



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

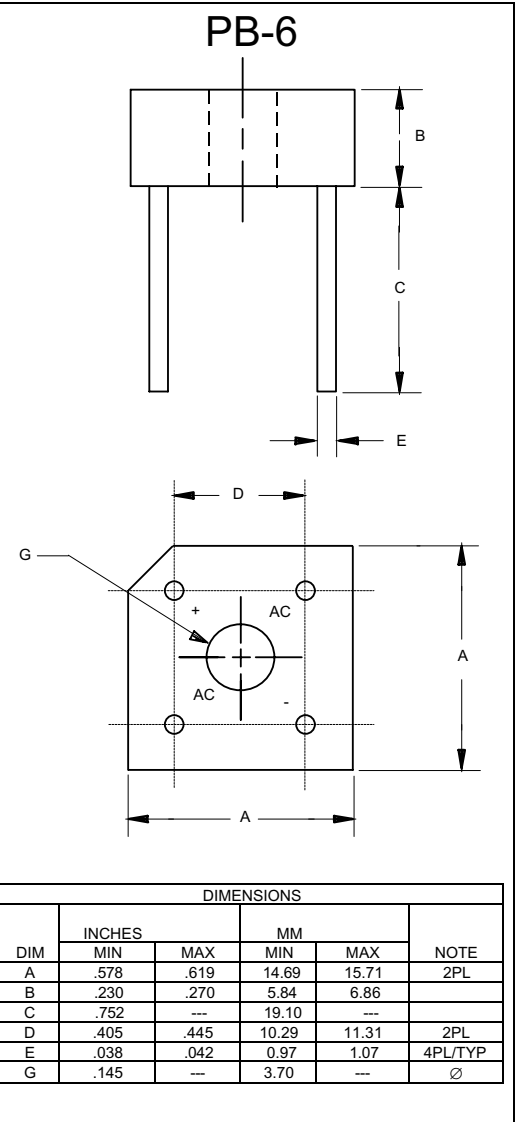
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| BR1005             | BR1005         | 50V                                    | 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                        |
| 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;<br>$T_J = 25^\circ\text{C}$ (Note 2) |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 10 $\mu\text{A}$<br>2mA | $T_J = 25^\circ\text{C}$<br>$T_J = 100^\circ\text{C}$           |

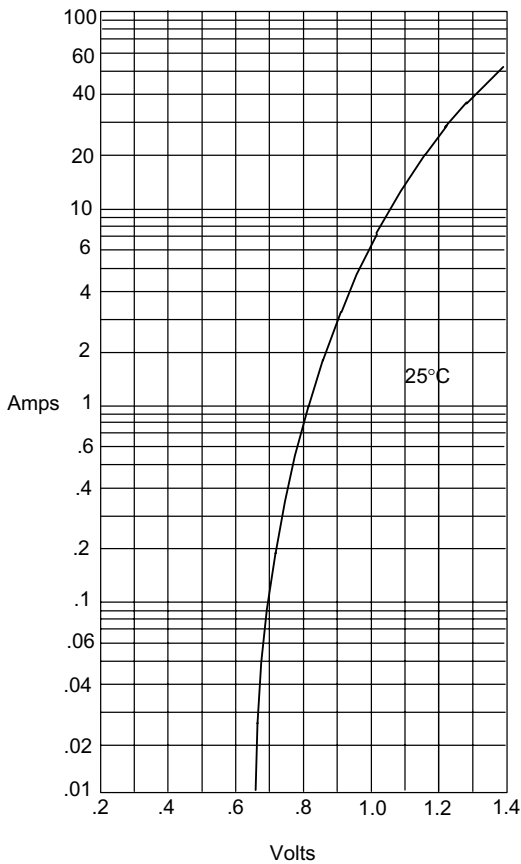
- Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7  
 2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

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



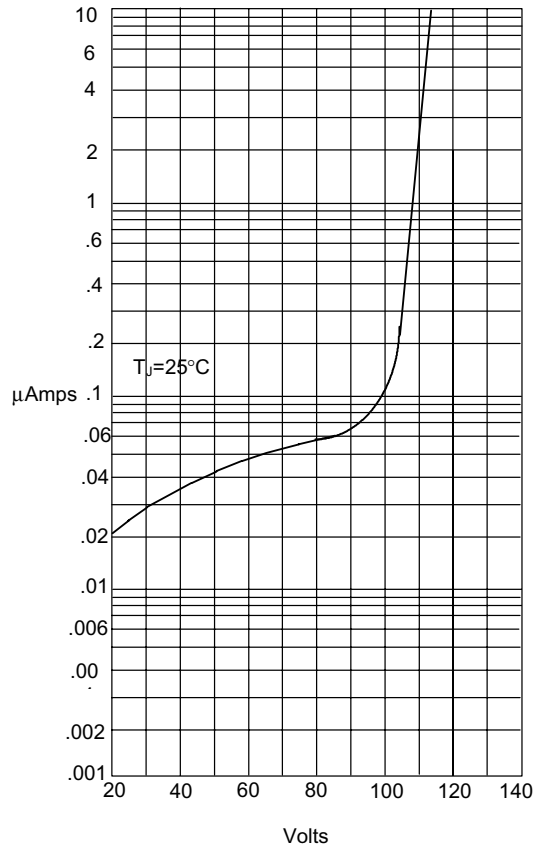
**BR1005 thru BR1010**

Figure 1  
Typical Forward Characteristics



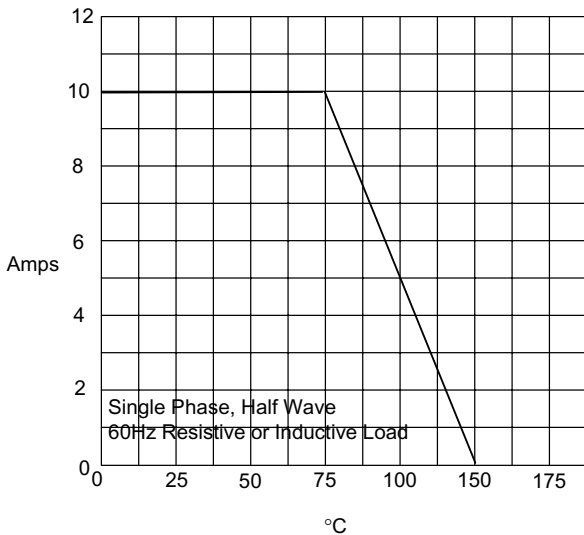
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
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Typical Reverse Characteristics



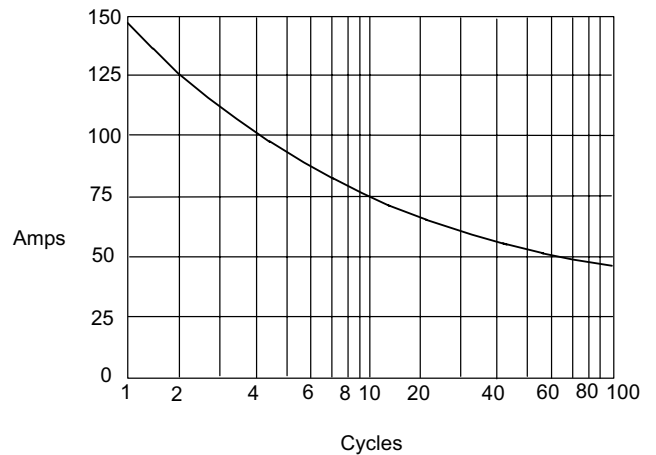
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

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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- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
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- Работу по проектам и поставку образцов.
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- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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