Micro Commercial Components
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MP5005W THRU MP5010W

50 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

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

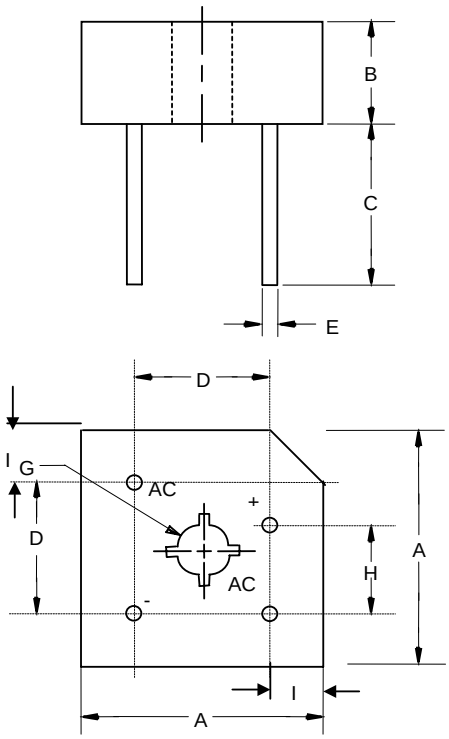
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MP5005W	MP5005W	50V	35V	50V
MP501W	MP501W	100V	70V	100V
MP502W	MP502W	200V	140V	200V
MP504W	MP504W	400V	280V	400V
MP506W	MP506W	600V	420V	600V
MP508W	MP508W	800V	560V	800V
MP5010W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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50.0A	T_C = 55°C
Peak Forward Surge Current	I_{FSM}	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.2V	I_{FM} = 25A per element; T_J = 25°C (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA 1.0mA	T_J = 25°C T_J = 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%

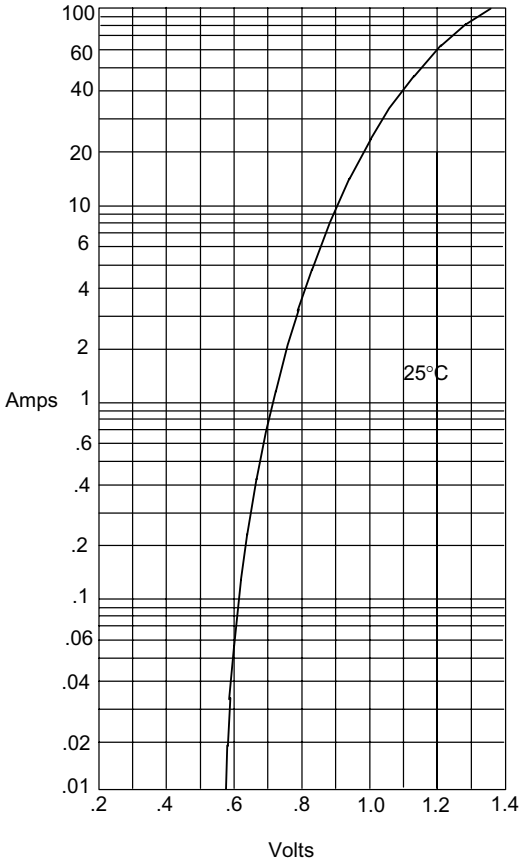
MP-50W



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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	---	∅
H	.429	.468	10.90	11.90	
i	.169	.236	4.30	6.00	

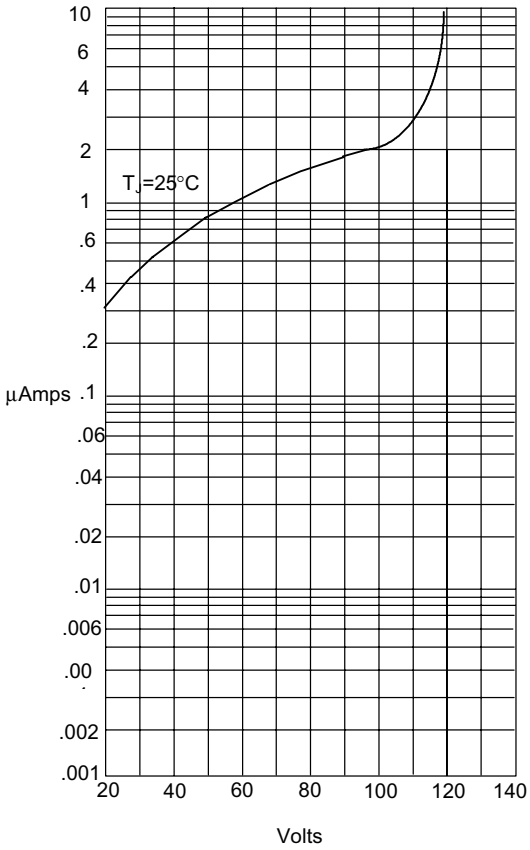
MP5005W thru MP5010W

Figure 1
Typical Forward Characteristics



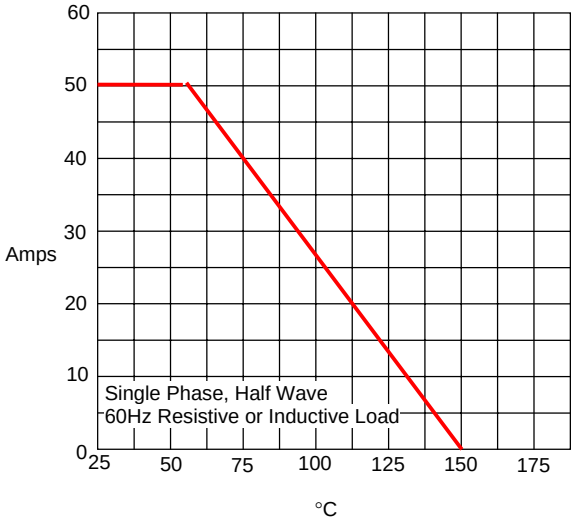
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



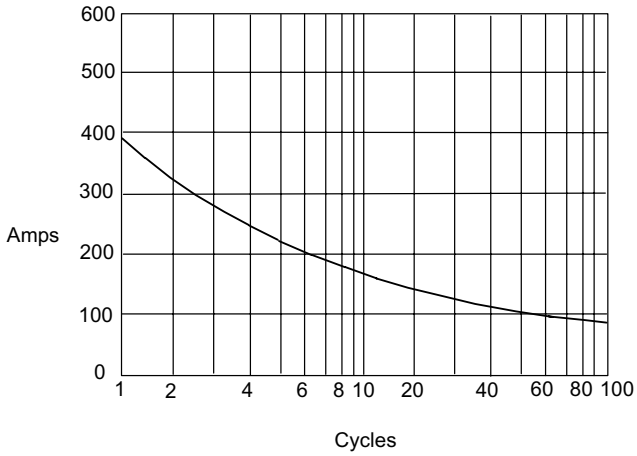
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Case Temperature - °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;50pcs/Box

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