

# **MP5010W-BP** Datasheet

www.digi-electronics.com



DiGi Electronics Part Number	MP5010W
Manufacturer	Micro Con
Aanufacturer Product Number	MP5010W
Description	BRIDGE RI
Detailed Description	Bridge Re

MP5010W-BP-DG **Micro Commercial Co** MP5010W-BP BRIDGE RECT 1P 1KV 50A MP-50WW Bridge Rectifier Single Phase Standard 1 kV Throug h Hole MP-50W

https://www.DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.



## Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
MP5010W-BP	Micro Commercial Co
Series:	Product Status:
	Active
Diode Type:	Technology:
Single Phase	Standard
Voltage - Peak Reverse (Max):	Current - Average Rectified (Io):
1 kV	50 A
Voltage - Forward (Vf) (Max) @ If:	Current - Reverse Leakage @ Vr:
1.2 V @ 25 A	10 μA @ 1000 V
Operating Temperature:	Mounting Type:
-50°C ~ 150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
4-Square, MP-50W	MP-50W
Base Product Number:	
MP5010	

# Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	Not Applicable
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8541 10 0080	



# **91**

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

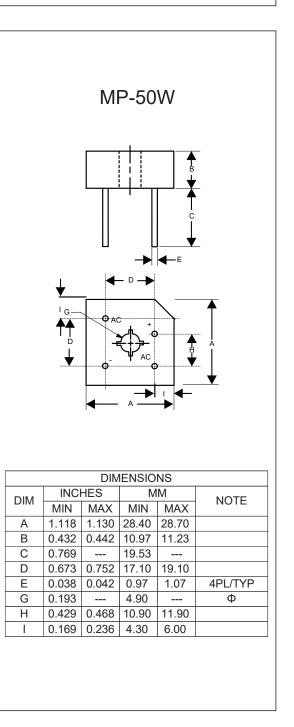
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MP5005W	MP5005W	50V	35V	50V
MP501W	MP501W	100V	70V	100V
MP502W	MP502W	200V	140V	200V
MP504W	MP504W	400V	280V	400V
MP506W	MP506W	600V	420V	600V
MP508W	MP508W	800V	560V	800V
MP5010W	MP5010W	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 <sub>F</sub>	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





10

5

2

1 0.5

0.2

0.1 └─ 0.6

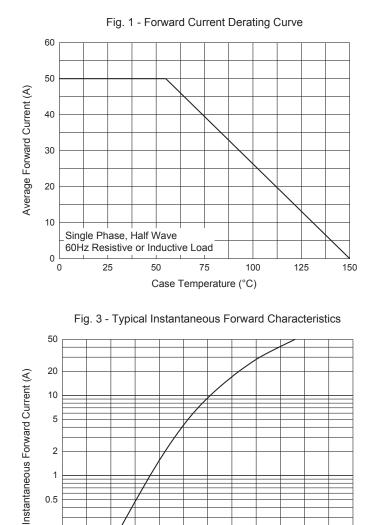
0.7

0.8

0.9

Instantaneous Forward Voltage (V)

## **Curve Characteristics**



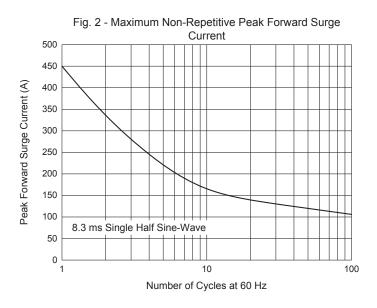
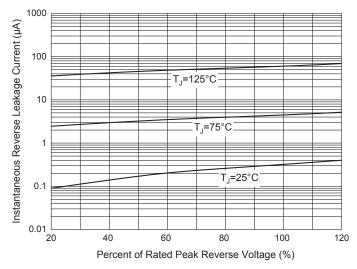


Fig. 4 - Typical Reverse Leakage Characteristics



T<sub>J</sub>=25°C

1.1

1.2

1.0



## **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.



# **OUR CERTIFICATE**

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com

DCI	DCI		
QUALITY MANAGEMENT SYSTEM CERTIFICATE	ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE	OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM CERTIFICATE	の可能可能可能 CERTIFICATE OF INCORPORATION
DIGI ELECTRONICS HK LIMITED	DIGI ELECTRONICS HK LIMITED	DIGI ELECTRONICS HK LIMITED	A. A. B. A. B. W. Hanniby and By that
RATINGS SHE IN HIS COMMERCIAL EXTREMENTAL AND STREET, MONGHO	PLATENTS 207, HO HOR COMMITTEE CALLES HAVE VER CHEET, MONORO	FLATENUE 207, HO HOUS COMPETENCE OF THE 2 MAYA VIEW STREET, MONGAO	DELERATIONCE INCLAMPSO 网络電子性者作用公司
GB/T 19001-2016 ktt ISO9001:2015	GB/T 24001-2016 idt ISO14001:2015	GB/T45001-2020 idt ISO45001:2018	$0 \rightarrow 0$ B, B $\rightarrow 0$ A, H B 122 B $\subset \odot$ G $\rightarrow H >$ 11 DN: Any Incorporated In Namy Early under the Comparise Ordinaria $A \rightarrow 0$ , $A \rightarrow A \rightarrow B$ , $A \rightarrow A \rightarrow C \rightarrow C + C \rightarrow N$ (Theoret T22 D for Larms of Hong Kong, and Balling Compare is
Ref Ref Participation components	Retto nagagante	For the Index of all interviews	Constant with in the Last in Yang Wong, and the lost dompany is it is a lost a limited company.
tankan motor make monotosi mar monotosi mar mar monotosi mar monotosi mar monotosi monotosi mar monotosi mot	tomantener men photosener men metalementener meneration Manalit	torinamientes 2008 Inter land can Can 2008-000-00 Jacobierto Maria Maria	★ # 4 # 0 ± 0 − Λ + − Λ ± + ± + # ± − Name# 04. 12 heavy 200.
			Oldentrikalis or in edit a kale or Min. Au L. L. DERING Programmer Auguston Mingrade Specific Automatistrature Auguston
In the second se	The second secon	Control tests of a state of the state o	In Heps: 公司各場合公司中局工作用:工作品中提供学校公司名表式市场大型公司者包括基本中 工程品名提用: TableAdd #: TableAdd #: TableAdd #: TableAdd #: TableA





Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.