



**REED SWITCH DEVELOPMENTS CORP.**

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**SPECIFICATION SHEET**

**2451-1900-100**

Alternate Part Number:  
**AM2451-1900-10-01**

Active / Equivalent Part Numbers:

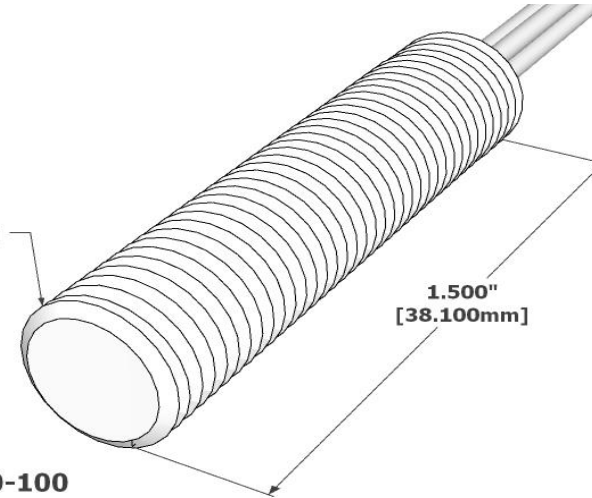
2451-1900-100 - Magnetic Reed Sensor Only

AM2451-1900-10-01 - Magnetic Reed Sensor Only

| Sensor (Reed) - Specifications |                                    | 1900               |       |
|--------------------------------|------------------------------------|--------------------|-------|
| Physical                       | Configuration                      | SPDT               |       |
|                                | Form                               | C                  |       |
|                                | Contact Position                   | OFFSET             |       |
|                                | Glass L                            | 14.00              | mm    |
|                                | Glass D                            | 2.30               | mm    |
|                                | Total L*                           | 55.00              | mm    |
|                                | Wire D                             | 0.53               | mm    |
|                                | Gap Location                       |                    |       |
|                                | Mount Spec*                        | THRU               |       |
|                                | Contact Material                   | RHODIUM            |       |
|                                | Max Vibration Resistance           | 20                 | G     |
|                                | Max Shock Resistance (11ms)        | 50                 | G     |
|                                | Lead Tensile Strength              | N/A                | KG    |
|                                | Operating                          | Pull in (+/- 2AT)* | 20-25 |
| Drop out*                      |                                    | 5                  | AT    |
| Operate Time                   |                                    | 2.0                | ms    |
| Bounce Time                    |                                    | 0.60               | ms    |
| Release Time                   |                                    | 0.50               | µs    |
| Resonant Frequency             |                                    | N/A                | Hz    |
| Max Operating Frequency        |                                    | 250                | Hz    |
| Operating Temperature Range    |                                    | -40 - 105          | °C    |
| Storage Temperature            |                                    | N/A                | °C    |
| Electrical                     |                                    | DC Contact Rating  | 20    |
|                                | AC Contact Rating                  | 20                 | VA    |
|                                | DC Switching Voltage               | 150                | VDC   |
|                                | AC Switching Voltage               | 150                | VAC   |
|                                | DC Switching Current               | 1.00               | A     |
|                                | AC Switching Current               | 1.00               | A     |
|                                | DC Max Carry Current               | 2.00               | A     |
|                                | AC Max Carry Current               | 2.00               | A     |
|                                | Min Breakdown Voltage              | 200                | VDC   |
|                                | Max Initial Contact Resistance     | 150                | mOhm  |
|                                | Typical Initial Contact Resistance | N/A                | mOhm  |
|                                | Max Contact Capacitance            | 0.80               | pF    |
|                                | Min Insulation Resistance          | 10 <sup>9</sup>    | Ohm   |

\* Pre-processed, bare reed element

DIA 0.313" [7.950mm]  
5/16 - 24 THREAD



**2451-1900-100  
Magnetic Reed Sensor**

All measurements are in Inches [millimeters]

**Sensor - Wire/Cable Characteristics (cont.)**

| Type                | Wire          |
|---------------------|---------------|
| Conductor Count     | 3             |
| Length              | 6.0"/152.4mm  |
| Colors              | RED, BLK, WHT |
| Insulation Material | PVC           |
| Gauge               | 24 AWG        |
| Stranded Copper     | 7 STR-TC      |
| Maximum Temp        | 105°C         |

**Conductor Configuration**

|                              |
|------------------------------|
| Common (COM) - WHITE         |
| Normally Open (NO) - RED     |
| Normally Closed (NC) - BLACK |

For More Information Visit:

[www.reedswitchdevelopments.com](http://www.reedswitchdevelopments.com)

Or Call Us At:

262-883-9060

**Housing Characteristics 2451**

| Cylindrical Threaded (5/16-24) |                |
|--------------------------------|----------------|
| Length                         | 1.500"/38.10mm |
| Width                          | 0.313"/7.95mm  |
| Material                       | Aluminum       |

**Standard Sensor/Actuator - Min. Actuation Distance**

|               |             |
|---------------|-------------|
| 2451-4006-000 | 0.19"/4.8mm |
|---------------|-------------|

**Assembly Certifications**

|                                 |   |
|---------------------------------|---|
| UL Recognized (File #: E102207) | Y |
| RoHS / Reach Compliant          | Y |
| Conflict Free Material          | Y |

REV DATE: 10/06/2021

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