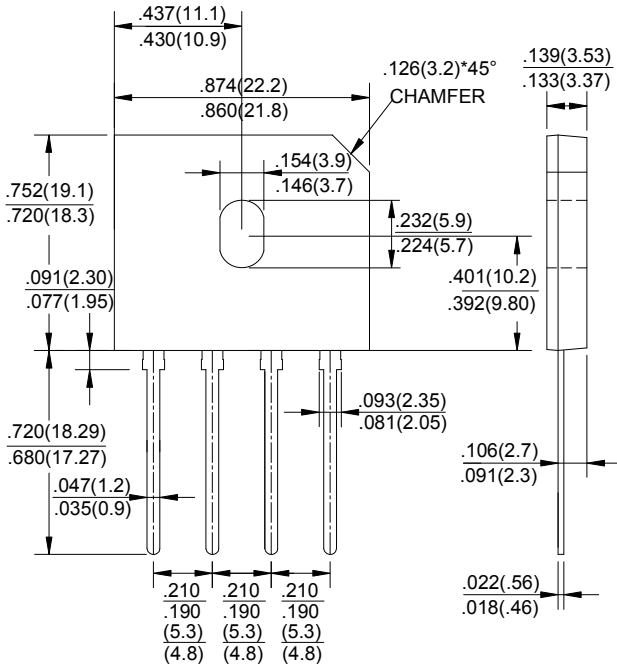


## GBU10/15/25 SERIES

### GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts

FORWARD CURRENT - 10/15/25 Amperes



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 U/L flammability classification 94V-0
- Mounting position: Any
- Weight: 0.138 ounces , 3.9 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise

specified. Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

### Package: GBU

| CHARACTERISTICS                                                                                         | SYMBOL | GBU<br>10005<br>15005<br>25005 | GBU<br>1001<br>1501<br>2501 | GBU<br>1002<br>1502<br>2502 | GBU<br>1004<br>1504<br>2504 | GBU<br>1006<br>1506<br>2506 | GBU<br>1008<br>1508<br>2508 | GBU<br>1010<br>1510<br>2510 | UNIT |
|---------------------------------------------------------------------------------------------------------|--------|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                  | VRRM   | 50                             | 100                         | 200                         | 400                         | 600                         | 800                         | 1000                        | V    |
| Maximum RMS Voltage                                                                                     | VRMS   | 35                             | 70                          | 140                         | 280                         | 420                         | 560                         | 700                         | V    |
| Maximum DC Blocking Voltage                                                                             | VDC    | 50                             | 100                         | 200                         | 400                         | 600                         | 800                         | 1000                        | V    |
| Maximum Average Forward (with heatsink Note 2)<br>Rectified Current @ Tc=100℃ (without heatsink)        | l(AV)  | GBU<br>10                      | 10<br>3.0                   | GBU<br>15                   | 15<br>3.2                   | GBU<br>25                   | 25<br>4.2                   | A                           |      |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method) | lFSM   |                                | 220                         |                             | 240                         |                             | 350                         | A                           |      |
|                                                                                                         |        |                                |                             |                             |                             |                             |                             |                             |      |
| Maximum Forward Voltage at 5.0/7.5/12.5A DC                                                             | VF     | 1.0                            |                             |                             |                             |                             |                             |                             | V    |
| Maximum DC Reverse Current @ TJ=25℃<br>at Rated DC Blocking Voltage @ TJ=125℃                           | IR     | 10.0<br>500                    |                             |                             |                             |                             |                             |                             | uA   |
| I²t Rating for Fusing (t<8.3ms)                                                                         | I²t    | 200                            |                             |                             |                             |                             |                             |                             | A²s  |
| Typical Junction Capacitance Per Element (Note1)                                                        | CJ     | 70                             |                             |                             |                             |                             |                             |                             | pF   |
| Typical Thermal Resistance (Note2)                                                                      | RθJC   | 2.2                            |                             |                             |                             |                             |                             |                             | ℃/W  |
| Operating Temperature Range                                                                             | TJ     | -55 to +150                    |                             |                             |                             |                             |                             |                             | ℃    |
| Storage Temperature Range                                                                               | TSTG   | -55 to +150                    |                             |                             |                             |                             |                             |                             | ℃    |

