

**Micro Commercial Components** 



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# MB1505 THRU MB1510

## **Features**

- Mounting Hole For #10 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)

## **Maximum Ratings**

- Mounting Torgue: 20 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

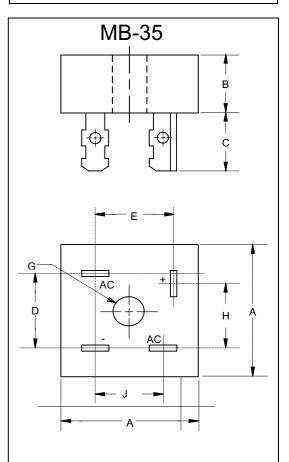
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent RMS		DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
MB1505	MB1505	50V	35V	50V
MB151	MB151	100V	70V	100V
MB152	MB152	200V	140V	200V
MB154	MB154	400V	280V	400V
MB156	MB156	600V	420V	600V
MB158	MB158	800V	560V	800V
MB1510	MB1510	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	15.0A	$T_C = 55^{\circ}C$
Peak Forward Surge Current	I <sub>FSM</sub>	300A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V <sub>F</sub>	1.2V	$I_{FM} = 7.5A$ per element; $T_J = 25^{\circ}C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μA 1mA	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C

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

## 15 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

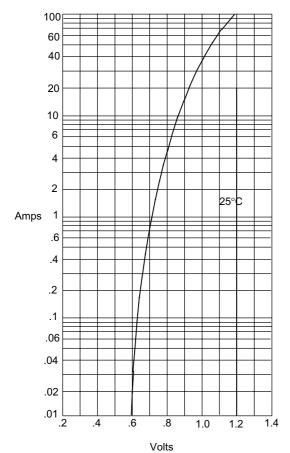


DIMENSIONS						
DIM	INCHES MIN	MAX	MM MIN	MAX	NOTE	
Α	1.115	1.135	28.33	28.83		
В	.427	.447	10.85	11.35		
С	.428	.468	10.87	11.89		
D	.688	.730	17.48	18.50		
Е	.618	.658	15.70	16.71		
G	.200		5.08		Ø	
Н	.618	.658	15.70	16.71		
J	.530	.570	13.46	14.48		



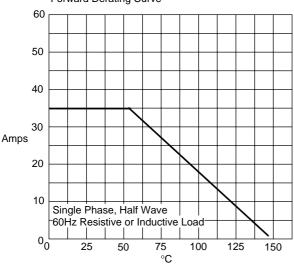
### MB1505 thru MB1510

Figure 1 Typical Forward Characteristics



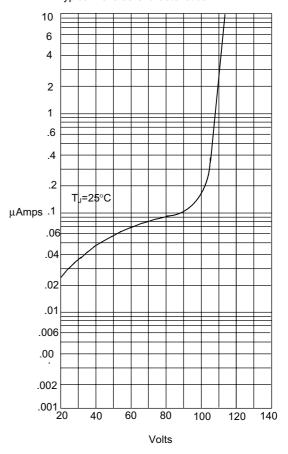
Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts

Figure 3 Forward Derating Curve



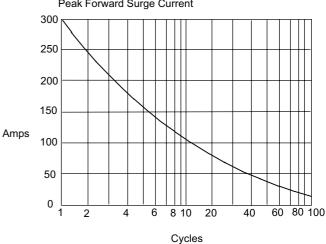
Average Forward Rectified Current - Amperes versus Case Temperature -  $^{\circ}\text{C}$ 

Figure 2 Micro Commercial Components
Typical Reverse Characteristics



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

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



### **Ordering Information**

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

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