



Micro Commercial Components



Micro Commercial Components  
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# BR1005 THRU BR1010

## Features

- Low Forward Voltage Drop
- Plastic Case
- Any Mounting Position
- Surge Rating of 150 Amps
- 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 (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)

## Maximum Ratings

- Mounting Torque: 4.5 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

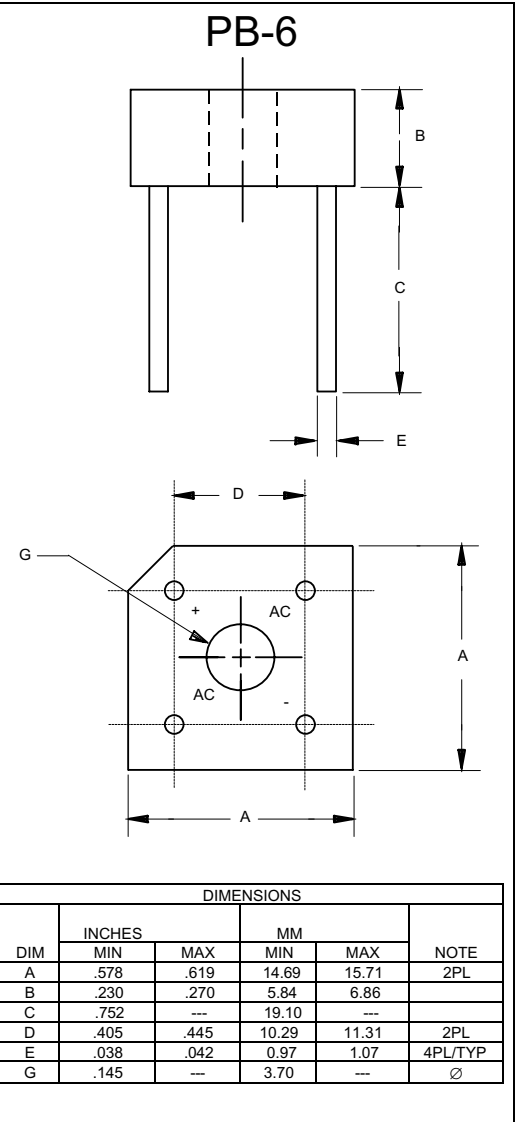
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage					
BR1005	BR1005	50V	35V	50V					
BR101	BR101	100V	70V	100V					
BR102	BR102	200V	140V	200V					
BR104	BR104	400V	280V	400V					
BR106	BR106	600V	420V	600V					
BR108	BR108	800V	560V	800V </tr <tr> <td>BR1010</td> <td>BR1010</td> <td>1000V</td> <td>700V</td> <td>1000V</td> </tr>	BR1010	BR1010	1000V	700V	1000V
BR1010	BR1010	1000V	700V	1000V					

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_c = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.1V	$I_{FM} = 5A$ per element; $T_J = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 2mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

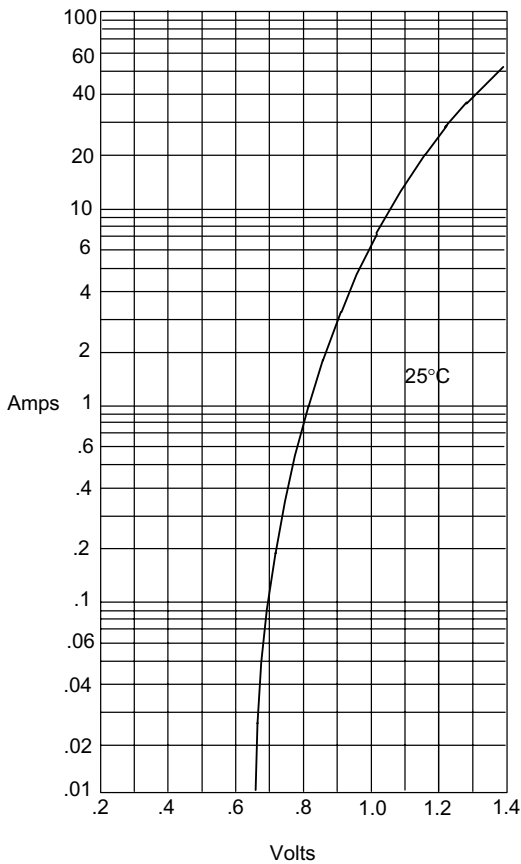
- Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7  
 2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

