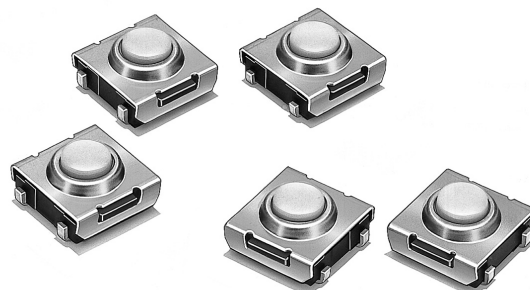


Tactile Switch (SMD)

B3SN

Compact Surface Mount Tactile Switch with Sealed Construction

- Sealed construction conforming to IP67 (IEC-60529) provides high reliability in locations exposed to dust or water.
- Available with ground terminals for protection against static electricity.
- Use of a stainless-steel spring provides a crisp clicking action.
- Gold plated version enables stable contact and insulation over long periods of time.
- Available in embossed taping package for automatic insertion.
- RoHS Compliant



Ordering Information

Switch height	Operating force	Model			
		Without ground terminal		With ground terminal	
		Bags (100 per bag)	Embossed Tape (3,000 per reel)	Bags (100 per bag)	Embossed Tape (3,000 per reel)
3.1 mm	Standard 160g	B3SN-3012	B3SN-3012P	B3SN-3112	B3SN-3112P
	Gold-plated 180g	---	B3SN-3012P-G	---	---

Note: Order in multiples of the quantities given for each package

Important Note: Switches cannot be water-washed.

Specifications

■ Characteristics

Contact form	SPST-NO
Switching capacity	1 to 50 mA, 5 to 24 VDC (resistive load)
Contact resistance	100 mΩ max. (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. 100 G) max.
Ambient operating temperature	-25° to 70°C (at 60% RH max.) with no icing or condensation
Ambient operating humidity	35% to 85% (at 5 to 35°C)
Service life	100,000 operations min.
Weight	Approx. 0.20 g

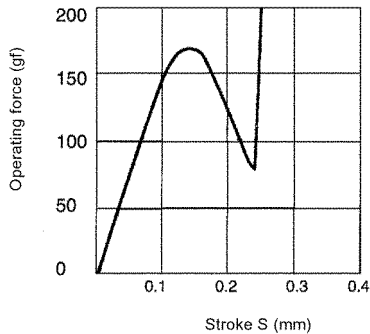
Note: Data shown are of initial value.

■ Operating Characteristics

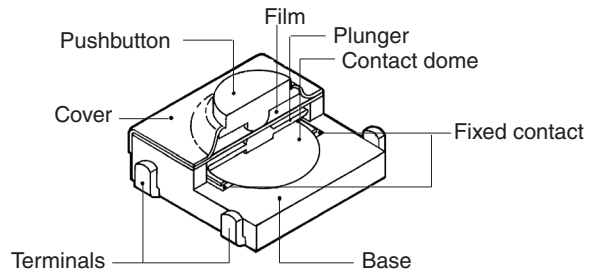
Characteristics	Standard (B3SN)	Gold-plated (B3SN-G)
Operating force (OF)	160 ± 50 g	180 ± 60 g
Release force (RF) min.	30 g	
Pretravel (PT)	0.25 ± 0.15 mm	

Engineering Data

■ Operating Force vs. Stroke (typical example)



■ Construction

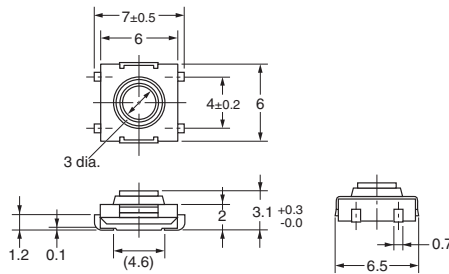
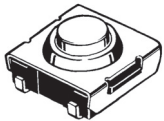


Dimensions

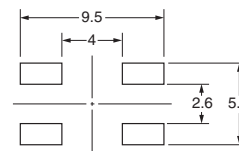
- Note:**
- Unless otherwise specified, all units are in millimeters and a tolerance of ± 0.4 mm applies to all dimensions.
 - Terminal numbers are not indicated on this switch. With the switch turned over so that the logo mark "OMRON" is visible on the upper part of the rear side of the switch base, the terminal on the right of the logo mark is numbered "1" and that on the bottom right is "3". Accordingly, two terminals on the left side are numbered "2" and "4" respectively.

Without Ground Terminal

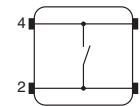
B3SN-3012
B3SN-3012P
B3SN-3012G



PCB Pad (Top View)

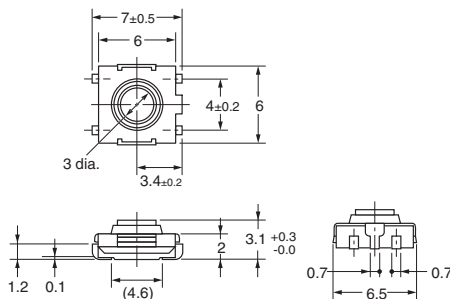
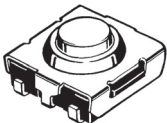


Terminal Arrangement /Internal Connections (Top View)

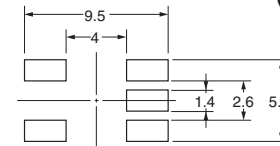


With Ground Terminal

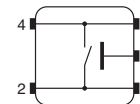
B3SN-3112
B3SN-3112P



PCB Pad (Top View)



Terminal Arrangement /Internal Connections (Top View)



Precautions

Be sure to read the precautions common to all Tactile Switches, contained in the Technical User's Guide, "Tactile Switches, Technical Information" for correct use.



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

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Specifications subject to change without notice

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Tactile Switch (SMD) **B3SN**