

B3FS

Tactile Switch (SMT)

6 × 6-mm Surface-mounting Switches for High-density Mounting. Available on Embossed Tape

- Provide a sharp click and high durability.
- Tape packing style also available.
- B32-series Key Tops mount to models with projected plungers.
- A small package containing 100 embossed taping reels is available, in addition to the standard package.



Model Number Legend

B3FS - 10 P -

(1) (2) (3)

(1) Plunger types

- 0 : Flat type (Height 3.1 mm)
- 1 : Flat type (Height 4.3 mm)
- 5 : Projected type
- 9 : Key top integrated type

(2) Force required for operation (Operating Force)

- 0 : 0.98 N
- 2 : 1.47 N
- 5 : 2.55 N

(3) Key-top height / Small-package capability

- No display : Standard
- A : 7.0 mm
- R100 : 100 pcs

List of Models

6 × 6 mm Models

Type	Contact material	Plunger type	Height	Operating force (OF)	Plunger color	Packaging		Bag		Embossed taping	
						Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit
B3FS-1000 models	Silver plated	 (Flat type)	3.1 mm	0.98 N	Black	B3FS-1000	100 pcs	B3FS-1000P B3FS-1000P-R100	3,000 pcs 100 pcs		
				1.47 N	Ivory	B3FS-1002		B3FS-1002P B3FS-1002P-R100	3,000 pcs 100 pcs		
				2.55 N	Blue	B3FS-1005		B3FS-1005P	3,000 pcs		
		 (Flat type)	4.3 mm	0.98 N	Black	B3FS-1010		B3FS-1010P B3FS-1010P-R100	1,000 pcs 100 pcs		
				1.47 N	Ivory	B3FS-1012		B3FS-1012P B3FS-1012P-R100	1,000 pcs 100 pcs		
				2.55 N	Blue	B3FS-1015		B3FS-1015P			
		 (Projected type)	7.3 mm	0.98 N	Black	B3FS-1050		B3FS-1050P			1,000 pcs
				1.47 N	Yellow	B3FS-1052		B3FS-1052P			
		 (Key top integrated type)	4.9 mm	1.47 N	Black	---	---	B3FS-1092P	900 pcs		
			4.9 mm	2.55 N				B3FS-1095P	900 pcs		
			7.0 mm	1.47 N				B3FS-1092P-A	700 pcs		

Note: Order in multiples of the minimum order unit. Switches are not sold individually.

■ 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 100 VDC with insulation tester)
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 max.
	Malfunction	100 m/s ² max.
Durability		Standard models (OF: 0.98 N): 1,000,000 operations min. High-force models (OF: 1.47 N): 300,000 operations min. High-force models (OF: 2.55 N): 100,000 operations min.
Weight		Approx. 0.2 g
Degree of protection		IEC IP00 equivalent
Washing		Not possible

■ Operating Characteristics

● 6 × 6 mm Models

Item	Type	B3FS-1000				
	Operating force (OF)	0.98 N	1.47 N		2.55 N	
	Model	B3FS-10□0P	B3FS-10□2P	B3FS-1092P	B3FS-10□5P	B3FS-1095P
Operating force (OF)		0.98±0.29 N	1.47±0.49 N	1.47±0.49 N	2.55±0.69 N	2.55±0.69 N
Releasing force (RF)		0.2 N min.	0.49 N min.	0.2 N min.	0.49 N min.	0.2 N min.
Pretravel (PT)		0.25 ^{+0.2} / _{-0.1} mm				

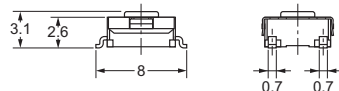
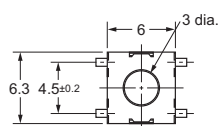
Dimensions

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.

