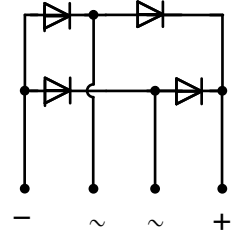
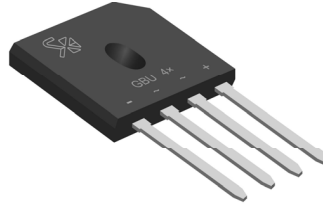


# GBU4A THRU GBU4M

## GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts

FORWARD CURRENT - **4.0** Amperes



## FEATURES

- Polarity:As marked on body
- Surge overload rating -150 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L  
The flammability classification 94V-0
- Mounting postition:Any
- Weight: 0.138 ounces , 3.9 grams

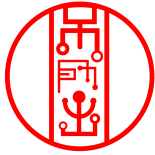
**GBU**

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| CHARACTERISTICS                                                                                          | SYMBOL           | GBU4A       | GBU4B | GBU4D | GBU4G | GBU4J | GBU4K | GBU4M | 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°C (without heatsink)        | IAV              | 4.0<br>2.4  |       |       |       |       |       |       | A                |
| Peak Forward Surage Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method) | IFSM             | 150         |       |       |       |       |       |       | A                |
| Maximum Forward Voltage at 2.0A DC                                                                       | VF               | 1.0         |       |       |       |       |       |       | V                |
| Maximum DC Reverse Current J=25°C<br>at Rated DC Blocking Voltage J=125°C                                | IR               | 5.0<br>500  |       |       |       |       |       |       | uA               |
| I <sup>2</sup> t Rating for Fusing (t<8.3ms)                                                             | I <sup>2</sup> t | 93          |       |       |       |       |       |       | A <sup>2</sup> s |
| Typical Junction Capacitance Per Element (Note1)                                                         | CJ               | 39          |       |       |       |       |       |       | pF               |
| Typical Thermal Resistance (Note2)                                                                       | RθJC             | 4.0         |       |       |       |       |       |       | °C/W             |
| Operating Temperature Range                                                                              | TJ               | -55 to +150 |       |       |       |       |       |       | °C               |
| Storage Temperature Range                                                                                | TSTG             | -55 to +150 |       |       |       |       |       |       | °C               |

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC. 2.Device mounted on 150mm\*150mm\*1.6mm Cu Plate Heatsink.



