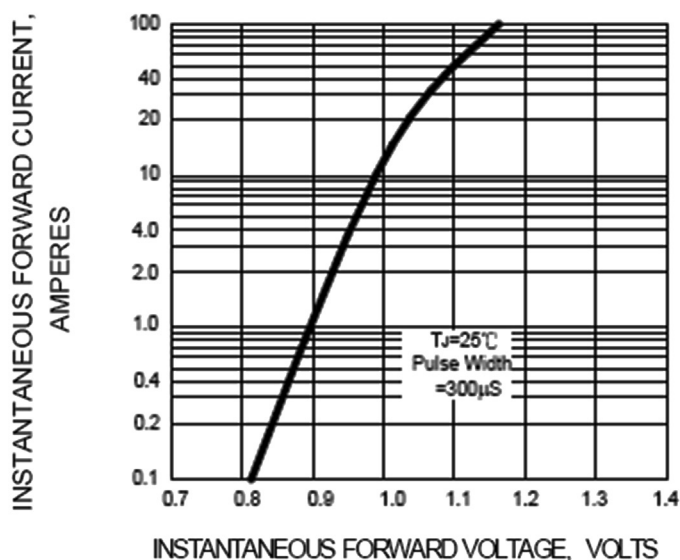
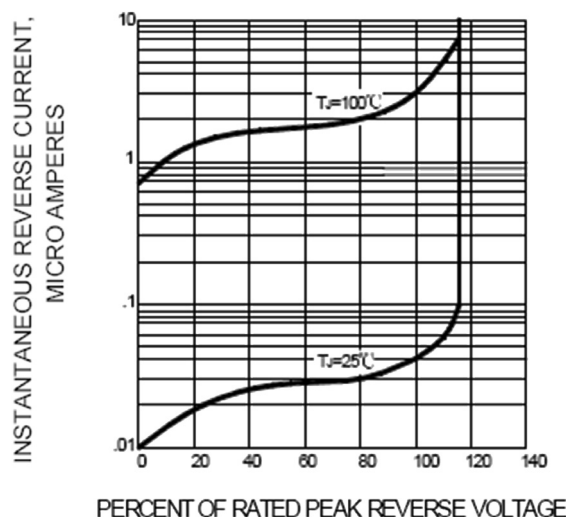
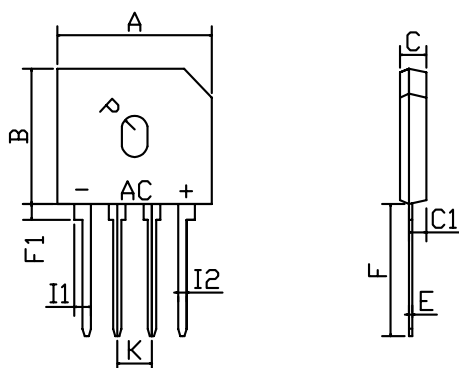


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



## Package Outline Dimensions:



| GBU                  |             |      |
|----------------------|-------------|------|
| Dim                  | Min         | Max  |
| A                    | 22          | 22.4 |
| B                    | 18.4        | 18.8 |
| C                    | 3.4         | 3.95 |
| C1                   | 2.5         | 3    |
| E                    | 0.4         | 0.6  |
| F                    | 17 min      |      |
| F1                   | 1.7         | 2.3  |
| I1                   | 2.3         | 2.6  |
| I2                   | 0.95        | 1.25 |
| K                    | 4.7         | 5.3  |
| P                    | 1.9 Typical |      |
| All Dimensions in mm |             |      |

## Package Information

| Device | Package | Shipping      |
|--------|---------|---------------|
| GBU810 | GBU     | 500 Units/Box |

## Part Number Table

| Description              | Part Number |
|--------------------------|-------------|
| Silicon Bridge Rectifier | GBU810      |

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