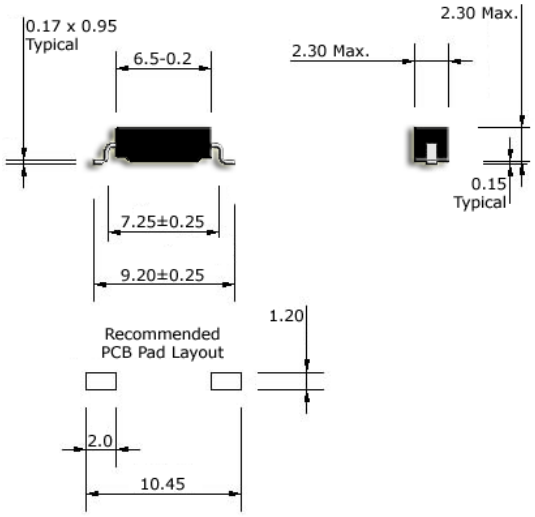
# R5-S Ultra-Miniature SMD Reed Sensor

## Gull wings, Normally Open, 5W




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, dentists drills, pacemakers and defibrillators, nerve stimulators, spirometers, high resolution level sensors...

### Specification

| | | |
|---|---|---|
| Contact Form | | A |
| Contact Rating (max) | W / VA | 5.0 |
| Switching Current (max) | A | 0.35 |
| Carry Current (max) | A | 0.5 |
| Switching Voltage (max) | $V_{DC}$ | 100 |
| Breakdown Voltage (min) | $V_{DC}$ | 150 |
| Initial Contact Resistance (max) | mΩ | 200 |
| Operating Temperature | °C | -40 to +140 |
| Shock Resistance (½Sin wave for 11ms) | g | 30 |
| Vibration Resistance (10-2000Hz) | g | 20 |

### Ordering Code

R5-S-(Operate AT Code)-(Packing Code)

| OAT Code | *Before | *After | Packing Code | |
|---|---|---|---|---|
| 1 | 7 – 12 | 15 – 35 | L | Plastic Box (500) |
| 2 | 12 - 17 | 25 - 45 | G | Tape (2500) |

*Indicate Operate AT band before and after modification of leads

### Example

R5-S-1-G denotes 7-12 Operate AT packed in taped reels.

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

www.reed-sensor.com

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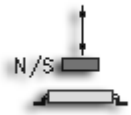
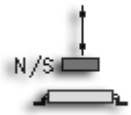
## Actuation Distances

Operate and release distances for the R5-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.

**R5S-1 (7-12 AT)**

| Actuation Sketch | Magnet | Dimensions | Operate Distance | Release Distance |
|---|---|---|---|---|
|   | NDR-T | 4.0 x 1.5 x 1.5 | 2.0 – 4.5 | 2.0 – 5.0 |
| | NDC-T | Ø2.0 x 4.0 | 2.5 – 5.0 | 2.5 – 5.5 |
| | NDR-S | 6.0 x 2.5 x 2.5 | 5.0 – 8.5 | 5.0 – 9.0 |
| | NDC-S | Ø3.0 x 7.0 | 6.0 – 10.0 | 6.0 – 10.5 |
| | NDR-M | 8.0 x 3.0 x 3.0 | 7.0 – 11.0 | 7.0 – 11.5 |
| | NDC-M | Ø4.0 x 10.0 | 9.5 – 13.0 | 9.5 – 13.5 |
| | NDR-L | 19.0 x 4.0 x 4.0 | 11.5 – 19.0 | 11.5 – 19.5 |
| | NDC-L | Ø8.0 x 15.0 | 19.0 – 27.0 | 19.0 – 27.5 |

**R5S-2 (12-17 AT)**

| Actuation Sketch | Magnet | Dimensions | Operate Distance | Release Distance |
|---|---|---|---|---|
|   | NDR-T | 4.0 x 1.5 x 1.5 | 2.0 – 3.0 | 2.0 – 3.5 |
| | NDC-T | Ø2.0 x 4.0 | 2.5 – 3.5 | 2.5 – 4.0 |
| | NDR-S | 6.0 x 2.5 x 2.5 | 5.0 – 6.5 | 5.0 – 7.0 |
| | NDC-S | Ø3.0 x 7.0 | 5.5 – 7.5 | 5.5 – 8.0 |
| | NDR-M | 8.0 x 3.0 x 3.0 | 7.0 – 9.0 | 7.0 – 9.5 |
| | NDC-M | Ø4.0 x 10.0 | 9.0 – 11.0 | 9.0 – 11.5 |
| | NDR-L | 19.0 x 4.0 x 4.0 | 11.0 – 15.0 | 11.0 – 15.5 |
| | NDC-L | Ø8.0 x 15.0 | 17.5 – 22.0 | 17.5 – 22.5 |