

MP1505W THRU MP1510W

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 15 Amperes

FEATURES

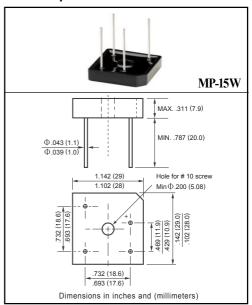
- * Superior thermal desing
- * 300 amperes surge rating
- * 1/4" universal faston terminal
- * Hole thru for # 10 screw

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)

| B | 0.44501 | | | | | | | | LINUTO |
|---|------------------|--------------|--------|--------|--------|--------|---------------------|---------|--------|
| RATINGS | SYMBOL | MP1505W | MP151W | MP152W | MP154W | MP156W | MP158W | MP1510W | UNITS |
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Output Current at Tc = 55°C | lo | 15.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave | | | | | | | Amps | | |
| superimposed on rated load (JEDEC method) | IFSM | 300 | | | | | | | |
| Typical Current Squarad Time | I ² t | 373.3 | | | | | A ² /Sec | | |
| RMS isolation voltage from case to lead | Viso | 2500 | | | | | | Volts | |
| Typical Thermal Resistance (from junction to case) | RθJC | 2 | | | | | | °C/W | |
| Typical Thermal Resistance (from junction to ambient | RθJA | 19 | | | | | -0/44 | | |
| Operating and Storage Temperature Range | TJ,TSTG | -55 to + 150 | | | | ٥C | | | |

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

| CHARACTERISTICS | | SYMBOL | MP1505W | MP151W | MP152W | MP154W | MP156W | MP158W | MP1510W | UNITS |
|--|-------------|--------|---------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Forward Voltage Drop per element a | VF | 1.1 | | | | | | | Volts | |
| Maximum Reverse Current at Rated | @Ta = 25°C | lo. | 5.0 | | | | | | uAmps | |
| DC Blocking Voltage per element | @Tc = 100°C | - IR | 0.2 | | | | | | | mAmps |

NOTE: 1. Suffix "W" for wire type

2015-03

RATING AND CHARACTERISTIC CURVES (MP1505W THRU MP1510W)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

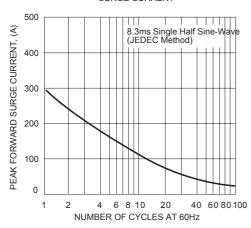


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

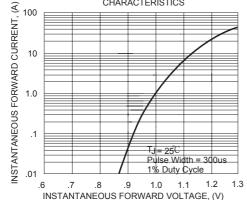


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

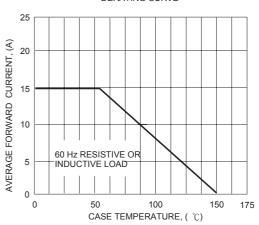
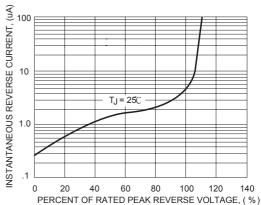
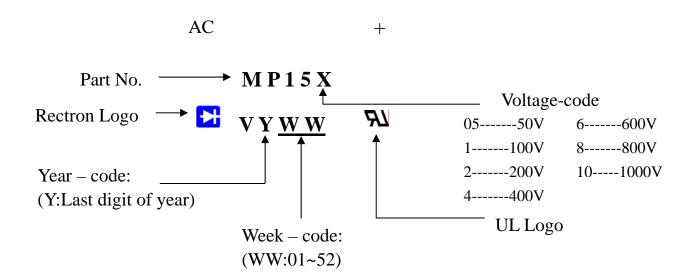


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



Marking Description





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/-35W | -B | 50 | 206*208*57 | 450*220*255 | 400 | 8.26 |



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