

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 15 Amperes

FEATURES

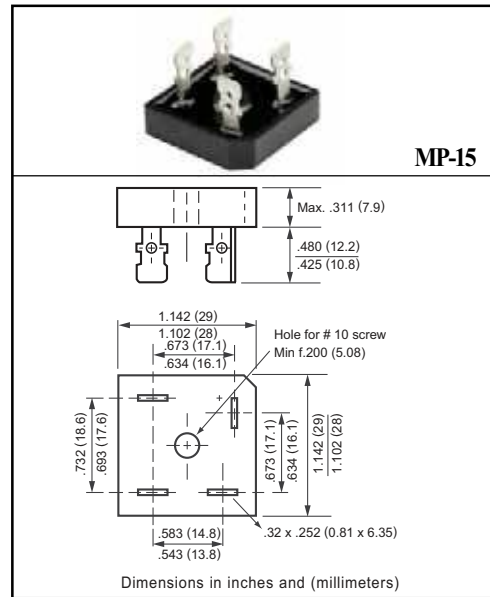
- * Superior thermal desing
- * 300 amperes surge rating
- * 1/4" universal faston terminal
- * Hole thru for # 10 screw

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
resistive or inductive load.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | MP1505 | MP151 | MP152 | MP154 | MP156 | MP158 | MP1510 | UNITS |
|---|-----------------------------|--------------|-------|-------|-------|-------|-------|--------|---------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Output Current at Tc = 55°C | I _O | 15.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 300 | | | | | | | Amps |
| Typical Current Squarad Time | I ² _t | 373.3 | | | | | | | A ² /Sec |
| RMS isolation voltage from case to lead | V _{ISO} | 2500 | | | | | | | Volts |
| Typical Thermal Resistance (from junction to case) | R _{θJC} | 2 | | | | | | | °C/W |
| Typical Thermal Resistance (from junction to ambient) | R _{θJA} | 19 | | | | | | | |
| Operating and Storage Temperature Range | T _{J,TSTG} | -55 to + 150 | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | MP1505 | MP151 | MP152 | MP154 | MP156 | MP158 | MP1510 | UNITS |
|---|----------------|--------|-------|-------|-------|-------|-------|--------|-------|
| Maximum Forward Voltage Drop per element at 7.5A DC | V _F | 1.05 | | | | | | | Volts |
| Maximum Reverse Current at Rated | I _R | 0.5 | | | | | | | uAmps |
| DC Blocking Voltage per element | | 500 | | | | | | | uAmps |

NOTE: 1. Suffix "W" for wire type
2. "RoHS compliant"

2023-06
REV:E

RATING AND CHARACTERISTIC CURVES (MP1505 THRU MP1510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

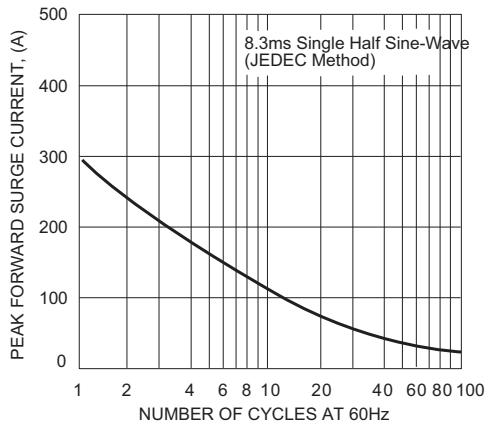


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

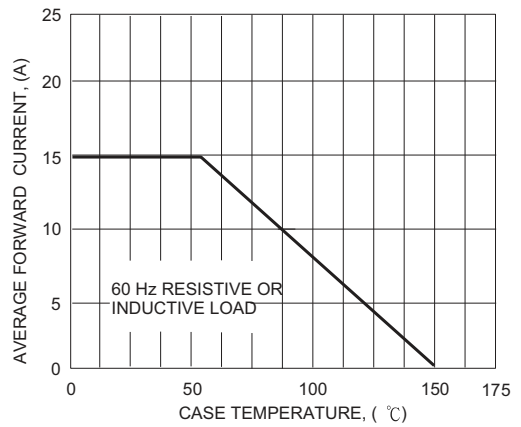


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

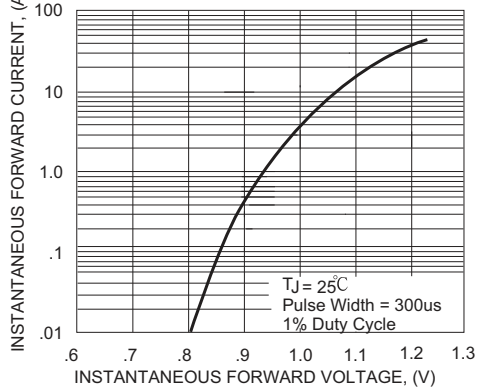
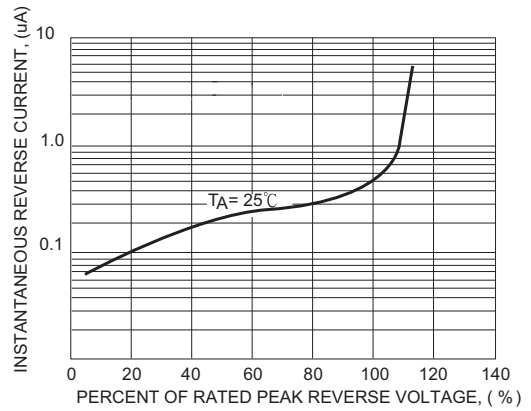


FIG. 4 - MAXIMUM REVERSE CHARACTERISTICS



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------------|--------------|------------|------------------------|---------------------|---------------|---------------------|
| MP-15/-25/-35 | -B | 50 | 206*208*45.5 | 450*220*255 | 500 | 9.6 |

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