

MP2505 THRU MP2510

# SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25 Amperes

#### **FEATURES**

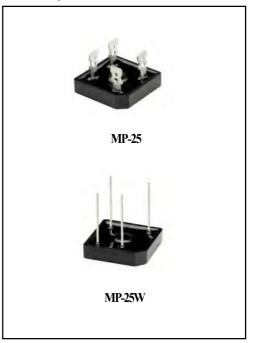
- \* Superior thermal desing
- \* 300 amperes surge rating
- \* 1/4" universal faston terminal
- \* Hole thru for # 10 screw

#### **MECHANICAL DATA**

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



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	MP2505	MP251	MP252	MP254	MP256	MP258	MP2510	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	
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							
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							٥C

#### 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		VF	1.1							Volts
Maximum Reverse Current at Rated	@Ta = 25°C	ln.	5.0							uAmps
DC Blocking Voltage per element	@Tc = 100°C	lR IR	0.5							mAmps

NOTE: 1. Suffix "W" for wire type

2. "Fully ROHS compliant", "100% Sn plating(Pb-free).

### RATING AND CHARACTERISTIC CURVES (MP2505 THRU MP2510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

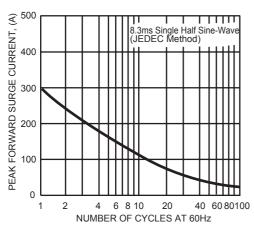
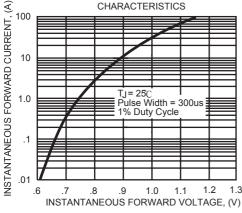
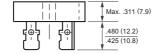
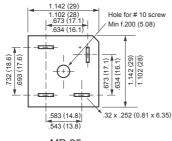


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS







MP-25

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

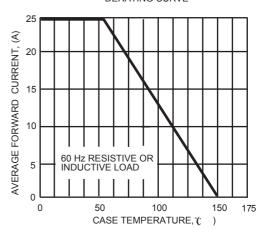
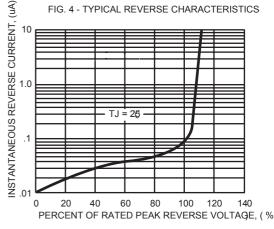
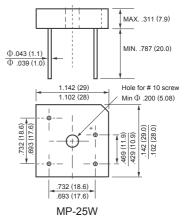


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS







Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.



## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bridge Rectifiers category:

Click to view products by Rectron manufacturer:

Other Similar products are found below:

MB2510 MB252 MB356G MB358G GBJ1504-BP GBU15J-BP GBU15K-BP GBU4A-BP GBU6B-E3/45 GSIB680-E3/45 DB101-BP DF01 DF10SA-E345 KBPC50-10S RS405GL-BP G5SBA60-E3/51 GBU10J-BP GBU6M GBU8D-BP GBU8J-BP GSIB1520-E3/45 2KBB10 36MB140A TB102M MB1510 MB258 MB6M-G MB86 TL401G MDA920A2 TU602 TU810 MP501W-BP BR101-BP BR84DTP204 BU2008-E3/51 36MB100A 36MT60 KBPC10/15/2501WP KBPC25-02 VS-2KBB60 DF06SA-E345 DF1510S VS-40MT160PAPBF W02M GBL02-E3/45 GBU4G-BP GBJ2506-BP GBU6B-E3/51 GSIB15A80-E3/45