

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

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 25 Amperes**

**FEATURES**

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

**MECHANICAL DATA**

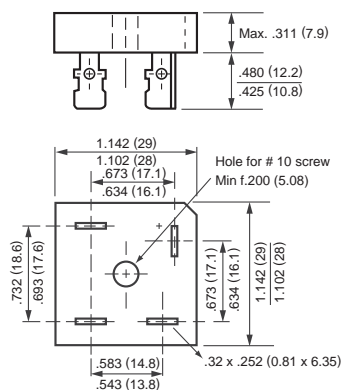
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O

**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-25**



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	MP2505	MP251	MP252	MP254	MP256	MP258	MP2510	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>	25.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	300							Amps
Typical Current Squarad Time	I <sup>2</sup> t	374							A <sup>2</sup> /Sec
RMS isolation voltage from case to lead	V <sub>ISO</sub>	2500							Volts
Typical Thermal Resistance (from junction to case)	R <sub>θJC</sub>	1.9							°C/W
Typical Thermal Resistance (from junction to ambient)	R <sub>θJA</sub>	19							
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	MP2505	MP251	MP252	MP254	MP256	MP258	MP2510	UNITS
Maximum Forward Voltage Drop per element at 12.5A 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							

NOTE: 1. Suffix "W" for wire type  
2. "ROHS compliant"

2019-06  
REV: E

## RATING AND CHARACTERISTIC CURVES( MP2505 THRU MP2510 )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

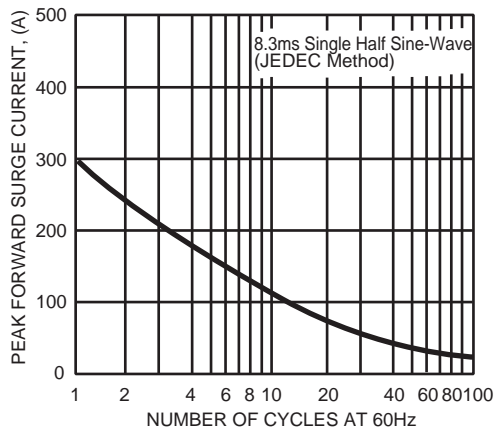


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

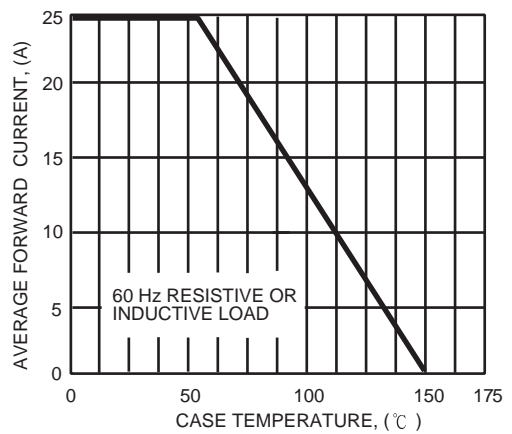


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

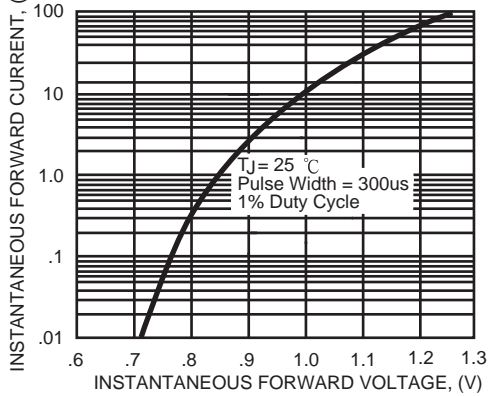
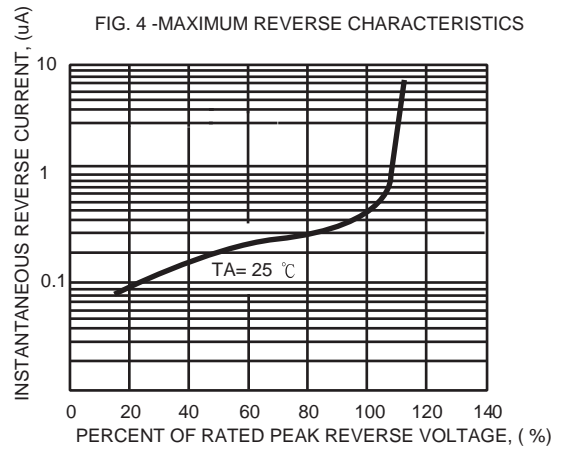


FIG. 4 - MAXIMUM REVERSE CHARACTERISTICS

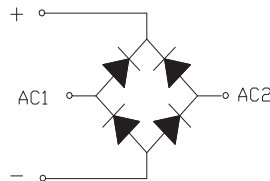




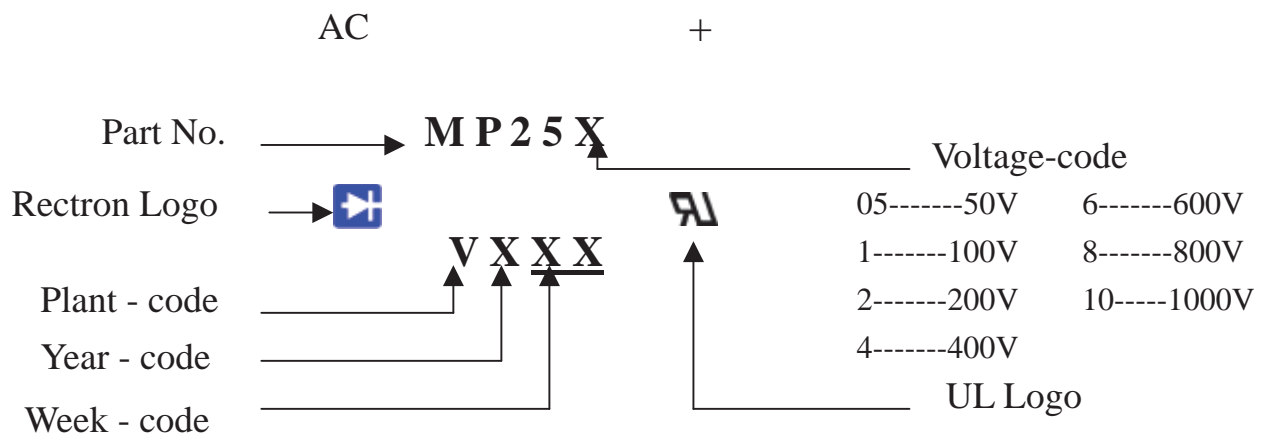
# RECTRON

## Attachment information about MP25X

### 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/-35	-B	50	206*208*45.5	450*220*255	500	9.6

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