

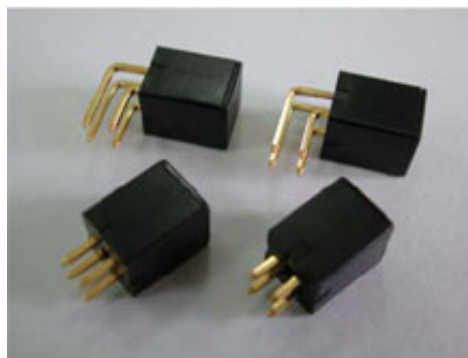


SENSOR SWITCH

Item.#	RBS13 Series	Description	TILT SWITCH	Version	V97.0
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- APPLICATIONS

1. Rotation Detecting
2. Two way 45° Tilt Detecting
3. Omni-directional Vibration Detecting



- FEATURES

1. Housing made of high insulation plastic material, free from electric conduction and rust problem.
2. Terminals and balls are gold plated to enhance the life.
3. All plastic material subject to industrial purpose meets with UL94V-0 grade; high temperature and fireproof function.
4. A Multi-functional product, combine functions of detecting tilt and vibration.
5. Suitable for vertical and Horizontal PCB.
6. Suitable to IC trigger signal.
7. RoHS Compliance.

- PATENTS

1. Taiwan Patent No. I 239025
2. U.S.A. Patent No. US 7,045,724 B1
3. China Patent No. ZL 2004 1 0091589.7



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

<p>RBS 13 01 00</p>	<p>Tilt Angle $\theta=45\pm 25^\circ$ Stable angle $\alpha < 30^\circ$</p> <p>Signal On Area B: (70°~110°) Uncertain Area (20°~70°); (110°~160°) Signal Off Area (160°~20°)</p> <p>Signal On Area C: (160°~200°) Uncertain Area (110°~160°); (200°~250°) Signal Off Area (250°~110°)</p> <p>Signal On Area A: (340°~20°) Uncertain Area (20°~70°); (290°~340°) Signal Off Area (70°~290°)</p> <p>Signal On Area D: (290°~250°) Uncertain Area (200°~250°); (290°~340°) Signal Off Area (340°~200°)</p>	<p>P.C.B. Layout (DIP) / Top View</p>
	<p>Fleetingly Open/OFF When Being Vibrated From Any Position</p>	<p>P.C.B. Layout (DIP) / Top View</p>

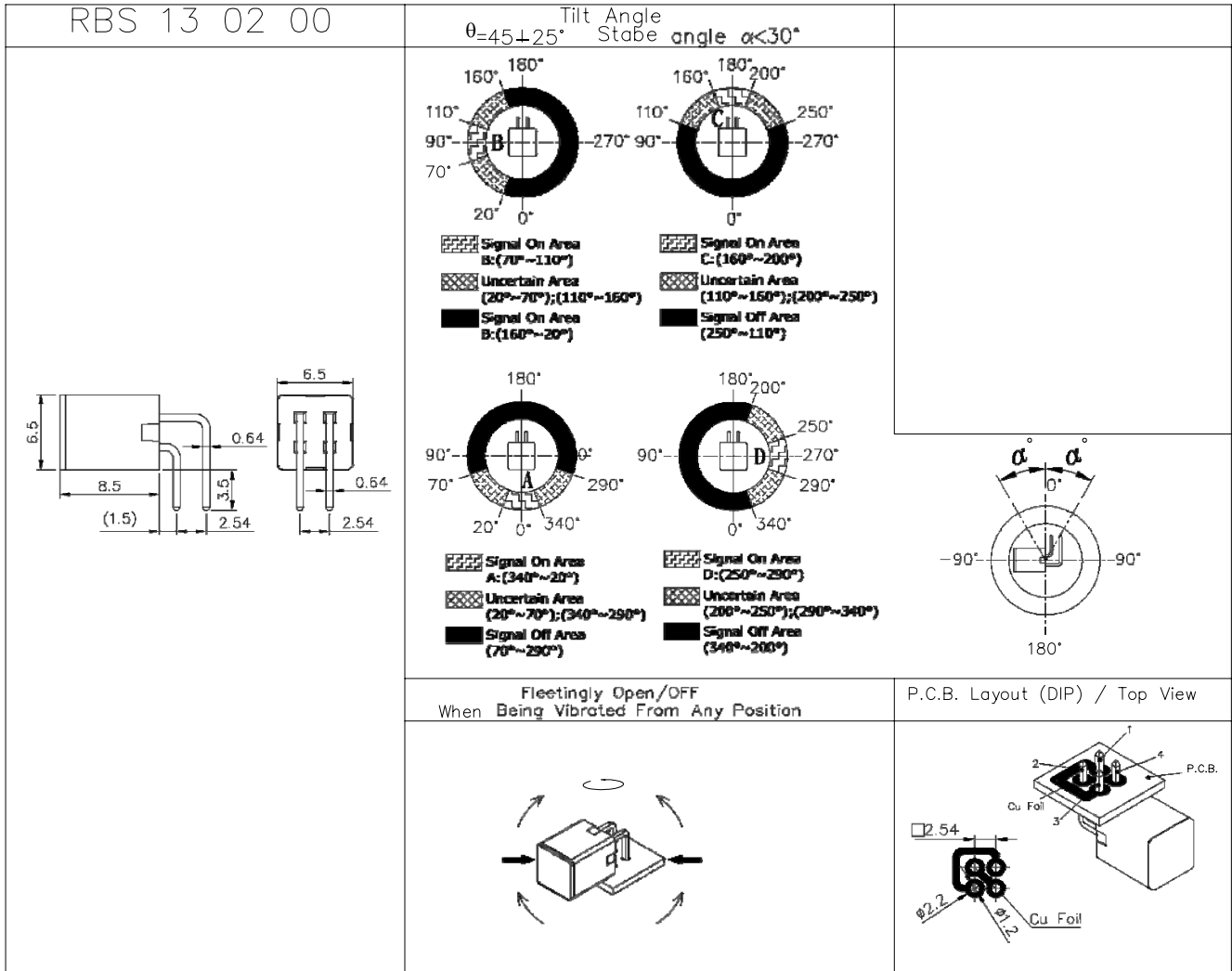
JIN ZON ENTERPRISE CO., LTD.

駿融企業有限公司



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● ELECTRICAL CHARACTERISTICS

1.	Contact Rating	25mA , 24VDC
2.	Contact Resistance	10Ω max.
3.	Differential Angle	Refer to the drawing
4.	Switching type	Normal Closed (NC)
5.	Insulation Resistance	1000MΩ min at 100 VDC
6.	Dielectric Strength	500 VDC min for 1 minute
7.	Capacitance	5pF max.

● 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 245±5°C for 5±0.5 seconds 95% coverage
7.	Heat resistance	260°C for 5 seconds

● BILL OF MATERIAL

1.	Housing	PA66+30%GF , UL 94V-0
2.	Cover	PA66+30%GF , UL 94V-0
3.	Terminal	Copper Alloy, Gold Plated over Nickel
4.	Cu-Ball	Copper Alloy, Gold Plated over Nickel



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● PACKAGE

	Part Number	Package	Quantity	Total	Size
1.	RBS130100	PE Bag	500 pcs	500 pcs	12.7 x 17.8 (cm)
		Inner Box	8 Bags	4,000 pcs	36 x 20 x 9 (cm)
	RBS130200	Carton	3 Boxes	12,000 pcs	36 x 28 x 23 (cm)

**Minimum Order Quantity: One Bag

● NOTE

1. Suggestion for Application : Application in occasions that require vibration functions, adding design of "ON 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.

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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.