MRS20 Series - Reed Proximity Switch (Bistable Magnetic Latching)

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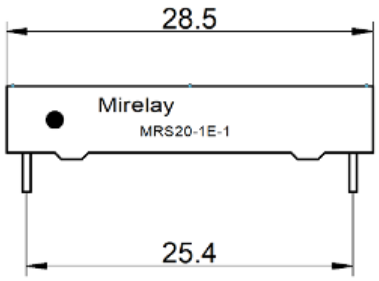
1. Features

- Output reliable contact switch
- High-end sensor applications
- Bistable magnetic latching technology
- Suitable for low power operation
- Custom design available
- Conforming to RoHS directive



MRS20 Product Image

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2. Performance Data

Parameter	Units	Value	
Contact Type	/	E (Bistable Magnetic Latching)	
Rated Power (max.)	W	10	100
Switching Voltage (Max DC/Peak AC)	V	180	1000
Switching Current (Max DC/Peak AC)	A	0.5	1.0
Carry Current (max.)	A	1.25	2.5
Contact Resistance (@0.5V & 50mA)	mΩ	150	150

Parameter	Units	Value	
Insulation Resistance (Rh <45%, 100V Test)	Ω	10^{10}	10^{10}
Vibration (02000Hz)	G	20	20
Shock Resistance (11ms, 1/2 sine wave)	G	30	30
Operating Temperature	°C	-40 +80	-40 +80
Storage Temperature	°C	-40 +85	-40 +85

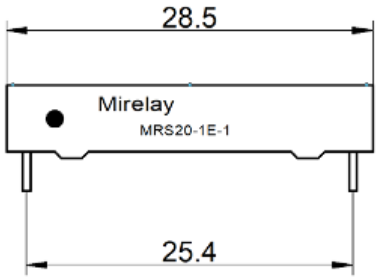
3. Example of Order Marking

MRS20 - □ - □ - (XXX)

Position	Description	Options
①	Product model	MRS20
②	Contact form	1E: Form E (Bistable Magnetic Latching)
③	Switch characteristic	1: 10W; 2: 100W
④	Special code	Customer special requirement

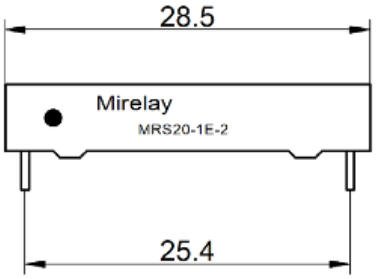
4. Outline Drawing

1) MRS20-1E-1 (10W Version)



MRS20-1E-1 Outline

2) MRS20-1E-2 (100W Version)



MRS20-1E-2 Outline

Refer to technical drawings for exact dimensions and mounting configuration.

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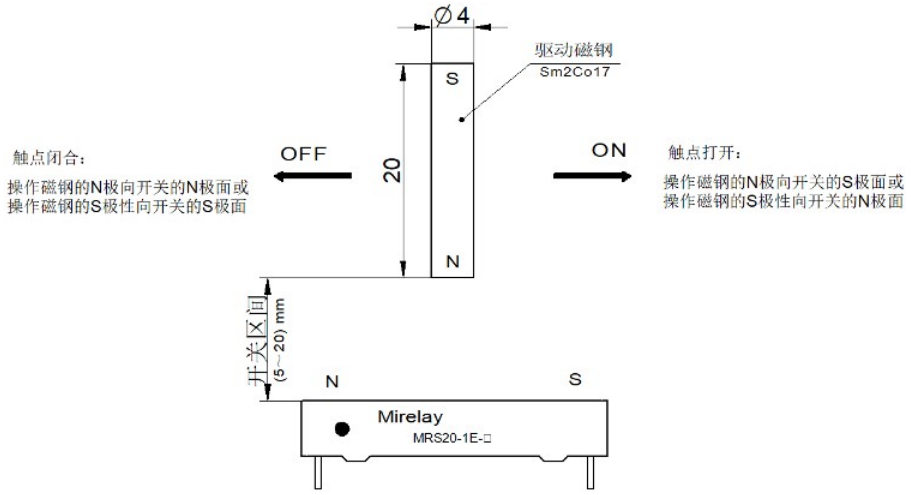
5. Operation Type



MRS20 Operation Characteristics

The bistable magnetic latching mechanism maintains state without continuous power, making it ideal for energy-efficient applications.

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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. **Mounting**: Use appropriate mounting methods to reduce switching distance and avoid installation on any ferromagnetic material surface.

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:

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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.