# **Reed Switch specifications**

# Model No: LDW-4002

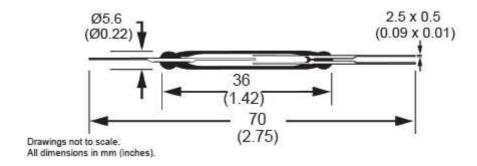
### **Features**

•The LDW-4002 is a single pole double throw reed switch designed for high speed low level switching systems.

## **Applications**

- •Automotive electronic devices
- •Rotation and speed Monitoring
- •Door and Window Contacts for Security System
- •Communication equipment
- •Measurement equipment

## **Dimensions**



| Outer Dimension | Glass Diameter (Max.)   | 5.6       | mm |
|-----------------|-------------------------|-----------|----|
|                 | Glass Length (Max.)     | 36        | mm |
|                 | Lead Diameter (Nominal) | 2.5 / 0.5 | mm |
|                 | Overall Length (Max.)   | 70        | mm |

### **Electrical Characteristics**

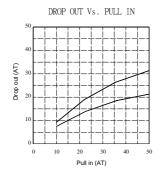
| Contact form                  |        | SPDT Form C Center gap  |  |
|-------------------------------|--------|-------------------------|--|
| Contact material              |        | Rhodium                 |  |
| Switching power               | (max.) | 60 VA                   |  |
| Switching Current             | (max.) | 0.5 Amp. DC 0.5 Amp. AC |  |
| Carry Current                 | (max.) | 1.0 Amp. DC 1.0 Amp. AC |  |
| Switching voltage             | (max.) | 400 VDC                 |  |
| Breakdown voltage             | (min.) | 1000 VDC                |  |
| Contact resistance            | (max.) | 100 Miniohms            |  |
| Insulation resistance         | (min.) | 10 <sup>98</sup> Ohms   |  |
| Contact capacitance           | (max.) | 1.0 pF                  |  |
| Operate time including bounce | (typ.) | 0.5 ms                  |  |
| Release time                  | (typ.) | 0.15 ms                 |  |
| Pull in Range                 |        | 40 – 50 AT              |  |
| Drop out                      |        | 30 – 70%                |  |

Note: 1. The specification for VA rating may be exceeded for less sensitive (High AT) switches, and should be decreased for very sensitive (Low AT) switches. Specific life testing for a particular load will be run upon request.

2. Breakdown voltage is measured in the presence of a radioactive ionizing source with leakage current limited to 100 microamperes.

## **Physical Characteristics**

| Operating Temperature               | -40°C to +125°C |
|-------------------------------------|-----------------|
| Storage Temperature                 | -50°C to +155°C |
| Vibration 10 – 2000 Hz (G 'S MAX)   | 35g             |
| Shock 11ms. ½ Sine wave (G ' S MAX) | 50g             |
| Resonant Frequency (TYP. )          | 1.1 KHz         |
| Switching Frequency (MAX. )         | 100 Hz          |



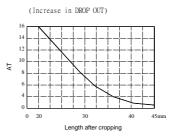
Change in PULL IN Vs. Lead Length

(Increase in PULL IN)

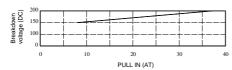
16
14
12
10
8
6
4
0
0 20 30 40 45mm

Length after cropping

Change in DROP OUT  $\operatorname{Vs.}$  Lead Length



Breakdown Voltage Vs. PULL IN (AT)



# **Minimum Life Expectancy**

| Load | 24VDC<br>100mA    | 100VDC<br>10mA      |
|------|-------------------|---------------------|
| Life | 2×10 <sup>6</sup> | 0.5×10 <sup>6</sup> |

### **End of Life Definition**

- 1. Contact resistance above 1 ohm.
- 2. Failure to open (sticking).