

**Micro Commercial Components** 

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# **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 <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

# MP5010W 50 Amp Single Phase Bridge Rectifier

50 to 1000 Volts

**MP5005W** 

THRU

# MP-50W

DIMENSIONS						
DIM	INCHES MIN	MAX	MM	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		

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

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

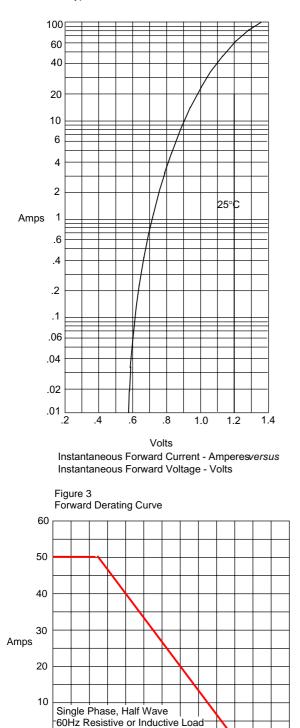
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## MP5005W thru MP5010W

Figure 1

Typical Forward Characteristics



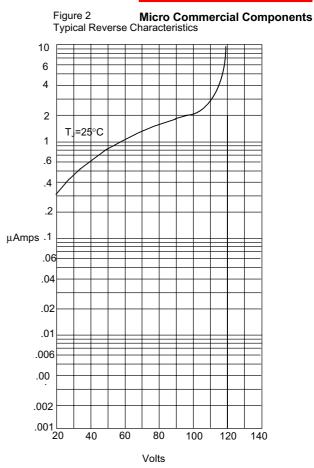
 $^{\circ}\text{C}$  Average Forward Rectified Current - Amperes versus Case Temperature -  $^{\circ}\text{C}$ 

125

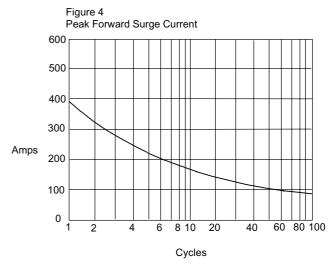
150

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;50pcs/Box

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