

**MP5005W
THRU
MP5010W**

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

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

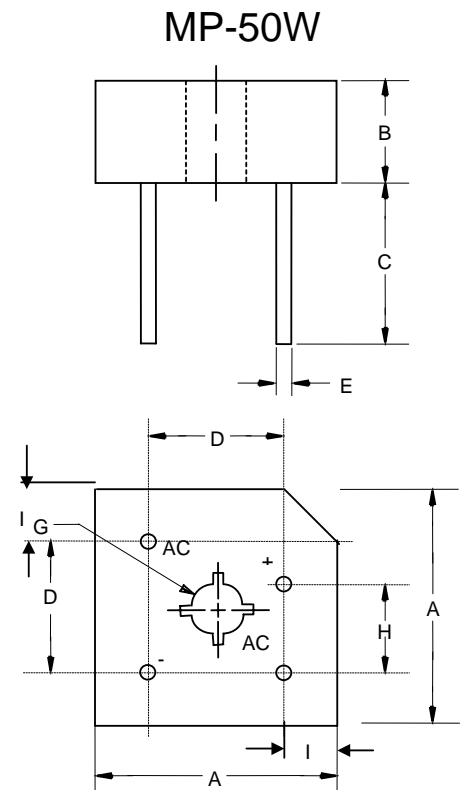
- Mounting Torque: 2.0 N.m, Tolerance: +/-10%
- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- UL Recognized File # E165989

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}	450A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.1V	$I_{FM} = 25\text{A}$ per element; $T_J = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 500 μA	$T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$
Typical Thermal Resistance	R_{thJC}	0.95°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%



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	---	∅
H	.429	.468	10.90	11.90	
I	.169	.236	4.30	6.00	

FIG.1 TYPICAL FORWARD CHARACTERISTICS

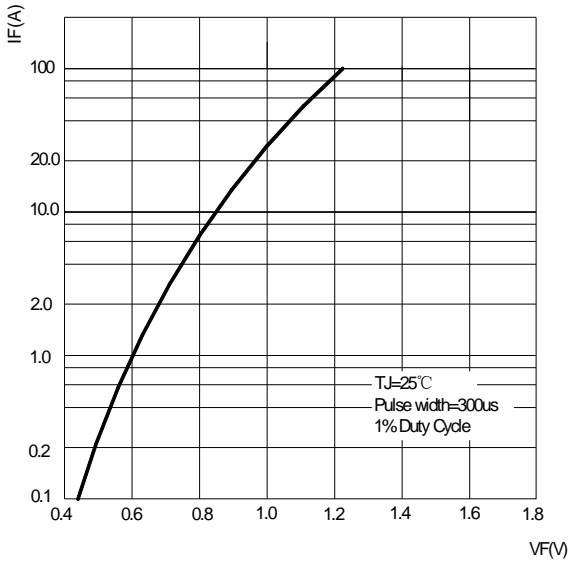


FIG2: Typical Reverse Characteristics

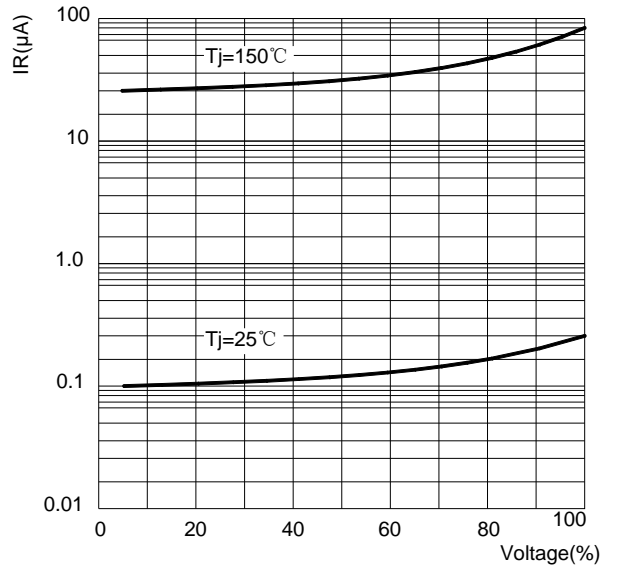
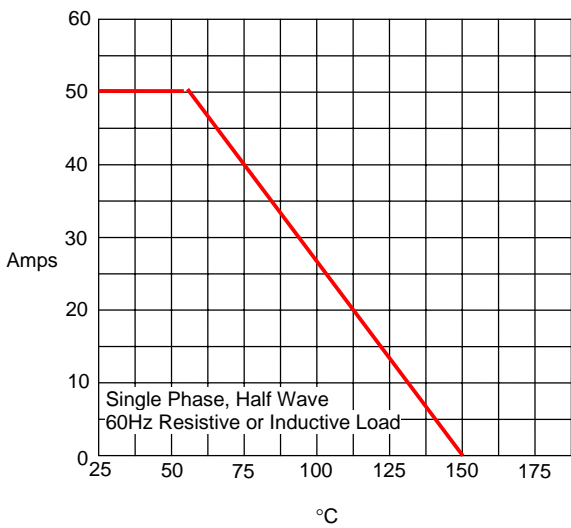
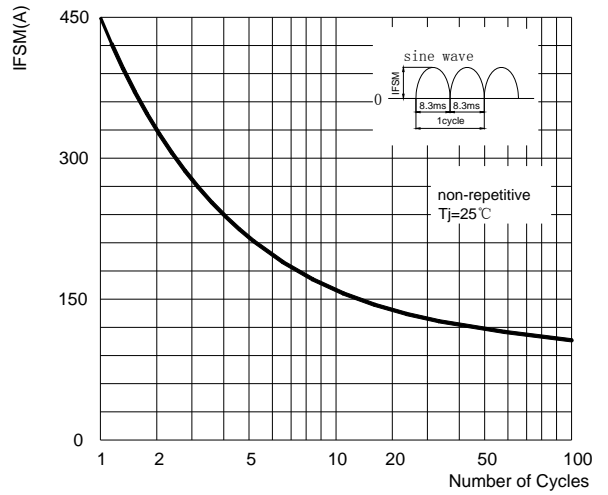


Figure 3 Forward Derating Curve



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

FIG4 Surge Forward Current Capability





Ordering Information

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

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

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