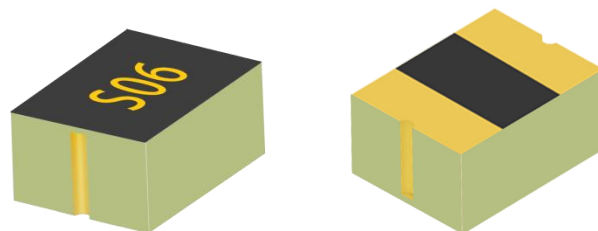


## SENSOR SWITCH

|          |        |             |                  |             |   |
|----------|--------|-------------|------------------|-------------|---|
| Item No. | S06    | Description | VIBRATION SWITCH | Version     | 4 |
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## ● FUNCTIONS

Omni-directional Vibration Detecting



## ● APPLICATIONS

1. GPS Tracker
2. TPMS
3. Alarm system, Anti-theft、Anti-tampered devices
4. Bicycle computer
5. RFID
6. Toys
7. Home automation
8. Wake up systems for power saving, Suck like remote controllers

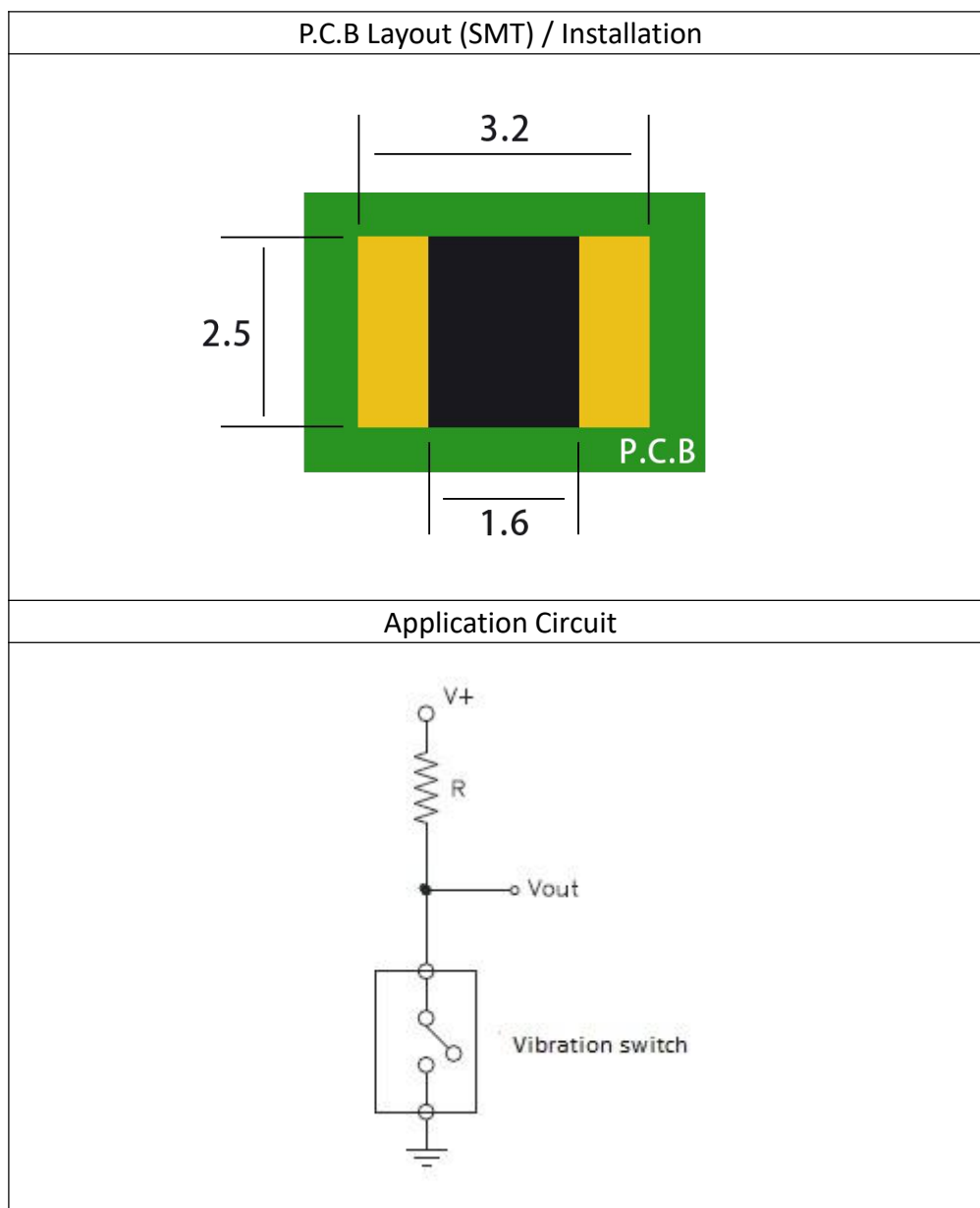
## ● DIMENSIONS / OPERATION

| S06 | Fleetingly Open When Being Vibrated From Any Position |
|-----|-------------------------------------------------------|
|     |                                                       |

## SENSOR SWITCH

|          |        |             |                  |             |   |
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● P.C.B LAYOUT (Unit: mm, Tolerance:  $\pm 0.1$  mm)



## SENSOR SWITCH

|          |        |             |                  |             |   |
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- Current / Voltage Suggested

| Input Current (mA) | Operating Voltage (V) | Condition |
|--------------------|-----------------------|-----------|
| <10                | 0.5 ~ 24              | --        |

- ELECTRICAL CHARACTERISTICS

|   |                         |                                |
|---|-------------------------|--------------------------------|
| 1 | Contact Rating          | 10 mA, 5 V DC                  |
| 2 | Insulation Resistance   | 1,000 M $\Omega$ min., 100V DC |
| 3 | Dielectric Strength     | 500 V DC min. for 1 minute     |
| 4 | Capacitance             | 5 pF Max.                      |
| 5 | Average Conductive Rate | 98% min.                       |

- RELIABLE TEST ITEMS

| Test Item             | Contents                             |
|-----------------------|--------------------------------------|
| IR Reflow             | Peak temp. = 260 °C *2 times         |
| Operating Temperature | -25 °C ~ 85 °C                       |
| Storage Temperature   | -40 °C ~ 85 °C                       |
| Humidity              | 40 °C / 95% RH                       |
