

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

**FEATURES**

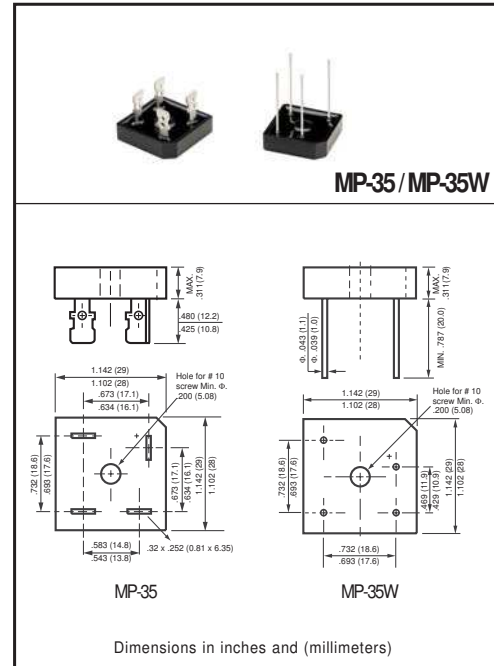
- \* Superior thermal design
- \* 400 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for # 10 screw

**MECHANICAL DATA**

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

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



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

RATINGS	SYMBOL	MP3505	MP351	MP352	MP354	MP356	MP358	MP3510	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS 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 Rectified Current at $T_C = 55^\circ\text{C}$	$I_O$	35							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	400							Amps
Typical Current Squared Time	$I^2t$	663.7							$\text{A}^2/\text{Sec}$
RMS isolation voltage from case to lead	$V_{ISO}$	2500							Volts
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.4							$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$	19							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150							$^\circ\text{C}$

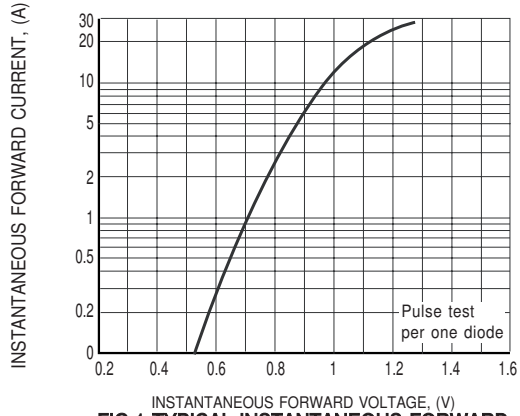
**ELECTRICAL CHARACTERISTICS (@ TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	MP3505	MP351	MP352	MP354	MP356	MP358	MP3510	UNITS
Maximum Instantaneous Forward Voltage at 17.5A DC	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	5.0							uAmps
	@ $T_A = 100^\circ\text{C}$	500							

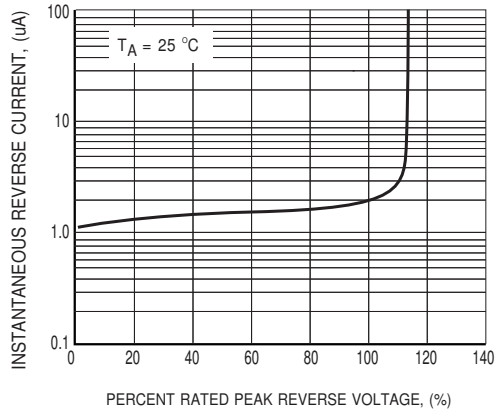
NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".  
3. Suffix "W" for wire type.

2011-02  
REV:C

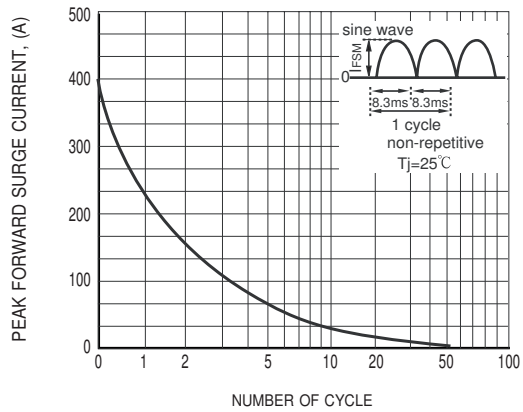
# RATING AND CHARACTERISTICS CURVES ( MP3505 THRU MP3510 )



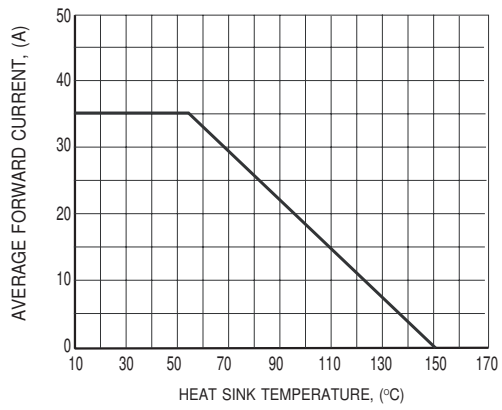
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.2 TYPICAL REVERSE CHARACTERISTICS**

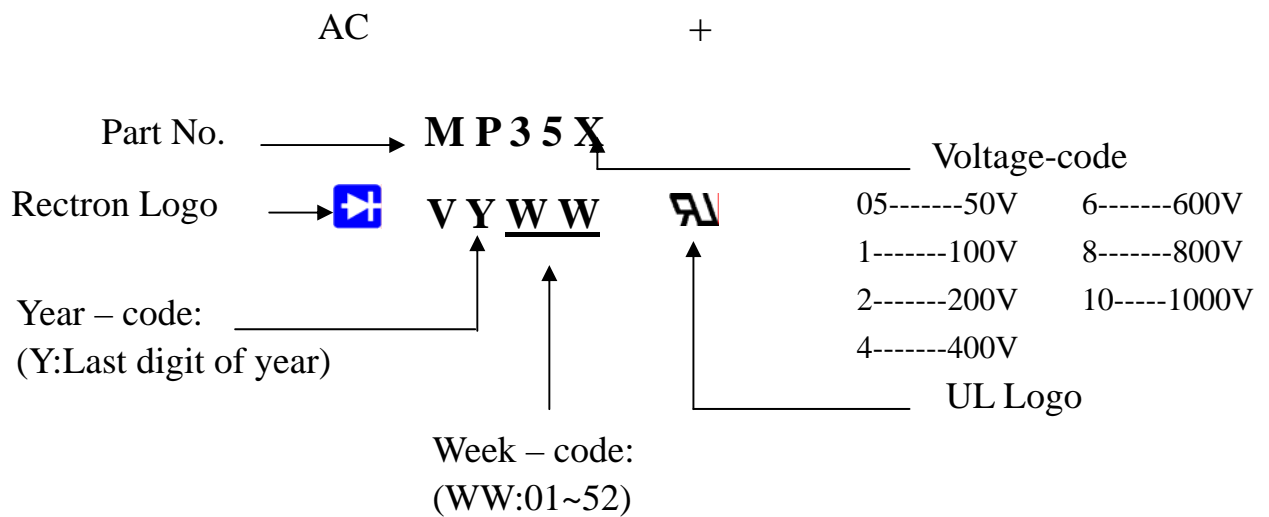


**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



**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 (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MP-35(W)	-B	50	203*205*57	450*220*255	400	7.7 (8.26)

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