

Kingtronics®**GBU15005 THRU
GBU1510****SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS****REVERSE VOLTAGE 50 to 1000 Volts****FORWARD CURRENT 15 Ampere****FEATURES**

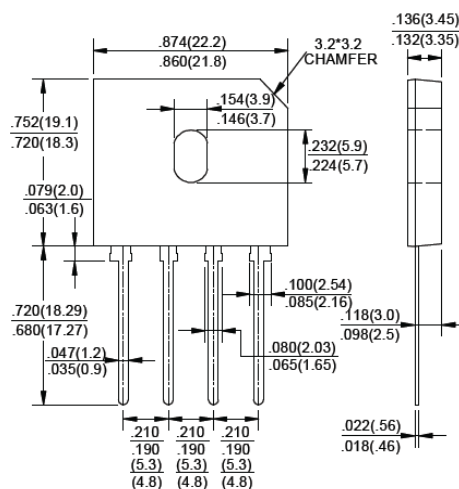
- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic Technique
- The plastic material has UL flammability classification 94V-0
- Electrically isolated base-1500 Volts

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.15 ounces, 4.0 grams
- Mounting position : Any

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 current by 20%

Dimensions in inches and (millimeters)

| PARAMETER | SYMBOL | GBU 15005 | GBU 1501 | GBU 1502 | GBU 1504 | GBU 1506 | GBU 1508 | GBU 1510 | UNIT |
|---|-----------------|-------------|----------|----------|----------|----------|----------|----------|---------------------------|
| Maximum Recurrent 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 (with heatsink Note 2) Rectified Current, @ $T_c=100^\circ\text{C}$ (without heatsink) | $I_{(AV)}$ | 15 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 240 | | | | | | | A |
| Maximum Forward Voltage at 7.5A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J = 25^\circ\text{C}$ at Rated DC blocking voltage @ $T_J = 125^\circ\text{C}$ | I_R | 5.0 500 | | | | | | | μA |
| I^2t Rating for fusing ($t < 8.3\text{ms}$) | I^2t | 166 | | | | | | | A^2S |
| Typical Junction Capacitance per element (Note 1) | C_J | 50 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 2.0 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

1- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2- Device mounted on 200mm x 200mm x 5mm Al Plate Heatsink.

Kingtronics® International CompanyWebsite: www.kingtronics.comEmail: info@kingtronics.com

Tel: (852) 8106 7033

Fax: (852) 8106 7099

RATINGS AND CHARACTERISTIC CURVES

FIG.1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

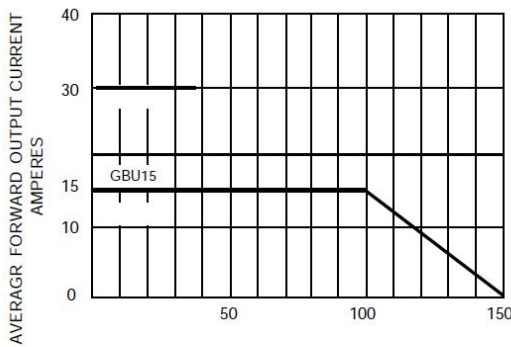


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

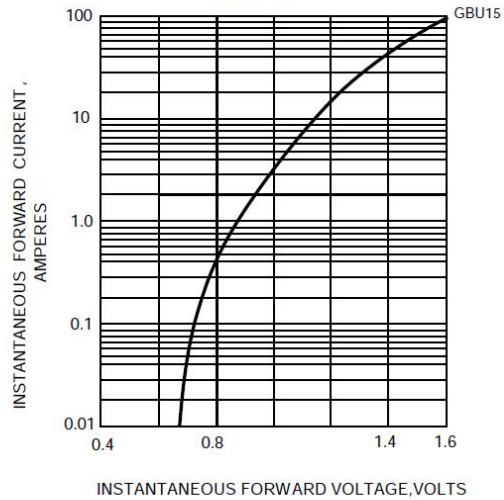


FIG.3-MAXIMUM FORWARD SURGE CURRENT

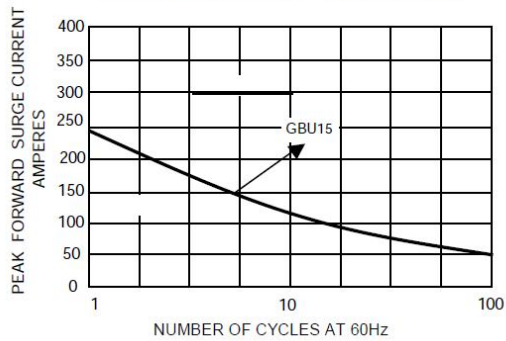


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

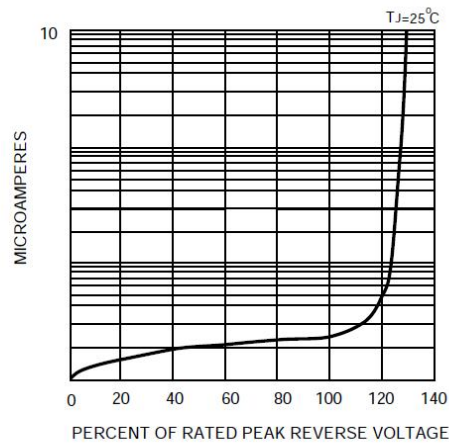
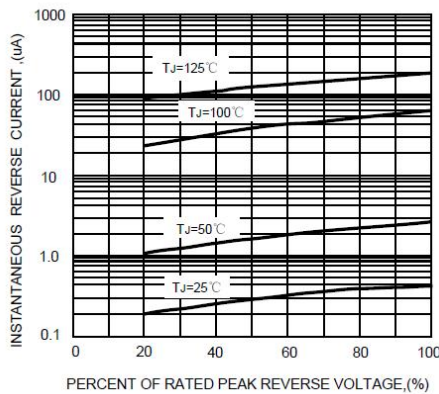


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.