



Micro Commercial Components  
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## MB2505 THRU MB2510

### Features

- Mounting Hole For #8 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Surge Rating Of 300 Amps

### Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

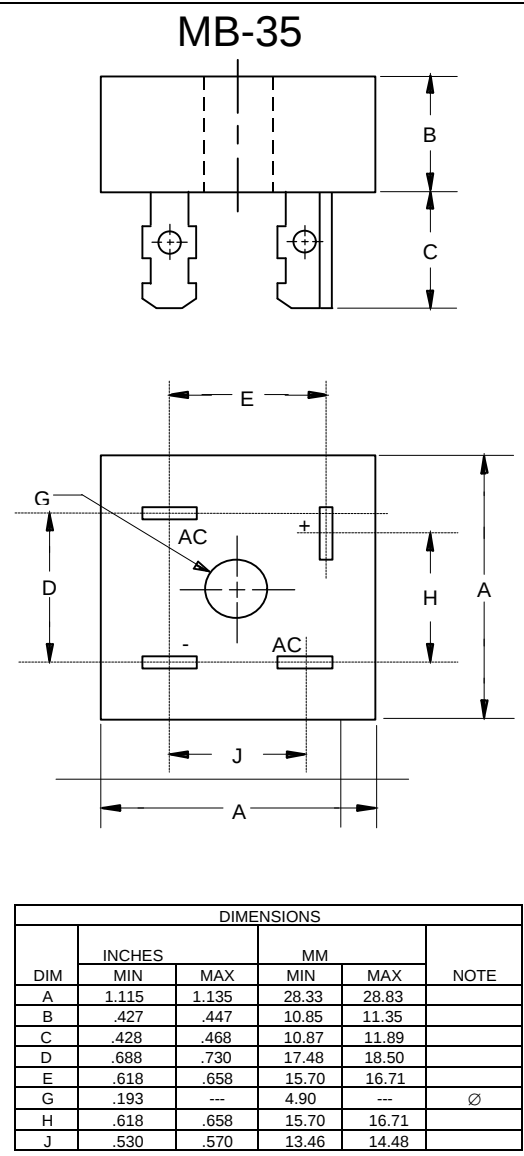
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| MB2505             | MB2505         | 50V                                    | 35V                 | 50V                         |
| MB251              | MB251          | 100V                                   | 70V                 | 100V                        |
| MB252              | MB252          | 200V                                   | 140V                | 200V                        |
| MB254              | MB254          | 400V                                   | 280V                | 400V                        |
| MB256              | MB256          | 600V                                   | 420V                | 600V                        |
| MB258              | MB258          | 800V                                   | 560V                | 800V                        |
| MB2510             | MB2510         | 1000V                                  | 700V                | 1000V                       |

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

|                                                         |             |             |                                                                  |
|---------------------------------------------------------|-------------|-------------|------------------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 25.0A       | $T_C = 55^\circ\text{C}$                                         |
| Peak Forward Surge Current                              | $I_{FSM}$   | 300A        | 8.3ms, half sine                                                 |
| Maximum Forward Voltage Drop Per Element                | $V_F$       | 1.2V        | $I_{FM} = 12.5\text{A}$ per element;<br>$T_J = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 10μA<br>1mA | $T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$            |

\*Pulse test: Pulse width 300 μsec, Duty cycle 1%

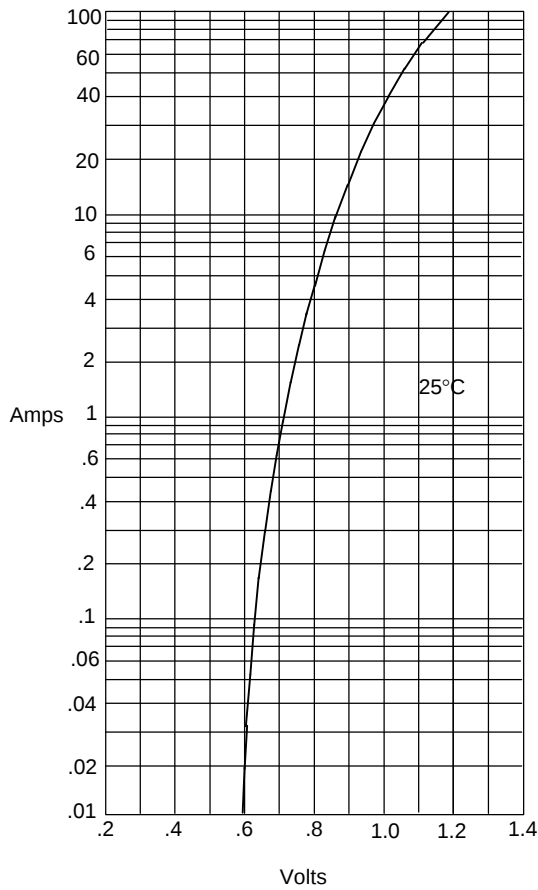
### 25 Amp Single Phase Bridge Rectifier 50 to 1000 Volts



