MRS01 Series - Molded Dry Reed Switch

SHR AUTOSENSOR TECH LIMITED Website: www.reed-relay.com

Email: sales@reed-relay.com

1. Features

- Small single-contact switch
- High insulation resistance, up to 10^9 Ω
- Suitable for low power operation
- Suitable for tape or reel packaging
- Custom design available
- Conforming to RoHS directive

2. Performance Data

Parameter	Units	Value
Model	/	MRS01-□
Rated Power (max.)	W	10
Switching Voltage (Max DC/Peak AC)	V	200
Switching Current (Max DC/Peak AC)	A	0.4
Carry Current (max.)	A	0.5
Contact Resistance (@0.5V & 50mA)	mΩ	150
Breakdown Voltage	VDC	250
Insulation Resistance (Rh <45%, 100V Test Voltage)	Ω	10^9
Operating Time (max.)	ms	0.6
Release Time (max.)	ms	0.1
Capacitance (typ.)	pF	0.2
Vibration Resistance	G	20
Shock Resistance (11ms, 1/2 sine wave)	G	30
Operating Temperature	°C	-40 +130

Parameter	Units	Value
Storage Temperature	℃	-50 +130

3. Example of Order Marking

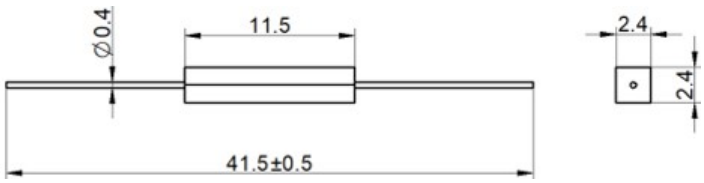
MRS01 - □ - □ (XXX)

Position	Description	Options
①	Product model	MRS01
②	Magnetic sensitivity (AT)	A: 05-10; B: 10-15; C: 15-20; D: 20-25; E: 25-30; F: 30-35; G: 35-40
③	PIN mode	0: Original reed straight pin 1: Flat straight pin 2: Flat and curved SMD pins 3: J-pin
④	Special code	Customer special requirement

4. Outline Drawing

Pin Configurations

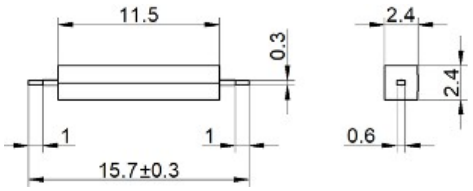
1) Original Reed Straight Pin



Original Reed Straight Pin

Standard straight pin configuration for through-hole mounting.

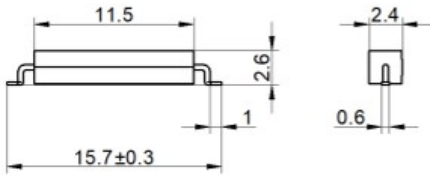
2) Flat Straight Pin



Flat Straight Pin

Flattened pin design for improved PCB contact.

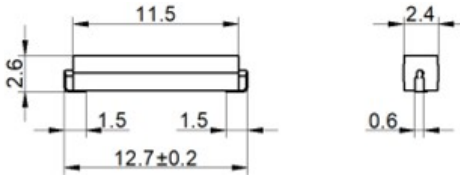
3) SMD Pin



SMD Pin

Surface mount device configuration with flat and curved pins for automated assembly.

4) J-Pin



J-Pin

J-shaped pin configuration for enhanced mechanical stability.

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5. Layout

PCB Layout

Standard PCB footprint layout for MRS01 series switches.

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6. Precautions for Use

1. **Environment**: Avoid installation in areas directly exposed to rain, strong magnetic fields, or near objects with thermal radiation.
2. **Density**: Avoid excessive bulk density in use, which may affect the electrical characteristics of the switch.
3. **Mechanical Shock**: Excessive mechanical shock strength may change its magnetic sensitivity or even damage the switch.
4. **Soldering**: Use appropriate pin tightening or heat dissipation to prevent mechanical or thermal stress during welding.
5. **Welding Parameters**: The maximum welding temperature is 260°C and the time is less than 5 seconds.

Technical Support

For specific parameters and performance details, please refer to the specifications and samples provided by SHR AUTOSENSOR TECH LIMITED.

Performance parameters vary from application area to application area. Customers should choose the appropriate product according to the specific conditions of use.

Contact Information:

SHR AUTOSENSOR TECH LIMITED 📧 Email: sales@reed-relay.com 🌐 Website: www.reed-relay.com

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Disclaimer

This document is for customer reference only. Specifications and parameters may be changed due to product improvement without further notice.