

|   |                |
|---|----------------|
|  | <b>E502650</b> |
|---|----------------|

**Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 10 °C/W Junction To Case
- Thermal Resistance: 47 °C/W Junction To Ambient

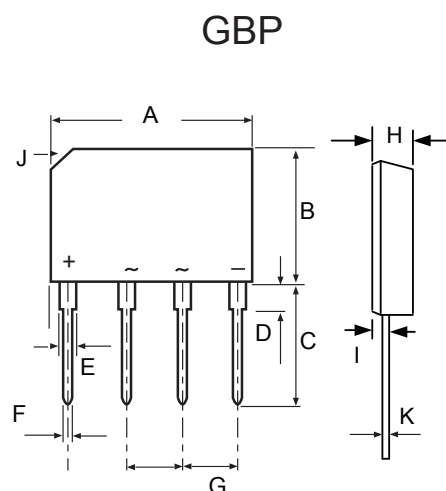
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| KBP4005G        | KBP4005G       | 50V                                    | 35V                 | 50V                         |
| KBP401G         | KBP401G        | 100V                                   | 70V                 | 100V                        |
| KBP402G         | KBP402G        | 200V                                   | 140V                | 200V                        |
| KBP404G         | KBP404G        | 400V                                   | 280V                | 400V                        |
| KBP406G         | KBP406G        | 600V                                   | 420V                | 600V                        |
| KBP408G         | KBP408G        | 800V                                   | 560V                | 800V                        |
| KBP410G         | KBP410G        | 1000V                                  | 700V                | 1000V                       |

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

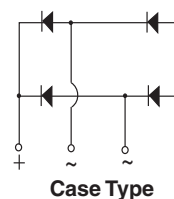
|   |             |        |                                    |
|---|-------------|--------|------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 4.0A   | $T_C = 70^\circ C$                 |
| Peak Forward Surge Current                              | $I_{FSM}$   | 110A   | 8.3ms, Half Sine                   |
| Maximum Forward Voltage Drop                            | $V_F$       | 1.05V  | $I_{FM} = 2.0A ; T_J = 25^\circ C$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 10µA   | $T_J = 25^\circ C$                 |
| Rating for Fusing                                       | $I^2t$      | 50 A²s | $t < 8.3ms$                        |

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

**4 Amp  
Glass Passivated  
Bridge Rectifier  
50 to 1000 Volts**



| DIM | INCHES      |       | MM         |       | NOTE |
|-----|-------------|-------|------------|-------|------|
|     | MIN         | MAX   | MIN        | MAX   |      |
| A   | 0.561       | 0.580 | 14.25      | 14.75 |      |
| B   | 0.406       | 0.417 | 10.10      | 10.60 |      |
| C   | 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  |      |
| H   | 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. 1 - Forward Current Derating Curve

