



Micro Commercial Components
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MB2505 THRU MB2510

Features

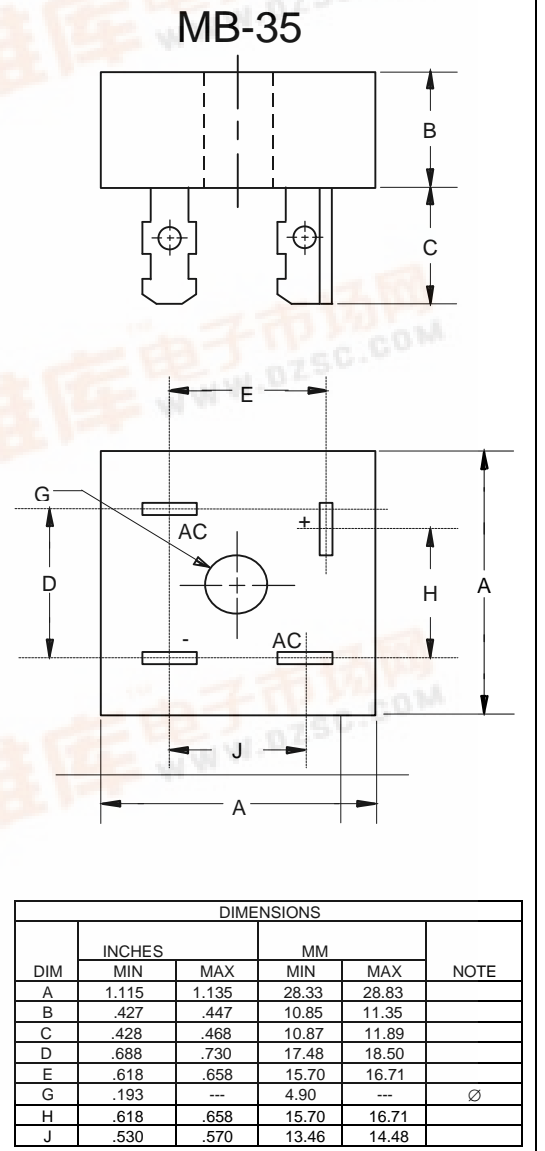
- Mounting Hole For #8 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Surge Rating Of 300 Amps

25 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

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

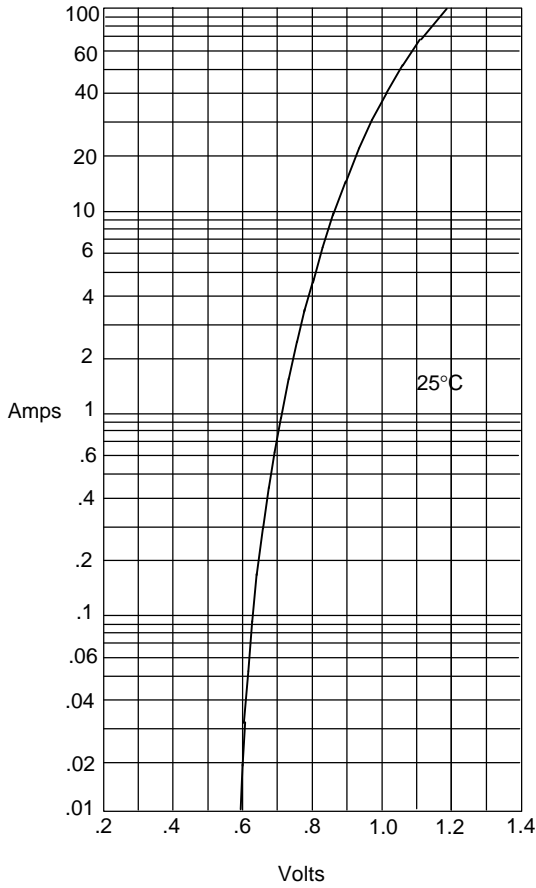
| | | | |
|---|-------------|-------------------------|--|
| Average Forward Current | $I_{F(AV)}$ | 25.0A | $T_C = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 300A | 8.3ms, half sine |
| Maximum Forward Voltage Drop Per Element | V_F | 1.2V | $I_{FM} = 12.5\text{A}$ per element; $T_J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

