

**Micro Commercial Components** 



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## **Features**

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- Case Material: Molded Plastic. UL Flammability
- Classification Rating 94V-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)

## **Maximum Ratings**

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

| MCC<br>Catalog<br>Number | Device<br>Marking | Maximum<br>Rœurrent<br>Peak<br>Reverse | Maximum<br>RMS<br>Voltage | Maximum<br>DC<br>Blocking<br>Voltage |  |  |
|--------------------------|-------------------|--|---------------------------|--------------------------------------|--|--|
|                          |                   | Voltage                                |                           |                                      |  |  |
| K BJ4005G                | KBJ4005G          | 50V                                    | 35V                       | 50V                                  |  |  |
| KB J401G                 | KBJ401G           | 100V                                   | 70V                       | 100V                                 |  |  |
| KB J 402G                | KBJ402G           | 200V                                   | 140V                      | 200V                                 |  |  |
| KB J404G                 | KBJ404G           | 400V                                   | 280V                      | 400V                                 |  |  |
| KB J406G                 | KBJ406G           | 600V                                   | 420V                      | 600V                                 |  |  |
| KB J408G                 | KBJ408G           | 800V                                   | 560V                      | 800V                                 |  |  |
| KB J410G                 | KBJ410G           | 1000V                                  | 700V                      | 1000V                                |  |  |

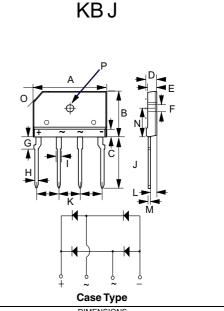
### Electrical Characteristics @ 25°C Unless Otherwise Specified

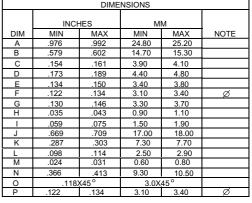
| Average Forward<br>Current                                       | I <sub>F(AV)</sub> | 4.0A               | $T_{C} = 100^{\circ}C$                                   |
|--|--------------------|--------------------|--|
| Peak Forward Surge<br>Current                                    | I <sub>FSM</sub>   | 150A               | 8.3ms, half sine   |
| Maximum Forward<br>Voltage Drop Per<br>Element                   | V <sub>F</sub>     | 1.0V               | $I_{FM}$ = 2.0A per<br>element;<br>$T_A$ = 25°C (Note 2) |
| Maximum DC<br>Reverse Current At<br>Rated DC Blocking<br>Voltage | I <sub>R</sub>     | 10μΑ<br>500μΑ      | TA = 25°C<br>T <sub>C</sub> = 100°C                      |
| I <sup>2</sup> t Rating for fusing                               | l <sup>2</sup> t   | 93A <sup>2</sup> S | (t<8.3ms)  |

High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7
Pulse Test: Pulse Width 300usec, Duty Cycle 1%

# KBJ4005G THRU KBJ410G

## 4 Amp GLASS PASSIVATED BRIDGE RECTIFIERS 50 to 1000 Volts





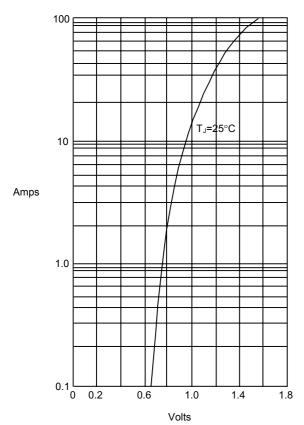
*Will source, Duty Cycle 1%* 



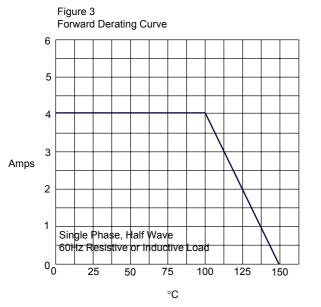
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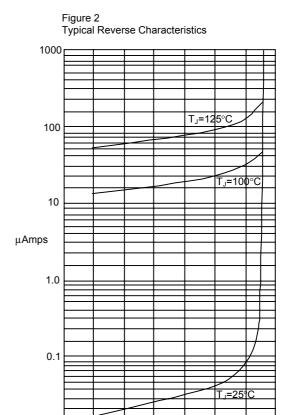
Figure 1

Typical Forward Characteristics



Instantaneous Forward Current - Amperes/ersus Instantaneous Forward Voltage - Volts





Volts

40

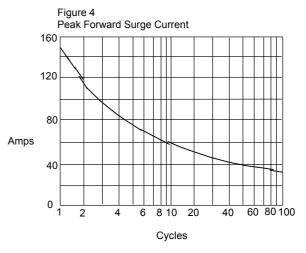
.01

0

Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts

80

120 140



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

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### **Ordering Information**

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

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