



Micro Commercial Components



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# MP3505 THRU MP3510

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

### Features

- UL Recognized File # E165989
- Mounting Hole For #8 Screw
- Plastic Case With Metal Bottom
- Any Mounting Position
- Surge Rating Of 400 Amps
- 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)

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Mounting Torque: 20 in-lbs Maximum

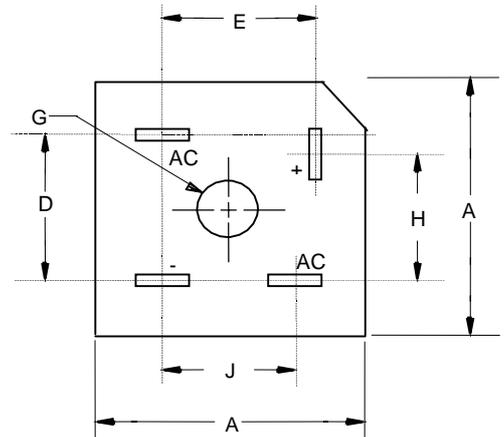
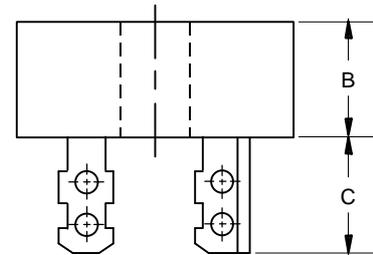
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MP3505	MP3505	50V	35V	50V
MP351	MP351	100V	70V	100V
MP352	MP352	200V	140V	200V
MP354	MP354	400V	280V	400V
MP356	MP356	600V	420V	600V
MP358	MP358	800V	560V	800V
MP3510	MP3510	1000v	700V	1000v

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

Average Forward Current	$I_{F(AV)}$	35.0A	$T_C = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.1V	$I_{FM} = 17.5\text{A}$ per element; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
$I^2t$ Rating for Fusing $t < 8.3\text{ms}$	$I^2t$	660	$\text{A}^2\text{S}$
Typical Thermal Resistance Junction to case(per element)	$R_{thjc}$	3.0	K/W

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

### MP-50

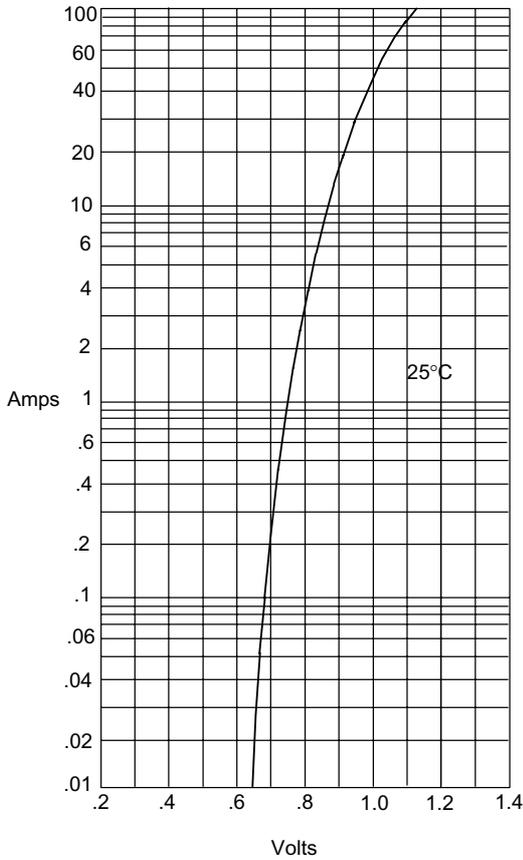


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.110	1.130	28.20	28.70	
B	.425	.442	10.80	11.23	
C	.468	.558	11.89	14.17	
D	.689	.728	17.50	18.50	
E	.618	.657	15.70	16.70	
G	.193	---	4.90	---	∅
H	.618	.657	15.70	16.70	
J	.531	.571	13.50	14.50	

[www.mccsemi.com](http://www.mccsemi.com)

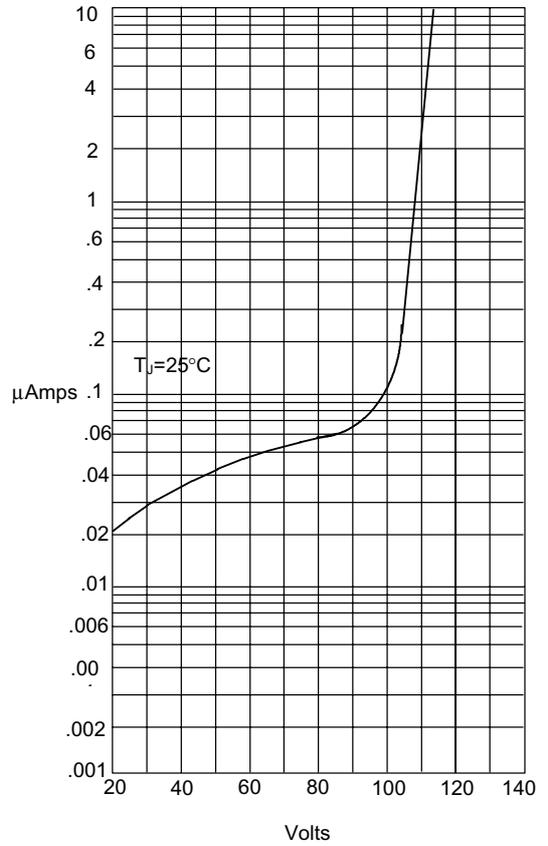
## MP3505 thru MP3510

Figure 1  
Typical Forward Characteristics



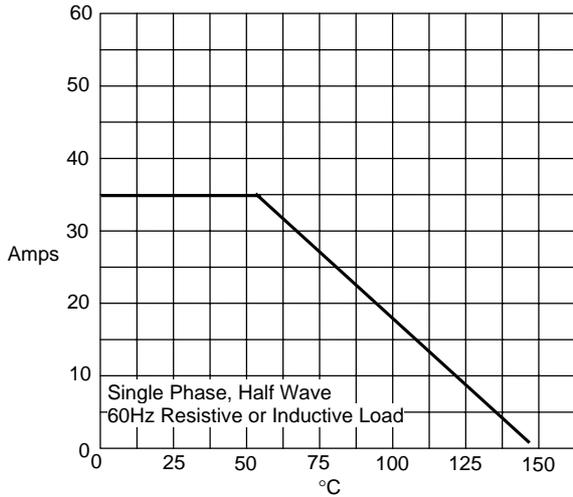
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



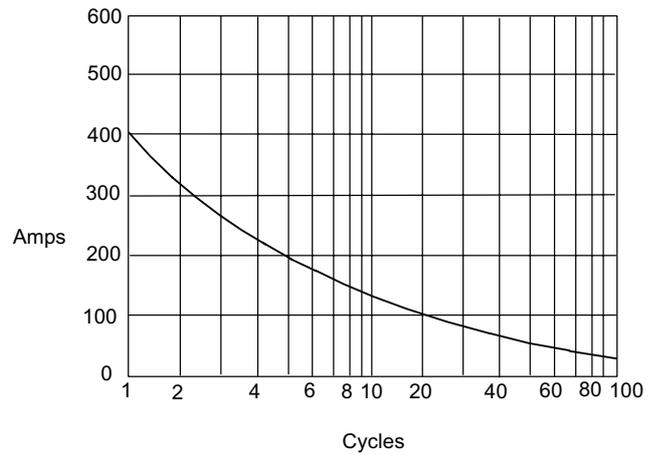
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



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

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles



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## 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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