



Micro Commercial Components



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

MP5005W

THRU

MP5010W

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)

Maximum Ratings

- 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 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

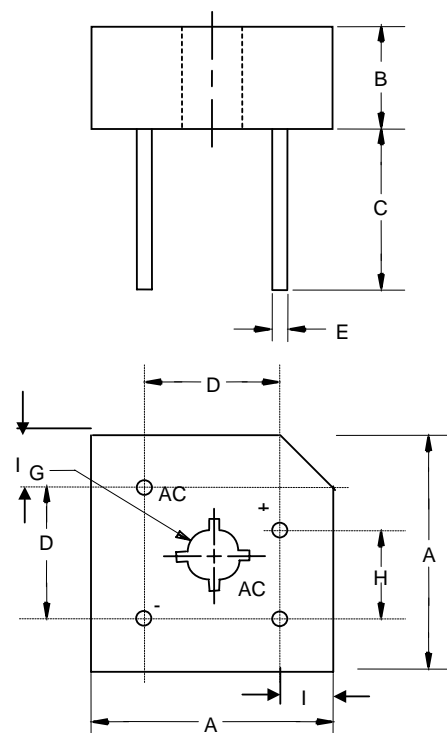
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50.0A	$T_C = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.2V	$I_{FM} = 25\text{A}$ per element; $T_J = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 1.0mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Thermal Resistance	R_{thJC}	1.6°C/W	Per Leg

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

50 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

MP-50W

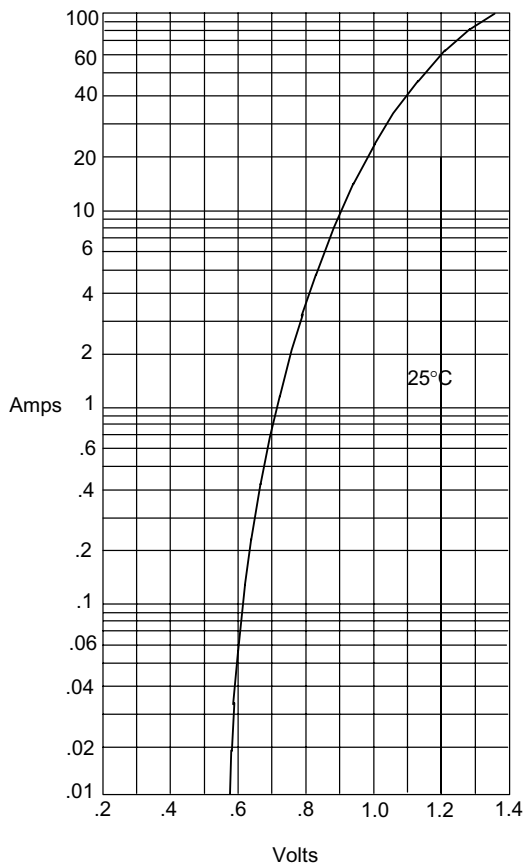


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.118	1.130	28.40	28.70	
B	.432	.442	10.97	11.23	
C	.769	---	19.53	---	
D	.673	.752	17.10	19.10	
E	.038	.042	.97	1.07	4PL/TYP
G	.193	---	4.90	---	Ø
H	.429	.468	10.90	11.90	
I	.169	.236	4.30	6.00	

www.mccsemi.com

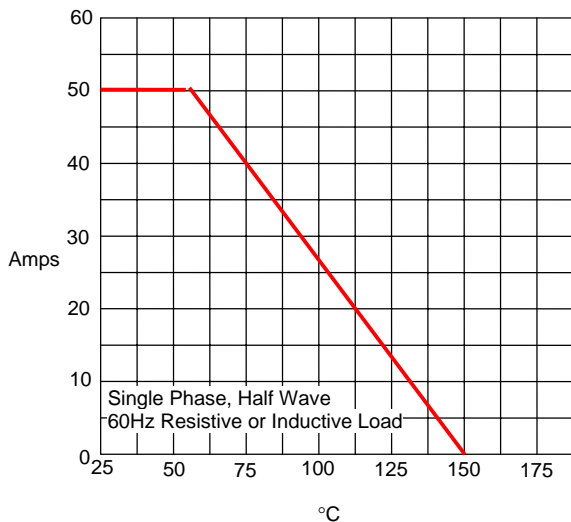
MP5005W thru MP5010W

Figure 1
Typical Forward Characteristics



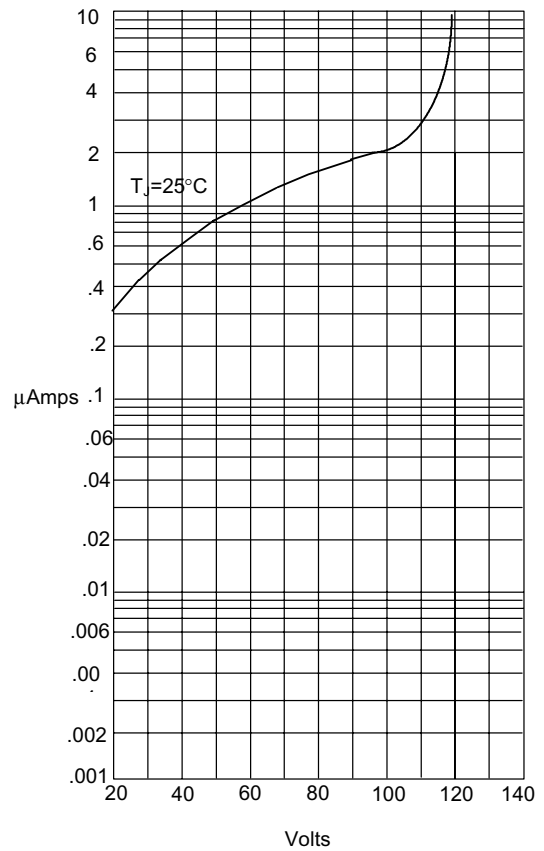
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 3
Forward Derating Curve



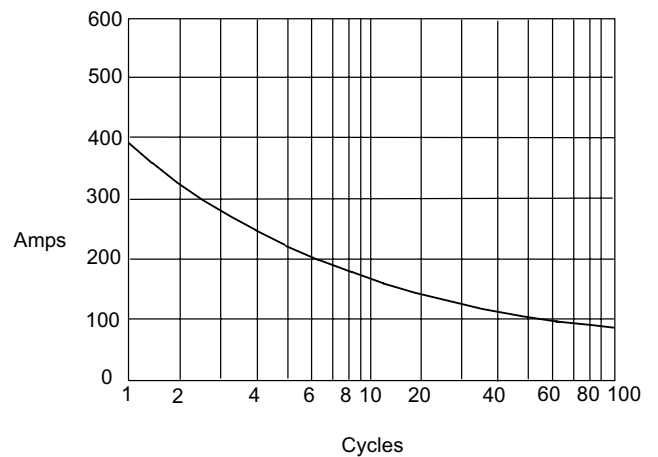
Average Forward Rectified Current - Amperes *versus*
Case Temperature - °C

Figure 2
Typical Reverse Characteristics



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

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

Ordering Information

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

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

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.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC):

[MP506W-BP](#) [MP502W-BP](#) [MP504W-BP](#) [MP5005W-BP](#) [MP5010W-BP](#) [MP501W-BP](#) [MP508W-BP](#)