

**MDRR-DT Features and Benefits**



**Features**

- Miniature SPDT changeover switch
- 14.73mm x 2.54mm (0.580" x 0.100") glass envelope
- Capable of switching 175 Vdc at up to 5 Watts
- Switching current up to 0.25 Amps
- 10<sup>9</sup> Ohms insulation resistance
- Available sensitivity range 10-30 AT
- RoHS Compliant

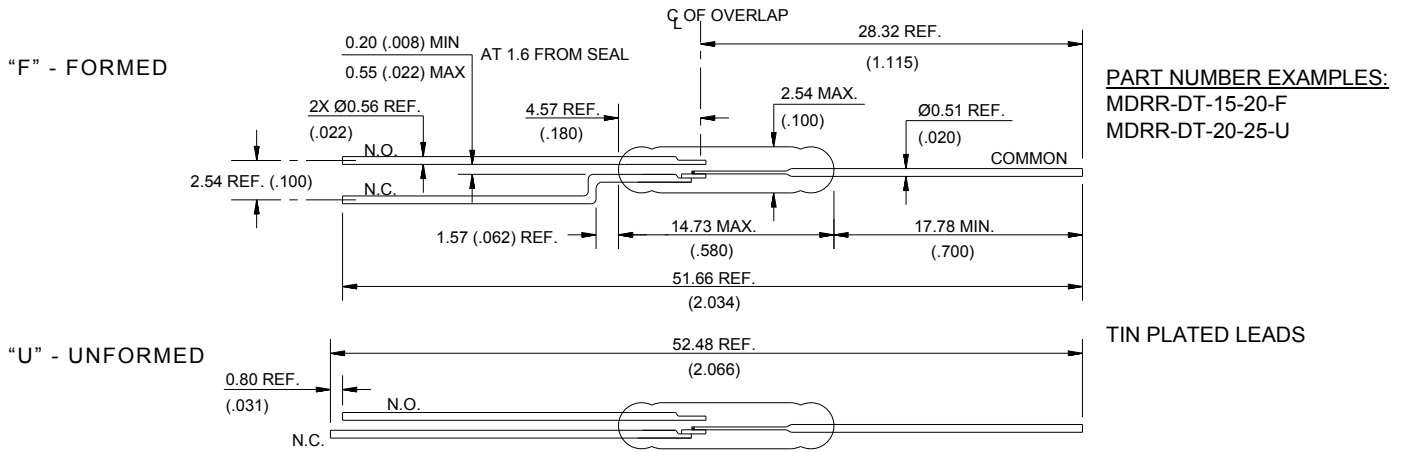
**Benefits**

- Hermetically sealed switch contacts are not affected by and have no effect on their external environment
- Can be used as changeover or normally closed contact
- No minimum switching voltage or current
- Zero operating power required for contact closure
- Fit and forget durability

**Applications**

- Position Sensing
- Proximity Sensing
- Industrial Controls
- Office Equipment
- Home Appliances

**DIMENSIONS mm (inch)**



| SWITCH TYPE   |                             | MDRR-DT             |                 |
|---|-----------------------------|---------------------|-----------------|
| Contact Form  |                             | C (SPDT)            |                 |
| Underwriters Laboratories Recognized, UL File E47258 (Note 1) |                             |                     |                 |
| ELECTRICAL RATINGS  |                             |                     |                 |
| Contact Power Rating (2)                                      |                             | W / VA - max.       | 5               |
| Voltage   | Switching Breakdown         | Vdc - max.          | 175             |
|   |                             | Vdc - min.          | 200             |
| Current   | Switching Carry             | Adc - max.          | 0.25            |
|   |                             | Adc - max.          | 1.50            |
| Resistance  | Contact, Initial Insulation | Ω - max.            | 0.100           |
|   |                             | Ω - min.            | 10 <sup>9</sup> |
| Capacitance   | Contact                     | pF - typ.           | 1               |
| Temperature   | Operating Storage (6)       | °C                  | -40 to +125     |
|   |                             | °C                  | -65 to +125     |
| OPERATING CHARACTERISTICS                                     |                             |                     |                 |
| Operate Time (3)  |                             | ms - max.           | 0.7             |
| Release Time (3)  |                             | ms - max.           | 1               |
| Shock   | 11ms ½ sine wave            | G - max.            | 50              |
| Vibration   | 50-2000 Hertz               | G - max.            | 30              |
| Resonant Frequency  |                             | Hz - typ.           | 11000           |
| MAGNETIC CHARACTERISTICS                                      |                             |                     |                 |
| Pull-In Range (4)   |                             | Ampere Turns        | 10-30           |
| Drop-out  |                             | Ampere Turns - min. | 5               |
| Rating Sensitivity (5)  |                             | Ampere Turns        | 20              |
| Test Coil   |                             |                     | L4989           |

**Notes:**

1. For details on electrical specifications, contact Littelfuse / Hamlin.
2. Contact Power Rating - Product of the switching voltage and current should never exceed this rating.
3. Operate (including Bounce) and Release Time - per EIA/NARM RS421A, diode suppressed coil.
4. Pull-In Range - Contact Littelfuse / Hamlin for tolerances available within this range.
5. Rating Sensitivity - The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.
6. Storage Temperature - Long term exposure at elevated temperature may degrade solderability of leads.

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