



DATA SHEET

GBP200~GBP2010

IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE - 50 to 1000 Volts CURRENT - 2.0 Amperes

GBP

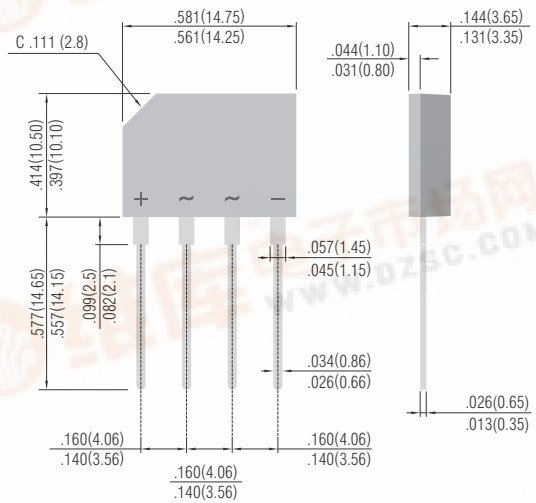
Unit: inch (mm)

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating : 60 Amperes peak

MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-202, Method 208
Mounting position: Any
Weight: 0.06 ounce, 1.7 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

| | GBP200 | GBP201 | GBP202 | GBP204 | GBP206 | GBP208 | GBP2010 | UNIT |
|---|--------------|--------|--------|--------|--------|--------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Input Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Rectified Output Current at 50°C Ambient. | 2.0 | | | | | | | A |
| Peak One Cycle Surge Overload Current | 60.0 | | | | | | | A |
| Maximum Instantaneous Forward Voltage Drop per Bridge element at 1.0A dc | 1.0 | | | | | | | V |
| Maximum (Total Bridge) Reverse Leakage at rated T _A =25° CDc Blocking Voltage per element T _A =100°C | 5.0 500 | | | | | | | µA |
| I _{2t} Rating for fusing (t<8.35ms) | 15.0 | | | | | | | A ² S |
| Typical junction capacitance per leg (Note 1) | 25.0 | | | | | | | pF |
| Typical Thermal Resistance per leg (Note 2) R _{θJA} R _{θJL} | 32.0 13.0 | | | | | | | °C / W |
| Operating Temperature Range, T _J | -55 to +125 | | | | | | | °C |
| Storage Temperature Range, T _{STG} | -55 to +150 | | | | | | | °C |

NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0 volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.47 x 0.47"(12 x 12mm)copper pads.





RATING AND CHARACTERISTIC CURVES

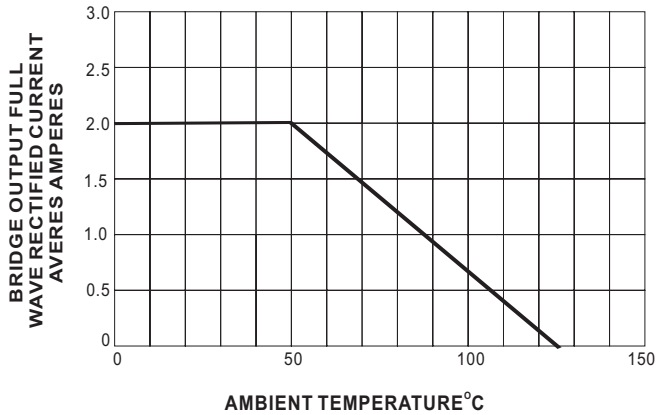


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

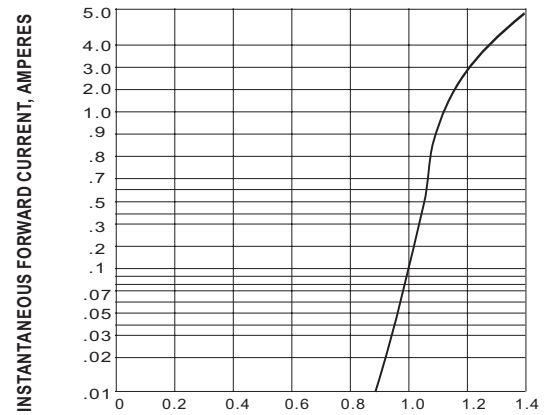


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS (25°C)

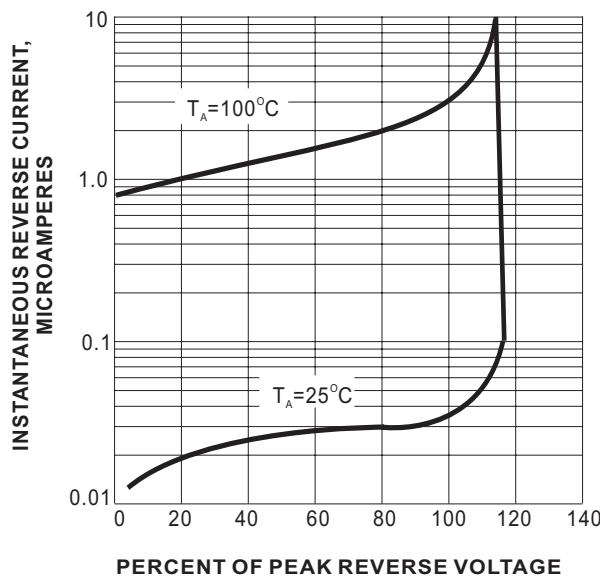


Fig. 3- TYPICAL REVERSE CHARACTERISTICS

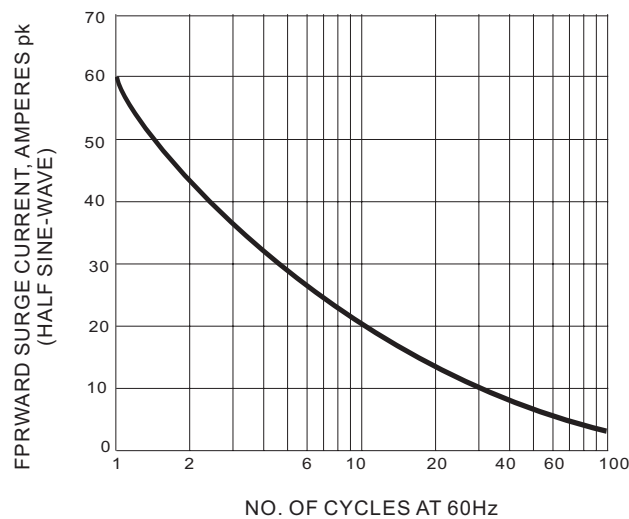


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT