

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

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 Catalog Number | Device Marking | Maximum Rœurrent Peak Reverse | Maximum RMS Voltage | Maximum DC Blocking 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 | | |

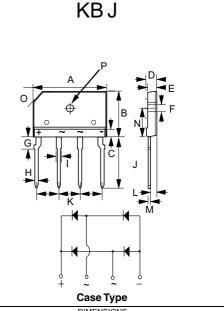
Electrical Characteristics @ 25°C Unless Otherwise Specified

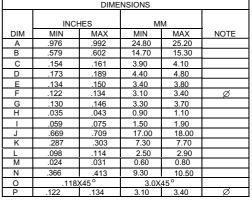
| Average Forward Current | I _{F(AV)} | 4.0A | $T_{C} = 100^{\circ}C$ |
|--|--------------------|--------------------|--|
| Peak Forward Surge Current | I _{FSM} | 150A | 8.3ms, half sine |
| Maximum Forward Voltage Drop Per Element | V _F | 1.0V | I_{FM} = 2.0A per element; T_A = 25°C (Note 2) |
|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





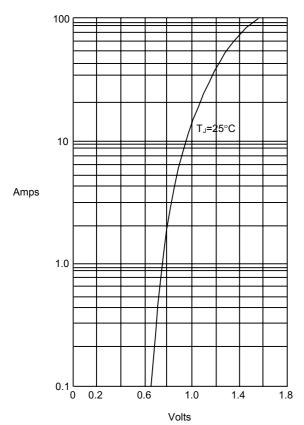
Will source, Duty Cycle 1%



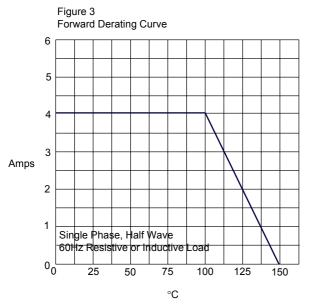
KBJ4005G THRU KBJ410G

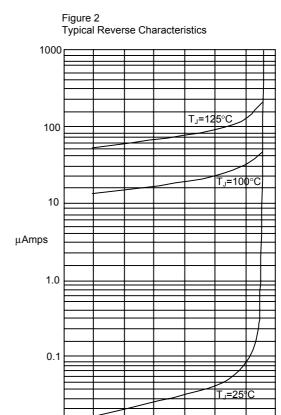
Figure 1

Typical Forward Characteristics



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





Volts

40

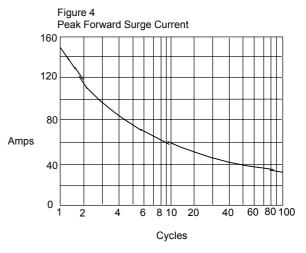
.01

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

- www.mccsemi.com



Ordering Information

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp*. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp*. and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

- www.mccsemi.com