

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

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes**

**FEATURES**

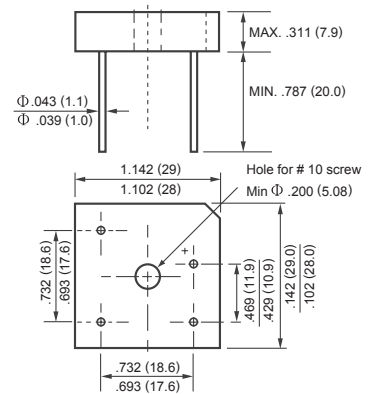
- \* Superior thermal desing
- \* 300 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for # 10 screw

**MECHANICAL DATA**

- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-0



**MP-35W**



Dimensions in inches and (millimeters)

**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)

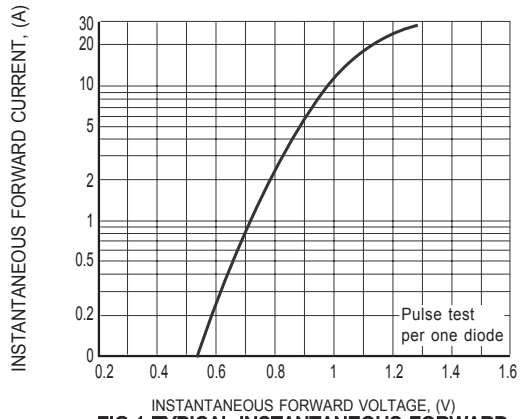
| RATINGS   | SYMBOL                            | MP3505W      | MP351W | MP352W | MP354W | MP356W | MP358W | MP3510W | UNITS |
|---|-----------------------------------|--------------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                  | 50           | 100    | 200    | 400    | 600    | 800    | 1000    | Volts |
| Maximum RMS Bridge Input Voltage  | V <sub>RMS</sub>                  | 35           | 70     | 140    | 280    | 420    | 560    | 700     | Volts |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>                   | 50           | 100    | 200    | 400    | 600    | 800    | 1000    | Volts |
| Maximum Average Forward Rectified Output Current at Tc = 55°C                                     | I <sub>o</sub>                    | 35.0         |        |        |        |        |        |         | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                  | 400          |        |        |        |        |        |         | Amps  |
| Operating and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 175 |        |        |        |        |        |         | °C    |

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

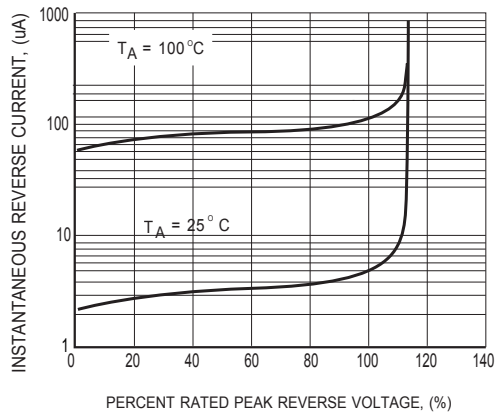
| CHARACTERISTICS                                      | SYMBOL         | MP3505W | MP351W | MP352W | MP354W | MP356W | MP358W | MP3510W | UNITS |
|--|----------------|---------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Forward Voltage Drop per element at 17.5A DC | V <sub>F</sub> | 1.1     |        |        |        |        |        |         | Volts |
| Maximum Reverse Current at Rated                     | I <sub>R</sub> | 5.0     |        |        |        |        |        |         | uAmps |
| DC Blocking Voltage per element                      |                |         |        |        |        |        |        |         | 0.2   |

