



Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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MB5005W THRU MB5010W

Features

- Mounting Hole For #8 Screw
- Plastic Case With Metal Bottom
- Any Mounting Position
- Surge Rating Of 400 Amps
- 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)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -50°C to +150°C
 Storage Temperature: -50°C to +150°C
- Mounting Torgue: 20 in-lbs Maximum

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Reccurrent	RMS	DC
Number		Peak	Voltage	Blocking
		Reverse		Voltage
		Voltage		_
MB5005W	MB5005W	50V	35V	50V
MB501W	MB501W	100V	70V	100V
MB502W	MB502W	200V	140V	200V
MB504W	MB504W	400V	280V	400V
MB506W	MB506W	600V	420V	600V
MB508W	MB508W	800V	560V	800V
MB5010W	MB5010W	1000v	700V	1000v

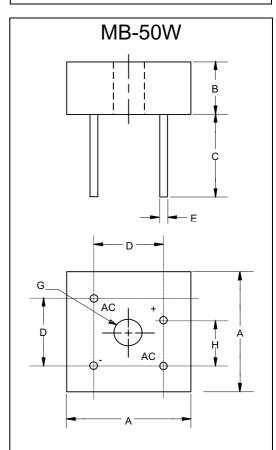
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50.0A	T _J = 55°C		
Peak Forward Surge Current	I _{FSM}	400A	8.3ms, half sine		
Maximum Forward Voltage Drop Per Element	V _F	1.2V	I_{FM} = 25A per element; T_J = 25°C (Note 2)		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	10μA 0.5mA	T _J = 25°C T _J = 100°C		

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

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

50 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

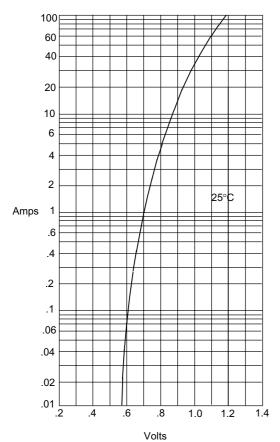


DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	-	1.140		29.00	
В	-	.452		11.50	
С	-	.750		19.10	
D	.692	.732	17.6	18.6	
Е	.040		1.00		4PL/TYP
G	.188		4.77		Ø
Н	.429	.468	10.9	11.9	



MB5005W thru MB5010W

Figure 1 Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 3

25

50

Forward Derating Curve 60 50 40 30 Amps 20 10 Single Phase, Half Wave 60Hz Resistive or Inductive 00

٥С Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C

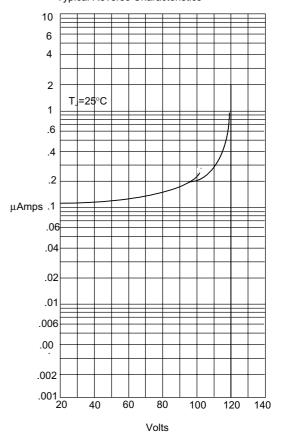
75

100

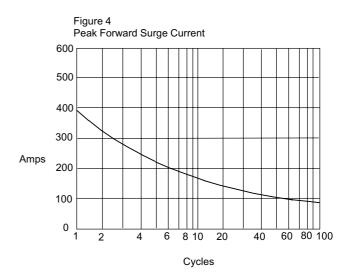
150

175

Figure 2 **Micro Commercial Components** Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperesversus 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

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