DRS-DTH 39.7mm Standard Changeover Reed Switch

RoHS

Description

The DRS-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 2mA, or 0.5A up to 30W/VA. The DRS-DTH has an insulation resistance of 10^9 ohms minimum and contact resistance of less than 125 milli-ohms.

Features

- Changeover switch
- Capable of switching 500Vdc or 0.5A at up to 30W
- Minimum voltage breakdown 1200Vdc
- Available sensitivity range 50-80 AT

Benefits

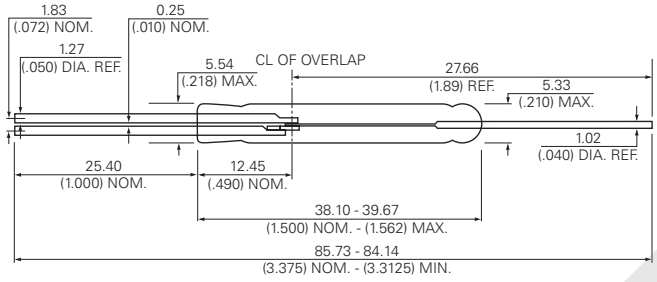
- Hermetically sealed switch contacts are not affected by and have no effect on their external environment
- Can be used as changeover or normally closed contact
- Capable of switching European mains voltage
- Zero operating power required for contact closure

Applications

- Security
- Limit switching
- Industrial safety applications
- White goods applications

Dimensions

Dimensions in mm (inch)



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 [1]		W/VA - max.	30
Voltage [3]	Switching [2]	Vdc - max. Vac - max.	500 350
	Breakdown [4]	Vdc - min.	1200
Current [3]	Switching [2]	Adc - max. Aac - max.	0.50 0.35
	Carry	Adc - max.	3.0
Resistance	Contact, Initial Insulation	Ω - max. Ω - min.	0.125 10^9
Capacitance	Contact	pF - typ.	2.0
Temperature	Operating Storage [5]	°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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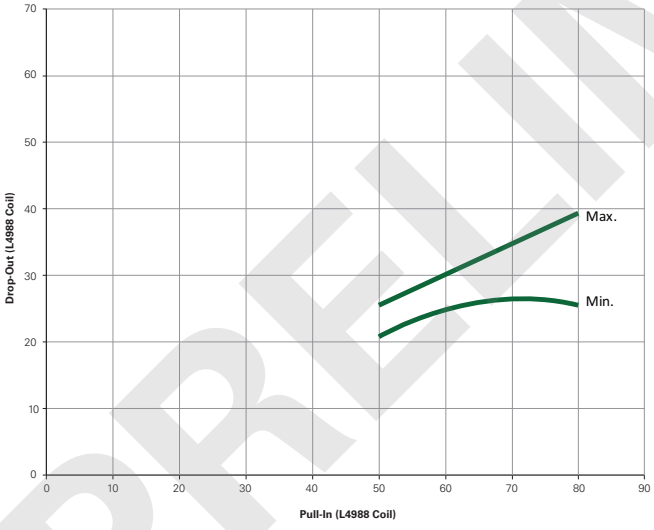
Product Characteristics

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

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



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

Part Numbering System

DRS-DTH-50-80

Series

AT Range
50-55 AT
50-60 AT
50-80 AT
55-60 AT
55-65 AT
65-70 AT
65-80 AT
70-75 AT
70-80 AT
75-80 AT

Example:
50-80 AT product is
DRS-DTH-50-80

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