



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!



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MDCG-4 15.3mm Sub-miniature Reed Switch



Description

The MDCG-4 Reed Switch is a sub-miniature, normally open switch with a 15.24mm long x 2.28mm diameter (0.600" x 0.090") glass envelope, capable of switching 200Vdc at 10W. It has high insulation resistance of 10¹⁰ ohms minimum and contact resistance less than 100 milli-ohms. This reed switch is also available in a surface mount version, that is, MDSM-4.

Features

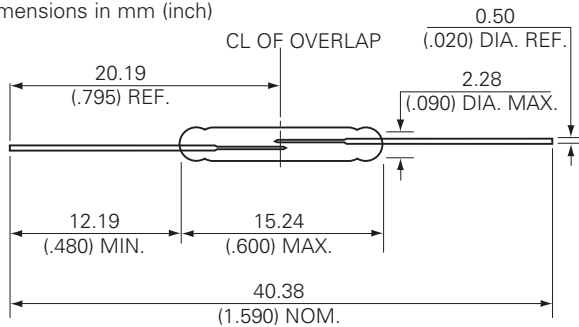
- Sub-miniature normally open switch
- Available sensitivity 12-38 AT
- Capable of switching 200Vdc or 0.5A at up to 10W

Agency Approvals

| Agency | Agency File Number | Ampere-Turns Range |
|--------|---------------------|--------------------|
| | E47258 E471070 | 12-38 AT |
| | DEMKO 14 ATEX 1393U | 12-38 AT |

Dimensions

Dimensions in mm (inch)



Benefits

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

Applications

- Reed Relays
- Security
- Limit Switching
- Level Sensing
- Office Equipment
- Industrial Control

Switch Type

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

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

Electrical Ratings

| | | | |
|-----------------------------|-----------------------------|------------------------|------------------|
| Contact Rating ¹ | | W/VA - max. | 10 |
| Voltage ³ | Switching ² | Vdc - max. | 200 |
| | Breakdown ⁴ | Vac - max. | 140 |
| | | Vdc - min. | 250 |
| Current ³ | Switching ² | A _{dc} - max. | 0.50 |
| | Carry | A _{ac} - max. | 0.35 |
| | | A _{dc} - max. | 1.20 |
| Resistance | Contact, Initial Insulation | Ω - max. | 0.100 |
| | | Ω - min. | 10 ¹⁰ |
| Capacitance | Contact | pF - typ. | 0.2 |
| Temperature | Operating | °C | -40 to +125 |
| | Storage ⁵ | °C | -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.

MDCG-4 15.24mm Sub-miniature Reed Switch

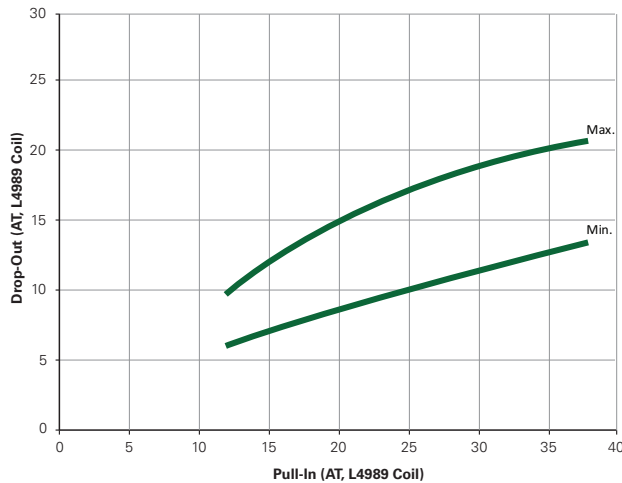
Product Characteristics

| Operating Characteristics | | |
|---------------------------------|--------------------|---------------|
| Operate Time ¹ | | 0.6ms - 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 | | 3.9kHz - typ. |
| Magnetic Characteristics | | |
| Pull-In Range ³ | Ampere Turns | 12-38 |
| Rating Sensitivity ⁴ | Ampere Turns | 20 |
| Test Coil | | L4989 |

Notes:

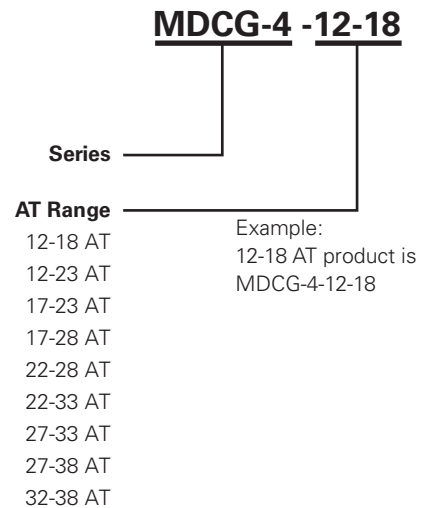
- Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
- Pull-In Range - Contact Littelfuse for narrower AT ranges available.
- Rating Sensitivity - The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.
- 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



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

Additional Information



Datasheet



Resources



Samples

Packaging

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