



# THE DATASHEET OF MP351



**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
**VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes**

**FEATURES**

- \* Superior thermal desing
- \* 400 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for # 10 screw

**MECHANICAL DATA**

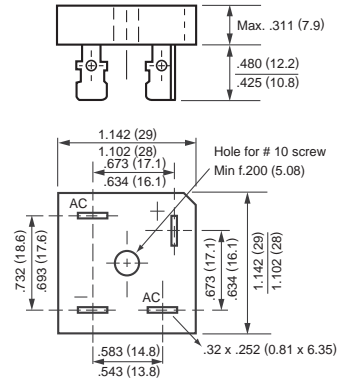
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



**MP-35**



Dimensions in inches and (millimeters)

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

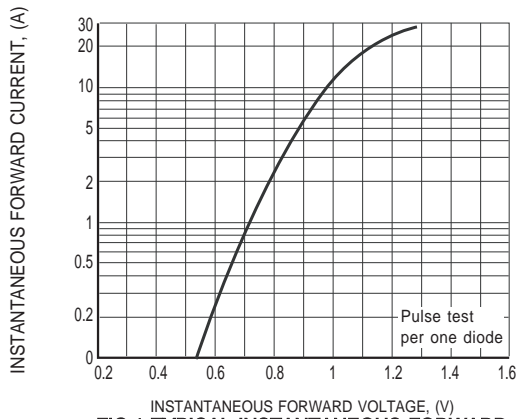
RATINGS	SYMBOL	MP3505	MP351	MP352	MP354	MP356	MP358	MP3510	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	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
Typical Current Squarad Time	I <sup>2</sup> <sub>t</sub>	664							A <sup>2</sup> /Sec
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)

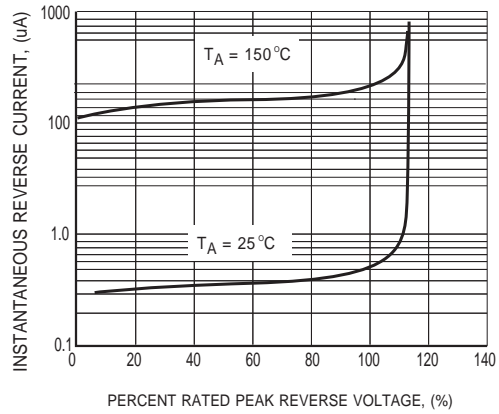
CHARACTERISTICS	SYMBOL	MP3505	MP351	MP352	MP354	MP356	MP358	MP3510	UNITS	
Maximum Forward Voltage Drop per element at 17.5A DC	V <sub>F</sub>					1.05				Volts
Maximum Reverse Current at Rated	I <sub>R</sub>					0.5				uAmps
DC Blocking Voltage per element						500				uAmps

NOTE: Suffix "W" for wire type

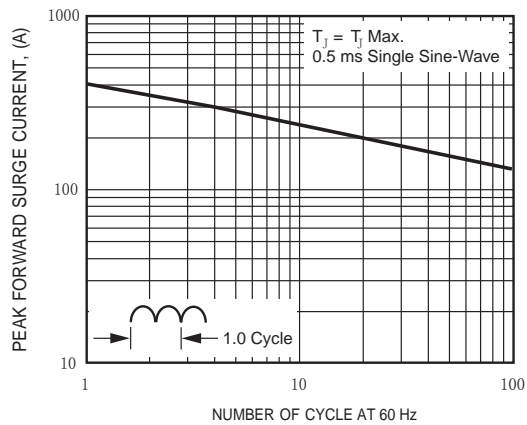
## RATING AND CHARACTERISTICS CURVES ( MP3505 THRU MP3510 )



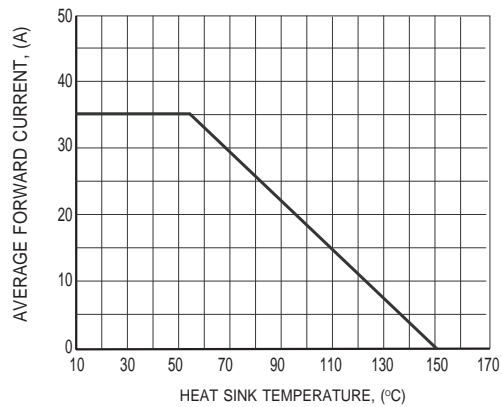
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.2 MAXIMUM REVERSE CHARACTERISTICS**

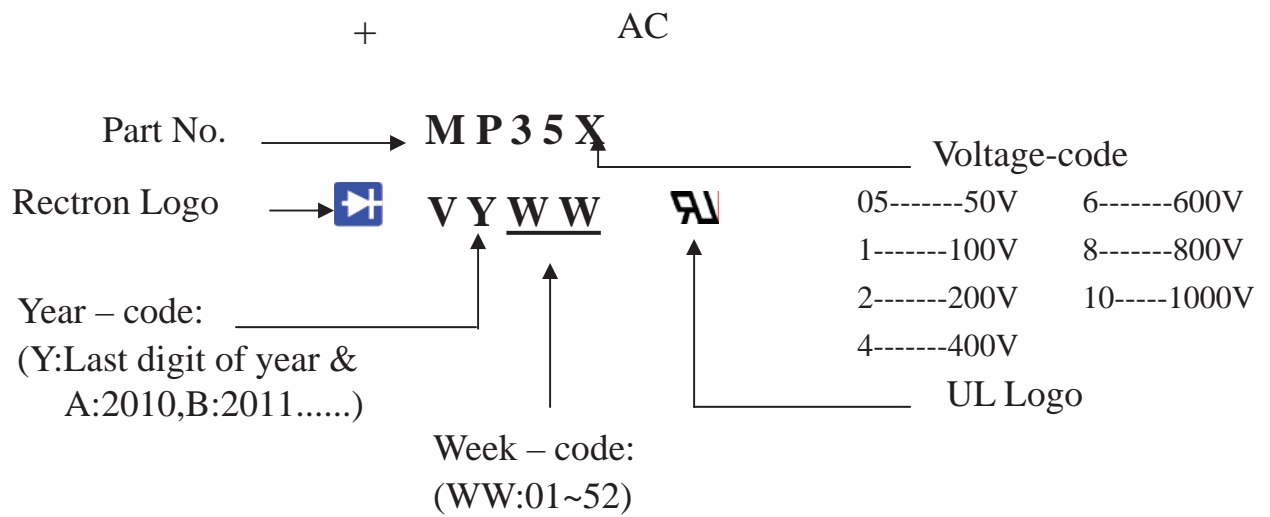


**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



**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 (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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