

MP2505W THRU MP2510W

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25 Amperes

FEATURES

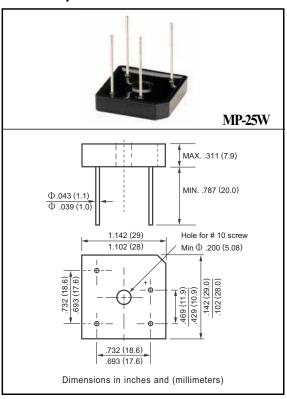
- * Superior thermal desing
- * 1/4" universal faston terminal
- * Hole thru for # 10 screw

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%.



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

RATINGS	SYMBOL	MP2505W	MP251W	MP252W	MP254W	MP256W	MP258W	MP2510W	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 Rectified Output Current at Tc = 55°C	lo	25.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300							Amps
Peak Forward Surge Current 10 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	273.3						Amps	
Typical Current Squared Time	l²t	373.5						A ² S	
RMS isolation voltage from case to lead	Viso	2500						Volts	
Typical Thermal Resistance (from junction to case)	RθJC	1.9						°C/W	
Typical Thermal Resistance (from junction to ambient)	RθJA	19						· C/ VV	
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150					٥C		

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

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CHARACTERISTICS		SYMBOL	MP2505W	MP251W	MP252W	MP254W	MP256W	MP258W	MP2510W	UNITS
Maximum Forward Voltage Drop per element	VF	1.1							Volts	
Maximum Reverse Current at Rated	@TA = 25°C	lp.	5.0						uAmps	
DC Blocking Voltage per element	@TA = 150°C	- IR	1.0							mAmps

NOTE: 1. Suffix "W" for wire type

2. "ROHS compliant".

RATING AND CHARACTERISTIC CURVES (MP2505W THRU MP2510W)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

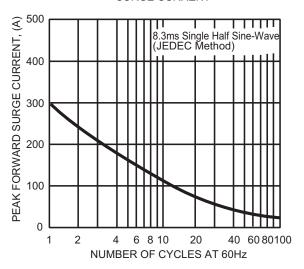


FIG. 3- TYPICAL INSTANTANEOUS FORWARD INSTANTANEOUS FORWARD CURRENT, (A) **CHARACTERISTICS** 100 10 TJ= 25 °C Pulse Width = 300us 1.0 1% Duty Cycle .1 .01 .9 1.0

INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 2 - TYPICAL FORWARD CURRENT **DERATING CURVE**

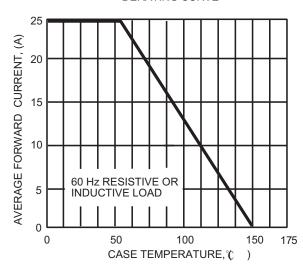
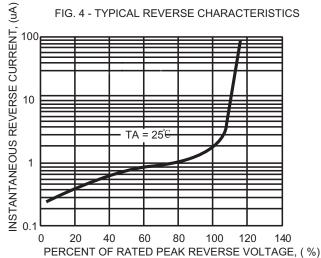


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

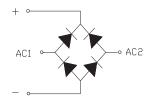




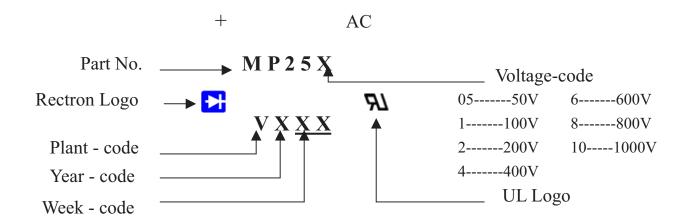


Attachment information about MP25XW

1. Internal Circuit



2. Marking on the body



3. Items marked on the inner box and carton

3.1 On the box (for –B)

CUSTOMER

TYPE

LOT NO.

QUANTITY

Q.A.

DATE

3.2 On the carton

CUSTOMER

TYPE

QUANTITY

LOT NO.

REMARK

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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