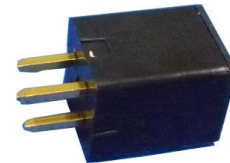


SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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● FUNCTIONS

1. Rotation Detecting
2. Two way 45° Tilt Detecting in horizontal PCB
3. Vibration Detecting



● APPLICATIONS

1. Rotation Detection for LCD monitor
2. Alarm system
3. Wake up systems for power saving, such like remote controllers
4. Automatically power off for Sporting equipment
5. Toys 、 Entertainment devices



● FEATURES

1. No electricity consumption during detection status.
2. Housing made of high insulation plastic material, free from electric conduction and rust problem.
3. Gold-plated ball and terminals, low possibility of oxidization.
4. All plastic materials subject to industrial purpose, resist high temperature and meet fireproof function.
5. Simple ON and OFF signals, easy for design.
6. RoHS compliance, an ideal substitute for mercury switch.
7. A more economical tilt and rotation detection option than IC design solution.
8. Switch State: Normal Close

● PATENTS

1. TAIWAN Patent No. I 261280
2. U.S.A. Patent No. US 7,473,857 B2 、 US 2008/0024956 A1
3. CHINA Patent No. ZL 200610078234.3



SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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● DIMENSIONS / OPERATION / P.C.B. LAYOUT (Unit: mm, Tolerance: ±0.25mm)

<p>RBS 13 01 00</p>	<p>Signal change angle $\theta = 45^\circ \pm 25^\circ$</p>
<p>P.C.B. Layout (DIP) / Top View</p>	<p>Application Circuit</p>



SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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<p>RBS 13 02 00</p>	<p>Signal change angle $\theta = 45^\circ \pm 25^\circ$</p>
<p>P.C.B. Layout (DIP) / Top View</p> <p>Switch-on Applications</p> <p>Vibration Applications</p>	<p>Application Circuit</p>



SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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● Current/Voltage Suggested

Input Current (mA)	Operating Voltage (V)	Condition
10	5	--

● ELECTRICAL CHARACTERISTICS

1	Contact Rating	10 mA · 5 VDC
2	Contact Resistance	10 Ω max.
3	Differential Angle	Refer to the above illustration
4	Insulation Resistance	1000 MΩ min. · 100 VDC
5	Dielectric Strength	500 VDC min. · 1 minute
6	Capacitance	5 pF max.



SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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● RELIABLE TEST ITEMS

Test Item	Standard	Contents
IR Reflow	--	--
Operating Temperature	MIL-STD-202G, TEST METHOD 107G, TEST A	-25 °C ~ 85 °C
Storage Temperature	MIL-STD-202G, TEST METHOD 107G, TEST A	-40 °C ~ 85 °C
Humidity	MIL-STD-202G, TEST METHOD 103B	40 °C/95 %RH
Mechanical Life	--	2 Hz horizontal/1,000,000 times
Electrical Life	--	100,000 times
Pull force of terminal	--	500 GF · 1 minutes

● Soldering Temperature and time

Condition / Operation Method	Soldering Temperature	Soldering Time
Wave Soldering	260±5°C	<5 sec. Max
Manual Soldering	260±5°C	<5 sec. Max



SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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● PACKAGE

	Part Number	Package	Quantity	Total	Size(mm)
1.	RBS130100	PE Bag	500 pcs	500 pcs	180L*130W
		Inner Box	10PE Bags	5,000 pcs	348L*191W*85H
		Carton	3 Boxes	15,000 pcs	364L*278W*213H

※ Package shown as below for reference.



PE Bag



Inner Box



Carton

	Part Number	Package	Quantity	Total	Size(mm)
1.	RBS130200	PE Bag	500 pcs	500 pcs	180L*130W
		Inner Box	8 PE Bag	4,000 pcs	348L*191W*85H
		Carton	3 Boxes	12,000 pcs	364L*278W*213H

※ Package shown as below for reference.



PE Bag



Inner Box



Carton



SENSOR SWITCH

Item #	RBS13 Series	Description	TILT SWITCH	Version	V101.3
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● **NOTE**

1. Suggestion for usage : For vibration usage or application · we suggest to add hysteresis for IC; if vibration is heavy · optical type of sensor switch is recommended.
2. 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.
3. If buyer's products will stay in power supply for a long time which needs very high stability, optical sensor switch is strongly recommended.

● **PRECAUTIONS FOR USE**

1. If the products is intended to be used for other endurance equipment requiring higher safety and reliability such as life support system, space and aviation devices, disaster and safety system, it's necessary to make verification of conformity or contact us for the details before using.
2. Do not try to clean the switch with a solvent or similar substance after the soldering process.
3. Use water-soluble flux may damage the switch.
4. If soldering temperature exceeds our specification, sensor switch could get apart.
5. Do not use switch in the environment of high humidity · because such an environment may cause the leakage current between the terminals.
6. More than the rated load may cause fire, so do not use more than the load.
7. In the circuit · switch should not be near or directly connected with the magnetic component solder joints (for example: relays, transformers, etc.).

