

**FL** E502650

### **Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Plastic Case With Metal Bottom

# **Maximum Ratings**

- Operating Junction Temperature Range: -50°C to +150°C
- Storage Temperature Range: -50°C to +150°C
- Typical Themal Resistance: 0.95°C/W Junction to Case(Per Leg)

# **Mechanical Data**

- Mounting Torque: 2.0 N.m, Tolerance:+/-10%
- Mounting Hole For #8 Screw

MCC Part 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

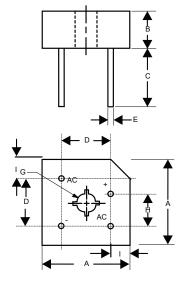
Average Forward Current	I <sub>F(AV)</sub>	50.0A	T <sub>C</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	450A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element	$V_{F}$	1.1V	I <sub>FM</sub> = 25A ; T <sub>J</sub> = 25°C (Note 2)
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 500μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

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

# 50 Amp Single Phase Glass Passivated Chip Bridge Rectifier 50 to 1000 Volts





DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	1.118	1.130	28.40	28.70	
В	0.432	0.442	10.97	11.23	
С	0.769		19.53		
D	0.673	0.752	17.10	19.10	
E	0.038	0.042	0.97	1.07	4PL/TYP
G	0.193		4.90		Ф
Н	0.429	0.468	10.90	11.90	
I	0.169	0.236	4.30	6.00	



#### **Curve Characteristics**

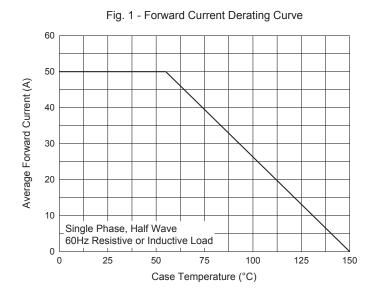
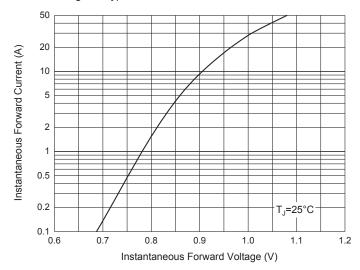


Fig. 3 - Typical Instantaneous Forward Characteristics



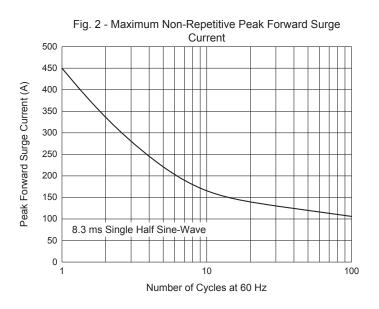
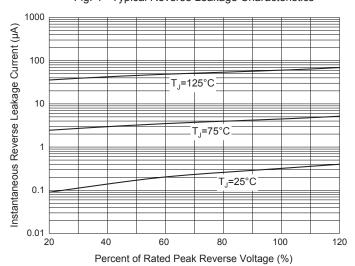


Fig. 4 - Typical Reverse Leakage Characteristics



Rev.3-3-11282020 2/3 MCCSEMI.COM



# **Ordering Information**

Device	Packing	
Part Number-BP	Bulk: 50Pcs/Box, 400Pcs/Ctn	

#### \*\*\*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. **Micro Commercial Components Corp**, products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

#### \*\*\*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.

Rev.3-3-11282020 3/3 MCCSEMI.COM