

# 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

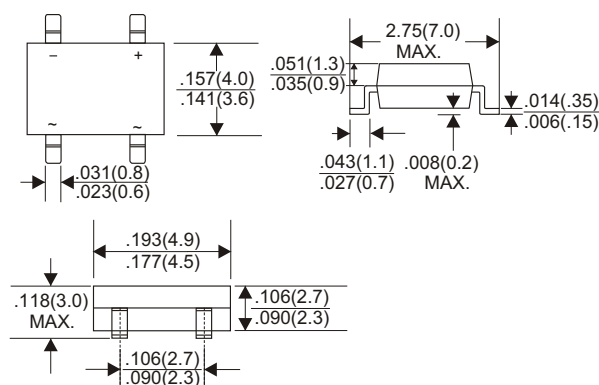
## VOLTAGE RANGE

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<br>at Ta=40°C(Note 1)                                       | 0.8        |      |      |      |      |      |      | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>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<br>Ta=25°C                                                                 | 5.0        |      |      |      |      |      |      | A     |
| at Rated DC Blocking Voltage<br>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

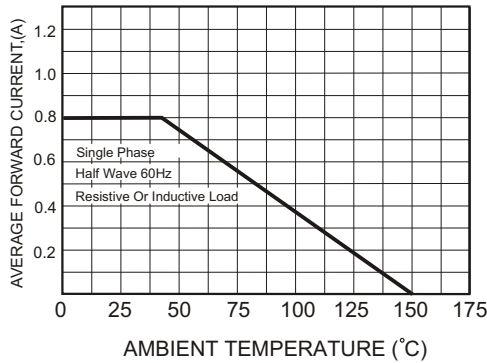


FIG.2-MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT

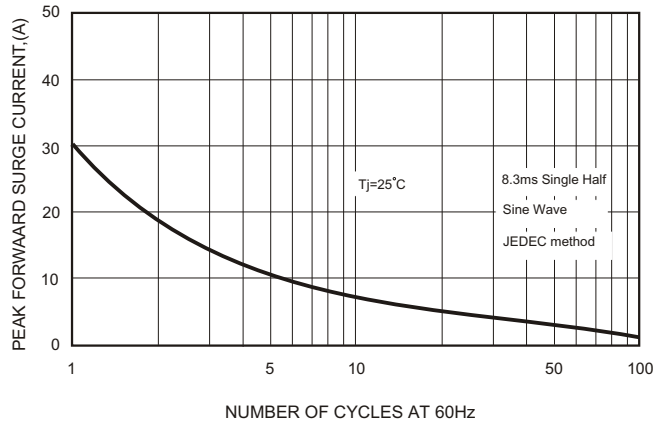


FIG.3-TYPICAL FORWARD  
CHARACTERISTICS

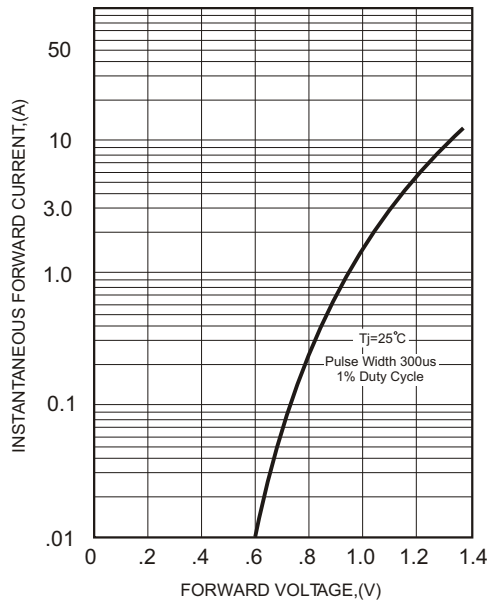


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

