OMRON

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)	Packaging: Plunger color	Bag: Model	Bag: Minimum packing unit	Embossed taping: Model	Embossed taping: 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**	1,000 pcs
		(Projected type)	7.3 mm	0.98 N	Black	**B3FS-1050**		**B3FS-1050P**	
				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 μA 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 mΩ max.
Insulation resistance		100 MΩ 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/s² max.
	Malfunction	100 m/s² 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

Type	**B3FS-1000**				
Operating force (OF)	**0.98 N**	**1.47 N**		**2.55 N**	
Item / 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

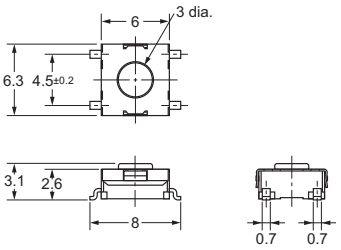
CAD Data marked products, 2D drawings and 3D CAD models are available.
For CAD information, please visit our website, which is noted on the last page.

(Unit: mm)

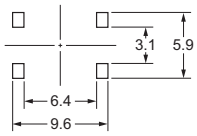
●6 × 6 mm Models

●Flat Type

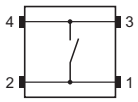
B3FS-1000
B3FS-1002
B3FS-1005
B3FS-1000P
B3FS-1002P
B3FS-1005P
B3FS-1000P-R100
B3FS-1002P-R100



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



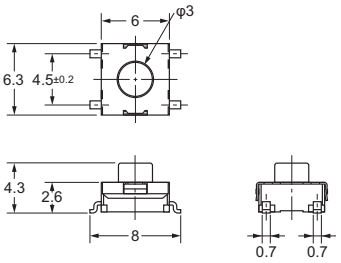
Terminal Arrangement/ Internal Connection (Top View)



CAD Data

●Flat Type

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



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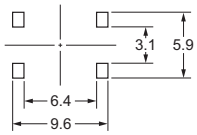
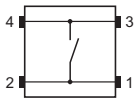


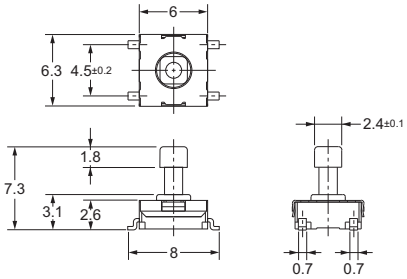
Terminal Arrangement/ Internal Connection (Top View)



CAD Data

●Projected Type

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



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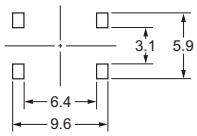
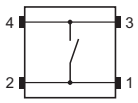


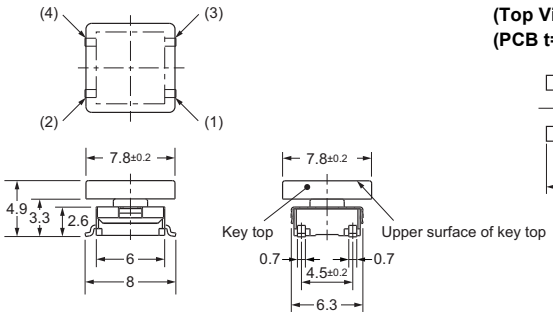
Terminal Arrangement/ Internal Connection (Top View)



CAD Data

●Key Top Integrated Type

B3FS-1092P
B3FS-1095P



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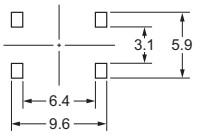
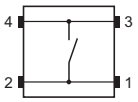
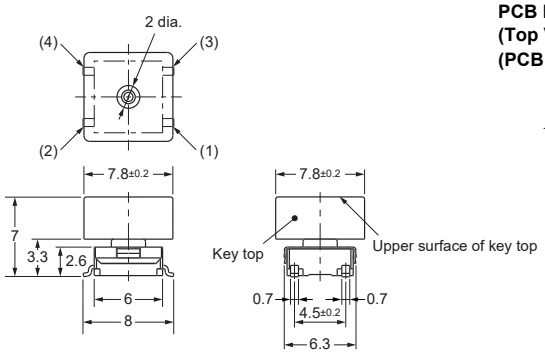


Terminal Arrangement/ Internal Connection (Top View)

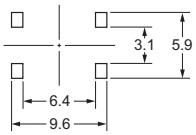


CAD Data

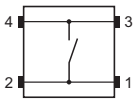
●Key Top Integrated Type
B3FS-1092P-A



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



Terminal Arrangement/
Internal Connection
(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.

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

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Device & Module Solutions Company

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