



Micro Commercial Components



Micro Commercial Components  
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**MP4005W**

**THRU**

**MP4010W**

## Features

- Mounting Hole For #8 Screw
- Plastic Case with Metal Bottom
- Any Mounting Position
- Surge Rating Of 400 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: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Mounting Torque: 2.0 N.m, Tolerance: +/-10%

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MP4005W	MP4005W	50V	35V	50V
MP401W	MP401W	100V	70V	100V
MP402W	MP402W	200V	140V	200V
MP404W	MP404W	400V	280V	400V
MP406W	MP406W	600V	420V	600V
MP408W	MP408W	800V	560V	800V
MP4010W	MP4010W	1000V	700V	1000V

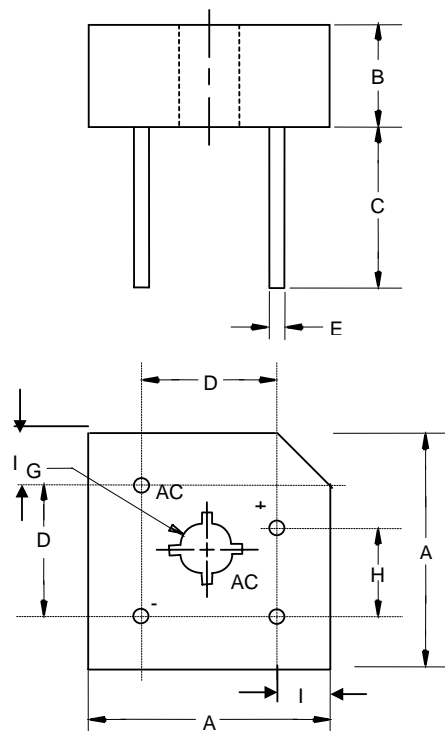
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	40.0A	$T_J = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.2V	$I_{FM} = 20\text{A per element};$ $T_J = 25^\circ\text{C (Note 2)}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 1.0mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

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

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

MP-50W

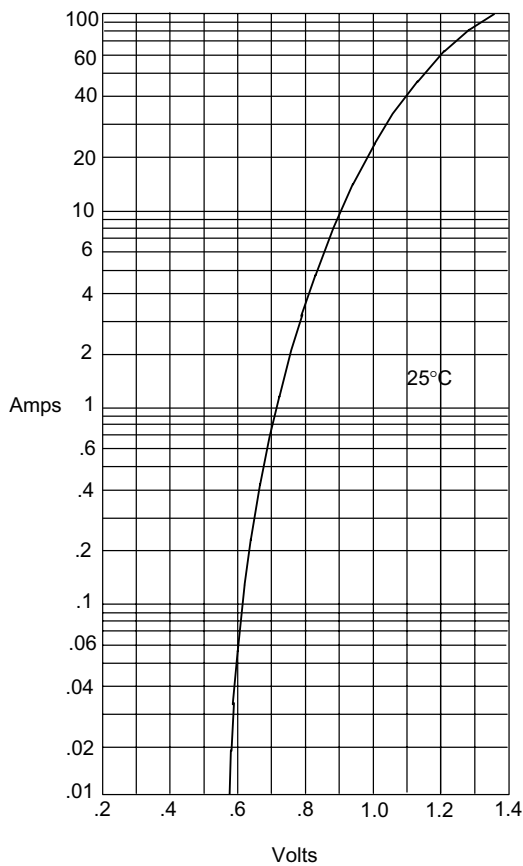


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.118	1.130	28.40	28.70	
B	.432	.442	10.97	11.23	
C	.769	---	19.53	---	
D	.673	.752	17.10	19.10	
E	.038	.042	.97	1.07	4PL/TYP
G	.193	---	4.90	---	Ø
H	.429	.468	10.90	11.90	
I	.169	.236	4.30	6.00	

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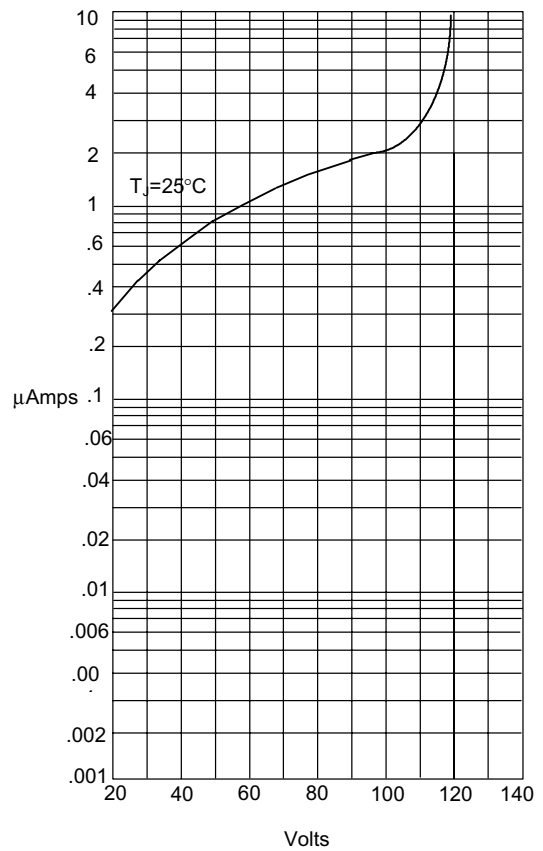
## MP4005W thru MP4010W

Figure 1  
Typical Forward Characteristics



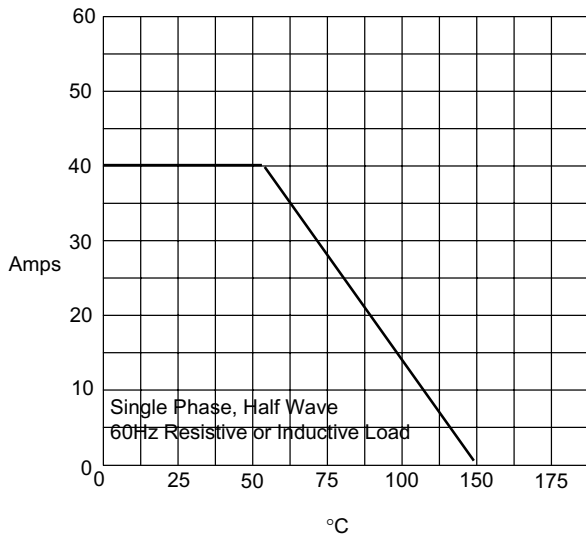
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



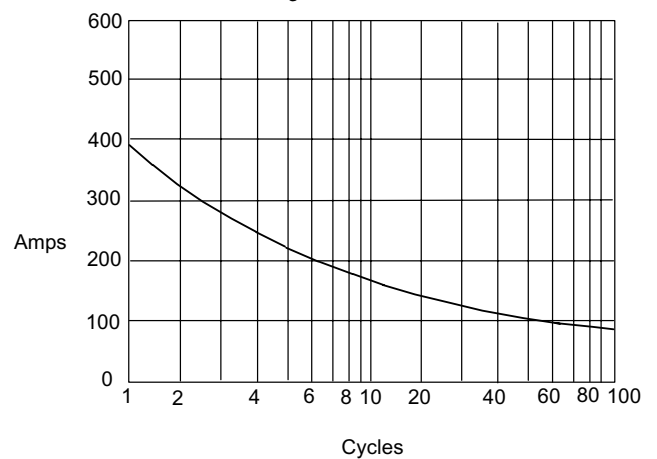
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature -  $^\circ\text{C}$

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; 400Pcs/Ctn

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