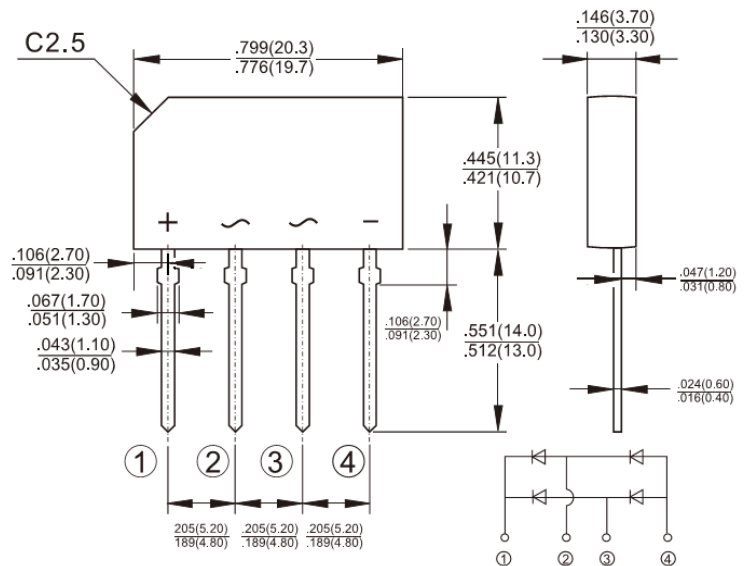
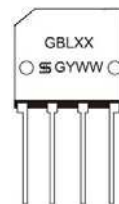



**GBL**
**Features**

- ◇ UL Recognized File # E-326243
- ◇ Glass passivated junction
- ◇ Ideal for printed circuit board
- ◇ High case dielectric strength
- ◇ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ◇ Typical IR less than 0.1uA
- ◇ High surge current capability
- ◇ High temperature soldering guaranteed: 260°C / 10 seconds at 5lbs., (2.3kg) tension
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode


**Mechanical Data**

- ◇ Case: Molded plastic body
- ◇ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ◇ Weight: 2.0 grams
- ◇ Mounting position: Any

**Dimensions in inches and (millimeters)**

**Marking Diagram**

- GBLXX = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

**Maximum Ratings and Electrical Characteristics**

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number  | Symbol  | GBL 005       | GBL 01 | GBL 02 | GBL 04 | GBL 06 | GBL 08 | GBL 10 | 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<br>@ $T_C=50^\circ C$<br>@ $T_A=40^\circ C$              | $I_{F(AV)}$   | 4<br>3        |        |        |        |        |        |        | A                |      |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$   | 150           |        |        |        |        |        |        | A                |      |
| Rating for fusing (t<8.3ms)  | $I^2T$  | 93            |        |        |        |        |        |        | A <sup>2</sup> S |      |
| Maximum Instantaneous Forward Voltage (Note 1)<br>@ 2 A<br>@ 4 A                                   | $V_F$   | 1.0<br>1.1    |        |        |        |        |        |        | V                |      |
| Maximum DC Reverse Current at Rated DC Block Voltage<br>@ $T_A=25^\circ C$<br>@ $T_A=125^\circ C$  | $I_R$   | 5<br>500      |        |        |        |        |        |        | uA               |      |
| Typical Junction Capacitance   | $C_j$   | 95            |        |        |        | 40     |        |        | pF               |      |
| Typical Thermal Resistance   | $R_{\theta JA}$<br>$R_{\theta JL}$<br>$R_{\theta JC}$ | 32<br>13<br>8 |        |        |        |        |        |        |                  | °C/W |
| Operating Temperature Range  | $T_J$   | - 55 to + 150 |        |        |        |        |        |        | °C               |      |
| Storage Temperature Range  | $T_{STG}$   | - 55 to + 150 |        |        |        |        |        |        | °C               |      |

Notes 1: Pulse Test with PW=300 usec, 1% Duty Cycle

## RATINGS AND CHARACTERISTIC CURVES (GBL005 THRU GBL10)

FIG.1 FORWARD CURRENT DERATING CURVE

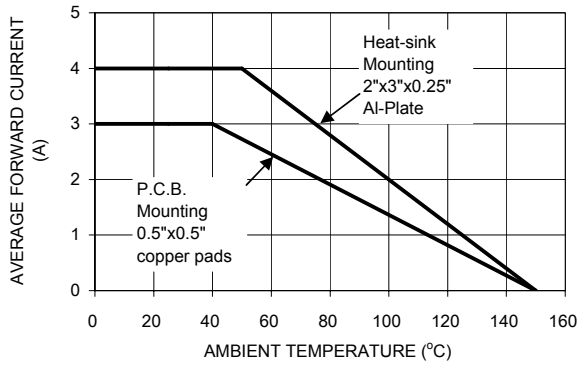


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

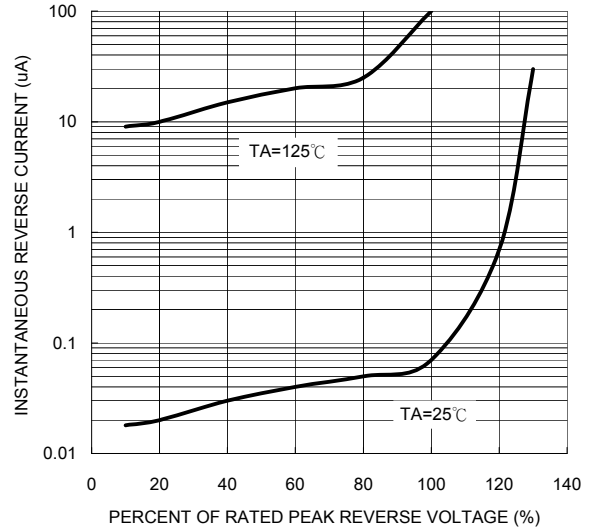


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

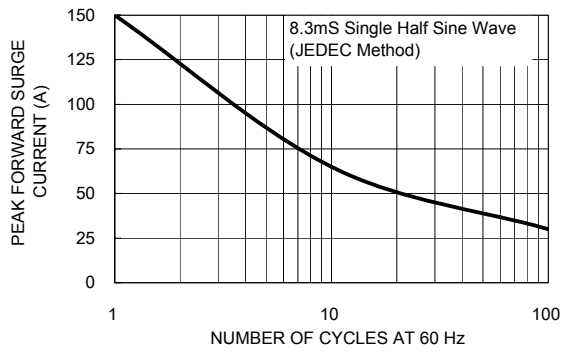


FIG. 4 TYPICAL JUNCTION CAPACITANCE

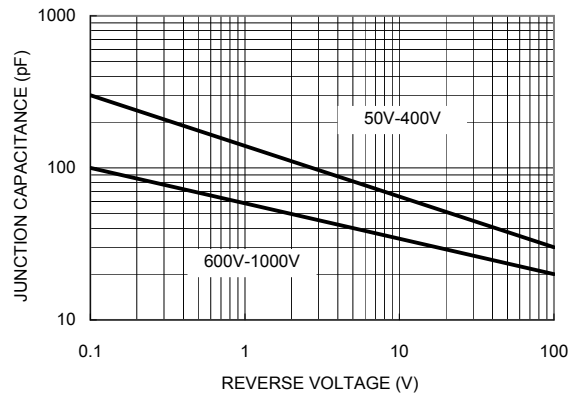


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

