

## Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

## Maximum Ratings

- UL Recognized File # E165989
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Mounting Torque: 5.0 in-lbs Maximum

| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|--|---------------------|-----------------------------|
| KBJ6005G        | 50V                                    | 35V                 | 50V                         |
| KBJ601G         | 100V                                   | 70V                 | 100V                        |
| KBJ602G         | 200V                                   | 140V                | 200V                        |
| KBJ604G         | 400V                                   | 280V                | 400V                        |
| KBJ606G         | 600V                                   | 420V                | 600V                        |
| KBJ608G         | 800V                                   | 560V                | 800V                        |
| KBJ610G         | 1000V                                  | 700V                | 1000V                       |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |                    |                      |  |
|---|--------------------|----------------------|--|
| Maximum Average Forward Rectified Current @ T <sub>C</sub> =110°C | I <sub>F(AV)</sub> | 6.0 A<br>2.8 A       | with heatsink <sup>(1)</sup><br>without heatsink |
| Peak Forward Surge Current  | I <sub>FSM</sub>   | 170A                 | 8.3ms, half sine                                 |
| Maximum Forward Voltage   | V <sub>F</sub>     | 1.0V                 | I <sub>FM</sub> = 3.0A;<br>T <sub>A</sub> =25°C  |
| Maximum DC Reverse Current At Rated DC Blocking Voltage           | I <sub>R</sub>     | 5.0uA<br>500uA       | T <sub>J</sub> =25°C<br>T <sub>J</sub> =125°C    |
| I <sup>2</sup> t Rating for fusing                                | I <sup>2</sup> t   | 120 A <sup>2</sup> S | t < 8.0ms  |
| Typical Thermal Resistance  | R <sub>JC</sub>    | 1.5 °C/W             | Note 1   |
| Typical Junction Capacitance                                      | C <sub>J</sub>     | 80pF                 | Measured at<br>F=1.0MHz<br>V <sub>R</sub> =4.0V  |

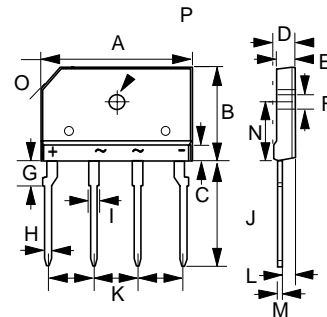
Note 1: Unit Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink

2: High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

# KBJ6005G THRU KBJ610G

## 6.0 Amp Glass Passivated Bridge Rectifiers 50 to 1000 Volts

### KBJ



| DIM | DIMENSIONS |      |         |       | NOTE |
|-----|------------|------|---------|-------|------|
|     | INCHES     |      | MM      |       |      |
| A   | .976       | .992 | 24.80   | 25.20 |      |
| B   | .579       | .602 | 14.70   | 15.30 |      |
| C   | .154       | .161 | 3.90    | 4.10  |      |
| D   | .173       | .189 | 4.40    | 4.80  |      |
| E   | .134       | .150 | 3.40    | 3.80  |      |
| F   | .122       | .134 | 3.10    | 3.40  | ∅    |
| G   | .130       | .146 | 3.30    | 3.70  |      |
| H   | .035       | .043 | 0.90    | 1.10  |      |
| I   | .059       | .075 | 1.50    | 1.90  |      |
| J   | .677       | .700 | 17.20   | 17.80 |      |
| K   | .287       | .303 | 7.30    | 7.70  |      |
| L   | .098       | .114 | 2.50    | 2.90  |      |
| M   | .024       | .031 | 0.60    | 0.80  |      |
| N   | .366       | .381 | 9.30    | 9.70  |      |
| O   | .118X45°   |      | 3.0X45° |       |      |
| P   | .122       | .134 | 3.10    | 3.40  | ∅    |



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## Ordering Information

|                  |             |
|------------------|-------------|
| Device           | Packing     |
| (Part Number)-BP | Bulk;1K/Box |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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