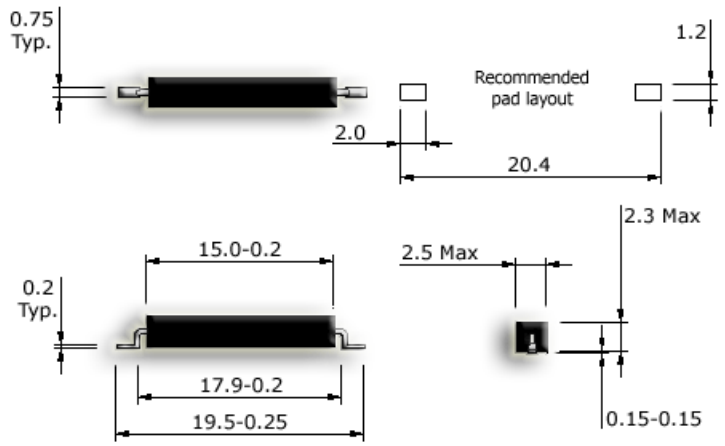
R2-S SMD Reed Sensor

SMD Package, Normally Open



Molded with internal blades parallel to SMD feet
All dimensions in mm

- Does not require power for operation
- Normally open (NO) form A contact
- Omni-polar device; actuates with either pole of magnet
- Molded with internal blades parallel to SMD feet
- Packed in tape and reels conforming to IEC-60286-3 norms
- Lead (Pb) free and RoHS compliant

Applications

This reed sensor is suitable for use in the following applications and many others: cellular phones and PDAs, weather proof electronics, fluid tank cap sensing, hands free kits...

Specification

Contact Form		A
Contact Rating (max)	W / VA	10
Switching Current (max)	A	0.5
Carry Current (max)	A	1.5
Switching Voltage (max)	V_{DC}	180
Breakdown Voltage (min)	V_{DC}	200
Initial Contact Resistance (max)	mΩ	150
Operating Temperature	°C	-40 to +140
Shock Resistance (½Sin wave for 11ms)	g	30
Vibration Resistance (10-2000Hz)	g	20

Ordering Code

R2-S-(Operate AT Code)-(Packing Code)

OAT Code	*Before	*After	Packing Code	
1	10 – 15	13 – 23	L	Plastic Box (500)
2	15 – 20	20 – 30	G	Tape (2500)
3	20 – 25	27 – 37		

*Indicate Operate AT band before and after modification of leads

Example

R2-S-3-L denotes 20-25 operate AT packed in plastic boxes.

Due to continual improvement, specifications are subject to change without notice

www.reed-sensor.com

1 February 2008

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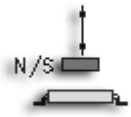
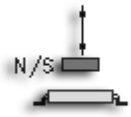
Actuation Distances

Operate and release distances for the R2-S ultra-miniature reed sensor in two standard AT bands, when actuated (as shown in the sketches) with NdFeB standard magnets is shown below. All distances given are in mm with tolerances of ±0.5mm. Although some of the AT band / magnet combinations will produce similar actuating distances, selecting the right AT band and magnet for an application is important and can be done by going through our AT band FAQ and our magnet selection guide.

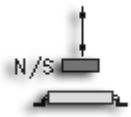
R2S-1 (10-15 AT)

Actuation Sketch	Magnet	Dimensions	Operate Distance	Release Distance
	NDR-T	4.0 x 1.5 x 1.5	3.5 – 5.5	4.0 – 6.0
	NDC-T	Ø2.0 x 4.0	4.0 – 7.0	4.5 – 7.5
	NDR-S	6.0 x 2.5 x 2.5	8.0 – 11.5	9.0 – 12.0
	NDC-S	Ø3.0 x 7.0	9.5 – 13.5	10.5 – 14.0
	NDR-M	8.0 x 3.0 x 3.0	11.5 – 16.0	12.5 – 16.5
	NDC-M	Ø4.0 x 10.0	15.0 – 20.0	16.0 – 21.0
	NDR-L	19.0 x 4.0 x 4.0	20.0 – 26.5	22.0 – 27.0
	NDC-L	Ø8.0 x 15.0	30.0 – 39.5	32.5 – 40.5

R2S-2 (15-20 AT)

Actuation Sketch	Magnet	Dimensions	Operate Distance	Release Distance
	NDR-T	4.0 x 1.5 x 1.5	2.0 – 4.0	3.0 – 5.0
	NDC-T	Ø2.0 x 4.0	2.5 – 5.0	4.0 – 6.0
	NDR-S	6.0 x 2.5 x 2.5	6.5 – 9.0	7.5 – 10.5
	NDC-S	Ø3.0 x 7.0	8.0 – 10.5	9.5 – 12.0
	NDR-M	8.0 x 3.0 x 3.0	10.0 – 13.0	11.0 – 15.0
	NDC-M	Ø4.0 x 10.0	12.0 – 16.0	14.0 – 19.0
	NDR-L	19.0 x 4.0 x 4.0	17.5 – 22.0	20.0 – 25.0
	NDC-L	Ø8.0 x 15.0	26.0 – 32.0	29.0 – 35.0

R2S-3 (20-25 AT)

Actuation Sketch	Magnet	Dimensions	Operate Distance	Release Distance
	NDR-T	4.0 x 1.5 x 1.5	2.0 – 3.0	2.5 – 4.0
	NDC-T	Ø2.0 x 4.0	2.5 – 3.5	3.5 – 4.5
	NDR-S	6.0 x 2.5 x 2.5	6.0 – 7.0	7.5 – 8.5
	NDC-S	Ø3.0 x 7.0	7.5 – 8.5	9.0 – 10.0
	NDR-M	8.0 x 3.0 x 3.0	9.0 – 10.5	10.5 – 12.0
	NDC-M	Ø4.0 x 10.0	11.5 – 13.0	13.0 – 15.0
	NDR-L	19.0 x 4.0 x 4.0	16.0 – 19.5	18.5 – 22.0
	NDC-L	Ø8.0 x 15.0	24.0 – 28.0	27.5 – 32.0

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