

**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



MP-15



MP-15W

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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

| RATINGS | SYMBOL | MP1505 | MP151 | MP152 | MP154 | MP156 | MP158 | MP1510 | 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 | Io | 15.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 300 | | | | | | | Amps |
| Typical Thermal Resistance (from junction to case) | RθJC | 2 | | | | | | | °C/W |
| Typical Thermal Resistance (from junction to ambient) | RθJA | 19 | | | | | | | |
| Operating and Storage Temperature Range | TJ,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 | VF | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at Rated DC Blocking Voltage per element | @TA = 25°C | 5.0 | | | | | | | uAmps |
| | @Tc = 100°C | 0.5 | | | | | | | mAmps |

NOTE: 1. Suffix "W" for wire type

2. "Fully ROHS compliant", "100% Sn plating(Pb-free).

RATING AND CHARACTERISTIC CURVES (MP1505 THRU MP1510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

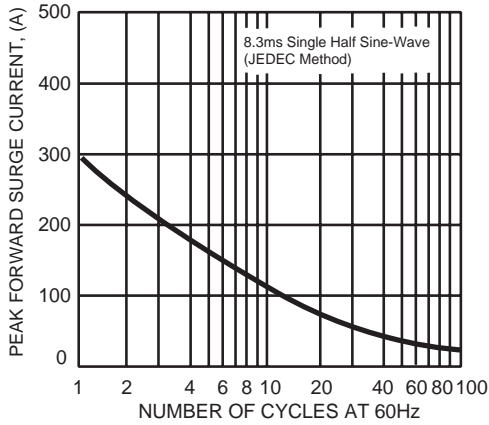


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

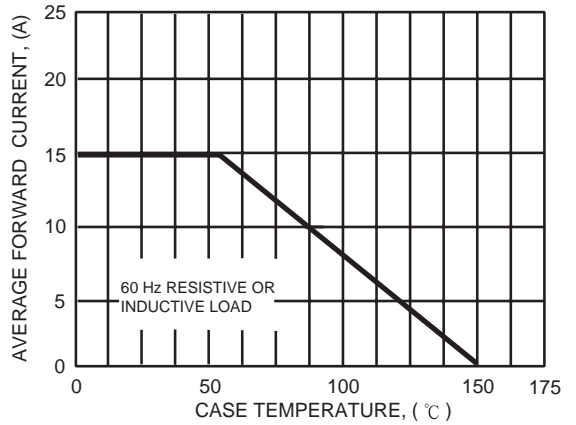


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

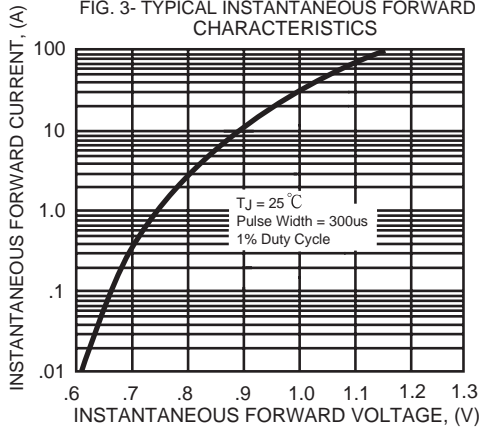


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

