

## **91**

E502650

### Features

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 8 °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 |
|--------------------|-------------------|---|---------------------------|-----------------------------------|
| KBP2005G           | KBP2005G          | 50V   | 35V                       | 50V                               |
| KBP201G            | KBP201G           | 100V  | 70V                       | 100V                              |
| KBP202G            | KBP202G           | 200V  | 140V                      | 200V                              |
| KBP204G            | KBP204G           | 400V  | 280V                      | 400V                              |
| KBP206G            | KBP206G           | 600V  | 420V                      | 600V                              |
| KBP208G            | KBP208G           | 800V  | 560V                      | 800V                              |
| KBP210G            | KBP210G           | 1000V   | 700V                      | 1000V                             |

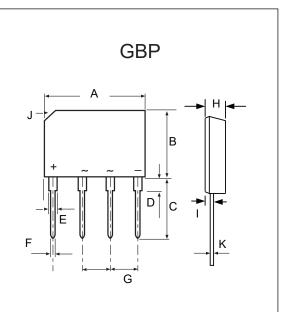
## Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average<br>Forward Current                                       | I <sub>F(AV)</sub> | 2.0A                | T <sub>A</sub> = 65°C  |  |
|--|--------------------|---------------------|--|--|
| Peak Forward<br>Surge Current                                    | I <sub>FSM</sub>   | 60A                 | 8.3ms, Half Sine   |  |
| Maximum Forward<br>Voltage Drop Per<br>Element                   | V <sub>F</sub>     | 1.05V               | I <sub>FM</sub> = 2.0A Per Element;<br>T <sub>J</sub> = 25°C |  |
| Maximum DC<br>Reverse Current At<br>Rated DC Blocking<br>Voltage | I <sub>R</sub>     | 10µA<br>1mA         | T <sub>J</sub> = 25°C<br>T <sub>J</sub> = 100°C              |  |
| Dielecric Strength   | V <sub>ISO</sub>   | 2KV                 |  |  |
| Rating for Fusing  | l²t                | 15 A <sup>2</sup> s | t<8.3ms  |  |
| Typical Junction<br>Capacitance                                  | CJ                 | 25 pF               | Measured at<br>1.0MHz, V <sub>R</sub> =4.0V                  |  |

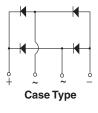
Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a

2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

# 2.0 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts



|     | DIMENSIONS  |       |            |       |      |  |  |
|-----|-------------|-------|------------|-------|------|--|--|
| DIM | INCHES      |       | MM         |       | NOTE |  |  |
|     | MIN         | MAX   | MIN        | MAX   | NOTE |  |  |
| А   | 0.561       | 0.580 | 14.25      | 14.75 |      |  |  |
| В   | 0.406       | 0.417 | 10.10      | 10.60 |      |  |  |
| С   | 0.561       | 0.581 | 14.25      | 14.73 |      |  |  |
| D   | 0.071       | 0.087 | 1.80       | 2.20  |      |  |  |
| E   | 0.046       | 0.056 | 1.17       | 1.42  |      |  |  |
| F   | 0.030       | 0.034 | 0.76       | 0.86  |      |  |  |
| G   | 0.140       | 0.160 | 3.56       | 4.06  |      |  |  |
| Н   | 0.131       | 0.161 | 3.35       | 4.10  |      |  |  |
| I   | 0.031       | 0.043 | 0.80       | 1.10  |      |  |  |
| J   | 0.106 X 45° |       | 2.70 X 45° |       |      |  |  |
| K   | 0.012       | 0.025 | 0.30       | 0.64  |      |  |  |





## **Curve Characteristics**

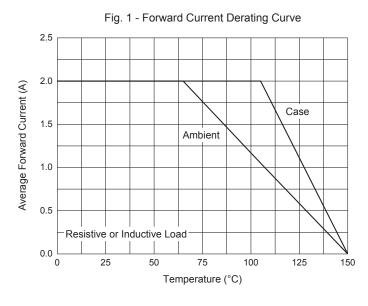


Fig. 3 - Typical Instantaneous Forward Characteristics

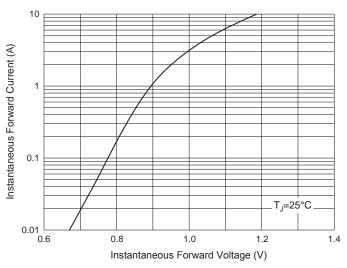
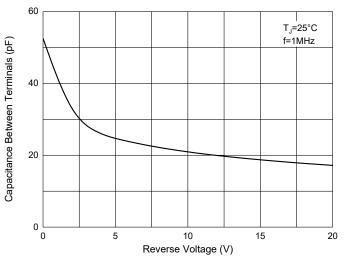


Fig. 5 - Capacitance Characteristics



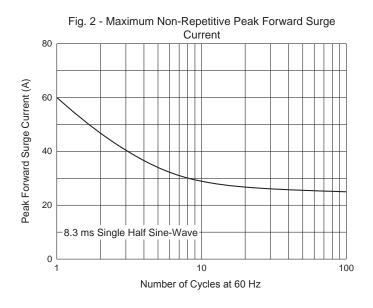
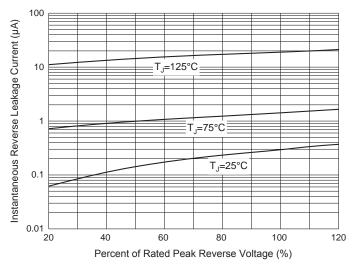


Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

| Device         | Packing                                    |  |
|----------------|--|--|
| Part Number-BP | Bulk:35pcs/Tube,2100pcs/Box,4200pcs/Carton |  |

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