

10A GLASS PASSIVATED BRIDGE RECTIFIER Reverse

Voltage - 100 to 1000 V

Forward Current – 10A

FEATURES

- ◆ Surge overload rating-200 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: GBJ
- ◆ Terminals: Solderable per MIL-STD-202, Method 208
- ◆ Approx. Weight: 6.79g /0.24oz

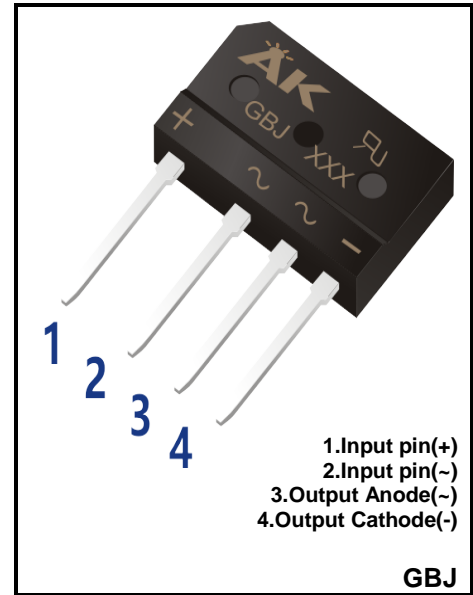
Maximum Ratings and Electrical characteristics

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 %.



RoHS
COMPLIANT
HALOGEN
FREE



| Parameter | Symbols | GBJ1001G | GBJ1002G | GBJ1004G | GBJ1006G | GBJ1008G | GBJ1010G | 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 | $I_{(AV)}$ | 10 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 200 | | | | | | A |
| Forward Voltage per element @ $I_F=5A$ DC | V_F | 1.0 | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_J=125^{\circ}C$ | I_R | 5 500 | | | | | | μA |
| I ² t Rating for Fusing(3ms≤t≤8.3ms) | I^2t | 166 | | | | | | A ² S |
| Typical Junction Capacitance ^(Note1) | C_j | 66 | | | | | | pF |
| Typical Thermal Resistance ^(Note2) | $R_{\theta JC}$ | 1.6 | | | | | | °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 75mm*75mm*1.6mm cu plate heatsink

