

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

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 0.5 Ampere**

**FEATURES**

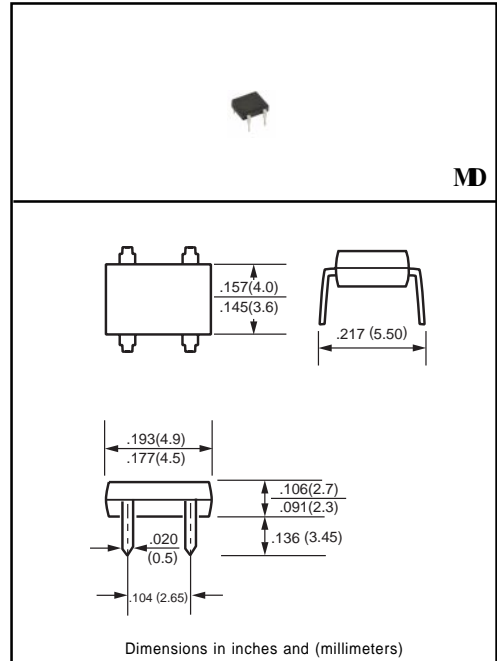
- \* Surge overload rating - 30 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body
- \* Mounting position: Any
- \* Weight: 0.5 gram

**MECHANICAL DATA**

- \* Epoxy : Device has UL flammability classification 94V-0
- \* UL listed 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.  
 For capacitive load, derate current by 20%.



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

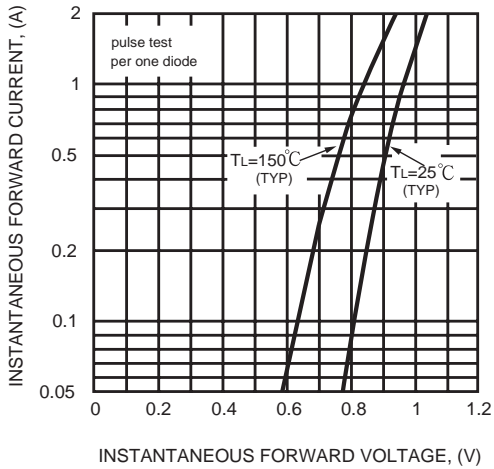
RATINGS	SYMBOL	MD1	MD2	MD3	MD4	MD5	MD6	MD7	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Rectified Current at TA = 30°C	I <sub>O</sub>	0.5							Amp
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							Amps
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)

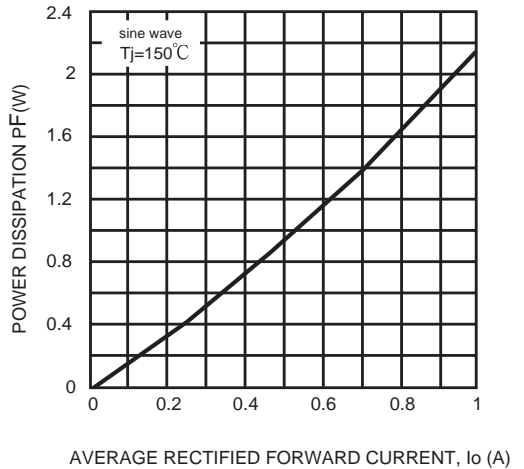
CHARACTERISTICS	SYMBOL	MD1	MD2	MD3	MD4	MD5	MD6	MD7	UNITS
Maximum Forward Voltage Drop per Bridge Element at 0.5A DC	V <sub>F</sub>	1.05							Volts
Maximum Reverse Current at rated DC Blocking Voltage per element	I <sub>R</sub>	@TA = 25°C							uAmps
		@TA = 125°C							mAmps

# RATING AND CHARACTERISTIC CURVES ( MD1 THRU MD7 )

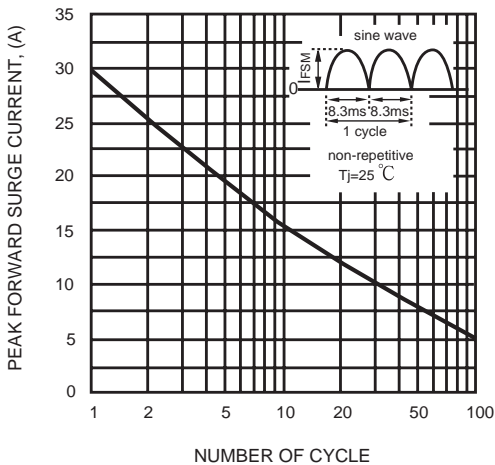
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



POWER DISSIPATION



SURGE FORWARD CURRENT CAPABILITY



TYPICAL FORWARD CURRENT DERATING CURVE

