OMRON

Sealed Surface-mounting Tactile Switch

B3SN

Slim, Sealed Switches with Surface-mounting Terminals

- Slim profile helps to downsize products.
- Sealed construction conforming to IP67 (IEC-60529) provides high reliability in locations exposed to dust or water. (✻ Excluding the terminal section.)
- Available with ground terminals for protection against static electricity.
- Use of a stainless-steel spring provides a crisp clicking action.
- Gold-plating enables stable contact and insulation over long periods of time.
- Available in embossed taping packages for automatic insertion.



RoHS Compliant (Refer to page 8 for details.)

Ordering Information

■ List of Models

Type	Bags (in units of 100 Switches)	Embossed taping (in units of 3,000 Switches)
Standard, without ground terminal	B3SN-3012	B3SN-3012P
Standard, with ground terminal	B3SN-3112	B3SN-3112P
Gold-plated, without ground terminal	---	B3SN-3012P-G

Note: Switches in bags must be ordered in units of 100 pieces, and Switches on embossed taping must be ordered in units of 3,000 pieces. Individual Switches are not sold individually.

Specifications

■ Ratings/Characteristics

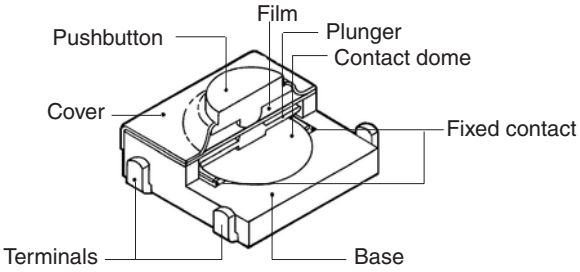
Switching capacity	1 to 50 mA, 5 to 24 VDC (resistive load)
Ambient operating temperature	–25°C to 70°C at 60% max. humidity (with no icing or condensation)
Ambient operating humidity	35% to 85% (at 5 to 35°C)
Contact configuration	SPST-NO
Contact resistance	100 mΩ max. (initial value) (rated: 1 mA, 5 VDC)
Insulation resistance	100 MΩ min. (at 250 VDC)
Dielectric strength	250 VAC, 50/60 Hz for 1 min
Bounce time	5 ms max.
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction: 1,000 m/s^2 {approx. 100G} max.
Life expectancy	100,000 operations min.
Weight	Approx. 0.2 g

■ Operating Characteristics

Item / Type	Standard	Gold-plated (B3SN-G)
Operating force (OF)	1.57±0.49 N {160±50 gf} max.	1.76±0.59 N {180 gf} max.
Releasing force (RF)	0.29 N {30 gf} min.	

Item / Type	Standard	Gold-plated (B3SN-G)
Pretravel (PT)	0.25±0.15 mm	

Nomenclature



Dimensions

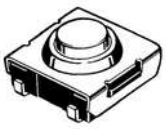
Note: **1.** All units are in millimeters unless otherwise indicated. Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

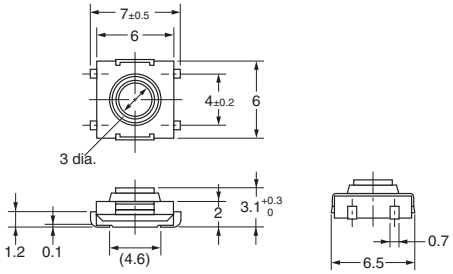
2. No terminal numbers are indicated on the Switches. The numbers used for terminals in the following graphics are indicated in the "Bottom View" diagram below. In this diagram, the Switch is rotated so that the terminals are on the right and left-hand sides, and the OMRON logo appears the right way up.



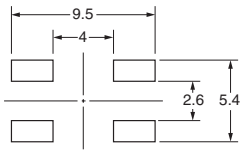
Without Ground Terminal

B3SN-3012
B3SN-3012P
B3SN-3012G

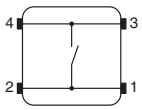




PCB Pad (Top View)

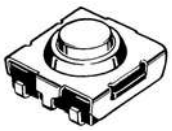


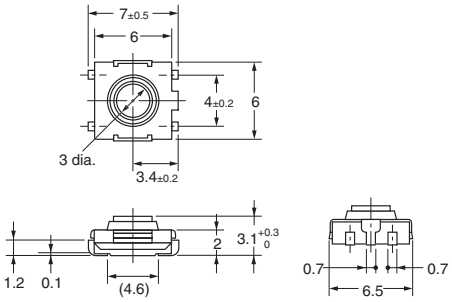
Terminal Arrangement /Internal Connections (Top View)



With Ground Terminal

B3SN-3112
B3SN-3112P





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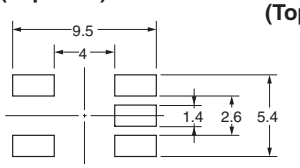

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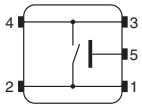

Precautions

Be sure to read the precautions common to all Tactile Switches on pages 5 to 7 for correct use.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. C096-E1-04A