

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	Maximum RMS Voltage	Maximum DC Blocking
MP1005	MP1005	Voltage 50V	35V	Voltage 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	V008
MP1010	MP1010	1000v	700V	1000V

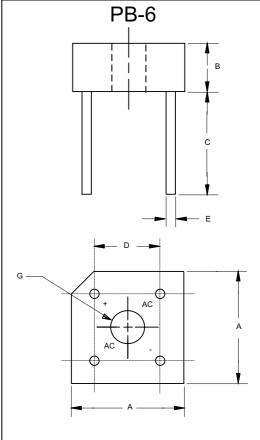
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward Current	$I_{F(AV)}$	10.0A	T <sub>J</sub> = 75°C		
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms, half sine		
Maximum Forward Voltage Drop Per Element	$V_{F}$	1.1V	I <sub>FM</sub> = 5A per element; T <sub>J</sub> = 25°C (Note 2)		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μA 2mA	T <sub>J</sub> = 25°C T <sub>J</sub> = 100°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

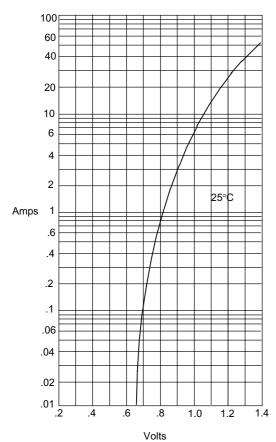


DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.578	.619	14.69	15.71	2PL	
В	.230	.270	5.84	6.86		
С	.752		19.10			
D	.405	.445	10.29	11.31	2PL	
Е	.038	.042	0.97	1.07	4PL/TYP	
O	.145	-	3.70		Ø	

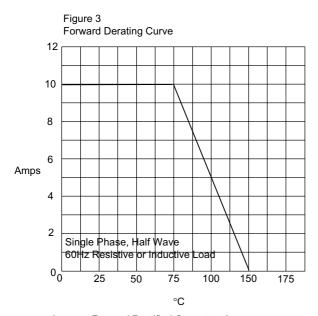


### MP1005 thru MP1010

Figure 1 Typical Forward Characteristics

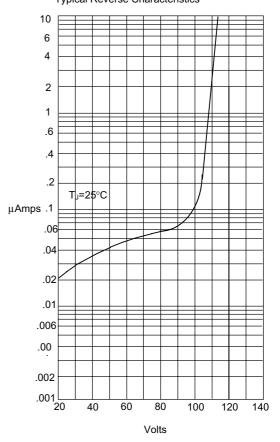


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

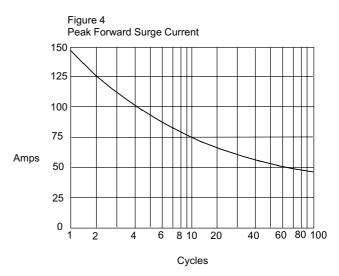


Average Forward Rectified Current - Amperes/ersus Ambient Temperature -  $^{\circ}$ C

Figure 2 Micro Commercial Components
Typical Reverse Characteristics



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



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



### **Ordering Information**

Device	Packing
(Part Number)-BP	Bulk;200pcs/Box

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