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



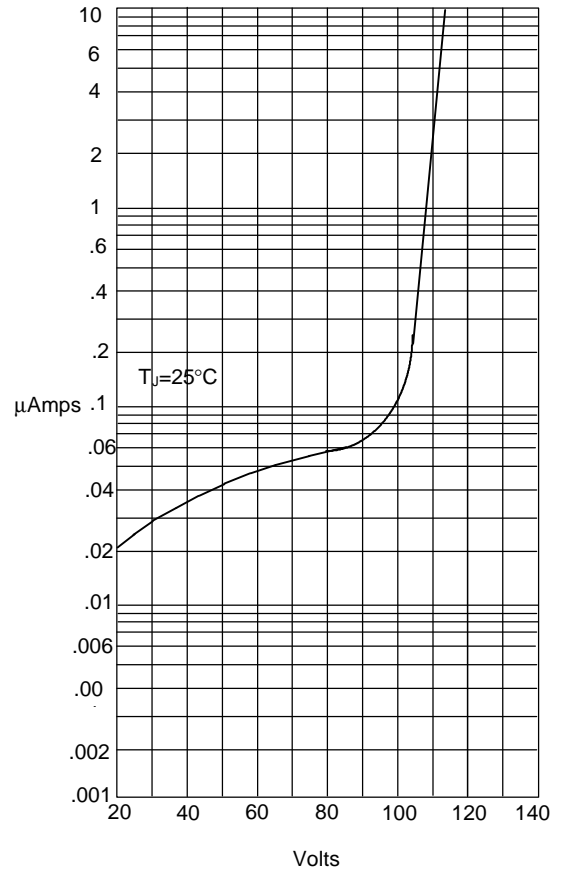
MB2505 thru MB2510

Figure 1
Typical Forward Characteristics



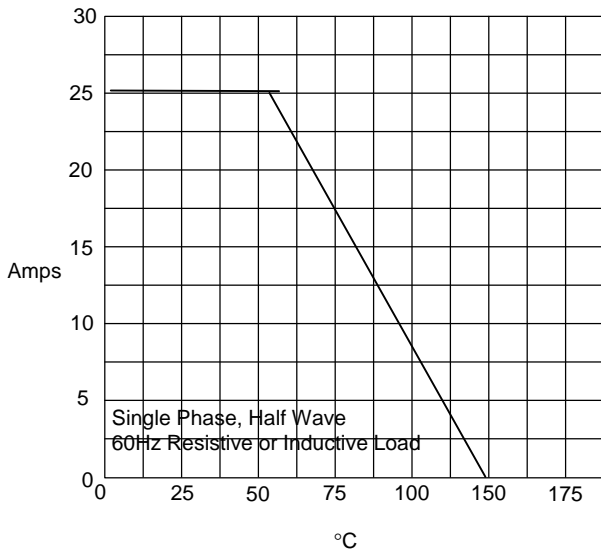
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



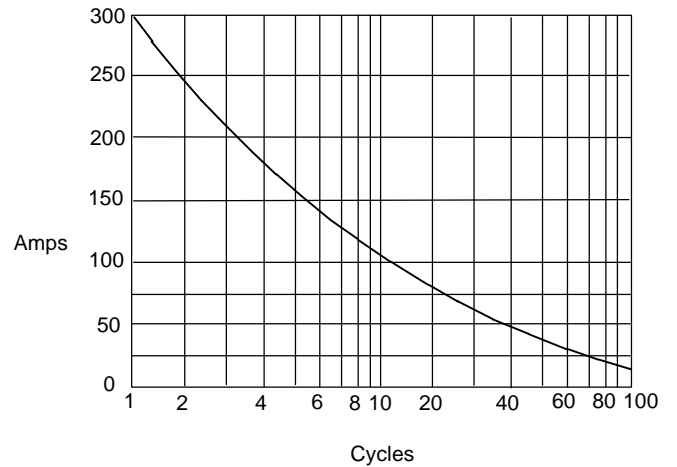
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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