



# 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%.

#### 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	In	5.0							uAmps
DC Blocking Voltage per element	@Tc = 100°C	- IR	0.5							mAmps
								2008-10		

NOTE: 1. Suffix "W" for wire type

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

# RATING AND CHARACTERISTIC CURVES(MP2505 THRU MP2510)

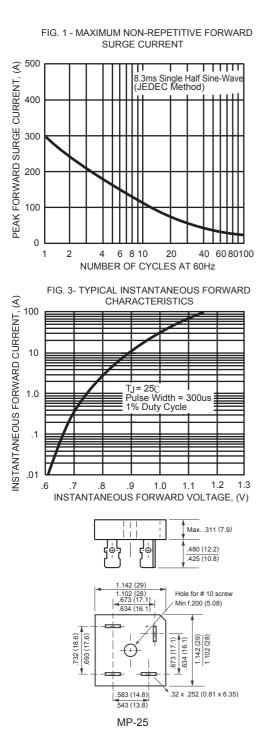
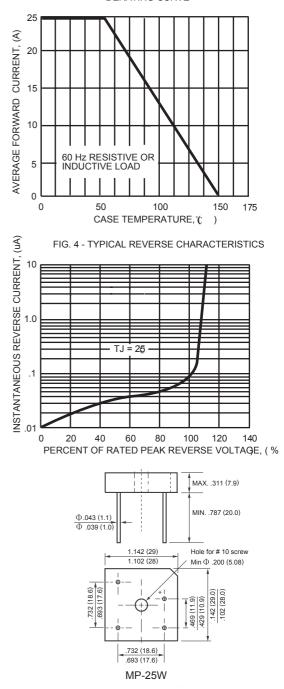


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE



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