Surface-mounting Tactile Switch for High-density Packaging

- ROHS compliant.
- Dust-sealed construction provides high reliability in locations exposed to dust.
- SMD Tactile Switch ideal for high-density mounting.
- Sealed construction conforming to IP64 (IEC-529). Can be washed after soldering.
- Ground terminal available to protect against static electricity.



Ordering Information

6 x 6 mm Type B3S-1000

Operating force (OF)		Height	Without ground terminal		With ground terminal	
			Bags (100 Switches)	Embossed tape (1,000 Switches)	Bags (100 Switches)	Embossed tape (1,000 Switches)
Standard-force	1.57 N {160 gf}	4.3 mm	B3S-1000	B3S-1000P	B3S-1100	B3S-1100P
High-force	2.26 N {230 gf}		B3S-1002	B3S-1002P	B3S-1102	B3S-1102P

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

Specifications

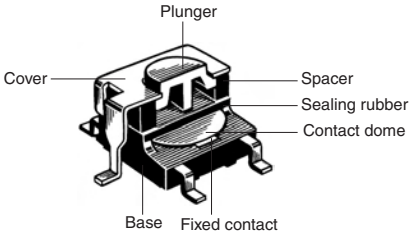
■ Ratings/Characteristics

Switching capacity	5 to 24 VDC, 1 to 50 mA (resistive load)
Insulation voltage	30 VDC
Ambient temperature	Operating: -25°C to 70°C, at 60% maximum (with no icing)
Ambient humidity	Operating: 35% to 85% (for +5°C 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	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.
Life expectancy	Standard force models (1.57 N): 500,000 operations min. High-force models (2.25 N): 300,000 operations min.
Weight	Approx. 0.3 g

■ Operating Characteristics

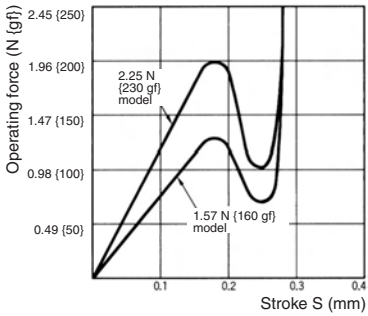
Item	B3S-1□00	B3S-1□02
Operating force (OF)	1.57 N {160 gf} max.	2.26 N {230 gf} max.
Releasing force (RF)	0.2 N {20 gf} min.	0.49 N {50 gf} min.
Pretravel (PT)	$0.25^{+0.2}_{-0.1}$ mm	

Nomenclature



Engineering Data

Operating Force vs. Stroke (Typical)



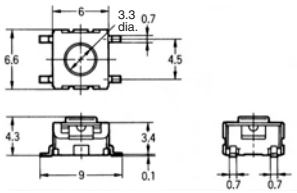
Dimensions

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

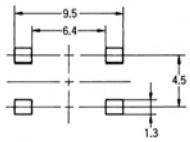
Without Ground Terminal

B3S-1000
B3S-1002

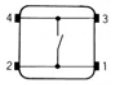




PCB Mounting (Top View)



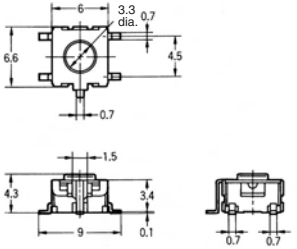
Terminal Arrangement /Internal Connections (Top View)



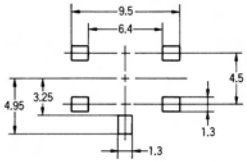
With Ground Terminal

B3S-1100
B3S-1102

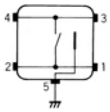




PCB Mounting (Top View)



Terminal Arrangement /Internal Connections (Top View)



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