OMRON

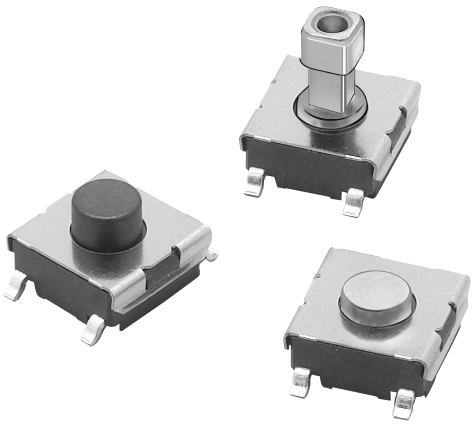
Tactile Switch (SMT)

B3FS

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

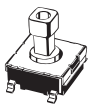
- Provide a sharp click and high durability.
- Tape packing style also available.
- B32-series Key Tops mount to models with projected plungers.
- A small package containing 100 embossed taping reels is available,in addition to the standard package.

RoHS Compliant



■ List of Models

6 × 6 mm Models

Type	Contact material	Plunger type	Height	Operating force (OF)	Plunger color	Bag		Embossed taping	
						Model	Minimum packing unit	Model	Minimum packing unit
B3FS-1000 models	Silver plated	 (Flat type)	3.1 mm	0.98 N {100 gf}	Black	B3FS-1000	100 pcs	B3FS-1000P	3,000 pcs
								B3FS-1000P-R100	100 pcs
				1.47 N {150 gf}	Ivory	B3FS-1002		B3FS-1002P	3,000 pcs
								B3FS-1002P-R100	100 pcs
				2.55 N {260 gf}	Blue	B3FS-1005		B3FS-1005P	3,000 pcs
		 (Flat type)	4.3 mm	0.98 N {100 gf}	Black	B3FS-1010		B3FS-1010P	1,000 pcs
								B3FS-1010P-R100	100 pcs
				1.47 N {150 gf}	Ivory	B3FS-1012		B3FS-1012P	1,000 pcs
								B3FS-1012P-R100	100 pcs
				2.55 N {260 gf}	Blue	B3FS-1015		B3FS-1015P	1,000 pcs
		 (Projected type)	7.3 mm	0.98 N {100 gf}	Black	B3FS-1050		B3FS-1050P	
				1.47 N {150 gf}	Yellow	B3FS-1052		B3FS-1052P	

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/s^2 {approx. 100G} max. Malfunction: 100 m/s^2 {approx. 10G} max.
Durability	Standard models (OF: 0.98 N {100 gf}): 1,000,000 operations min. High-force models (OF: 1.47 N {150 gf}): 300,000 operations min. High-force models (OF: 2.55 N {260 gf}): 100,000 operations min.
Weight	Approx. 0.2 g
Degree of protection	IEC IP00
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□0□**	**B3FS-10□2□**	**B3FS-10□5□**
Operating force (OF)	0.98±0.29 N {100±30 gf}	1.47±0.49 N {150±50 gf}	2.55±0.69 N {260±70 gf}
Releasing force (RF)	0.2 N {20 gf} min.	0.49 N {50 gf} min.	0.49 N {50 gf} min.
Pretravel (PT)	$0.25\ ^{+0.2}/_{-0.1}$ mm		

■ Dimensions (Unit: mm)

Note: 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.

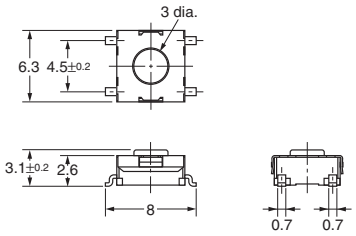


6 × 6 mm Models

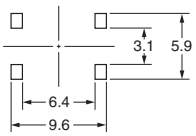
Flat Type

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

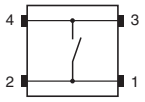




PCB Pad
(Top View)
(PCB t= 1.6)



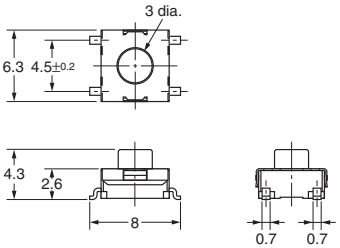
Terminal Arrangement/ Internal Connection
(Top View)



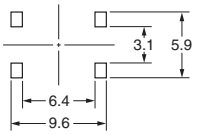
Flat Type

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

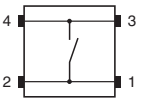




PCB Pad
(Top View)
(PCB t= 1.6)

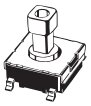


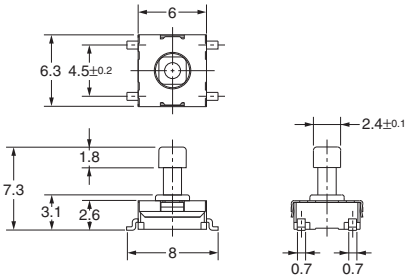
Terminal Arrangement/ Internal Connection
(Top View)



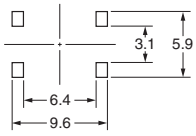
Projected Type

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

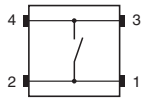




PCB Pad
(Top View)
(PCB t= 1.6)



Terminal Arrangement/ Internal Connection
(Top View)



Note: 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.

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

OMRON Corporation

Electronic and Mechanical Components Company

Regional Contact

Americas
https://www.components.omron.com/

Europe
http://components.omron.eu/

Asia-Pacific
https://ecb.omron.com.sg/

China
https://www.ecb.omron.com.cn/

Korea
https://www.omron-ecb.co.kr/

Japan
https://www.omron.co.jp/ecb/

© OMRON Corporation 2007-2019 All Rights Reserved.
In the interest of product improvement, specifications are subject to change without notice.

Cat. No. A113-E1-06
0719(0207)(O)