

Tactile Switch (SMD)




B3FS

Surface-mounting Switches Ideal for High-density Mounting

- Tape packing style also available
- Allows reflow soldering
- Incorporates a snap-action contact mechanism that ensures sharp switching operations
- 3 actuator heights for design flexibility
- RoHS Compliant



Ordering Information

Type	Item			Model	
	Plunger	Height x pitch	Operating force (OF)	Bag (See Note 1.)	Embossed tape (See Note 2.) (qty./reel)
Standard 6 x 6 mm	Flat 	3.1 x 8.0 mm	General-purpose: 100 gf	B3FS-1000	B3FS-1000P (3000)
			High-force: 150 gf	B3FS-1002	B3FS-1002P (3000)
	Flat 	4.3 x 8.0 mm	General-purpose: 100 gf	B3FS-1010	B3FS-1010P (1000)
			High-force: 150 gf	B3FS-1012	B3FS-1012P (1000)
	Projected 	7.3 x 8.0 mm	General-purpose: 100 gf	B3FS-1050	B3FS-1050P (1000)
			High-force: 150 gf	B3FS-1052	B3FS-1052P (1000)

Note: 1. Orders must be made in units of 100 pieces.

2. Orders must be made in units of 3,000 pieces. For the packing style, refer to *Key Switch Packing* under Precautions section.

Important Note: Switches cannot be water-washed.

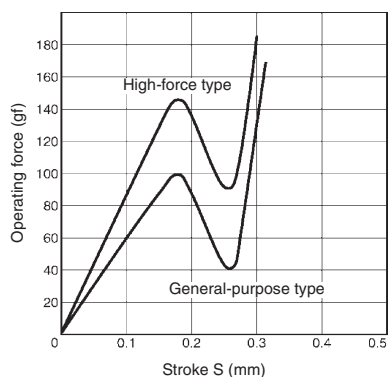
Specifications

■ Characteristics

Switching capacity		50 mA, 24 VDC (resistive load)
Contact form		SPST-NO
Contact material		Silver plating
Contact resistance		100 mΩ max. (initial value) (rated: 1 mA, 5 VDC)
Insulation resistance		100 MΩ min. (at 100 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 min. {approx. 100G min.}
Life expectancy	General-purpose	1,000,000 operations min.
	High-force type	300,000 operations min.
Ambient temperature	Operating	–25°C to +70°C
Ambient humidity	Operating	35% to 85%
Weight		Approx. 0.2 g

Engineering Data

■ Operating Force vs Stroke (Typical Example)



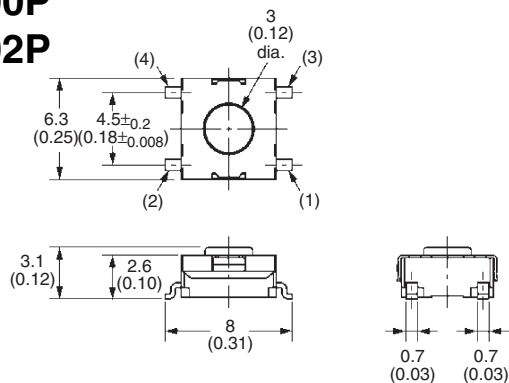
■ Operating Characteristics

Characteristics	B3FS-1000 series	
	General-purpose	High-force
Operating force (OF) max.	100 ± 30 gf	150 ± 50 gf
Releasing force (RF) min.	20 gf	50 gf
Pretravel (PT)	0.25 ^{+0.2} _{–0.1} mm	

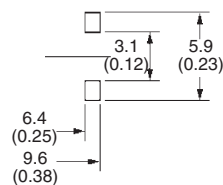
Dimensions

Unit: mm (inch)

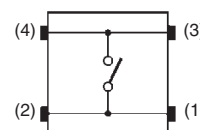
■ B3FS-1000 B3FS-1002 B3FS-1000P B3FS-1002P



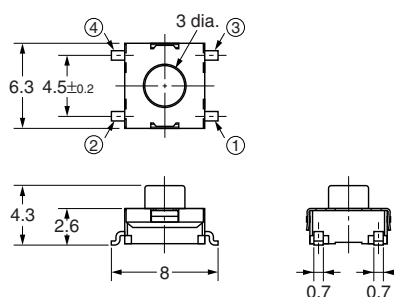
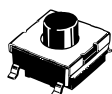
PCB Pad
(Top View)
(One-side PCB $t = 1.6$)



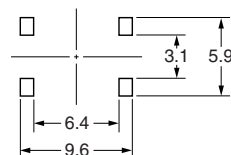
Terminal Arrangement/
Internal Connection
(Top View)



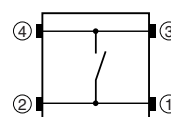
■ B3FS-1010 B3FS-1012 B3FS-1010P B3FS-1012P



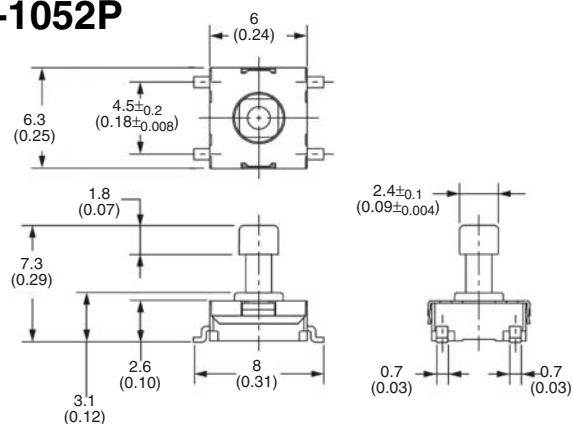
PCB Pad
(Top View)
(One-side PCB $t = 1.6$)



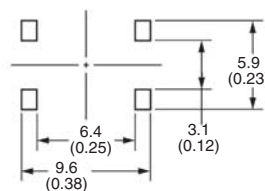
Terminal Arrangement/
Internal Connection
(Top View)



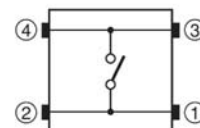
■ B3FS-1050 B3FS-1052 B3FS-1050P B3FS-1052P



PCB Pad
(Top View)
(One-side PCB $t = 1.6$)



Terminal Arrangement/
Internal Connection
(Top View)



Hints on Correct Use

See the Tactile Switch User's Guide, "Tactile Switches - Technical Information" for information regarding processing and handling.

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To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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**OMRON ELECTRONIC
COMPONENTS LLC**

55 E. Commerce Drive, Suite B
Schaumburg, IL 60173

847-882-2288

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