

Sealed Tactile Switch (SMT)

B3S

Surface-mounting Switches with a Sealed Structure for High Reliability.
Available on Embossed Tape

- Sealed construction conforming to IP67 (IEC-60529) provides high contact reliability in locations exposed to dust or water. (* Excluding the terminal section.)
- Surface-mounting terminals for high-density mounting.
- Ground terminal available to protect against static electricity.
- Available in embossed taping packages for automatic mounting.



■List of Models

6 × 6 mm Models

					Without ground terminal				With ground terminal			
					Bags		Embossed taping		Bags		Embossed taping	
					Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit
B3S-1000 Series	Silver plated	4.3 mm	1.57 N max.	Ivory	B3S-1000	100 pcs	B3S-1000P	1,000 pcs	B3S-1100	100 pcs	B3S-1100P	1,000 pcs
			2.26 N max.	Black	B3S-1002		B3S-1002P		B3S-1102		B3S-1102P	

Note: Switches in bags must be ordered in units of 100 Switches, and Switches on embossed taping must be ordered in units of 1,000 Switches.

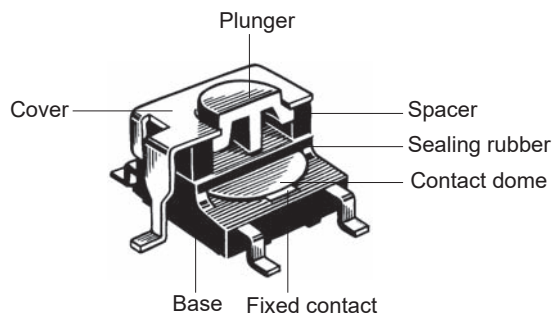
■Ratings/Characteristics

Rating (resistive load)	1 to 50 mA, 3 to 24 VDC
Minimum applicable load (reference value)	10 μ A at 1 VDC (resistive load)
Ambient operating temperature	-25°C to +70°C at 60%RH max. (with no icing or condensation)
Ambient operating humidity	35% to 85% (at +5 to +35°C)
Contact form	SPST-NO
Contact resistance (initial value)	100 m Ω max.
Insulation resistance	100 M Ω min. (at 250 VDC with insulation tester)
Dielectric strength	500 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. Malfunction: 100 m/s ² {approx. 10G} max.
Durability	Standard force models (1.57 N): 500,000 operations min. High-force models (2.26 N): 300,000 operations min.
Weight	Approx. 0.3 g
Degree of protection	IEC IP67 equivalent
Washing	Possible

■Operating Characteristics

Item	Type	B3S Series	
	Operating force (OF)	1.57 N	2.26 N
	Model	B3S-1□00	B3S-1□02
Operating force (OF)		1.57 N max.	2.26 N max.
Releasing force (RF)		0.2 N min.	0.49 N min.
Pretravel (PT)		0.25 ^{+0.2} / _{-0.1} mm	

Model Structure



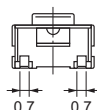
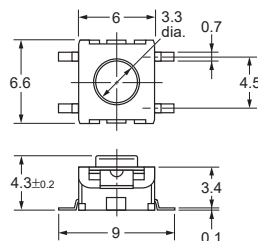
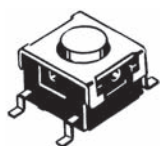
Dimensions

CAD Data marked products, 2D drawings and 3D CAD models are available.
For CAD information, please visit our website, which is noted on the last page.

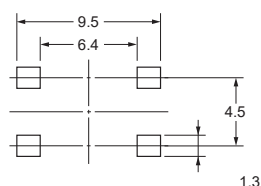
(Unit: mm)

Without Ground Terminal

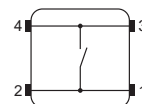
B3S-1000
B3S-1002



PCB Pad (Top View)



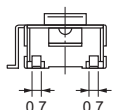
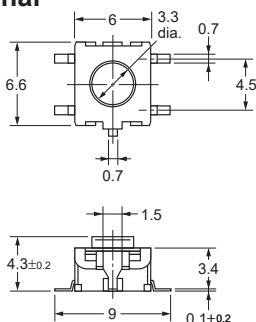
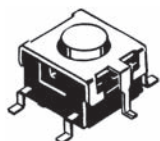
Terminal Arrangement / Internal Connections (Top View)



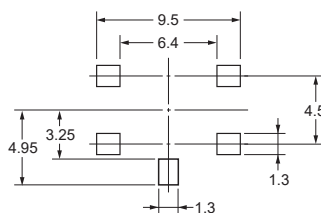
CAD Data

With Ground Terminal

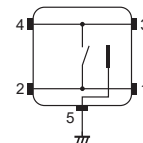
B3S-1100
B3S-1102



PCB Pad (Top View)



Terminal Arrangement / Internal Connections (Top View)



CAD Data

Note: 1. 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.

2. Unless otherwise specified, a tolerance of ± 0.3 mm applies to all dimensions. No terminal numbers are indicated on the Switches.



Precautions

Be sure to read the safety precautions common to all Tactile Switches for correct use.

Please check each region's Terms & Conditions by region website.

OMRON Corporation

Device & Module Solutions Company

Regional Contact	
Americas https://components.omron.com/us	Europe https://components.omron.com/eu
Asia-Pacific https://components.omron.com/ap	China https://components.omron.com.cn
Korea https://components.omron.com/kr	Japan https://components.omron.com/jp