



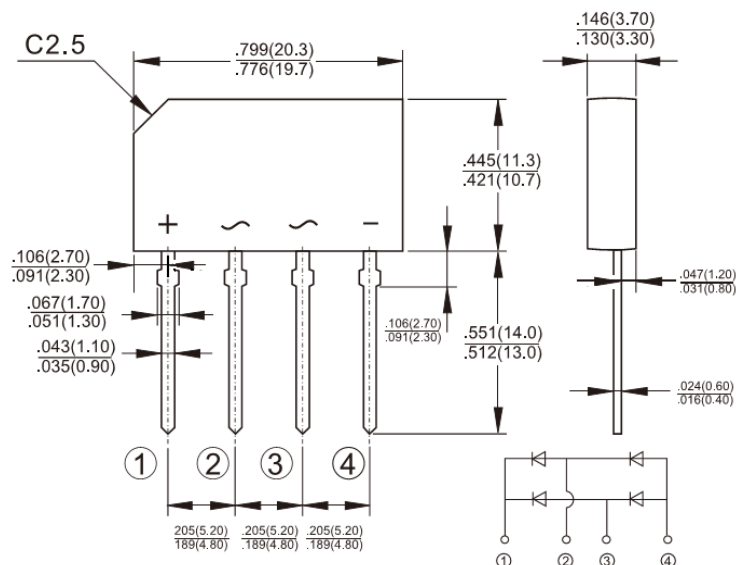
GBLA005 - GBLA10

Single Phase 4.0AMPS. Glass Passivated Bridge Rectifiers

GBL

Features

- ✧ 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



- PN = 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 | GBLA 005 | GBLA 01 | GBLA 02 | GBLA 04 | GBLA 06 | GBLA 08 | GBLA 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 @ $T_C=50^{\circ}C$ @ $T_A=40^{\circ}C$ | $I_{F(AV)}$ | 4 3 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 120 | | | | | | | A |
| Rating for fusing (t<8.3ms) | I^2T | 59.76 | | | | | | | A ² S |
| Maximum Instantaneous Forward Voltage (Note 1) @ 4 A | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^{\circ}C$ @ $T_A=125^{\circ}C$ | I_R | 5 500 | | | | | | | uA |
| Typical Thermal Resistance | $R_{\theta JA}$ $R_{\theta JL}$ | 47 10 | | | | | | | °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 (GBLA005 THRU GBLA10)

FIG.1 FORWARD CURRENT DERATING CURVE

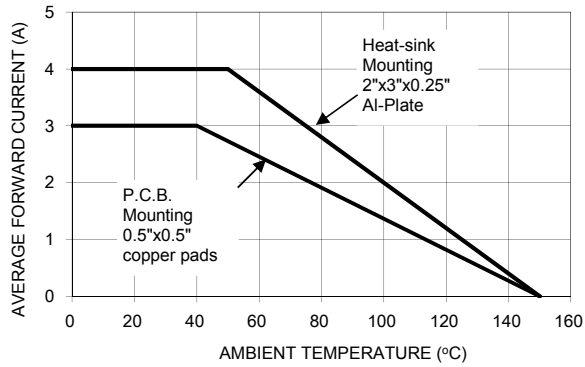


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

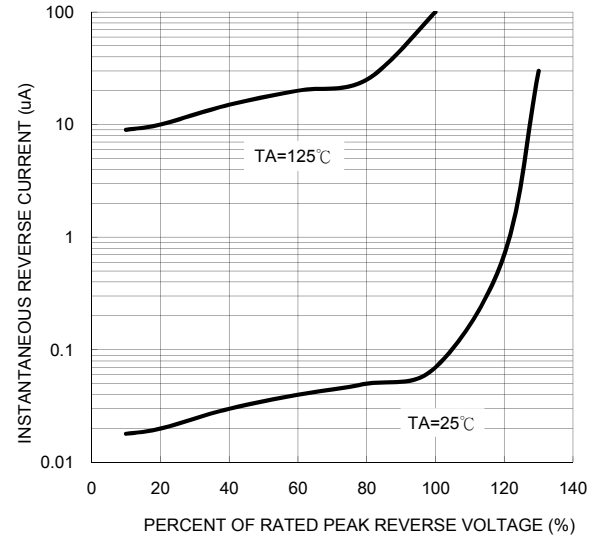


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

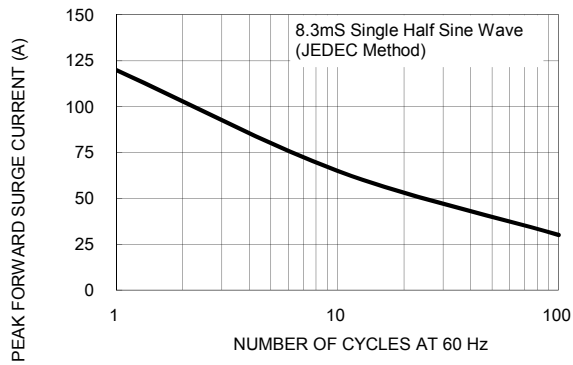


FIG. 4 TYPICAL JUNCTION CAPACITANCE

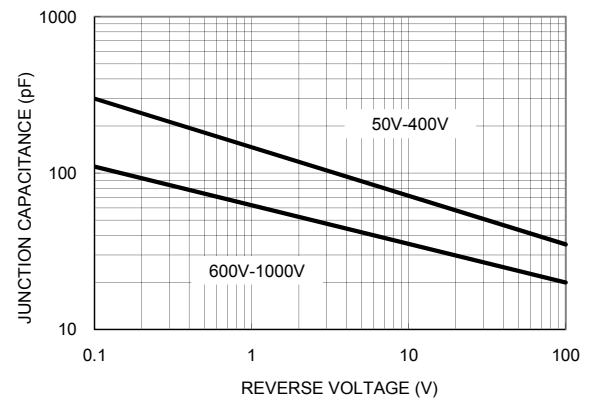


FIG. 5 TYPICAL FORWARD CHARACTERISRICS

