



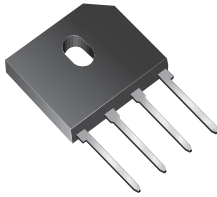
Elektronische Bauelemente

GBU15005 THRU GBU1510

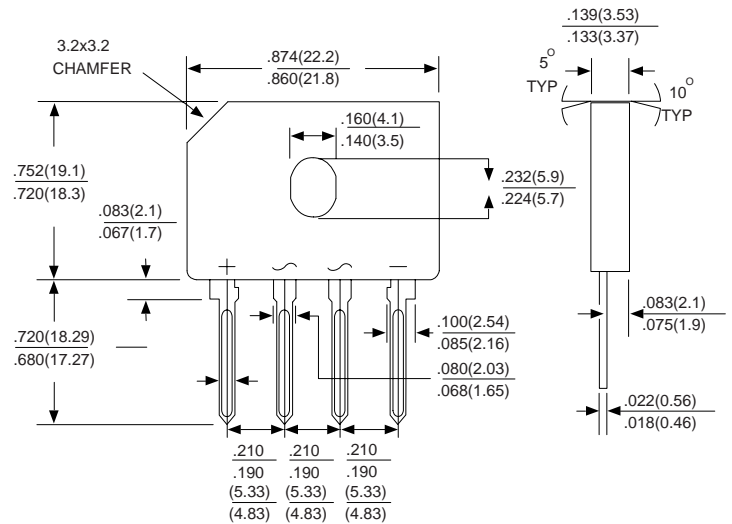
VOLTAGE 50V~1000V

15.0 AMP Glass Passivated Bridge Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen-free.



GBU



Dimensions in inches and (millimeters)

FEATURES

- * Surge Overload Rating -220~350 Amperes Peak
- * Ideal For Printed Circuit Board
- * Reliable Low Cost Construction Utilizing Molded Plastic Technique
- * Plastic Material Has Underwrites Laboratory Flammability Classification 94V-0
- * Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| CHARACTERISTICS | 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} | 30 | 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 =100°C (with heatsink Note 2) | I _(AV) | 15 | | | | | | | A |
| Rectified Current @ T _c =100°C (without heatsink) | | 3.2 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 240 | | | | | | | A |
| Maximum Forward Voltage at 5.0/7.5/12.5A DC | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =25°C | I _R | 10.0 | | | | | | | uA |
| @ T _J =125°C | | 500 | | | | | | | |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 200 | | | | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | C _J | 70 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJC} | 2.2 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C |

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM FORWARD SURGE CURRENT

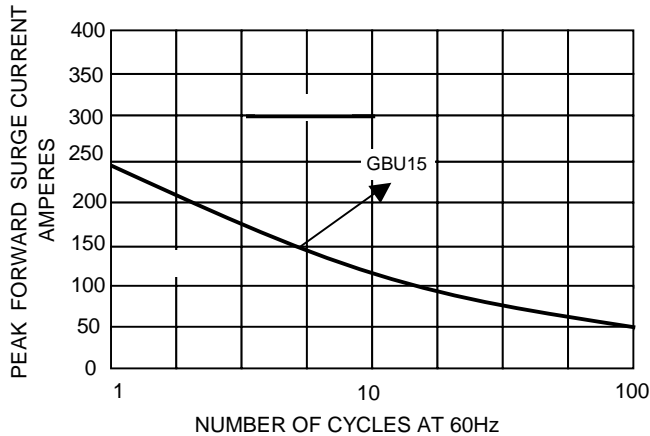


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

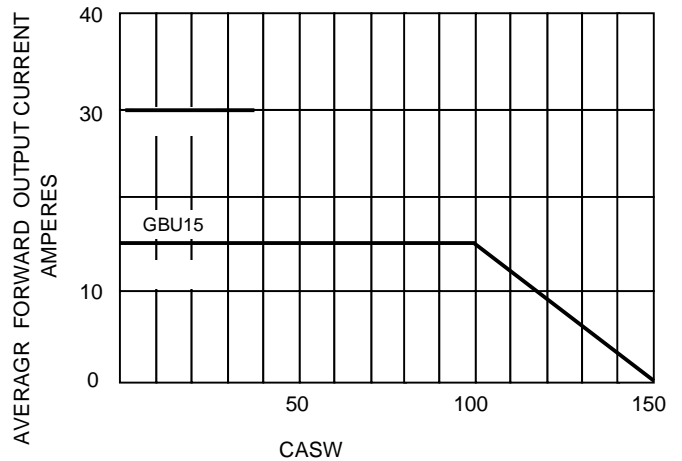


FIG.3-TYPICAL FORWARD CHARACTERISTICS

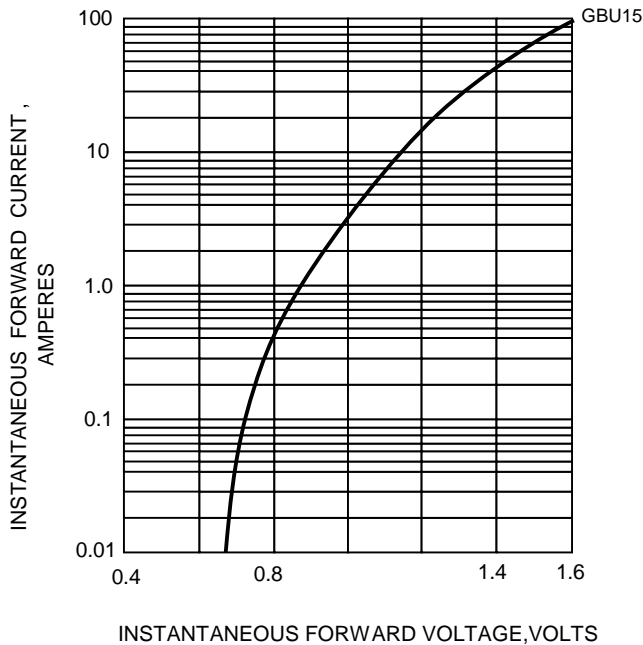


FIG.4-TYPICAL REVERSE CHARACTERISTICS

