

**SENSOR SWITCH**

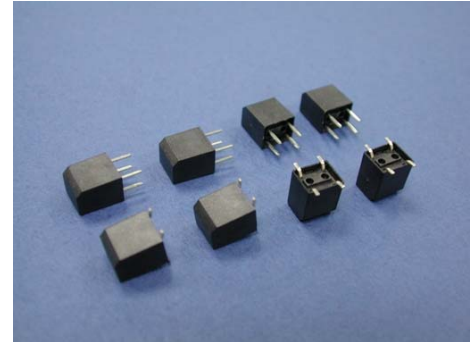
Item.#	RBS15 Series	Description	TILT SWITCH	Version	V96.0
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● APPLICATIONS

1. One Axis 15° Tilt Detecting

● FEATURES

1. Small size & compact space.
2. Housing made of high insulation plastic material, free from electric conduction and rust problem.
3. Four terminals for ball contact, making the output signal more stable.
4. Terminals and balls are gold plated to enhance the life.
5. All plastic material subject to industrial purpose meets with UL94V-0 grade; high temperature and fireproof function.
6. Suitable to IC trigger signal.
7. Complete replacement of mercury switch and meet with environmental protection.



● PATENTS

1. U.S.A. Patent No. US 7176396 B1



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● DIMENSIONS / OPERATION / P.C.B. LAYOUT (Unit: mm, Tolerance: ±0.25mm)

RBS 15 11 00	Tilt Angle ($\theta=15^\circ\pm 10^\circ$)	P.C.B. Layout (DIP) / Top View
RBS 15 21 00	Tilt Angle ($\theta=15^\circ\pm 10^\circ$)	P.C.B. Layout (SMT) / Top View

● ELECTRICAL CHARACTERISTICS

1.	Contact Rating	25mA , 24VDC
2.	Contact Resistance	Initial : 5Ω max. After Life Test : 10Ω max.
3.	Differential Angle	Refer to the drawing
4.	Switching type	Normal Open (NO)
5.	Insulation Resistance	1000MΩ min. At 100 VDC
6.	Dielectric Strength	500 VDC min. for 1 minute
7.	Capacitance	5pF max



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● MECHANICAL CHARACTERISTICS

1.	Temperature Range	Operating: -25°C to +85°C Storage: -40°C to +85°C
2.	Pull Force of Terminal	500 gf for 1 minute
3.	Operation Life	100,000 Cycles
4.	Conductive Rate (Switch-on Rate)	min. over 90%
5.	Humidity	95% RH, 40° C for 96 hrs.
6.	Solder ability	After flux 260±5°C for 5±0.5 seconds 95% coverage

● BILL OF MATERIAL

1.	Housing	Glass-Fiber Liquid crystal polymer, UL 94V-0
2.	Terminal	Copper Alloy, Gold Plated over Nickel
3.	Ball	Copper Alloy, Gold Plated over Nickel

● PACKAGE

	Part Number	Package	Quantity	Total	Size
1.	RBS1511	PE Bag	600 pcs	600 pcs	12.7 x 17.8 cm
		Inner Box	10 Bags	6,000 pcs	36 x 20 x 9 cm
		Carton	3 Boxes	18,000 pcs	36 x 28 x 23 cm
2.	RBS1521	Reel	700 pcs	700 pcs	30 x 30 cm
		Inner Box	2 Reels	1,400 pcs	36 x 34 x 7 cm
		Carton	4 Boxes	5,600 pcs	37 x 37 x 28 cm

* Minimum Order Quantity: One Bag / One Reel



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● NOTE

1. Suggestion for Application : Application in occasions that require vibration functions, adding design of “OFF DELAY” is recommended. For great vibration, Optical type products are recommended.
2. Suggestion Contact Rating: 5 mA.
3. Conductive Rate: To test the conductivity (Switch-on Rate) of one switch individually for 100 times, if the switch conductive 95 times, we call the “conductive rate” is 95%.
4. For the continued product improvement as one of the company policy, specifications may change or update without notice. The latest information can be obtained through our sales offices. Normally, all products are supplied under our standard conditions.

● PRECAUTIONS FOR USE

1. The product is used mainly in electronic devices such as automotive devices, visual devices, home electrical appliances, information devices and communication settings. If the products is intended to be used for other endurance equipments requiring higher safety and reliability such as life support system, space and aviations devices, disaster and safety system, it's necessary to make verification of conformity or contact us for the details before using.
2. Don't try to clean the switch with a solvent or similar substance after the soldering process.
3. The switch might be damaged if using the water-soluble flux.
4. Don't use the switch in the environment with high humidity or other bedewing possibility, as it may cause leaking among the terminals.
5. It might catch fire if the rating exceeds the specifications. Never use the switch beyond the rating.