

MRS03 Series

Molded Dry Reed Switch

1 Feature

- ◆ Small single-contact switch
- ◆ High Insulation resistance, up to $10^9\Omega$
- ◆ Suitable for low power operation
- ◆ Suitable for tape or reel packaging
- ◆ Custom Design, conforming to Rohs directive



2 Performance Data

Parameter	Units	Value
Model	/	MRS03-□
Rated Power(max.)	W	10
Switching Voltage(Max DC/Peak AC)	V	170
Switching Current(Max DC/Peak AC)	A	0.5
Carry current(max.)	A	0.5
Contact Resistance(@0.5V&50mA)	mΩ	200
Breakdown Voltage	VDC	210
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	0.4
Vibration Resistance	G	20
Shock Resistance(1/2 sine wave duration 11ms)	G	30
Operating Temperature	°C	-40~+130
Storage Temperature	°C	-50~+130

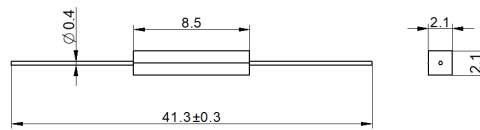
3 Example of order marking

MRS03 - □ - □ (XXX)
 ① ② ③ ④

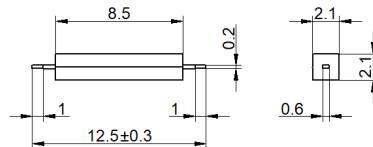
- ① Product model: MRS03
- ② Magnetic sensitivity(AT): A: 05-10; B: 10-15; C: 15-20
D: 20-25; E: 25-30; F: 30-35; G: 35-40
- ③ PIN mode: 0: Original reed straight pin; 1: Flat straight pin
2: Flat and curved SMD pins ; 3: J-pin
- ④ Special code: Customer special requirement

4 Outline drawing

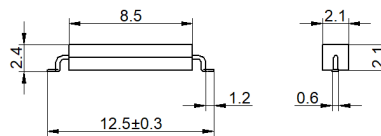
1) Original Reed straight pin



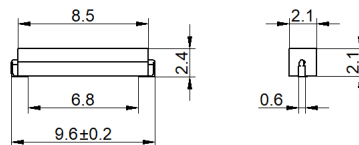
2) Flat straight pin



3) SMD pin



4) J-pin



5 Layout



6 Precautions for use

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

⚠Statement:

The document is for customer reference only. Specifications and parameters may be changed due to product improvement. For the specific parameters and performance of each product, please refer to the specifications and samples provided by Mirelay without further notice.

Performance parameters vary from application area to application area, so customers should choose the appropriate product according to the specific conditions of use, if in doubt, please contact Shanghai MiRelay Electronics Co., Ltd. for more technical support.