

TILT SENSOR SWITCH

Item No.	RBS200112	Description	Ball-Contact	Version	3
Page	1 of 5		Publish Date	May 15, 2018	

● FUNCTIONS

20°Tilt Detecting for 4 directions in horizontal mode.

● APPLICATIONS

1. Automatically shut off for home appliances.
2. Automatically shut off for Sporting equipment.
3. Alarm system.
4. Anti-theft / Anti-tamper devices.
5. Being motion detection (personal locator).



● FEATURES

1. Suitable for horizontal PCB.
2. Switch State: DIP Normal Open.
3. Tiny size, suitable for small space.
4. Gold-plated ball and terminals, low possibility of oxidization.
5. Housing made of high insulation plastic material, free from electric conduction and rust problem.
6. All plastic materials subject to industrial purpose, resist high temperature and meet fireproof function.
7. Simple ON and OFF signals, easy for design.
8. Low price solution.
9. Almost zero consume for energy-saving demand.
10. RoHS compliance, an ideal substitute for mercury switch.
11. A more economical tilt and vibration detection option than IC design solution.
12. All made in Taiwan and examined before shipment.

● PATENTS

1. Taiwan Patent No. I 239025
2. U.S.A. Patent No. US 7,045,724 B1
3. China Patent No. ZL 200410091589.7
4. China Patent No. 201220308500.8

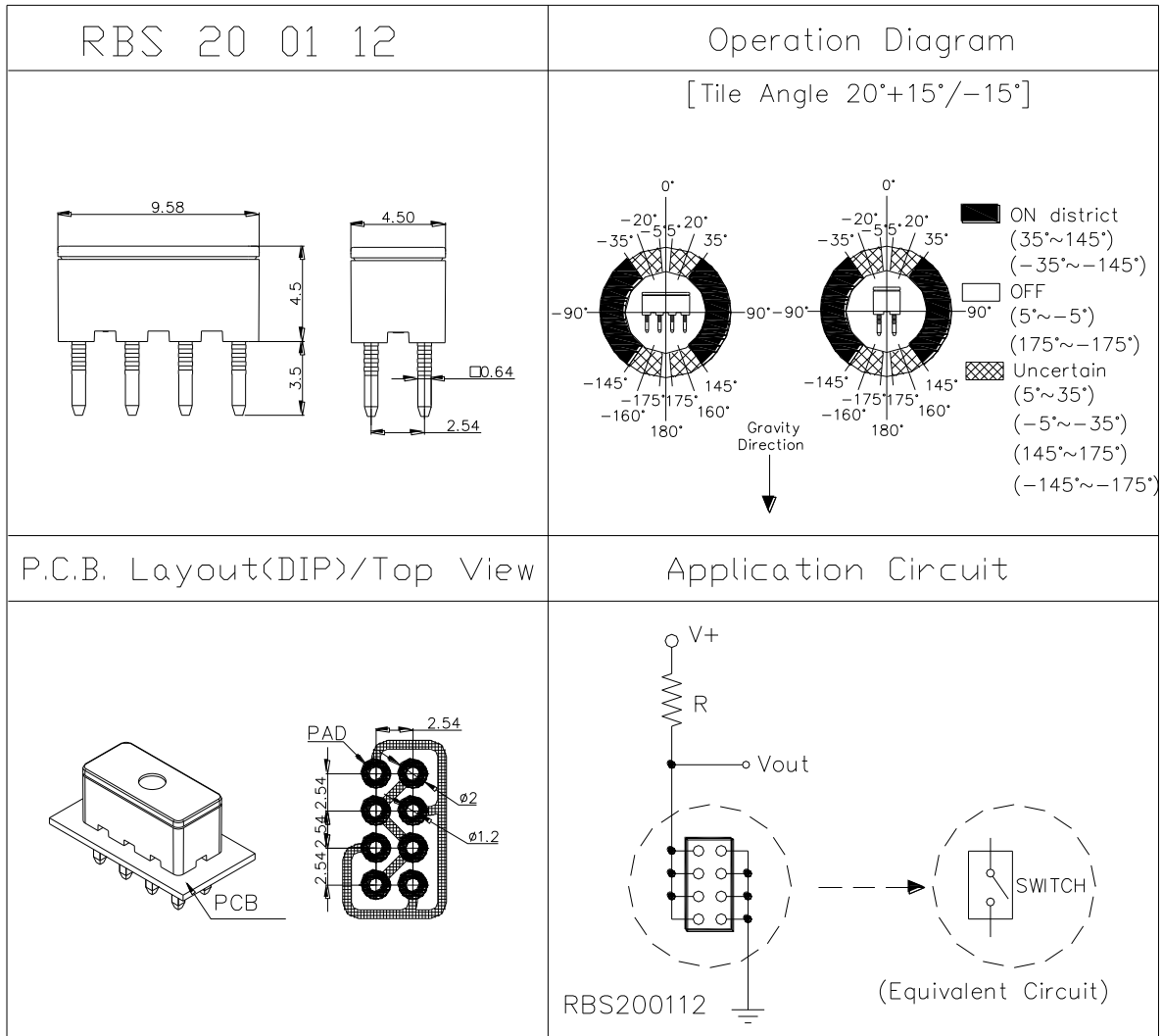


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Item No.	RBS200112	Description	Ball-Contact	Version	3
Page	2 of 5		Publish Date	May 15, 2018	

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

Fig. 1



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Item No.	RBS200112	Description	Ball-Contact	Version	3
Page	3 of 5		Publish Date	May 15, 2018	

● Current/Voltage Suggested

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

● ELECTRICAL CHARACTERISTICS

1	Contact Rating	10 mA, 5 VDC
2	Contact Resistance	10 Ω max.
3	Differential Angle	Refer to Fig. 1
4	Insulation Resistance	1000 MΩ min., 100 VDC
5	Dielectric Strength	500 VDC min., 1 minute
6	Capacitance	5 pF max.
7	Conductive Rate:	98% min.

● RELIABLE TEST ITEMS

Reliable Test for RBS200112

	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



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Item No.	RBS200112	Description	Ball-Contact	Version	3
Page	4 of 5		Publish Date	May 15, 2018	

● 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
Suitable Production Process				
Wave Soldering	260±5°C	< 5 seconds max.	-	DIP
Manual Soldering	300±5°C	< 3 seconds max.	30W or Temperature-controlled manual soldering	DIP

● PACKAGE

	Part Number	Package	Quantity	Total Quantity	Dimension(mm)
1.	RBS200112	PE bag	500 pcs	500 pcs	127L*178W
		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.



PE bag



Inner box



Carton

