Axial Lead Reed Switches High Power > MLRR-3

MLRR-3 15.2mm Miniature Close Differential Reed Switch





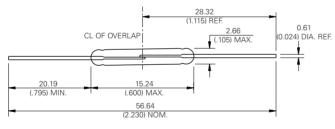
Agency Approvals

Agency	Agency File Number	Ampere-Turns Range
c Al °us	E47258 E471070	17-38 AT

Note: Contact Littelfuse for specific agency approval ratings

Dimensions

Dimensions in mm



Description

The MLRR-3 Reed Switch is a miniature, normally open switch with a 15.24mm long x 2.54mm diameter (0.600" x 0.100") glass envelope, capable of switching 200Vdc at 20W with close differential (CD) characteristics. It has high insulation resistance of 10^{10} ohms minimum and contact resistance less than 100 milli-ohms.

This reed switch is also available in a surface mount version, that is, MLSM-3. It can handle light inductive loads.

Features

- Miniature normally open switch
- Capable of switching 200Vdc or 01.0A at up to 20W.
- Available sensitivity range 17-38 AT
- Close differential AT between PI and DO value
- Maximum switched current of 1.0Amps

Benefits

- Hermetically sealed switch contacts are not affected by and have no effect on their external environment
- Zero operating power required for contact closure

Applications

- Security
- Limit Switching
- Office Equipments
- Light Inductive Loads

Switch Type

Contact Form	A (SPST-NO)
Materials	Body: Glass Leads: Tin Plated Nickel Iron

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

Electrical Ratings

Contact Rating ¹		Watt - max.	20
Voltage ³	Switching ² Breakdown ⁴	Vdc - max. Vac - max. Vdc - min.	200 140 250
Current ³	Switching ² Carry	Adc - max. Aac - max. Adc - max.	1.0 0.7 1.2
Resistance	Contact, Initial Insulation	Ω - max. Ω - min.	0.100 10 ¹⁰
Capacitance	Contact	pF - typ.	0.4
Temperature	Operating Storage ⁵	°C °C	-40 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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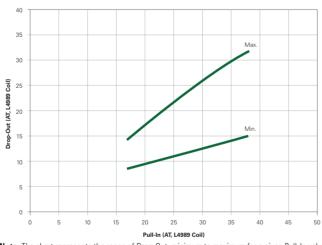
Product Characteristics

Operating Characteristics							
Operate Time ¹		0.7ms - max.					
Release Time ¹		0.2ms - max.					
Shock ²	11ms 1/2 sine wave	100G - max.					
Vibration ²	50-2000 Hertz	30G - max.					
Resonant Frequency		6.25kHz - typ.					
Magnetic Characteristics							
Pull-In Range ³	Ampere Turns	17-38					
Rating Sensitivity ⁴	Ampere Turns	20					
Test Coil		L4989					

Notes:

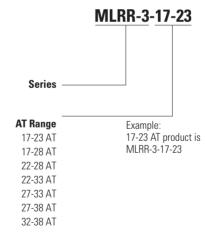
- 1. Operate (including bounce)/Release Time per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- 2. Shock and Vibration per EIA/NARM RS-421-A and MIL-STD-202.
- 3. Pull-In Range Contact Littelfuse for narrower AT ranges available.
- 4. Rating Sensitivity The value at which contact ratings and operating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



 $\textbf{Note:} \ \mathsf{The \ chart \ represents \ the \ range \ of \ \mathsf{Drop-Out, \ minimum \ to \ maximum \ for \ a \ given \ \mathsf{Pull-In \ value.}$

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	3000	N/A	N/A

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

MLRR-3 12-23 MLRR-3 22-38 MLRR-3 22-33 MLRR-3 27-38 MLRR-3 12-28 MLRR-3 17-38 MLRR-3 27-33 MLRR-3 12-28 MLRR-3 12-18 MLRR-3 17-28 MLRR-3 32-38 MLRR-3 17-23 MLRR-3 22-28 MLRR-3-17-23 MLRR-3-17-23 MLRR-3-12-18 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-28 MLRR-3-12-38 MLRR-3-27-38 MLRR-3-17-28 MLRR-3-22-38 MLRR-3-37-43 MLRR-3-27-48 MLRR-3-7-13 MLRR-3-42-48