

Micro Commercial Components



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MB2505 THRU MB2510

Features

- Mounting Hole For #10 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Surge Rating Of 300 Amps
- 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 Torque: 20 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

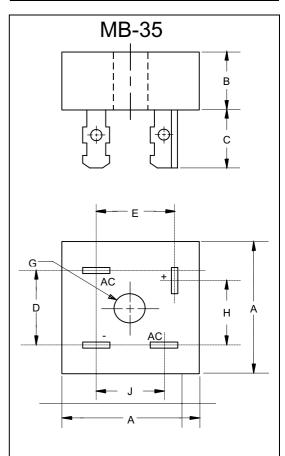
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------------|-------------------|---|---------------------------|--------------------------------------|
| MB2505 | MB2505 | 50V | 35V | 50V |
| MB251 | 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°C |
|--|--------------------|-------------|---|
| Peak Forward Surge Current | I _{FSM} | 300A | 8.3ms, half sine |
| Maximum Forward Voltage Drop Per Element | V _F | 1.2V | I_{FM} = 12.5A per element; T_J = 25°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I _R | 10μA 1mA | T _J = 25°C T _J = 125°C |

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

25 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

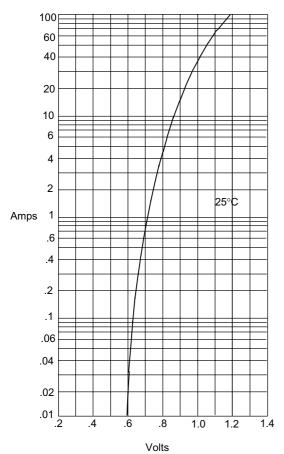


| DIMENSIONS | | | | | | |
|------------|----------------|-------|---------------|-------|------|--|
| DIM | INCHES MIN MAX | | MM MIN MAX | | NOTE | |
| A | 1.115 | 1.135 | 28.33 | 28.83 | | |
| В | .427 | .447 | 10.85 | 11.35 | | |
| С | .428 | .468 | 10.87 | 11.89 | | |
| D | .688 | .730 | 17.48 | 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 | | |

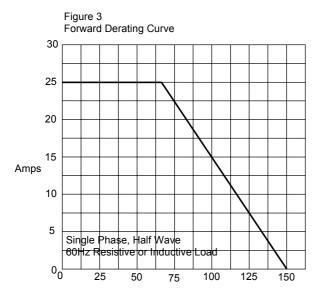


MB2505 thru MB2510

Figure 1
Typical Forward Characteristics

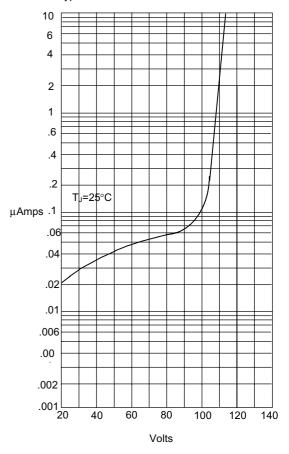


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

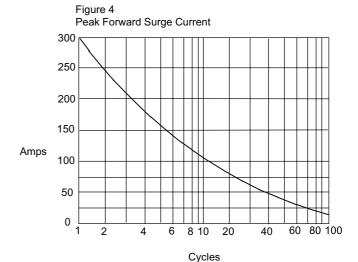


Average Forward Rectified Current - Amperes versus Case Temperature - $^{\circ}\text{C}$

Figure 2 Micro Commercial Components
Typical Reverse Characteristics



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



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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