



21201 Itasca St.
Chatsworth, CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MB3505W THRU MB3510W

Features

- Mounting Hole For #8 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Surge Rating Of 400 Amps

35 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

Maximum Ratings

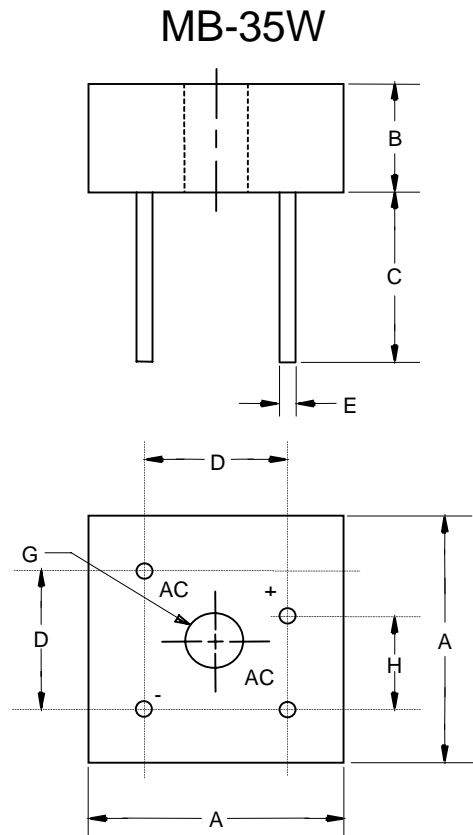
- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C

| Microsemi Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------------|----------------------------------------|---------------------|-----------------------------|
| MB3505W | 50V | 35V | 50V |
| MB351W | 100V | 70V | 100V |
| MB352W | 200V | 140V | 200V |
| MB354W | 400V | 280V | 400V |
| MB356W | 600V | 420V | 600V |
| MB358W | 800V | 560V | 800V |
| MB3510W | 1000v | 700V | 1000v |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---------------------------------------------------------|-------------|---------------------|-------------------------------------------------------------|
| Average Forward Current | $I_{F(AV)}$ | 35.0A | $T_J = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 400A | 8.3ms, half sine |
| Maximum Forward Voltage Drop Per Element | V_F | 1.1V | $I_{FM} = 17.5A$ per element; $T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 10 μ A 1.0mA | $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ |

*Pulse test: Pulse width 300 μ sec, Duty cycle 1%

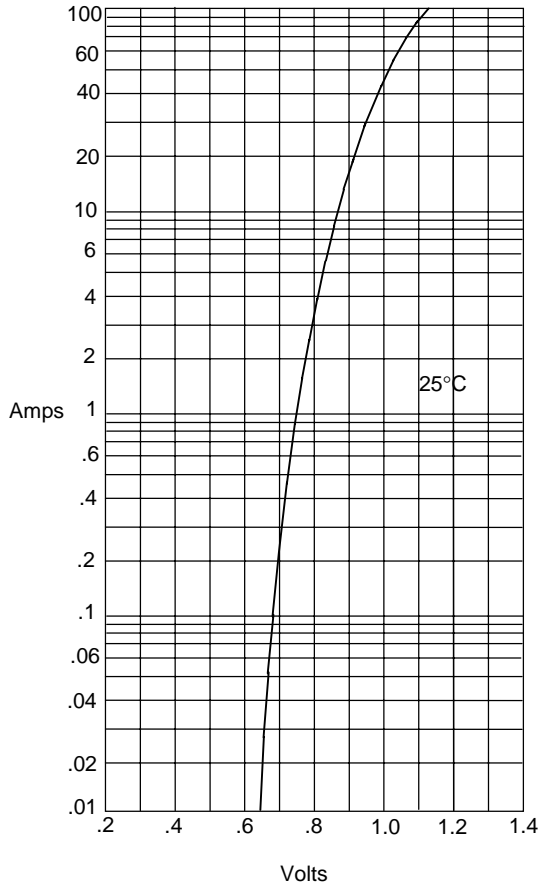


| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|-------|-------------|
| | MIN | MAX | MIN | MAX | |
| A | --- | 1.140 | --- | 29.00 | |
| B | --- | .452 | --- | 11.50 | |
| C | --- | .750 | --- | 19.10 | |
| D | .692 | .732 | 17.6 | 18.6 | |
| E | .040 | --- | 1.00 | --- | 4PL/TYP |
| G | .188 | --- | 4.77 | --- | \emptyset |
| H | .429 | .468 | 10.9 | 11.9 | |

