

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

**VOLTAGE RANGE 1200 Volts CURRENT 35 Amperes**

**FEATURES**

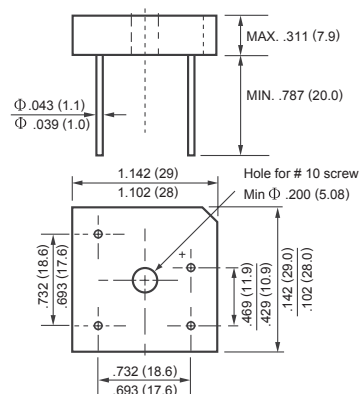
- \* Superior thermal desing
- \* 300 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for # 10 screw

**MECHANICAL DATA**

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



**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%.

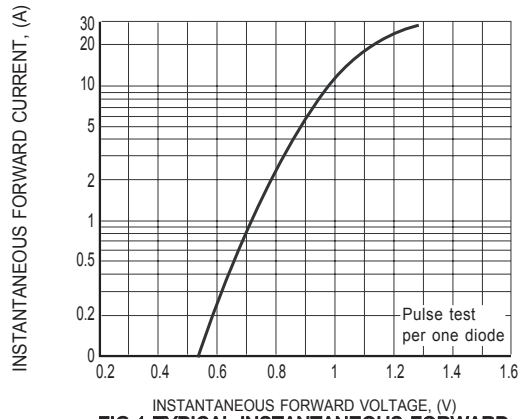
**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MP3512W	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1200	Volts
Maximum RMS Bridge Input Voltage	VRMS	840	Volts
Maximum DC Blocking Voltage	VDC	1200	Volts
Maximum Average Forward Rectified Output Current at Tc = 55°C	Io	35.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300	Amps
RMS isolation voltage from case to lead	VISO	2500	Volts
Typical Current Squarad Time	I <sup>2</sup> t	374	A <sup>2</sup> /Sec
Typical Thermal Resistance (from junction to case)	RθJC	1.9	°C/W
Typical Thermal Resistance (from junction to ambient)	RθJA	19	
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150	°C

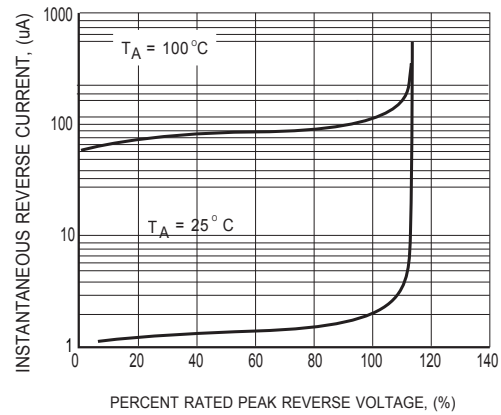
**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MP3512W	UNITS
Maximum Forward Voltage Drop per element at 17.5A DC	VF	1.1	Volts
Maximum Reverse Current at Rated	IR	5.0	uAmps
DC Blocking Voltage per element		0.2	mAmps

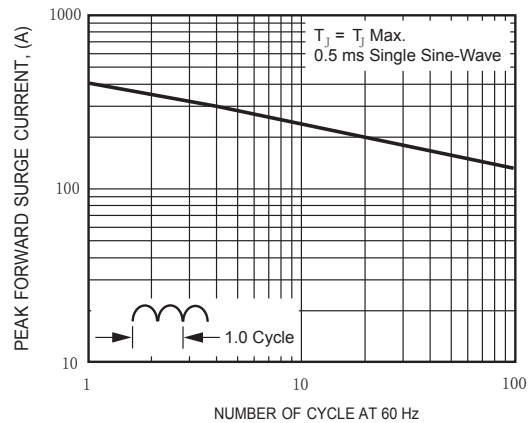
## RATING AND CHARACTERISTICS CURVES ( MP3512W )



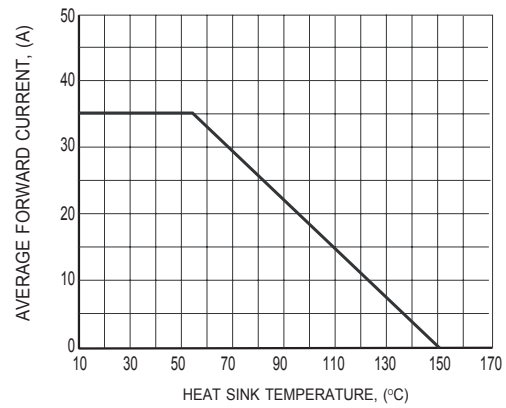
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.2 TYPICAL REVERSE CHARACTERISTICS**

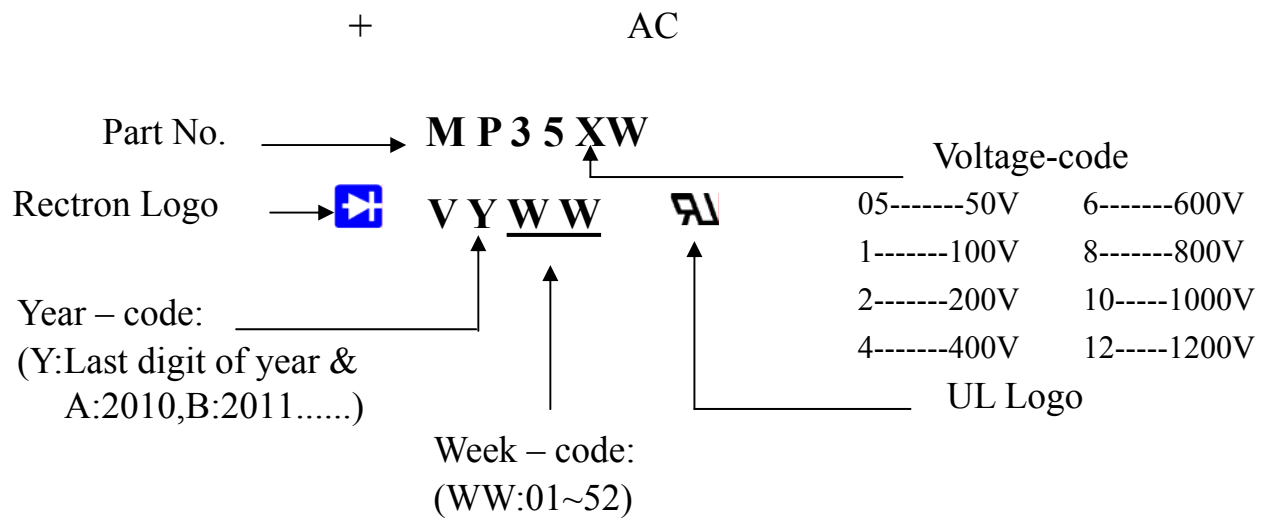


**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



**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-15/-25/-35W	-B	50	206*208*57	450*220*255	400	8.26

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