

Subminiature Basic Switch


D3C

A Low-cost Subminiature Switch With a Built-in Slide Mechanism

- Compact (8 x 6 x 4.2 (W x H x D)) and light (approximately 0.3 g).
- Built-in slide mechanism for selecting shorting or non-shorting timing of the switch.
- Available with a 3-mm long stroke.
- Ideal for household appliances, sound equipment, office equipment, communications equipment, etc.



Ordering Information

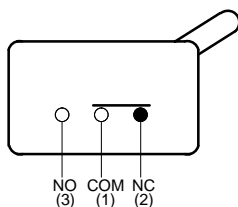
Actuator	General-purpose		Low operating force	
	Non-shorting Model	Shorting Model	Non-shorting Model	Shorting Model
Hinge lever 	D3C-1210	D3C-2210	D3C-1220	D3C-2220

Specifications

■ Characteristics

Operating speed	1 to 500 mm/s
Operating frequency	Mechanical: 200 operations/min Electrical: 30 operations/min
Insulation resistance	100 MΩ (at 250 VDC)
Contact resistance	50 mΩ max. (initial value)
Dielectric strength	250 VAC, 50/60 Hz for 1 min between contacts of same polarity 250 VAC, 50/60 Hz for 1 min between each terminal and ground
Electrical rating	0.1 A at 30 VDC (resistive load)
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction: 300 m/s ² (approx. 30G)
Life expectancy	50,000 operations min. at the rated switching frequency
Ambient temperature	Operating: -20°C to 80°C (with no icing)
Ambient humidity	Operating: 65% max. (at 5°C to 35°C)
Weight	Approx. 0.3 g

■ Contact Form

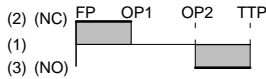


■ Operating Characteristics

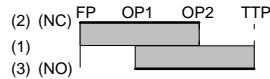
	Non-shorting Model		Shorting Model	
	D3C-1210	D3C-1220	D3C-2210	D3C-2220
OF max.	1.28 N (130 gf)	0.39 N (40 gf)	1.28 N (130 gf)	0.39 N (40 gf)
RF min.	0.10 N (10 gf)	0.03 N (3 gf)	0.10 N (10 gf)	0.03 N (3 gf)
TTP	1.3±0.4 mm		1.3±0.4 mm	
FP max.	4.8 mm		4.8 mm	
OP1	3.5±0.3 mm		3.4±0.3 mm	
OP2	2.5±0.3 mm		2.6±0.3 mm	

Switching T

Non-shorting Model



Shorting Model

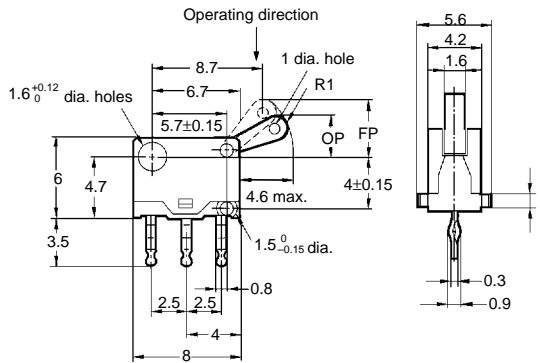
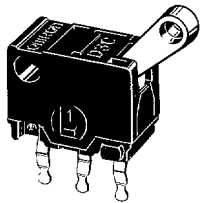


Dimensions

- Note: 1. All units are in millimeters unless otherwise indicated.
 2. Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

Hinge Lever

D3C-1210/-2210
 D3C-1220/-2220

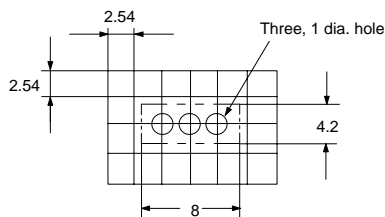


Precautions

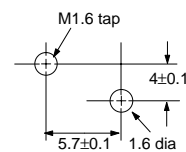
Mounting

Refer to the following dimensions for PCB mounting. The distance between two adjacent terminals is 2.54 mm.

PCB Dimensions



Mounting Holes



When soldering each terminal of the D3C, apply a soldering iron rated at 30 W for no longer than three seconds. Do not impose any external force to the terminals for approximately one minute after the terminals are soldered.

Make sure that the terminals of the D3C are insulated from one another and the ground.

When mounting the D3C with screws, use M1.6 mounting screws with plain washers or spring washers. Tighten the screws to a torque of 4.9 to 9.8 x 10² N • m (0.5 to 1 kgf • cm).

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
 To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.