Technical Data Sheet

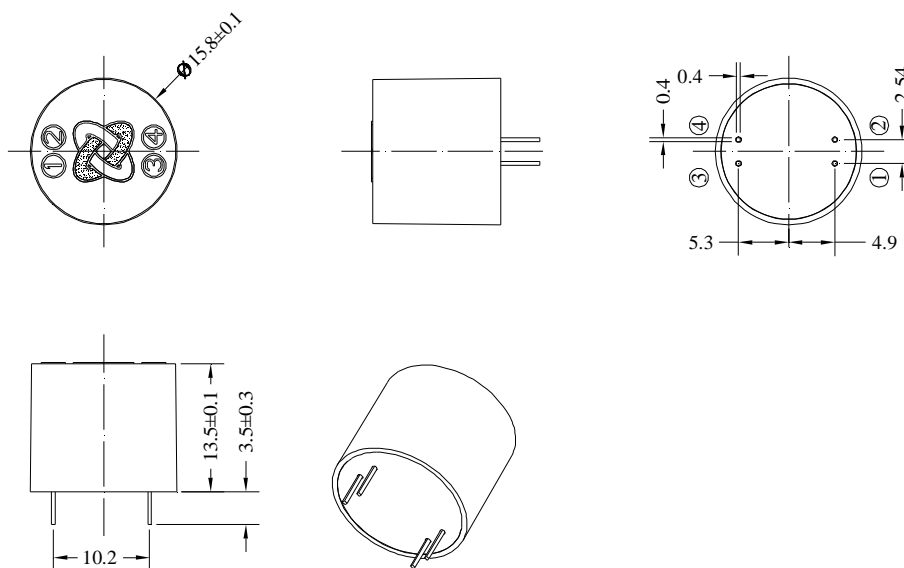## 360° infrared tip over switch   TS-IR01

Features

- High reliability , Low cost
- High precision of tip over action angles
- With a high radiant intensity infrared LED
- With a fast response time and high sensitivity phototransistor
- Conforms to the safety standard
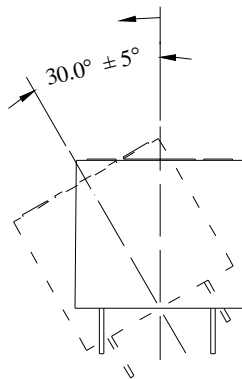- This product itself will remain with in RoHS compliant version

Applications

- Heaters, Electrical Irons
- Fans, Air Purifiers
- Humidifiers, Cooling Fans, Air Conditions
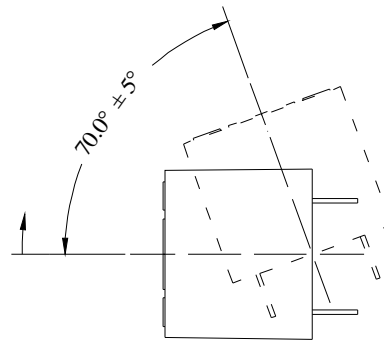- Other appliances which need the tip over protected

Package Dimensions

Notes: 1. All dimensions are in millimeters
        2. Tolerances unless dimensions ±0.25mm

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Action Angles

Tip over action angle: 30° ± 5°   Recover action angle: 70° ± 5°
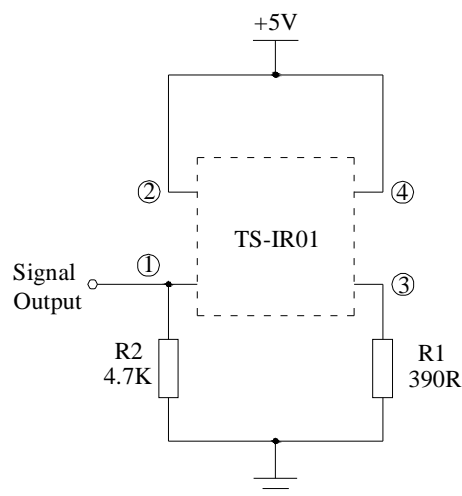
Notes: 1. The switch has 360° the full radial direction tip over detect
2. Tip over action angle is 30°±5°in every radial direction
3. Recover action angle is 70°±5°in every radial direction

Uses and tests

Connect the tip over switch into below circuit. Signal will be used as a sensor output to the MCU I/O port. When detected the change of Signal Output value, MCU will release some orders to do some corresponding actions to protect the unit.

The typical application circuit with power supplier DC 5V show as below:

DC 5V application typical circuit

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Below table show the parameters (Ta=25℃)

Switch status	Output of Signal(V)	Value	Total Current(mA)	Power Consumption(mW)
Erect	< 0.1	0	<12	<60
Tip Over	> 4.6	1	<12	<60

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating
Operating Temperature	T_{opr}	-25℃-85℃
Storage Temperature	T_{stg}	-40℃-85℃
Soldering Temperature	T_{sol}	260℃
Life	T	50,000 h

Packing Quantity Specification

100Pcs/Tray, 10Tray/Canton