

**Micro Commercial Components** 



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# **MB3505 THRU MB3510**

## Features

- Mounting Hole For #10 Screw
- High Conductivity Metal Case
- Any Mounting Position
- 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)

- UL Recognized File # E165989
- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C
- Mounting Torgue: 20 in-lbs Maximum

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB3505	MB3505	50V	35V	50V
MB351	MB351	100V	70V	100V
MB352	MB352	200V	140V	200V
MB354	MB354	400V	280V	400V
MB356	MB356	600V	420V	600V
MB358	MB358	800V	560V	800V
MB3510	MB3510	1000V	700V	1000V

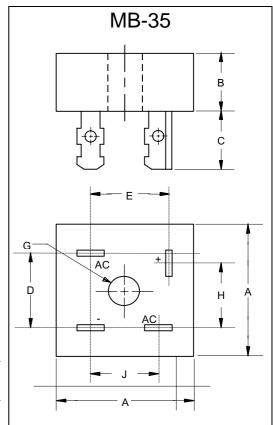
### Electrical Characteristics @ $25\,^{\circ}$ C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	35.0A	T <sub>C</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_{F}$	1.2V	$I_{FM}$ = 17.5A per element; $T_J$ = 25°C (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μA 1.0mA	$T_J = 25^{\circ}\mathbb{C}$ $T_J = 125^{\circ}\mathbb{C}$
Thermal Resistence Junction to case	$R_{thJC}$	2.5℃/W	

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

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

# 35 Amp Single Phase **Bridge Rectifier** 50 to 1000 Volts



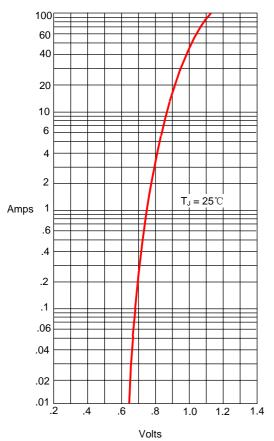
DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	1.115	1.135	28.33	28.83		
В	.427	.447	10.85	11.35		
С	.428	.468	10.87	11.89		
D	.688	.730	17.48	18.50		
Е	.618	.658	15.70	16.71		
G	.193		4.90		Ø	
Н	.618	.658	15.70	16.71		
J	.530	.570	13.46	14.48		

# MB3505 thru MB3510



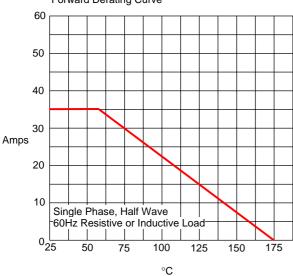
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Figure 1 Typical Forward Characteristics



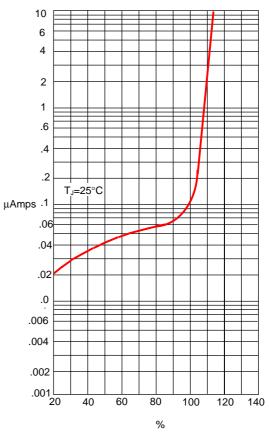
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 3 Forward Derating Curve



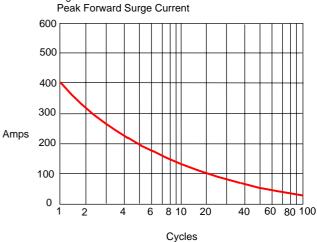
Average Forward Rectified Current - Amperes versus Case Temperature - °C

Figure 2 Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - microAmpere versus Percent Of Rated Peak Reverse Voltage - %

Figure 4



Peak Forward Surge Current - Amperes versus 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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