

**Micro Commercial Components** 



**Micro Commercial Components** 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

### **Features**

- Any Mounting Position
- Mounting Hole For #8 Screw
- Plastic Case with Metal Bottom
- 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 (Note1) ("P"Suffix designates Compliant. See ordering information)

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- Mounting Torque: 2.0 N.m, Tolerance:+/-10% 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

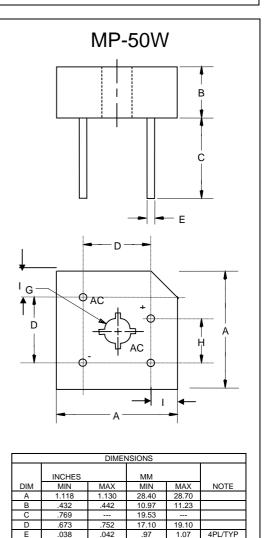
Average Forward Current	I <sub>F(AV)</sub>	50.0A	T <sub>C</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_{F}$	1.2V	I <sub>FM</sub> = 25A per element; T <sub>J</sub> = 25°C (Note 2)
Maximum DC Reverse Current At Rated DC Blocking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

# **MP5005W**

# THRU

## **MP5010W**

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



4.90

10.90

11.90

.468

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

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

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.193

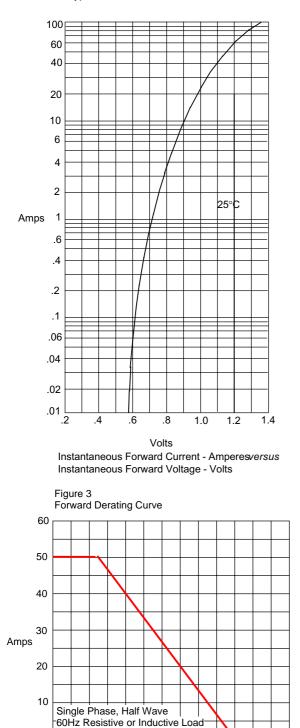
.429



### MP5005W thru MP5010W

Figure 1

Typical Forward Characteristics



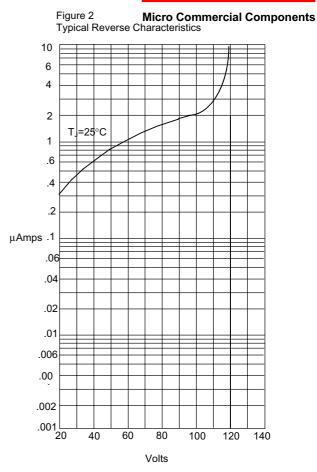
 $^{\circ}\text{C}$  Average Forward Rectified Current - Amperes versus Case Temperature -  $^{\circ}\text{C}$ 

125

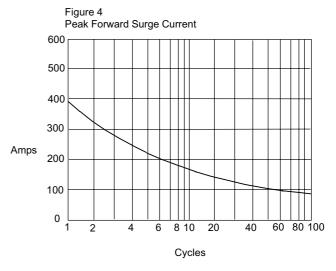
150

175

100



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



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

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0<sub>25</sub>

50

75



### **Ordering Information**

Device	Packing	
(Part Number)-BP	Bulk; 400Pcs/Ctn	

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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

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