

MODEL: B200: NON-DIRECTIONAL VIBRATION SENSORS:

Features: Normal Close type, Non-directional Vibration type, Automatically return when no action.
Applications: for Battery power saving circuits, Burglar-proof tags etc.

Specifications:

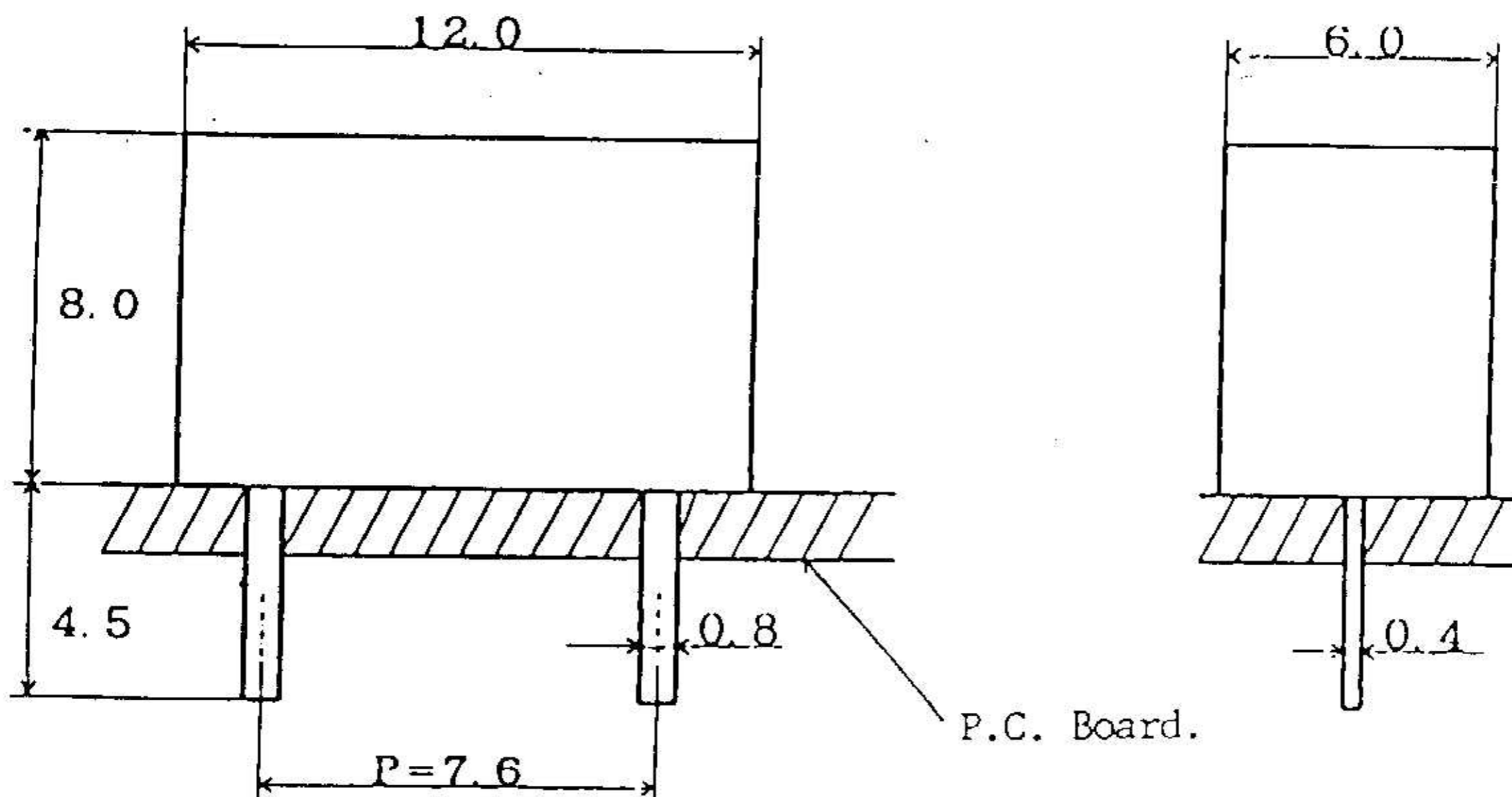
On-Off Operation:	Normal close, Non-directional vibrate sensing, Automatically return when no action, Chater at vibration.
Sensing Angle:	Non-directional type.
Sensing Sensitivity:	0.1G (Horizontal use), 1G (Vertical use) at 10Hz/S.
No. of Contacts:	Electrodo contacts 2 pcs.
Electrode Contacts:	Electric conduction ball contacts.
Air-Tightness:	Non-Water proof type.
Contact Capacity:	Less 30mA (resistance load) at 6V DC (max)
Resistance between Terminals:	Less 5 Ω (Initial value: less 1 Ω) at 6V DC/30mA.
Insulation Resistance:	Over 10M Ω at 100V AC (open circuit)
Dielectric Strength:	60 seconds at 100V AC, (open circuit), Leak current: less 1mA.
Using Temperature Range:	-30 $^{\circ}\text{C}$ ~ +80 $^{\circ}\text{C}$ (but ice-free places)
Endurance:	100,000 times at 6V DC (load resistance 10K Ω)
Vibration Proof:	10Hz.1G, XYZ directions for 8 hours vibration.
Shock Proof:	After giving 588m/S ² shock, no abnormal.
Humidity Proof & Insulation Resistance:	95%RH at 40 $^{\circ}\text{C}$, after 24 hours, no abnormal.
Heat Proof:	80 $^{\circ}\text{C}$, after 96h, no abnormal.
Cold Proof:	-30 $^{\circ}\text{C}$, after 96 hours, no abnormal.
Heat Cycle:	-30 $^{\circ}\text{C}$ and +80 $^{\circ}\text{C}$ each 2-hours x 10 times.
Dropping Test:	Drop 5 times from 100cm Height to a 30mm thick veneer board.
Dimensions:	12.0mm x 8.0mm x 6.0mm