# GBU4A THRU GBU4M

FIG.1-FORWARD CURRENT DERATING CURVE

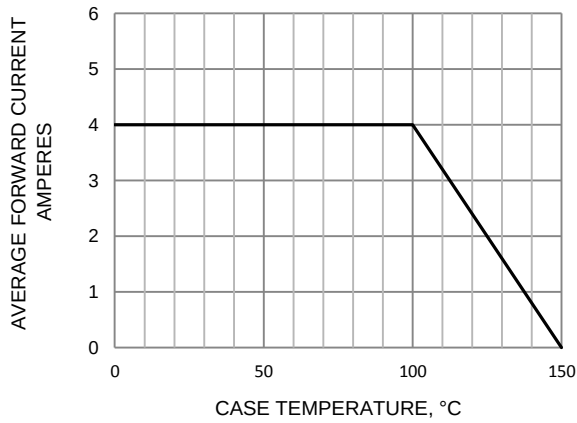


FIG.2-MAXIMUM FOWARD SURGE CURRENT

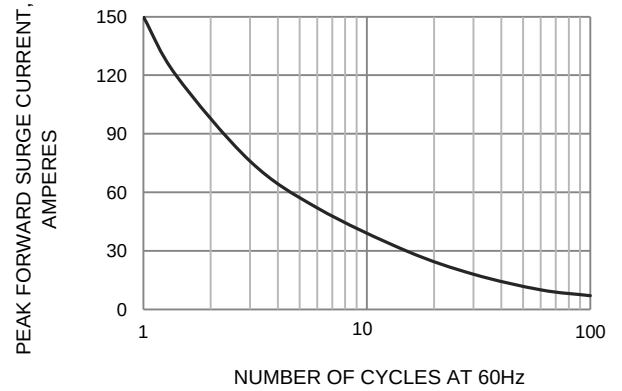


FIG.3-TYPICAL JUNCTION CAPACITANCE

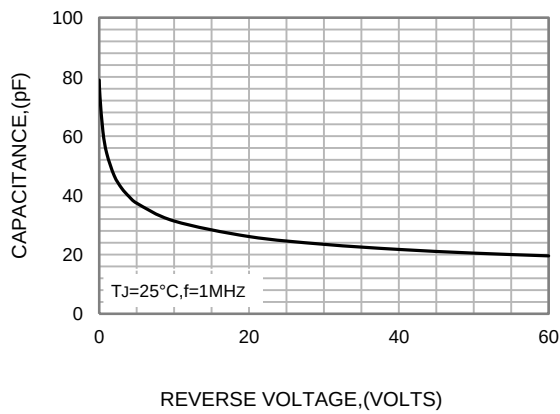


FIG.4-TYPICAL FORWARD CHARACTERISTICS

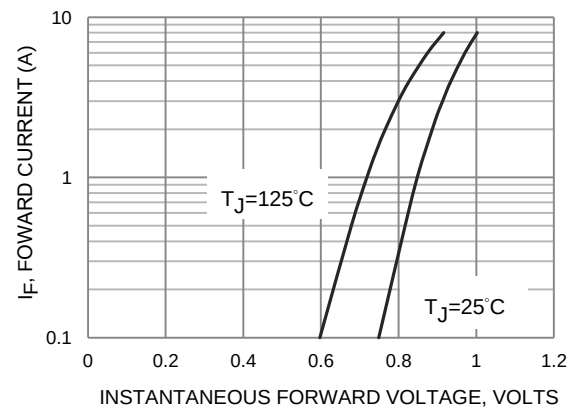
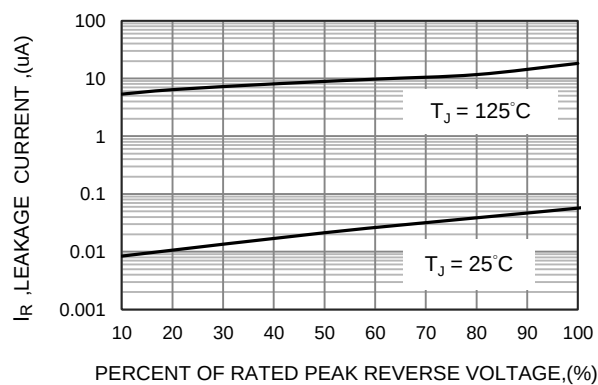


FIG.5-TYPICAL REVERSE CHARACTERISTICS

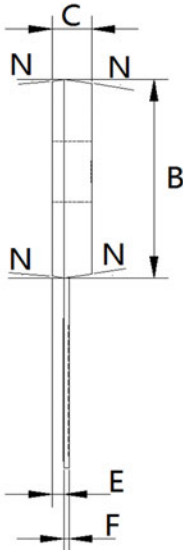
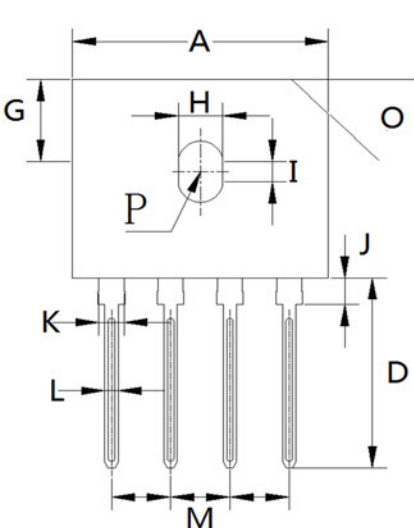




# GBU4A THRU GBU4M

## PACKAGE OUTLINE

GBU



## Marking

| Type number | Marking code |
|-------------|--------------|
| GBU4A       | GBU4A        |
| GBU4B       | GBU4B        |
| GBU4D       | GBU4D        |
| GBU4G       | GBU4G        |
| GBU4J       | GBU4J        |
| GBU4K       | GBU4K        |
| GBU4M       | GBU4M        |

GBU mechanical data

| UNIT |     | A     | B     | C    | D     | E    | F    | G    | H    | I    | J    | K    | L    | M    | N               | O       | P              |
|------|-----|-------|-------|------|-------|------|------|------|------|------|------|------|------|------|-----------------|---------|----------------|
| mm   | max | 22.30 | 18.80 | 3.56 | 18.00 | 1.00 | 0.56 | 7.90 | 4.10 | 2.16 | 2.75 | 2.35 | 1.27 | 5.33 | 7.0°<br>TYPICAL | 3.2X45° | 1.90<br>RADIUS |
|      | min | 21.80 | 18.30 | 3.30 | 17.50 | 0.76 | 0.46 | 7.40 | 3.50 | 1.65 | 1.85 | 1.95 | 1.02 | 4.83 |                 |         |                |
| mil  | max | 878   | 740   | 140  | 709   | 39   | 22   | 311  | 161  | 85   | 108  | 93   | 50   | 210  |                 | 126°45° | 75<br>RADIUS   |
|      | min | 858   | 720   | 130  | 689   | 30   | 18   | 291  | 138  | 65   | 73   | 77   | 40   | 190  |                 |         |                |