

Tilt Sensor Switch

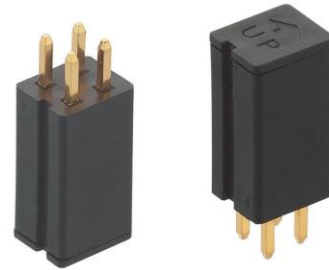
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● FUNCTIONS

1. Horizontal Tilt Detecting
2. Vertical Up-Side Down Detecting

● APPLICATIONS

1. Position Detection for Iron
2. Lighting system for night time while car hold being opened
3. Toys, Entertainment Device



● FEATURES

1. Suitable for vertical PCB.
2. Switch state: DIP Normal Close.
3. Housing made of high insulation plastic material, free from electric conduction and rust problem.
4. Gold-plated ball and terminals, low possibility of oxidization.
5. All plastic materials subject to industrial purpose, resist high temperature and meet fireproof function.
6. Simple ON and OFF signals, easy for design.
7. RoHS compliance, an ideal substitute for mercury switch.
8. A more economical tilt and rotation detection option than IC design solution.
9. All made in Taiwan and examined before shipment.



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● PATENTS

1. Taiwan Patent No. 155965
2. Taiwan Patent No. 476797
3. U.S.A. Patent No. US 6,198,059 B1
4. U.S.A. Patent No. US 7,256,360 B1
5. U.S.A. Patent No. US 7,446,272 B2
6. U.S.A. Patent No. US 9,058,945 B2
7. China Patent No. 201220308500.8
8. China Patent No. 201210218323.9

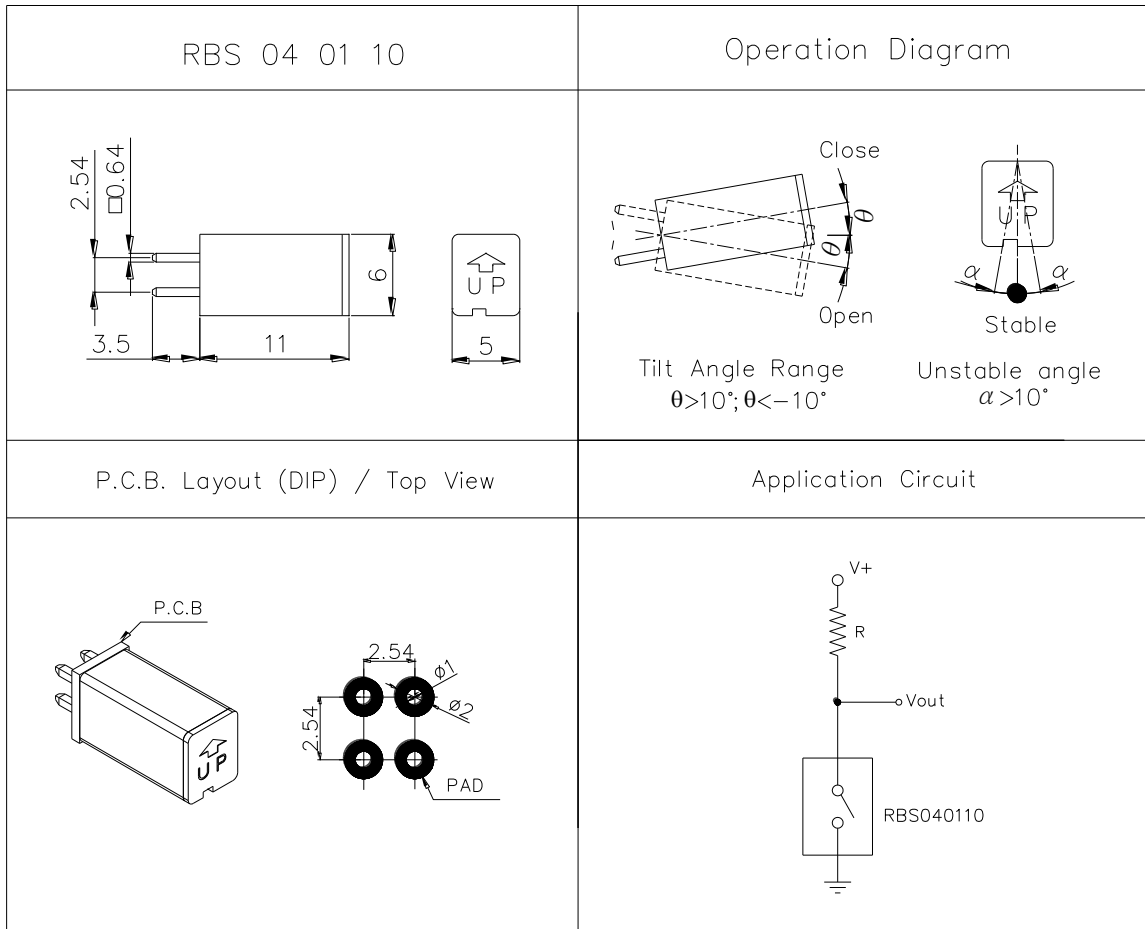


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● DIMENSIONS / OPERATION / P.C.B. LAYOUT (Unit: mm, Tolerance: ±0.25mm)

Fig. 1



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● Current/Voltage Suggested

Input Current (mA)	Operating Voltage (V)	Condition
1.0	5	--

● ELECTRICAL CHARACTERISTICS

1.	Contact Rating	10 mA, 5VDC
2.	Contact Resistance	10 Ω max.
3.	Operation Diagram	Refer to Fig. 1
4.	Insulation Resistance	1000 MΩ min., 100 VDC
5.	Dielectric Strength	500 VDC min., 1 minute
6.	Capacitance	5pF max.
7.	Conductive Rate	90% min.



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● RELIABLE TEST ITEMS

Reliable Test for RBS040110

	Test Item	Contents
1	Operating Temperature	-25°C ~ 85°C
2	Storage Temperature	-40°C ~ 85°C
3	Humidity	40 °C / 95 %RH
4	Mechanical Life	2 Hz horizontal 1,000,000 times
5	Electrical Life	100,000 times

● SOLDERING CONDITION

Following soldering conditions are for reference only, please use soldering information that solder paste manufacturer recommends.

Condition	Soldering Temperature	Soldering Time	Wattage of Manual Soldering	Type
Wave Soldering	260±5°C	< 5 seconds max.	-	DIP
Manual Soldering	300±5°C	< 3 seconds max.	30W or Temperature-controlled manual soldering	DIP



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● PACKAGE

	Part Number	Package	Quantity	Total	Dimension (mm)
1.	RBS040110	PE Bag	500 pcs	500 pcs	205L*145W
		Inner Box	10 PE Bags	5,000 pcs	348L*191W*85H
		Carton	3 Boxes	15,000 pcs	364L*278W*213H

※ Package shown as below for reference.