## 10 Amp Single Phase Bridge Rectifier 50 to 1000 Volts



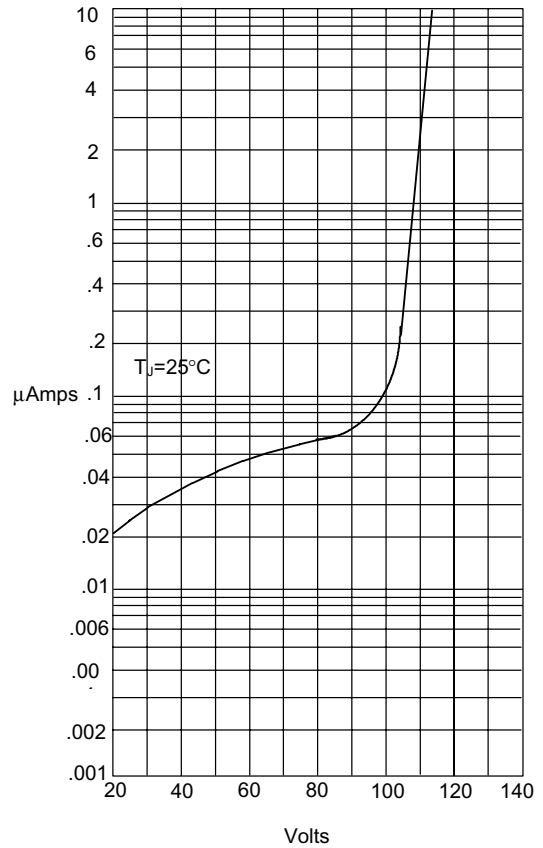
**BR1005 thru BR1010**

Figure 1  
Typical Forward Characteristics



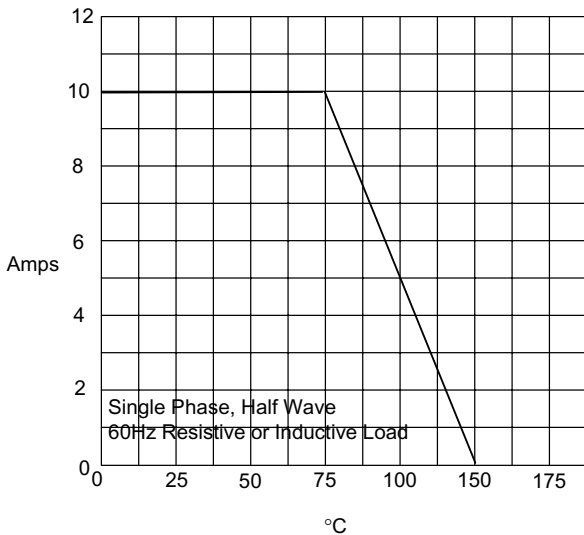
Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

Figure 2  
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Typical Reverse Characteristics



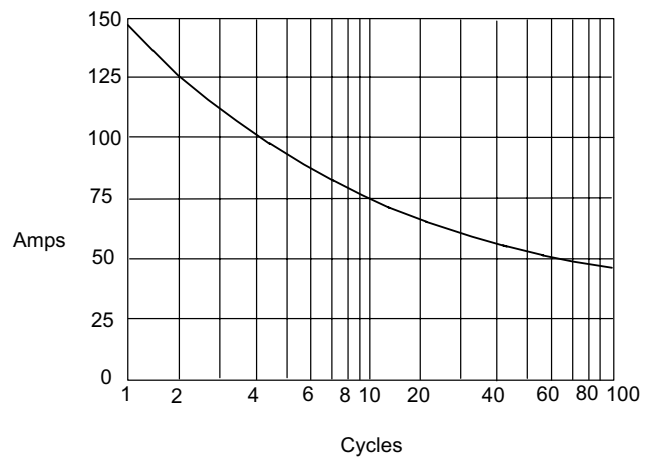
Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus* Case Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles



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### Ordering Information :

Device	Packing
Part Number-BP	Bulk: 1.6Kpcs/Carton

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

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