# MB2505 thru MB2510

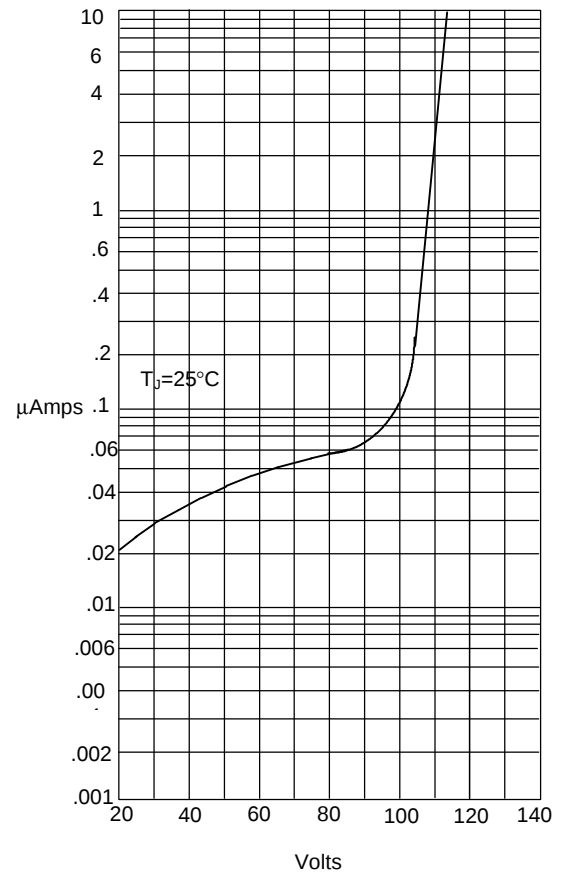


Figure 1  
Typical Forward Characteristics



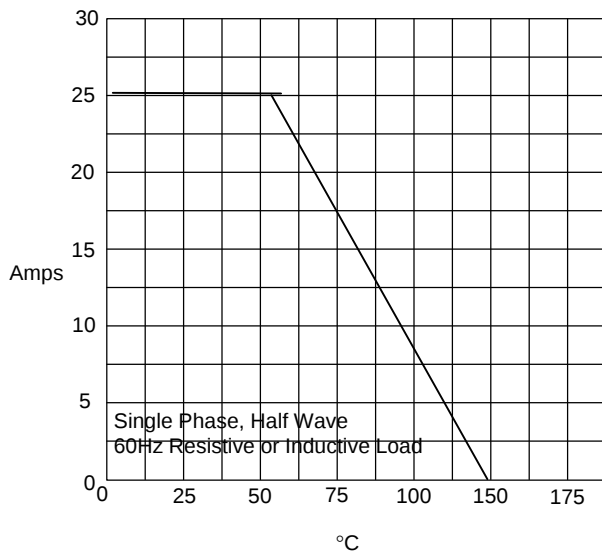
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



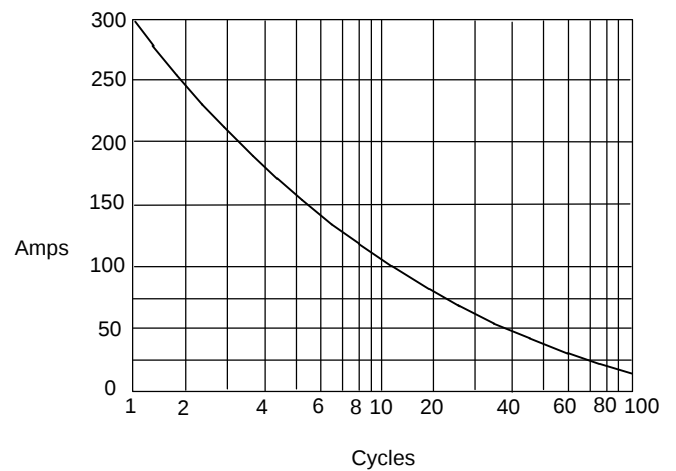
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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

Datasheets for electronic components.