

# MD1S THRU MD7S



SINGLE PHASE 0.8 AMP SURFACE MOUNT BRIDGE RECTIFIERS



## FEATURES

- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded plastic technique
- \* High surge current capability
- \* Polarity: Symbol molded on body
- \* Mounting position: Any
- \* Weight: 0.12 grams

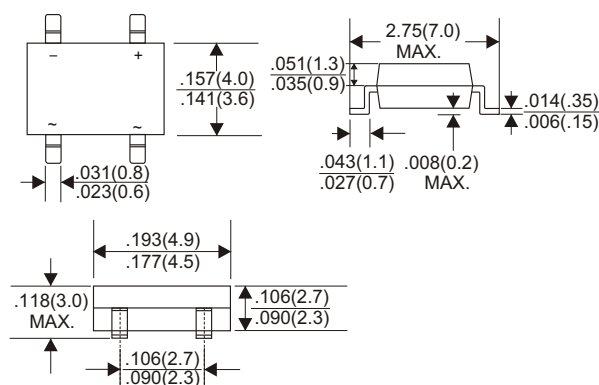
## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

0.8 Ampere

### MDS



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	MD1S	MD2S	MD3S	MD4S	MD5S	MD6S	MD7S	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)								0.8	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								3.0	A
Maximum Forward Voltage Drop per Bridge Element at 0.4A D.C.								1.0	V
Maximum DC Reverse Current Ta=25°C								5.0	A
at Rated DC Blocking Voltage Ta=125°C								500	A
Typical Thermal Resistance R <sub>JA</sub> (Note 2)								75	°C/W
Operating Temperature Range, T <sub>J</sub>								-55 — +150	°C
Storage Temperature Range, T <sub>STG</sub>								-55 — +150	°C

NOTES: 1. Mounted on P.C. Board.  
2. Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (MD1S THRU MD7S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

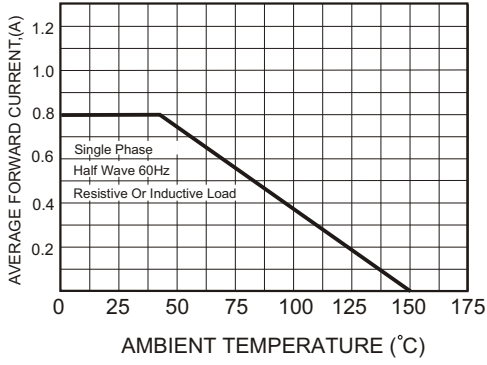


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

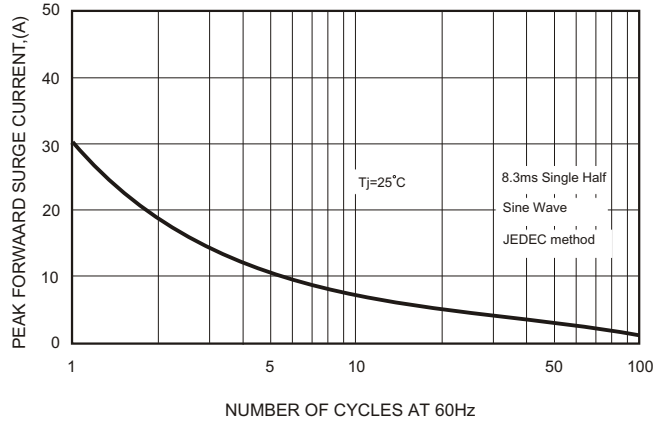


FIG.3-TYPICAL FORWARD CHARACTERISTICS

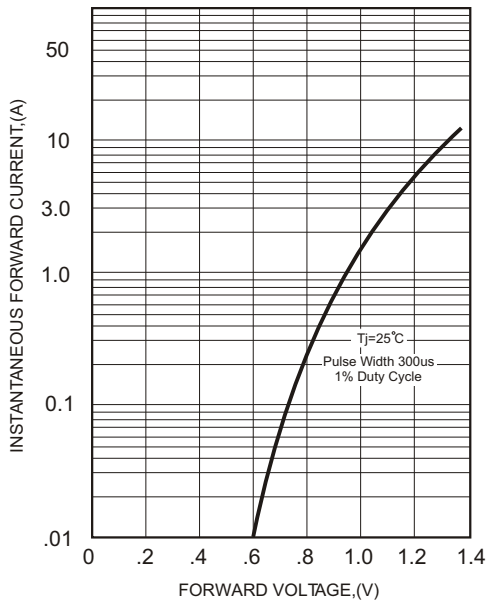


FIG.4-TYPICAL REVERSE CHARACTERISTICS