Notice: SOLDERING: Please use by Hand soldering only.

Please do not use by Flow Soldering & Reflow Soldering.

In order to avoid mis-operating by the un-necessary vibrations, the additional circuit is provided.

DIMENSIONS & MOUNTING EXAMPLE:



GENERAL REFERENCE CIRCUITS FOR
B200 VIBRATION SENSOR:

DEC. 2. 2002

Circuit Conditions:

LED/Bz "OFF" at stop of vibration.

LED/Bz "ON" at vibration(Operating of all directions)

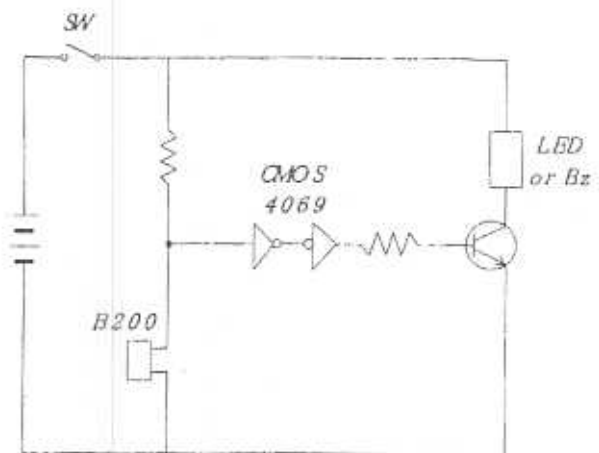
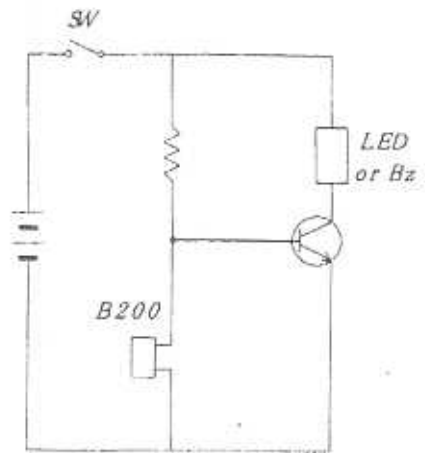
Remarks: When the customer will design the circuits to be used with B200 sensor, we recommend that the circuits will be designed and provided with the above "Circuit Conditions" due to saving of the consumption of battery.

Circuit without Micro-computer:

Operating current: 0.1 ~ 10mA.

Circuit with Micro-computer:

Operating current: Few μ A.



MODEL: B200: NON-DIRECTIONAL VIBRATION SENSOR:

Features: Sensing at small vibration of all-directions, XYZ axis.

Applications: Security circuits in bicycle lights, Burglar-proof tags etc.

Specifications:

ON-OFF Operation: Normal close type.
"CHATER" at vibration of all-direction in all positions.
"ON" at stop of vibration.

No. of Contacts: Electrode contacts, 2 pcs.

Electrode Contacts: Electric conduction ball contacts.

Air-Tightness: Non-water proof type.

Contact Capacity: Less 30mA(resistance load) at 6V DC(max.)

Resistance between Terminals: Less 5 ohms(Initial value: less 1 ohm) at 6V DC / 30mA.

Insulation Resistance: Over 10M ohms at 100V AC(open circuit)

Dielectric Strength: 60 seconds at 100V AC(open circuit)
Leak current: less 1mA.

Temperature Range: -30°C to +80°C(but ice free places)

Endurance: After 10,000,000 cycles(to X axis), Resistance value is satisfied(inspection by no-load)

Vibration Proof: 10Hz. 1G, after vibrate each 8 hours(XYZ axis), Resistance value is satisfied(inspection by no-load)

Heat Proof: +80°C, after 96 hours, no abnormal.

Cold Proof: -30°C, after 96 hours, no abnormal.

Dropping Test: Drop 5 times from 100cm. height to a 30mm. thick plywood board.

Dimensions: 12.0 mm x 7.0 mm x 5.5 mm.

Notice: Hand soldering only.
Low temperature solder under 240°C, within 3-second.
Do not use Flow & Reflow solderings.
In order to avoid mis-operating by un-necessary vibrations, the additional circuit is provided.

Specifications are subject to change without notice.

SIC:9/25/2001.