NOTE: Suffix "W" for wire type

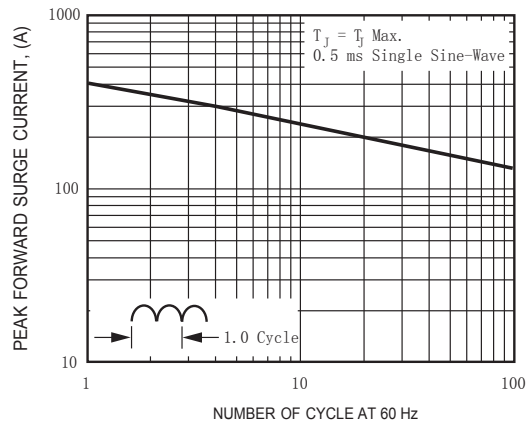
# RATING AND CHARACTERISTICS CURVES ( MP3505W THRU MP3510W )



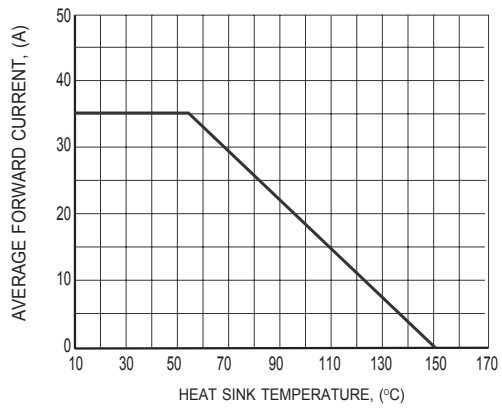
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.2 TYPICAL REVERSE CHARACTERISTICS**

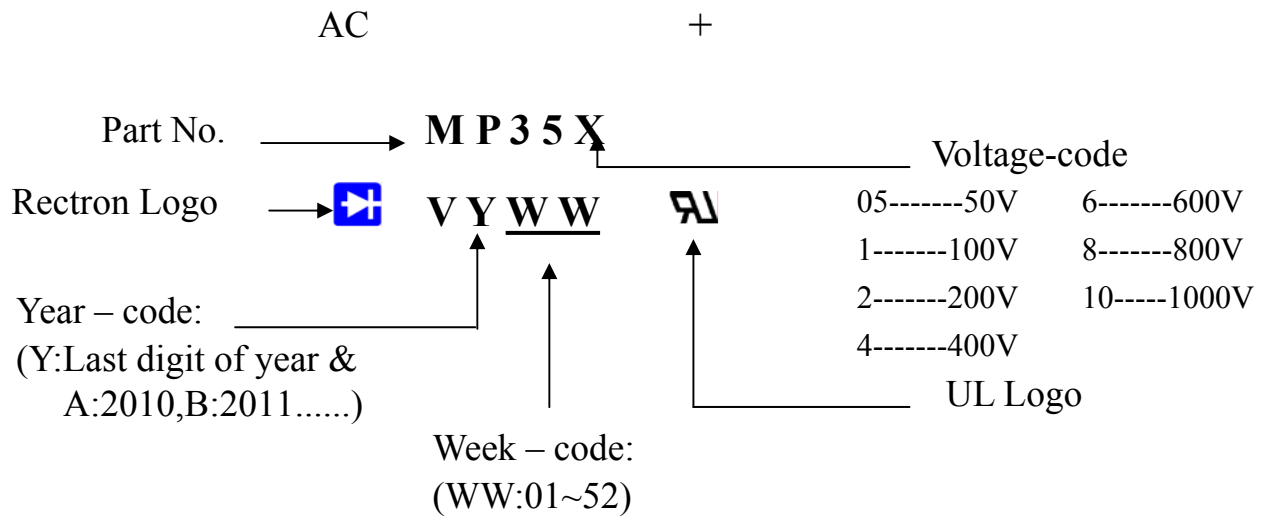


**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



**FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE**

## Marking Description



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

## BULK PACK

| PACKAGE        | PACKING CODE | EA PER BOX | INNER BOX SIZE<br>(mm) | CARTON SIZE<br>(mm) | EA PER CARTON | GROSS<br>WEIGHT(Kg) |
|----------------|--------------|------------|------------------------|---------------------|---------------|---------------------|
| MP-15/-25/-35W | -B           | 50         | 206*208*57             | 450*220*255         | 400           | 8.26                |

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