

Obsolete

M.C.C.

Micro Commercial Components

Micro Commercial Components
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MP1005 THRU MP1010

Features

- Low Forward Voltage Drop
- Plastic Case
- Any Mounting Position
- Surge Rating Of 150 Amps
- Case Material: Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

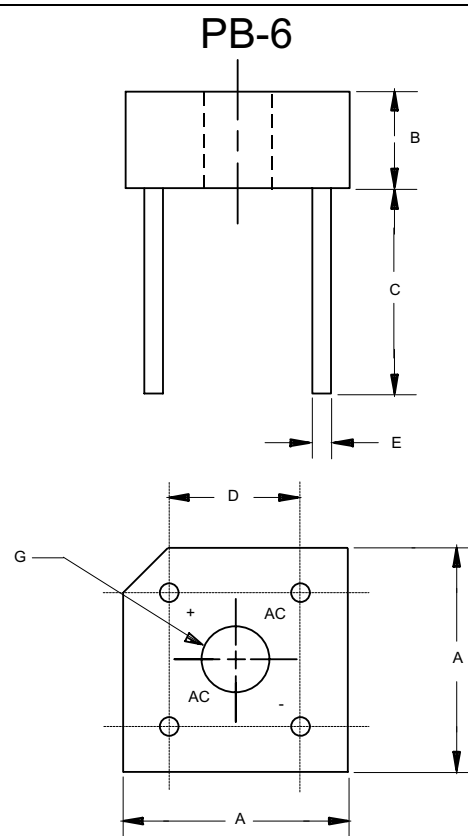
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| MP1005 | MP1005 | 50V | 35V | 50V |
| MP101 | MP101 | 100V | 70V | 100V |
| MP102 | MP102 | 200V | 140V | 200V |
| MP104 | MP104 | 400V | 280V | 400V |
| MP106 | MP106 | 600V | 420V | 600V |
| MP108 | MP108 | 800V | 560V | 800V |
| MP1010 | MP1010 | 1000v | 700V | 1000V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|-------------|---|
| Average Forward Current | $I_{F(AV)}$ | 10.0A | $T_J = 75^\circ\text{C}$ |
| 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 | 10µA 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

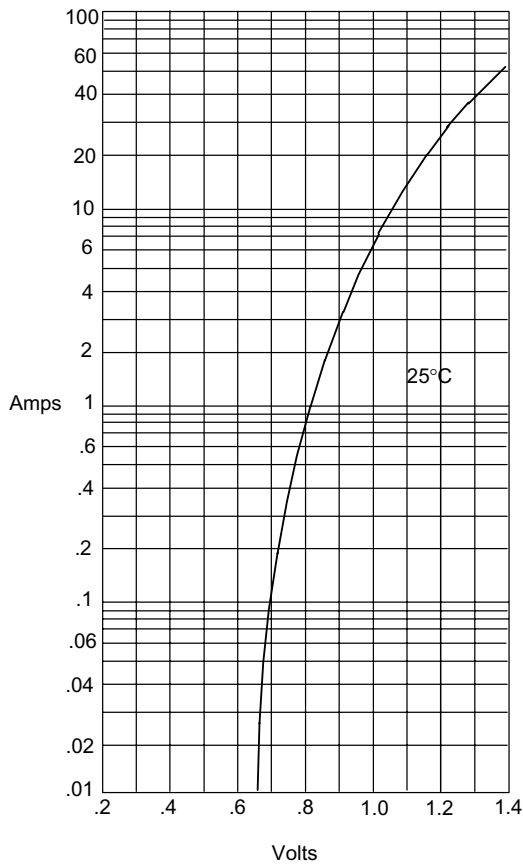


| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|-------|---------|
| | MIN | MAX | MIN | MAX | |
| A | .578 | .619 | 14.69 | 15.71 | 2PL |
| B | .230 | .270 | 5.84 | 6.86 | |
| C | .752 | --- | 19.10 | --- | |
| D | .405 | .445 | 10.29 | 11.31 | 2PL |
| E | .038 | .042 | 0.97 | 1.07 | 4PL/TYP |
| G | .145 | --- | 3.70 | --- | ∅ |

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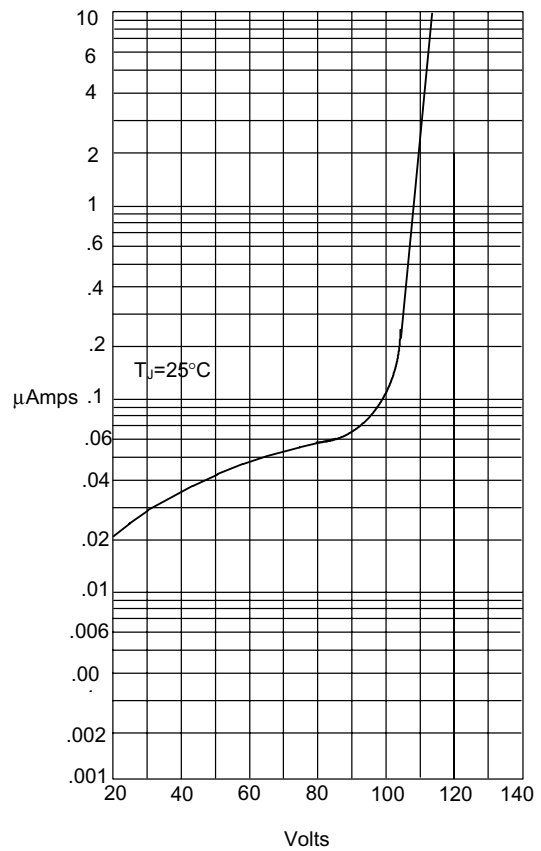
MP1005 thru MP1010

Figure 1
Typical Forward Characteristics



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

Figure 2
Micro Commercial Components
Typical Reverse Characteristics



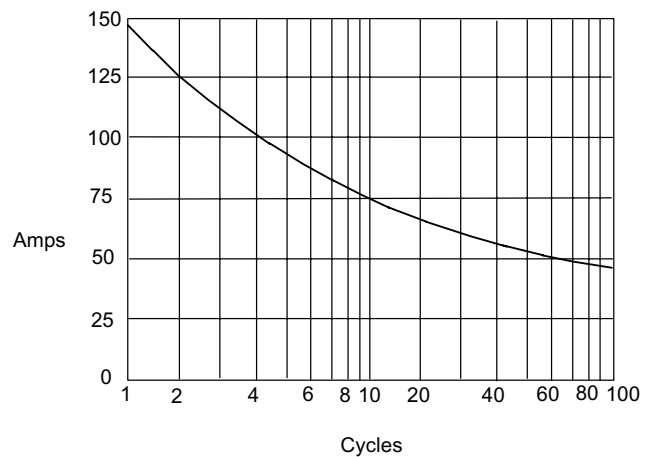
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient 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;200pcs/Box |

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