

# DRR-DTH 39.7mm Standard Changeover Reed Switch

RoHS



#### **Dimensions**

Dimensions in mm (inch)



## Description

The DRR-DTH Reed Switch is a large changeover switch with a 39.67mm long x 5.33mm diameter (1.562" x 0.210") glass envelope, capable high voltage and power switching up to 500Vdc at 30W. The DRR-DTH has an insulation resistance of  $10^9$  ohms minimum and contact resistance of less than 125 milli-ohms.

The DRT-DTH Reed Swith, another varient of the DRR-DTH, is made for heavier loads.

#### **Features**

- Changeover switchCapable of switching 500Vdc or
- 0.5A at up to 30WMinimum voltage breakdown
- 1200Vdc

### **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

#### **Applications**

- Security
- Limit switching

- Available sensitivity range
  50-80 AT
- Minimum voltage breakdown
  1200Vdc
- Capable of switching European mains voltage
- Zero operating power required for contact closure
- Industrial safety applications
- White goods applications

#### **Switch Type**

Contact Form	C (SPDT-CO)
Materials	Body: Glass Leads: Tin-plated Ni-Fe wire

Note: SPDT-CO = Single-Pole, Double-Throw, Change Over

## **Electrical Ratings**

Contact Rating <sup>1</sup>		W/VA - max.	30
Voltage <sup>3</sup>	Switching <sup>2</sup> Breakdown <sup>4</sup>	Vdc - max. Vac - max. Vdc - min.	500 350 1200
Current <sup>3</sup>	Switching <sup>2</sup> Carry	Adc - max. Aac - max. Adc - max.	0.50 0.35 3.0
Resistance	Contact, Initial Insulation	Ω - max. Ω - min.	0.125 10 <sup>9</sup>
Capacitance	Contact	pF - typ.	2.0
Temperature	Operating Storage <sup>5</sup>	°C °C	-20 to +125 -65 to +125

Notes:

1. Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.

2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A and AN107 for details.

3. Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.

4. Breakdown Voltage - per MIL-STD-202, Method 301.

5. Storage Temperature - Long time exposure at elevated temperature may degrade solderability of the leads.

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## **Product Characteristics**

Operating Characteristics						
Operate Time 1		4.5ms - max.				
Release Time <sup>1</sup>		7.0ms - max.				
Shock <sup>2</sup>	11ms 1/2 sine wave	10G - max.				
Vibration <sup>2</sup>	50-2000 Hertz	15G - max.				
Resonant Frequency	Hz - typ.	2.75kHz - typ.				
Magnetic Characteristics						
Pull-In Range <sup>3</sup>	Ampere Turns	50-80				
Rating Sensitivity <sup>4</sup>	Ampere Turns	60				
Test Coil		L4988				

Notes:

1. Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil II).

2. Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.

3. Pull-In Range - Contact Littelfuse for narrower AT ranges available

4. Rating Sensitivity - The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.

5. Custom modifications of forming and/or cutting of reed switches are available. Please contact Littelfuse.

## **Drop-Out vs. Pull-In Chart**



#### **Part Numbering System**



Note: These AT values are the before-modification values of the bare reed switch.

## Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	1000	N/A	N/A