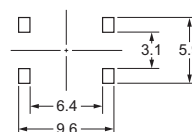
6 × 6 mm Models

Flat Type

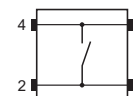
B3FS-1000
B3FS-1002
B3FS-1005
B3FS-1000P
B3FS-1002P
B3FS-1005P
B3FS-1000P-R100
B3FS-1002P-R100



PCB Pad
(Top View)
(PCB t= 1.6)



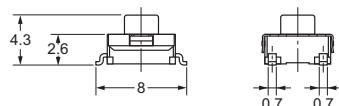
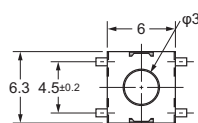
Terminal Arrangement/
Internal Connection
(Top View)



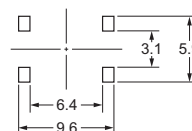
CAD Data

Flat Type

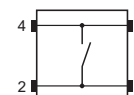
B3FS-1010
B3FS-1012
B3FS-1015
B3FS-1010P
B3FS-1012P
B3FS-1015P
B3FS-1010P-R100
B3FS-1012P-R100



PCB Pad
(Top View)
(PCB t= 1.6)



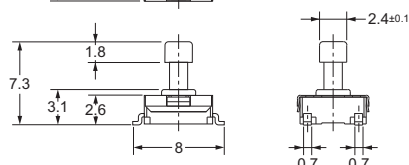
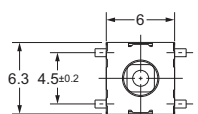
Terminal Arrangement/
Internal Connection
(Top View)



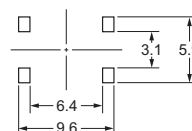
CAD Data

Projected Type

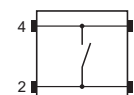
B3FS-1050
B3FS-1052
B3FS-1050P
B3FS-1052P



PCB Pad
(Top View)
(PCB t= 1.6)



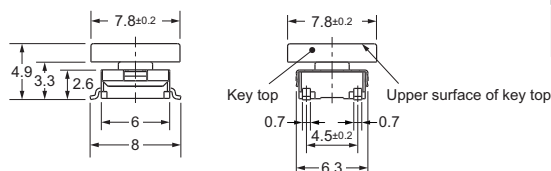
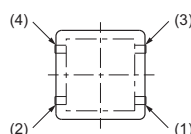
Terminal Arrangement/
Internal Connection
(Top View)



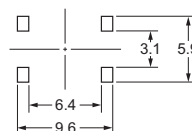
CAD Data

Key Top Integrated Type

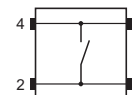
B3FS-1092P
B3FS-1095P



PCB Pad
(Top View)
(PCB t= 1.6)

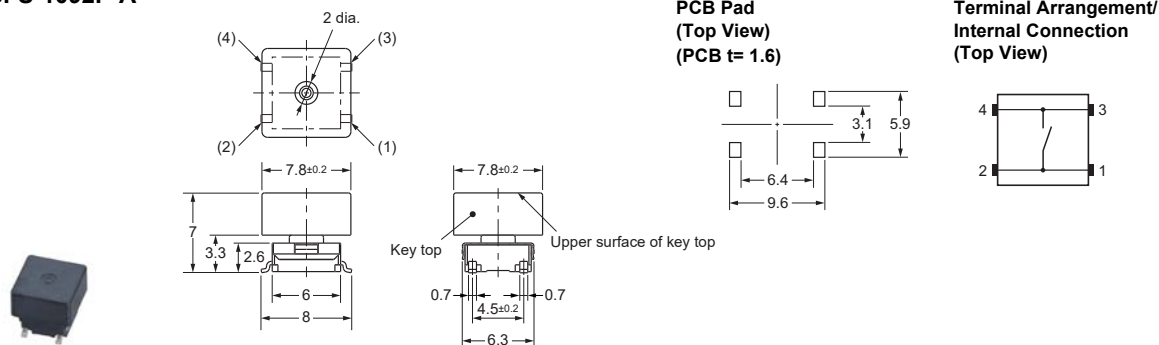


Terminal Arrangement/
Internal Connection
(Top View)



CAD Data

● Key Top Integrated Type B3FS-1092P-A



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.



Note: 2. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions. No terminal numbers are indicated on the Switches.

■ Key Tops

B32-series Key Tops are available for projected plungers. Refer to the Datasheet of B32 for details.

■ Precautions

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

MEMO

This image shows a full page of blank graph paper. The grid consists of small, evenly spaced squares formed by thin, light gray lines. There are no margins, text, or other markings on the page.

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