

B3S-1000P Datasheet



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DiGi Electronics Part Number	B3S-1000P-DG
Manufacturer	Omron Electronics Inc-EMC Div
Manufacturer Product Number	B3S-1000P
Description	SWITCH TACTILE SPST-NO 0.05A 24V
Detailed Description	Tactile Switch SPST-NO Top Actuated Surface Mount

This model B3S-1000P is available at DiGi Electronics.

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Purchase and inquiry

Manufacturer Product Number:

B3S-1000P

Series:

B3S

Circuit:

SPST-NO

Contact Rating @ Voltage:

0.05A @ 24VDC

Mounting Type:

Surface Mount

Actuator Length, Right Angle:

-

Termination Style:

Gull Wing

Illumination:

Non-Illuminated

Illumination Voltage (Nominal):

-

Ingress Protection:

IP67 - Dust Tight, Waterproof

Operating Temperature:

-25°C ~ 70°C

Switch Travel:

0.25mm

Base Product Number:

B3S

Manufacturer:

Omron Electronics Inc-EMC Div

Product Status:

Active

Switch Function:

Off-Mom

Actuator Type:

Standard

Actuator Height off PCB, Vertical:

4.30mm

Actuator Orientation:

Top Actuated

Outline:

6.60mm x 6.00mm

Illumination Type, Color:

-

Operating Force:

160gf

Features:

Sealed - Fully

Actuator Material:

-

Mechanical Life:

500,000 Cycles

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8536.50.9031

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

OMRON**Sealed Tactile Switch (SMT)****B3S****Surface-mounting Switches with a Sealed Structure for High Reliability.****Available on Embossed Tape**

- Sealed construction conforming to IP67 (IEC-60529) provides high contact reliability in locations exposed to dust or water. (* Excluding the terminal section.)
- Surface-mounting terminals for high-density mounting.
- Ground terminal available to protect against static electricity.
- Available in embossed taping packages for automatic mounting.



RoHS Compliant

■ List of Models**6 × 6 mm Models**

Operation type	Contact material	Height	Operating force (OF)	Plunger color	Without ground terminal				With ground terminal			
					Bags		Embossed taping		Bags		Embossed taping	
					Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit	Model	Minimum packing unit
B3S-1000 Series	Silver plated	4.3 mm	1.57 N {160 gf} max.	Ivory	B3S-1000	100 pcs	B3S-1000P	1,000 pcs	B3S-1100	100 pcs	B3S-1100P	1,000 pcs
			2.26 N {230 gf} max.	Yellow	B3S-1002		B3S-1002P		B3S-1102		B3S-1102P	

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

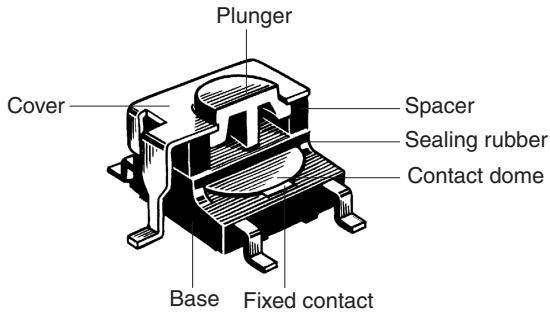
■ Ratings/Characteristics

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 250 VDC with insulation tester)
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.
Durability	Standard force models (1.57 N {160 gf}): 500,000 operations min. High-force models (2.26 N {230 gf}): 300,000 operations min.
Weight	Approx. 0.3 g
Degree of protection	IEC IP67
Washing	Possible

■ Operating Characteristics

Item	Type Operating force (OF) Model	B3S Series	
		1.57 N B3S-1□00	2.26 N 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	

■ Model Structure



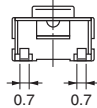
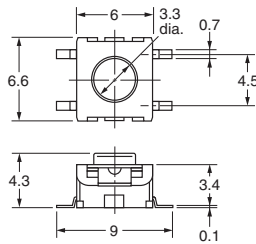
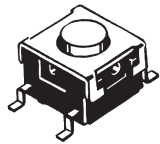
■ Dimensions (Unit: mm)

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.

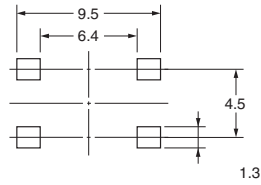


Without Ground Terminal

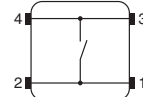
B3S-1000
B3S-1002



PCB Pad (Top View)

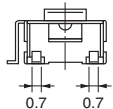
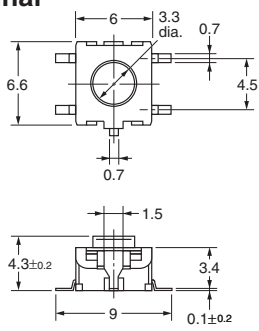
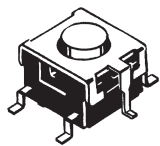


Terminal Arrangement /Internal Connections (Top View)

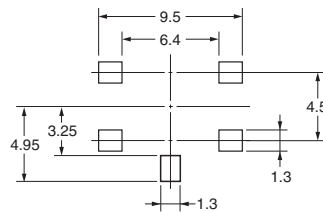


With Ground Terminal

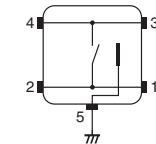
B3S-1100
B3S-1102



PCB Pad (Top View)



Terminal Arrangement /Internal Connections (Top View)



Note: Unless otherwise specified, a tolerance of ± 0.3 mm applies to all dimensions. No terminal numbers are indicated on the Switches.

■ Precautions

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

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