| Mechanical Life       | 2 Hz, horizontal<br>50,000,000 times |
| Electrical Life       | 50,000,000 times                     |

## SENSOR SWITCH

|          |        |             |                  |         |   |
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## ● SOLDERING CONDITION

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

| Condition<br>Operation Method | Soldering Temperature | Soldering Time   | Wattage of Manual Soldering                     | Suitable Production Process |
|-------------------------------|-----------------------|------------------|-------------------------------------------------|-----------------------------|
| IR Reflow                     | 260±5℃                | < 5 seconds max. | --                                              | SMT                         |
| Manual Soldering              | 320±5℃                | < 3 seconds max. | 20 W or Temperature-controlled manual soldering | DIP、SMT                     |

## ● PACKAGE

| Part Number | Package     | Quantity |
|-------------|-------------|----------|
| S06         | Tape & Reel | 2500 pcs |

## SENSOR SWITCH

|          |        |             |                  |             |   |
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## ● FEATURES

1. Both Suitable for horizontal and vertical PCB.
2. The S06 acts like a normally closed switch chatters open and closed as it is vibrated. Note that the S06 is not guaranteed to be closed-----occasionally the sensing mechanism may remain open when at rest.The engineer should design his or her software to look for high-to-low and low-to-high edge transitions rather than an open or closed state of the switch.
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. RoHS compliance, an ideal substitute for mercury switch.
9. A more economical vibration detection option than IC design solution.
10. All made in China and examined before shipment.

## SENSOR SWITCH

|          |        |             |                  |             |   |
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## ● NOTE

1. Suggestion for usage : For vibration usage or application, we suggest to add hysteresis for IC.
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. If the product 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.