

Micro Commercial Components 20736 Marilla Street Chatsworth

CA 91311 Phone: (818) 701-4933

(818) 701-4939 Fax:

# MP5005W **THRU MP5010W**

### **Features**

- Any Mounting Position Mounting Hole For #8 Screw
- Plastic Case with Metal Bottom
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

# **Maximum Ratings**

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- UL Recognized File # E165989

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
MP5005W	MP5005W	50V	35V	50V
MP501W	MP501W	100V	70V	100V
MP502W	MP502W	200V	140V	200V
MP504W	MP504W	400V	280V	400V
MP506W	MP506W	600V	420V	600V
MP508W	MP508W	800V	560V	800V
MP5010W	MP5010W	1000V	700V	1000V

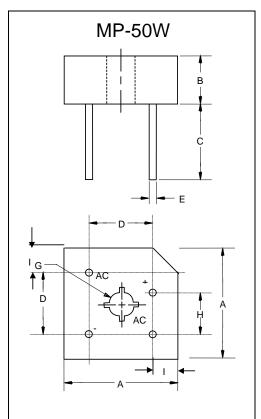
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	50.0A	$T_C = 55^{\circ}C$
Peak Forward Surge Current	I <sub>FSM</sub>	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_{F}$	1.2V	I <sub>FM</sub> = 25A per element; T <sub>J</sub> = 25°C (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μA 1.0mA	T <sub>J</sub> = 25°C T <sub>J</sub> = 100°C
Typical Thermal Resistance	RthJC	1.6°C/W	Per Leg

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

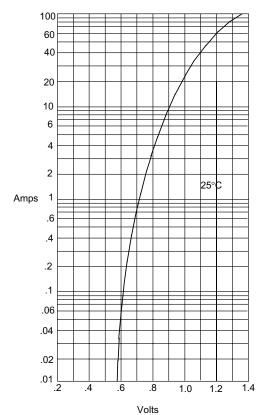
# 50 Amp Single Phase **Bridge Rectifier** 50 to 1000 Volts



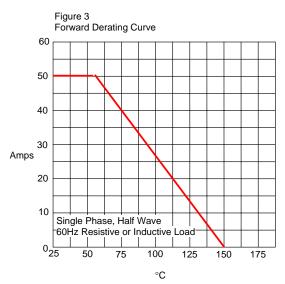
	DIMENSIONS					
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	1.118	1.130	28.40	28.70		
В	.432	.442	10.97	11.23		
С	.769		19.53	-		
D	.673	.752	17.10	19.10		
E	.038	.042	.97	1.07	4PL/TYP	
G	.193		4.90		Ø	
Н	.429	.468	10.90	11.90		
i	.169	.236	4.30	6.00		



Figure 1 Typical Forward Characteristics



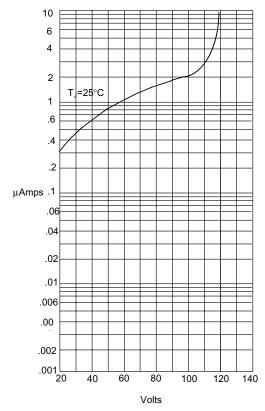
Instantaneous Forward Current - Amperes/ersus Instantaneous Forward Voltage - Volts



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

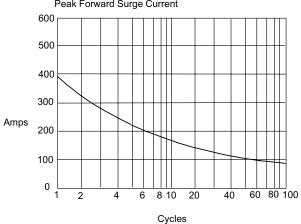


Figure 2 Micro Commercial Components
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmpere*sersus* Percent Of Rated Peak Reverse Voltage - Volts

Figure 4
Peak Forward Surge Current



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



### **Ordering Information**

Device	Packing
(Part Number)-BP	Bulk;50pcs/Box

#### \*\*\*IMPORTANT NOTICE\*\*\*

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.
Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp. and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical,

Aerospace or Military Applications.