MB3505W thru MB3510W

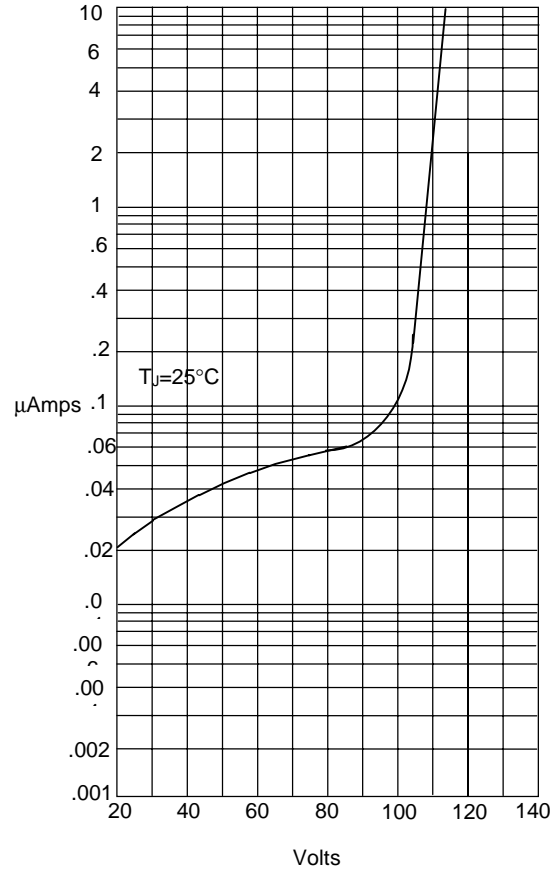


Figure 1
Typical Forward Characteristics



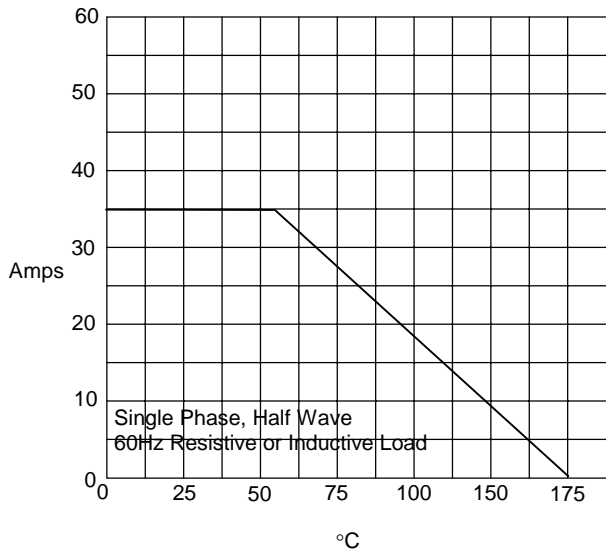
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



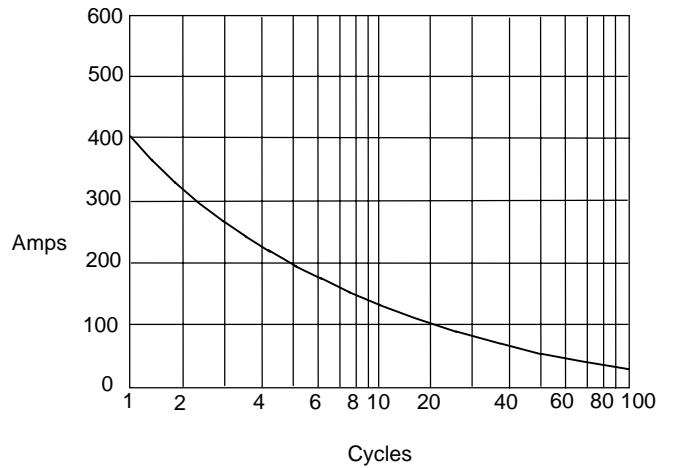
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



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

Figure 4
Peak Forward Surge Current



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