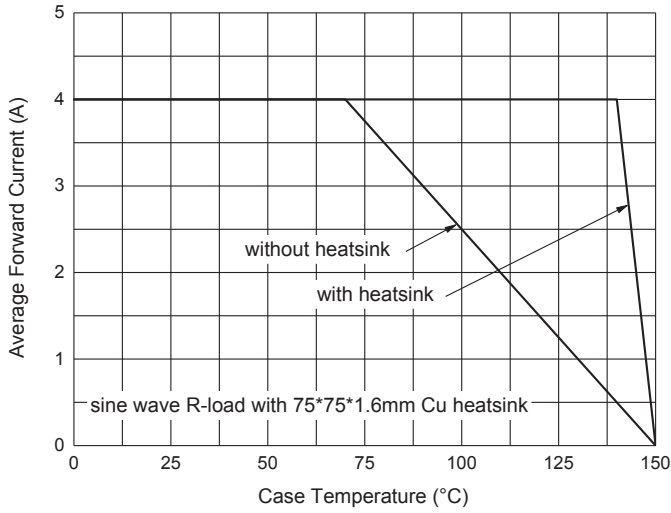


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

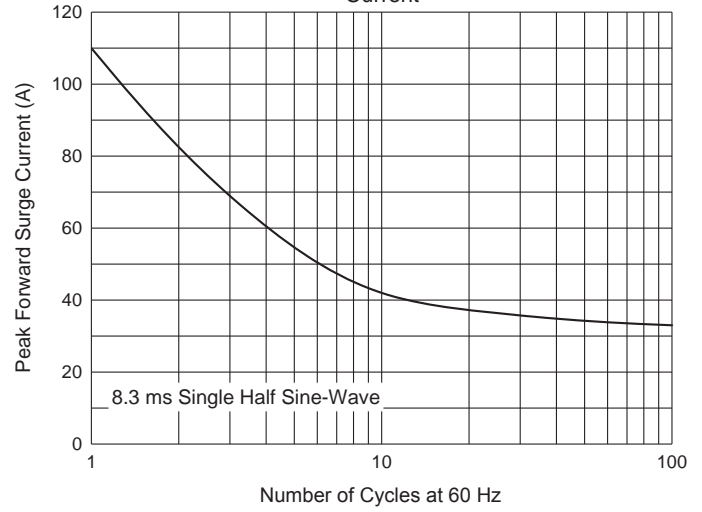


Fig. 3 - Typical Instantaneous Forward Characteristics

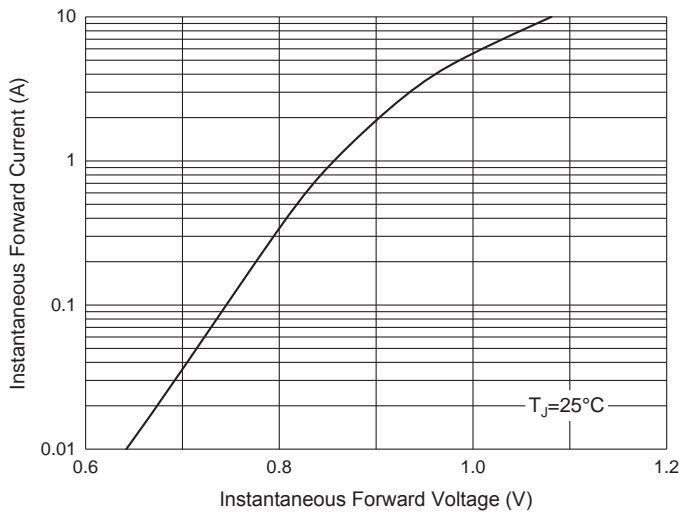
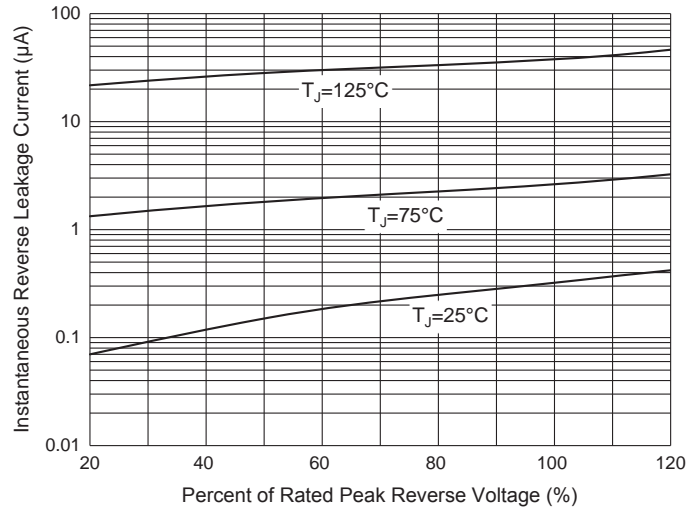


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing           |
|----------------|-------------------|
| Part Number-BP | Bulk: 4.2Kpcs/Ctn |

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

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- Техническая поддержка проекта;
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