

MB1S THRU MB10S

### SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER VOLTAGE RANGE 50 to 1000 Volts CURRENT 0.5 Ampere

#### FEATURES

- \* Surge overload rating 30 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body
- \* Mounting position: Any
- \* Weight: 0.5 gram

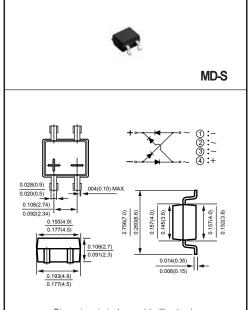
#### **MECHANICAL DATA**

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At T<sub>A</sub> = 25°C unless otherwise noted)

For capacitive load, derate current by 20%.

RATINGS	SYMBOL	MB1S	MB2S	MB3S	MB4S	MB6S	MB8S	MB10S	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 Output Current at $T_A = 40^{\circ}C$	I <sub>O</sub>	0.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							Amps
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	85							- °C/W
	RθJL	20							
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							٥C

ELECTRICAL CHARACTERISTICS (At T<sub>A</sub> = 25°C unless otherwise noted)

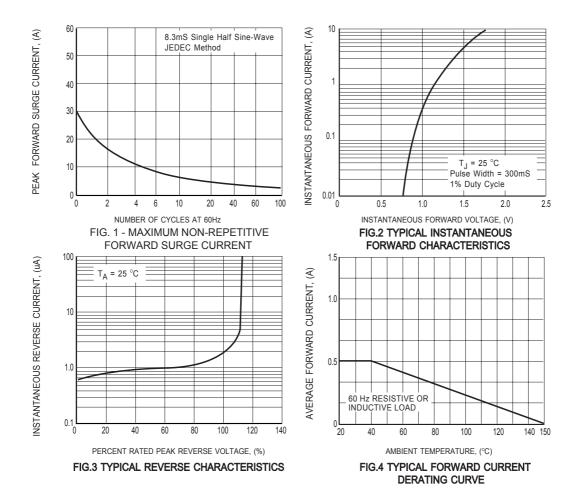
CHARACTERISTICS		SYMBOL	MB1S	MB2S	MB3S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 0.5A DC		VF	1.05							Volts
DC Blocking Voltage per element	@T <sub>A</sub> = 125°C	IR IR				0.5				mAmps

Note: 1."Fully ROHS compliant","100% Sn plating(Pb-free).

2. Thermal Resistance: PCB mounted.

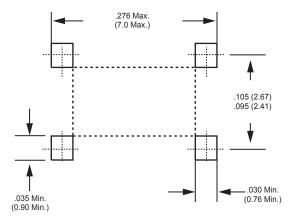
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# **C**RECTRON

## Mounting Pad Layout



Dimensions in inches and (millimeters)



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