

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









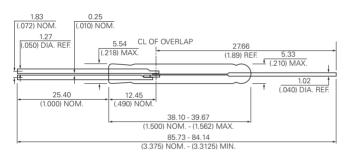
# DRT-DTH 39.7mm Standard Changeover Reed Switch

RoHS



#### **Dimensions**

Dimensions in mm (inch)



### **Description**

The DRT-DTH Reed Switch is a standard changeover switch with a 39.67mm long x 5.33mm diameter (1.562" x 0.210") glass envelope, with tungsten contacts capable of high voltage and power switching up to 500Vdc at 50W. It has the insulation resistance of  $10^9$  ohms minimum and contact resistance less than 500 milli-ohms.

#### **Features**

- · Changeover switch
- Capable of switching 500Vdc or 1.5A at up to 50W
- Minimum voltage breakdown 1000Vdc
- Available sensitivity range 50-80 AT

### **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
- Capable of switching European mains voltage
- Zero operating power required for contact closure

### **Applications**

- Security
- Limit switching
- 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.	50
Voltage <sup>3</sup>	Switching <sup>2</sup> Breakdown <sup>4</sup>	Vdc - max. Vac - max. Vdc - min.	500 350 1000
Current <sup>3</sup>	Switching <sup>2</sup> Carry	Adc - max. Aac - max. Adc - max.	1.5 1.0 2.0
Resistance	Contact, Initial Insulation	$\Omega$ - max. $\Omega$ - min.	0.500 <sup>6</sup> 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.
- 6. Contact resistance measured at 36Vdc, 100mA, switched wet.
- 7. Not recommended for small electrical loads.



# DRT-DTH 39.7mm Standard Changeover Reed Switch

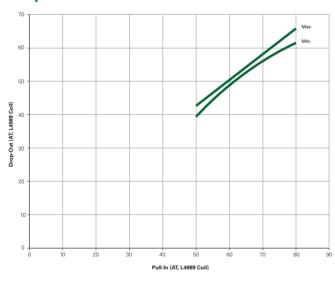
### **Product Characteristics**

Operating Characteristics					
Operate Time <sup>1</sup>		5.5ms - max.			
Release Time <sup>1</sup>		8.0ms - 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

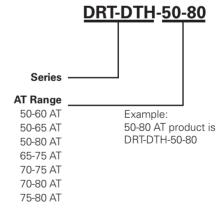
- 1. Operate (including bounce)/Release Time per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- 2. Shock and Vibration per EIA/NARM RS-421-A and MIL-STD-202.
- 3. Pull-In Range Contact Littelfuse for narrower AT ranges available.
- 4. Rating Sensitivity The value at which contact ratings and operating 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**



 ${\tt Note: Chart\ represents\ the\ range\ of\ Drop-Out,\ min\ to\ max\ for\ a\ given\ Pull-In\ value.}$ 

# **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