MP15M SERIES

SINGLE-PHASE 15 AMPS. SILICON BRIDGE RECTIFIERS

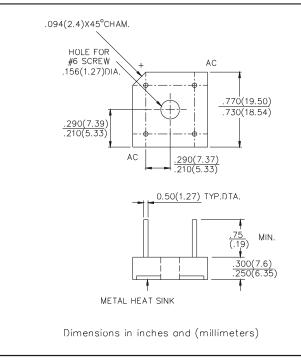




FEATURES

- 300 Amps Surge capability
- CASE: Molded Plastic with Heatsink Interally Mounted in the Bridge Encapsulation
- Electrically isolated metal case for maximum heat dissipation
- Mounting: thru hole for #6 screw

VOLTAGE RANGE 50 TO 1000 VOLTS PRV CURRENT 15 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| | | MP15005M | MP1501M | MP1502M | MP1504M | MP1506M | MP1508M | MP1510M | UNITS |
|--|-------------------|-------------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | ٧ |
| Maximum RMS Bridge Input Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | ٧ |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | ٧ |
| Maximum Average Forward Output Current @ T _A =55°C | V _(AV) | 15 | | | | | | | А |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Method) | I _{FSM} | 200 | | | | | | | А |
| Maximum Forward Voltage per Bridge Element MP15 at IF 7.5A | V _F | 1.1 | | | | | | | ٧ |
| Maximum DC Reverse Current at rated @ T _A =25°C DC Blocking Voltage Per Bridge Element | I _R | 10 | | | | | | | μΑ |
| Operating Temperature Range | T _J | -55 to +125 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +125 | | | | | | | °C |

^{*(}Plastic case & Metal base)

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RATING AND CHARACTERISTICS CURVES MP15M SERIES

Fig.1 - MAXIMUM FORWARD SURGE CURRENT

WHERE S 200

100

100

100

NUMBER OF CYCLES AT 60 Hz

10

100

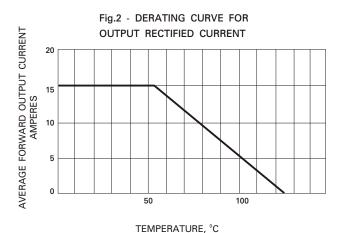
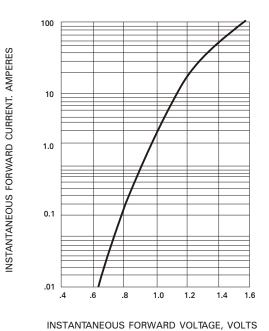


Fig.4 - TYPICAL REVERSE CHARACTERISTICS

Fig.3 - TYPICAL FORWARD CHARACTERISTICS



OURRENT, MICROAMPERSS OUT 100 130 140

10

PERCENT OF RATED PEAK REVERSE VOLTAGE