

71

E502650

### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- · High Case Dielectric Strength
- High Surge Current Capability

# 2.0 Amp Glass Passivated Single-Phase Rectifiers 50 to 1000 Volts

# **Maximum Ratings**

Operating Junction Temperature Range: -55°C to +150°C

• Storage Temperature Range: -55°C to +150°C

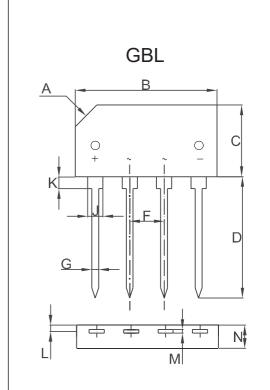
Typical Thermal Resistance : 47°C/W Junction To Ambient
 Typical Thermal Resistance : 10°C/W Junction To Case

| MCC<br>Part Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Maximum<br>RMS<br>Voltage | Maximum DC<br>Blocking<br>Voltage |
|--------------------|-------------------|---|---------------------------|-----------------------------------|
| GBL2005            | GBL2005           | 50V   | 35V                       | 50V                               |
| GBL201             | GBL201            | 100V  | 70V                       | 100V                              |
| GBL202             | GBL202            | 200V  | 140V                      | 200V                              |
| GBL204             | GBL204            | 400V  | 280V                      | 400V                              |
| GBL206             | GBL206            | 600V  | 420V                      | 600V                              |
| GBL208             | GBL208            | 800V  | 560V                      | 800V                              |
| GBL210             | GBL210            | 1000V   | 700V                      | 1000V                             |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

| Maximum Average Forward Current                                  | I <sub>F(AV)</sub> | 2.0A                    | T <sub>A</sub> = 25°C           |
|--|--------------------|-------------------------|---------------------------------|
| Peak Forward<br>Surge Current                                    | I <sub>FSM</sub>   | 80A                     | 8.3ms, Half Sine                |
| Maximum<br>Instantaneous<br>Forward Voltage                      | V <sub>F</sub>     | 1.05V                   | I <sub>FM</sub> = 1.0A;(Note2)  |
| Maximum DC<br>Reverse Current At<br>Rated DC Blocking<br>Voltage | I <sub>R</sub>     | 10μΑ                    | T <sub>A</sub> = 25°C           |
| Rating for Fusing  | l <sup>2</sup> t   | 26.6 A <sup>2</sup> sec | 1ms <t<8.3ms< td=""></t<8.3ms<> |

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7 2.Pulse Measurement, Rating of Per Diode



| DIMENSIONS |         |         |       |       |       |
|------------|---------|---------|-------|-------|-------|
| DIM        | INCHES  |         | MM    |       | NOTE  |
|            | MIN     | MAX     | MIN   | MAX   | NOTE  |
| Α          | 0.118 ) | C 0.118 | 3.0 2 | X 3.0 | X 45° |
| В          | 0.756   | 0.835   | 19.20 | 21.20 |       |
| С          | 0.413   | 0.453   | 10.50 | 11.50 |       |
| D          | 0.512   | 0.591   | 13.00 | 15.00 |       |
| F          | 0.193   | 0.201   | 4.90  | 5.10  |       |
| G          | 0.039   | 0.047   | 1.00  | 1.20  |       |
| J          | 0.047   | 0.071   | 1.20  | 1.80  |       |
| K          | 0.079   | 0.118   | 2.00  | 3.00  |       |
| L          | 0.035   | 0.043   | 0.90  | 1.10  |       |
| М          | 0.020   | 0.027   | 0.50  | 0.70  |       |
| N          | 0.118   | 0.157   | 3.00  | 4.00  |       |



## **Curve Characteristics**

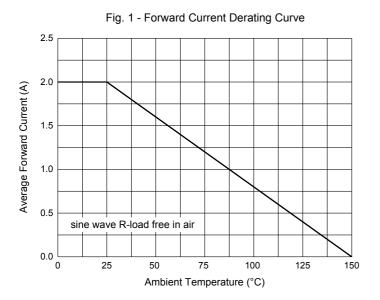


Fig. 3 - Typical Instantaneous Forward Characteristics

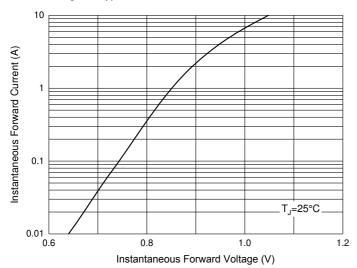


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

100

80

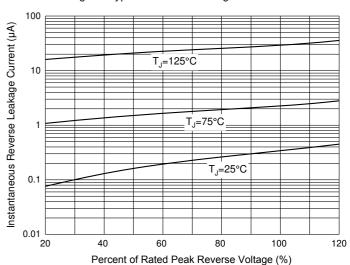
60

8.3 ms Single Half Sine-Wave

100

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

| Device         | Packing                                  |
|----------------|--|
| Part Number-BP | Tube:22pcs/Tube,1100pcs/Box,4400pcs/Ctn; |

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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