



Micro Commercial Components



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MB5005 THRU MB5010

Features

- Halogen free available upon request by adding suffix "-HF"
- Case to Terminal Isolation Voltage 2500V (RMS)
- High Conductivity Metal Case
- Any Mounting Position
- 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 Torgue: 20 in-lbs Maximum
- Surge Rating Of 400 Amps
- Mounting Hole For #8 Screw
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

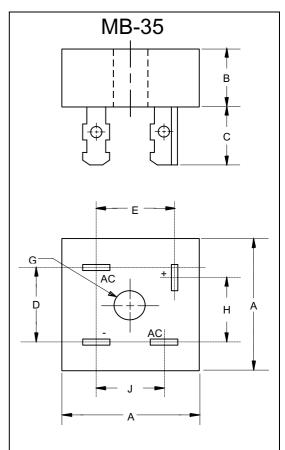
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent RMS		DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
MB5005	MB5005	50V	35V	50V
MB501	MB501	100V	70V	100V
MB502	MB502	200V	140V	200V
MB504	MB504	400V	280V	400V
MB506	MB506	600V	420V	600V
MB508	MB508	800V	560V	800V
MB5010	MB5010	1000v	700V	1000v

Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward Current	$I_{F(AV)}$	50.0A	$T_C = 55^{\circ}C$			
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			
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	10μA 1mA	T _J = 25°C T _J = 125°C			
Typical Thermal Resistance Junction to Case (Note 1)	R $ heta$ JC	1.5K/W	Per element			

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

50 Amp Single Phase Bridge Rectifier 50 to 1000 Volts



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MA	MIN	MA	NOTE	
Α	1.115	1.135	28.33	28.83		
В	.427	.447	10.85	11.35		
С	.428	.480	10.87	12.20		
D	.688	.730	17.48	18.50		
Е	.618	.658	15.70	16.71		
G	.193		4.90		Ø	
Н	.618	.658	15.70	16.71		
J	.530	.570	13.46	14.48		

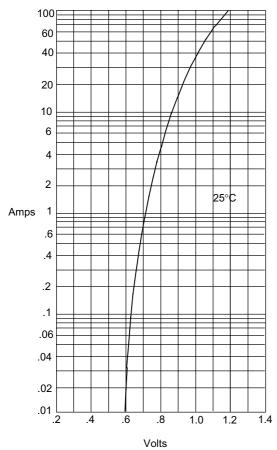
^{2.} Thermal resistance junction to case mounted on heatsink.



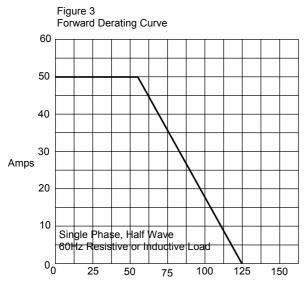
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MB5005 thru MB5010

Figure 1
Typical Forward Characteristics



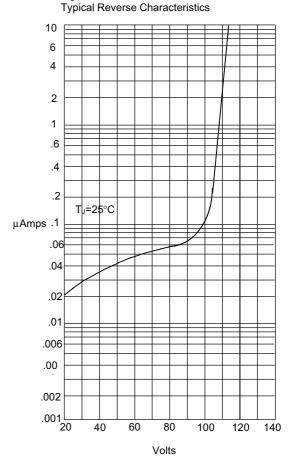
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Mounted on a 220x220x50mm ALplateheatsink

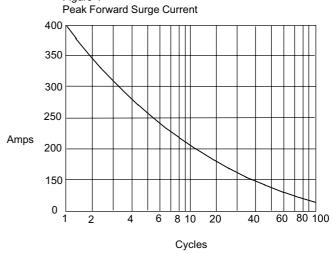
Average Forward Rectified Current - Amperes *versus*Case Temperature - °C

Figure 2



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

Figure 4



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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