




THE DATASHEET OF MP5010W



	E502650
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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 Thermal 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	$I_{F(AV)}$	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	$I_{FM} = 25A ; T_J = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 μ A 500 μ A	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$

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

MP-50W

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.118	1.130	28.40	28.70	
B	0.432	0.442	10.97	11.23	
C	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	---	Φ
H	0.429	0.468	10.90	11.90	
I	0.169	0.236	4.30	6.00	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

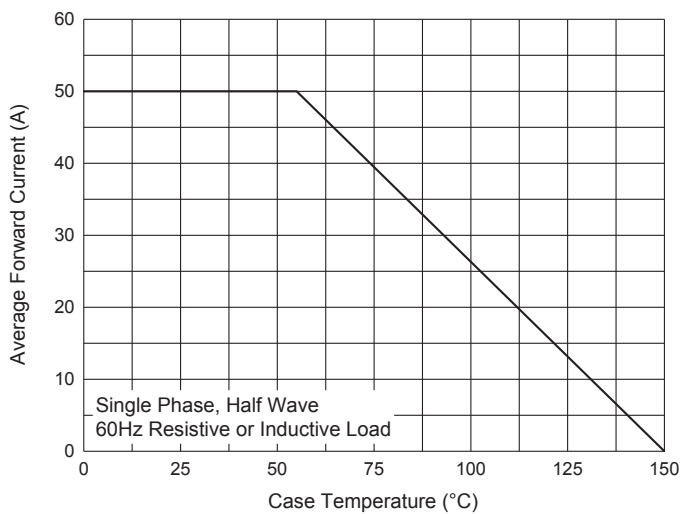


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

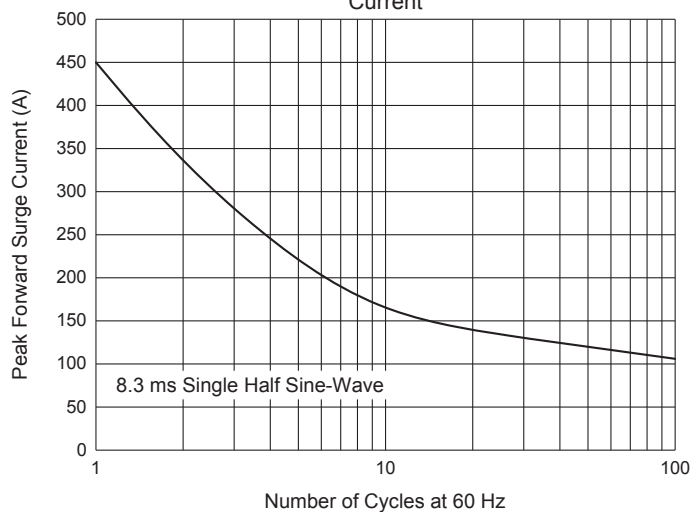


Fig. 3 - Typical Instantaneous Forward Characteristics

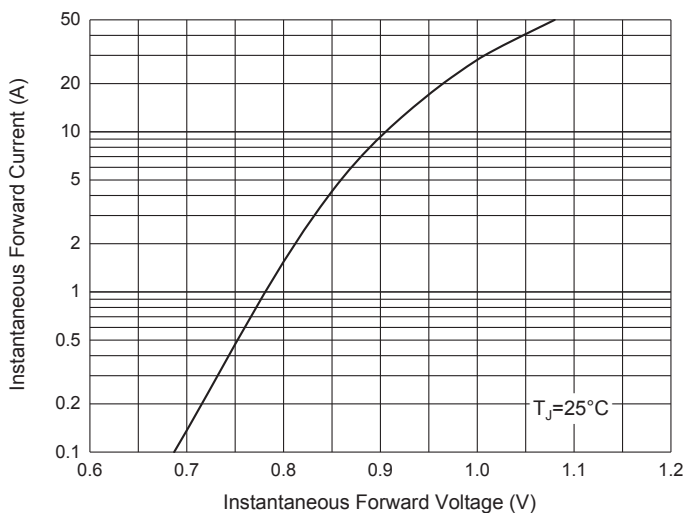
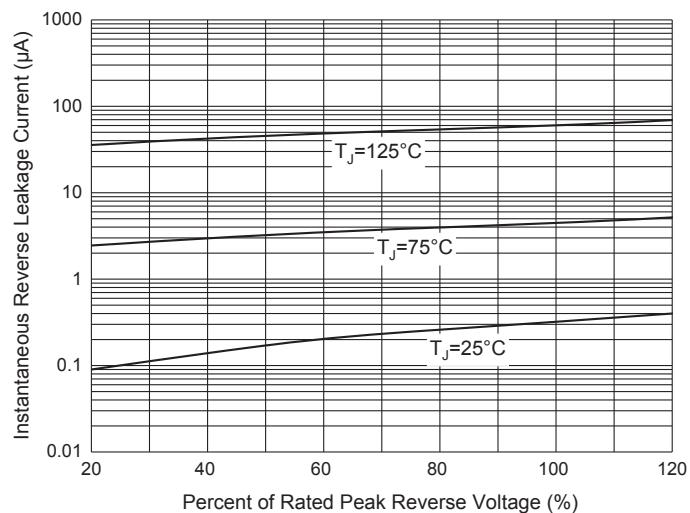


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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