



SENSOR SWITCH

Item.#	VBS02 Series	Description	VIBRATION SWITCH	Version	V97.0
Page	1 of 4		Date	Sep. 30, 2008	

● APPLICATIONS

1. Single Axis Vibration Detecting:
Step Counter
2. Centrifugal Force Detecting:
Tire Pressure Monitoring System
Electric Sawing Machine



● FEATURES

1. Small size & compact space.
2. With high-quality spring inside the housing.
3. Using Insert Molding Technology to increase strength between base and terminal.
4. All plastic material subject to industrial purpose meets with UL94V-0 grade; high temperature and fireproof function.
5. Suitable to IC trigger signal.
6. Complete replacement of mercury switch and meet with environmental protection.

● PATENTS

1. TAIWAN Patent NO. 181432
2. U.S.A. Patent NO. US 6,555,772 B1
3. CHINA Patent NO. ZL 01 2 59628.0



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Page	2 of 4		Date	Sep. 30, 2008	

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

VBS 02 06 00	Trigger Force Between 1.5G to 5G	Installation Position
VBS 02 06 01	Trigger Force Between 1.5G to 5G	Installation Position
VBS 02 07 00	Trigger Force Between 1.5G to 5G	Installation Position
VBS 02 07 01	Trigger Force Between 1.5G to 5G	Installation Position
VBS 02 08 01	Trigger Force Between 1.5G to 5G	P.C.B. Layout (DIP) / Installation Position



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Page	3 of 4		Date	Sep. 30, 2008	

● ELECTRICAL CHARACTERISTICS

1.	Contact Rating	25mA · 24VDC
2.	Switching type	Normal Open (NO)
3.	Insulation Resistance	1000MΩ min. At 100 VDC
4.	Dielectric Strength	500 VDC min. for 1 minute
5.	Capacitance	5pF max

● MECHANICAL CHARACTERISTICS

1.	Temperature Range	Operating: -25°C to +85°C (Tin Plated) -40°C to +125°C (Gold Plated) Storage: -40°C to +85°C (Tin Plated) -50°C to +150°C (Gold Plated)
2.	Pull Force of Terminal	500 gf for 1 minute
3.	Operation Life	100,000 Cycles (Tin Plated) 1,000,000 Cycles (Gold Plated)
4.	Vibration	Per MIL-STD-202F, Method 204D
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	Copper Alloy, Tin Plated over Nickel (VBS020600 and VBS020700) Copper Alloy, Gold Plated over Nickel (VBS020601, VBS020701, and VBS020801)
2.	Metal Cover	Copper Alloy, Gold Plated over Nickel
3.	Isolation Base	Glass-Fiber LCP, UL 94V-0
4.	Terminal	Copper Alloy, Gold Plated over Nickel
5.	Ball	Stainless steel, Gold Plated over Nickel
6.	Spring	Copper Alloy, Gold Plated over Nickel



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Page	4 of 4		Date	Sep. 30, 2008	

● PACKAGE

	Part Number	Package	Quantity	Total	Size
1.	VBS020600	PE Bag	1,000 pcs	1,000 pcs	12.7 x 17.8 (cm)
	VBS020601				
	VBS020700	Inner Box	10 Bags	10,000 pcs	36 x 20 x 9 (cm)
	VBS020701				
VBS020801	Carton	3 Boxes	30,000 pcs	36 x 28 x 23 (cm)	

* Minimum Order Quantity: One Bag

● NOTE

1. Suggestion Contact Rating: 5 mA.
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.

● 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.

d., Taipei, Taiwan, R. O. C.

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