

MDSR-10 10.2mm Sub-miniature Reed Switch


Magnetic Characteristics
Agency Approvals

Agency	Agency File Number	Amperes-Turns Range	Amperes-Turns
	E47258 E471070	10-25 AT	10-25

Note: Contact Littelfuse for specific agency approval ratings.

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

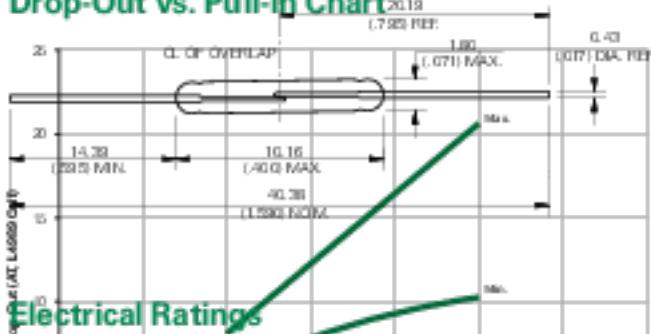
2. Shock & Vibration - per EIA/NARM RS-421-A and MIL-STD-202.

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

4. Rating Sensitivity - The value at which contact rating is and operating characteristics are determined. Do not exceed this value.

Dimensions

Dimensions in mm (inch)

Drop-Out vs. Pull-In Chart

Electrical Ratings

Contact Rating ¹	Switching ²	WVA - max.	10
Voltage ³	Breakdown ⁴	Vdc - max. Vac - max. Vdc - min.	200 140 250
Current ³	Switching ²	Adc - max. Aac - max. Adc - max.	0.50 0.35 1.00
Resistance	Carry	O - max. O - min.	0.120 10 ³
Capacitance	Contact	pF - typ.	0.2
Temp ⁵		"C	-40 to +125
Packaging Option	Packaging Specification	Quantity	Tagging Width

Notes:

1. Contact rating is product of the switching voltage and current. Current should never exceed power rating. Contact Littelfuse for additional load/life information. N/A.
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 d301.
5. Storage Temperature - Long time exposure at elevated temperature may degrade solderability of the leads.

Description

The MDSR-10 Reed Switch is a sub-miniature, normally open switch with a 10.16mm long x 1.00mm diameter (0.400" x 0.071") glass envelope, capable of switching 200Vdc at 10W. It has high insulation resistance of 10^{10} ohms minimum and low contact resistance of less than 120 milli-ohms. This reed switch is also available in a surface mount version, MDSM-10.

2 sine wave 100G - max.

00 Hz 30G - max.

Features

- Sub-miniature normally open switch
- Capable of switching 200Vdc or 0.6A at up to 10W
- 10^{10} Ohm Insulation resistance
- Available sensitivity range 10-25 AT

Benefits

- Hermetically sealed switch contacts are not affected by and have no effect on their external environment
- Low space requirement
- Zero operating power required for contact
- Excellent for switching microcontroller logic level loads

Applications

- Reed Relays (particularly suited to ATC type applications)
- Security Systems
- Limit Switching
- Office Equipments

Part Numbering System
Switch Type

MDSR-10-10-15

Contact Form	A (SPST-NO)	
Materials Series	Body: Glass	Leads: Tin-plated Ni-Fe wire

Note: SPST-NO = Single pole, single throw, normally open

AT Range	Example: 10-15 AT product is equivalent to 10-15
10-25 AT	WVA - max.
10-15 AT	Vdc - max.
15-20 AT	Vac - max.

10-25 AT	WVA - max.	10
10-15 AT	Vdc - max.	200
15-20 AT	Vac - max.	140
	Vdc - min.	250
	Adc - max.	0.50
	Aac - max.	0.35
	Adc - max.	1.00

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120
	O - min.	10 ³

10-25 AT	O - max.	0.120

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