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

2. Device mounted on 100mm\*100mm\*1.6mm cu plate heatsink.

# GBU10/15/25 SERIES

## GLASS PASSIVATED BRIDGE RECTIFIERS RATING AND CHARACTERISTIC CURVES

FIG.1-MAXMUN NON-REPETITIVE  
SURGE CURRENT

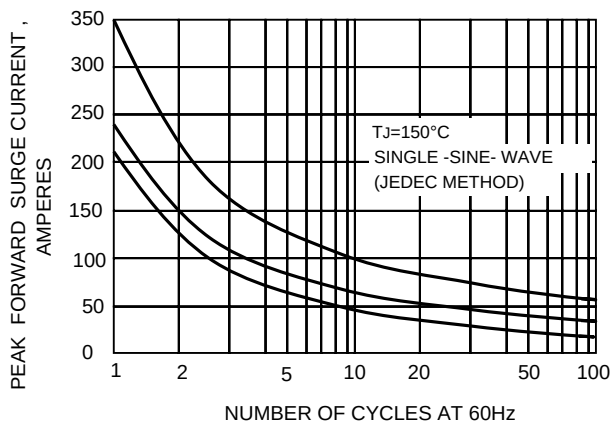


FIG.2- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

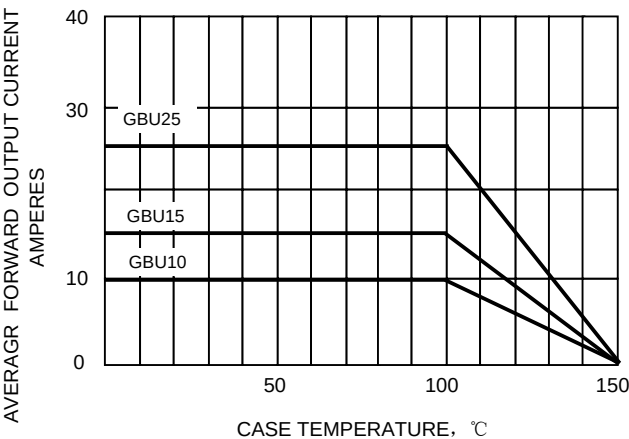


FIG.3-TYPICAL FORWARD  
CHARACTERISTICS

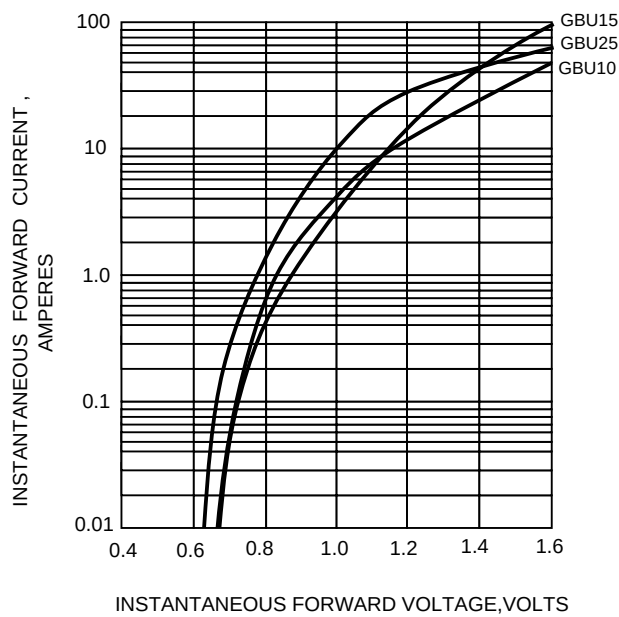


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