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

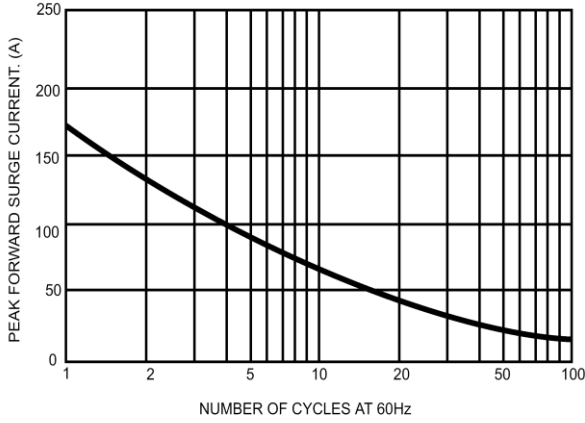


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

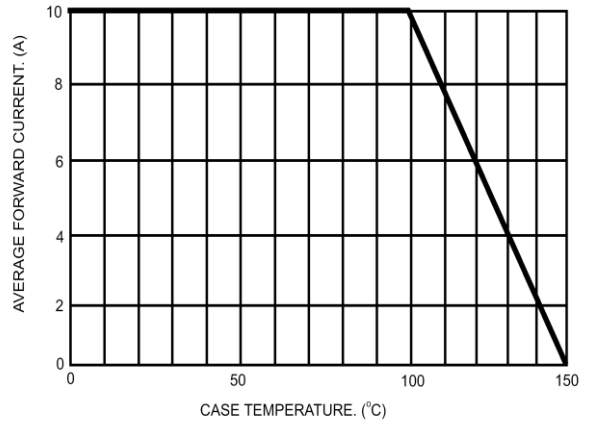


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

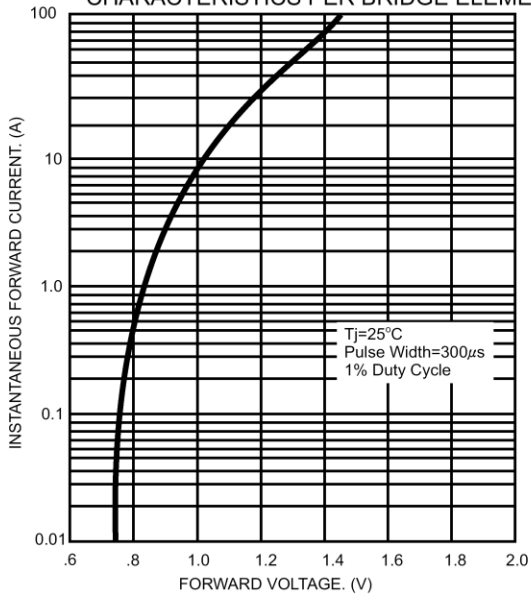
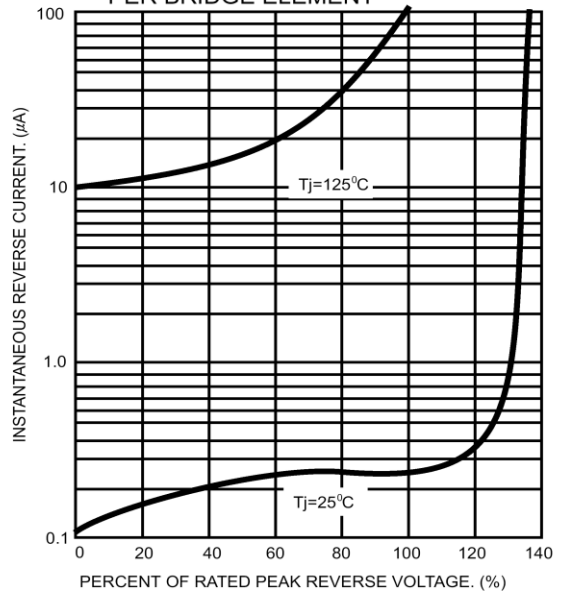
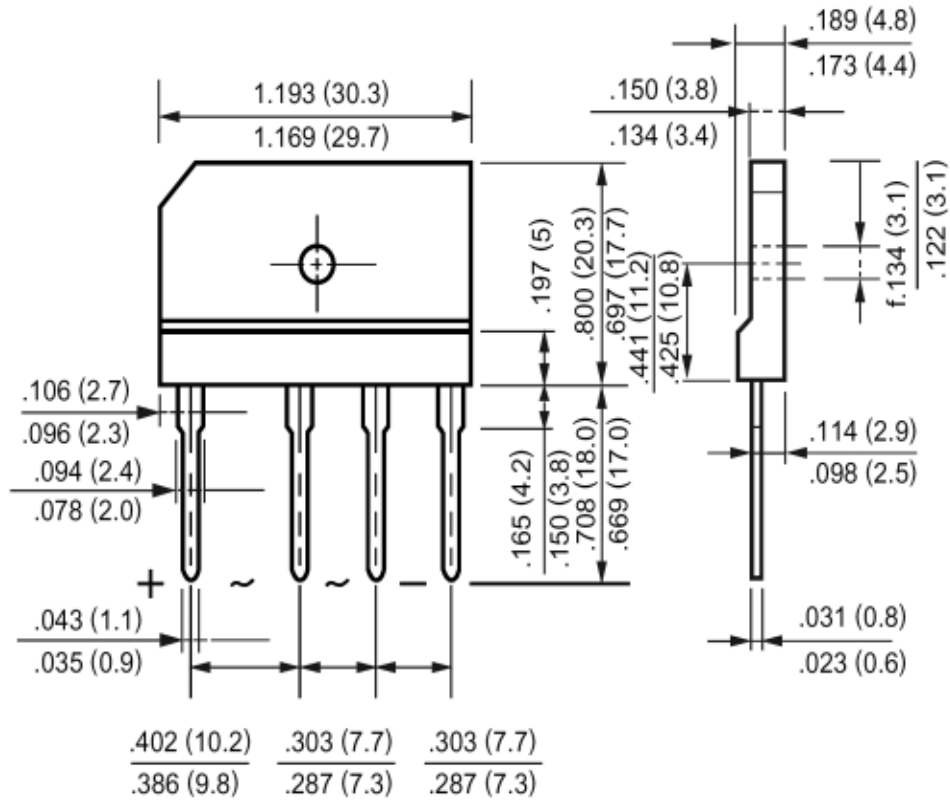


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Package Outline

GBJ



Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| GBJ | BOX | 200 | EIA-481-1 |