

OMRON®

SUBMINIATURE

Basic Switch

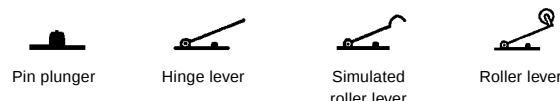
D2F

Subminiature Basic Switch

- Super compact, ideal for PCB mounting
- Switches 3 A loads (general-purpose), 1 A loads (low force general-purpose) and 0.1 A loads (microvoltage/microcurrent)
- Long life span assured by high-precision dual spring reverse-action mechanism
- Flux penetration prevented by using an insert terminal and allowing a height difference at the case bottom
- Ideal for a wide variety of applications from household appliances and office equipment to audio equipment and communications equipment

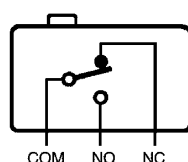


Ordering Information



Actuator	Contact type	Model	Contact OF	Part Number				
				Terminal type				
Pin plunger	Microvoltage/ current	Low force	75 g	D2F-01F	D2F-01F-T	D2F-01F-D	D2F-01F-A	D2F-01F-A1
		Standard	150 g	D2F-01	D2F-01-T	D2F-01-D	D2F-01-A	D2F-01-A1
	General- purpose	Low force	75 g	D2F-F	D2F-F-T	D2F-F-D	D2F-F-A	D2F-F-A1
		Standard	150 g	D2F	D2F-T	D2F-D	D2F-A	D2F-A1
Hinge lever	Microvoltage/ current	Low force	25 g	D2F-01FL	D2F-01FL-T	D2F-01FL-D	D2F-01FL-A	D2F-01FL-A1
		Standard	80 g	D2F-01L	D2F-01L-T	D2F-01L-D	D2F-01L-A	D2F-01L-A1
	General- purpose	Low force	25 g	D2F-FL	D2F-FL-T	D2F-FL-D	D2F-FL-A	D2F-FL-A1
		Standard	80 g	D2F-L	D2F-L-T	D2F-L-D	D2F-L-A	D2F-L-A1
Simulated roller lever	Microvoltage/ current	Low force	40 g	D2F-01FL3	D2F-01FL3-T	D2F-01FL3-D	D2F-01FL3-A	D2F-01FL3-A1
		Standard	80 g	D2F-01L3	D2F-01L3-T	D2F-01L3-D	D2F-01L3-A	D2F-01L3-A1
	General- purpose	Low force	40 g	D2F-FL3	D2F-FL3-T	D2F-FL3-D	D2F-FL3-A	D2F-FL3-A1
		Standard	80 g	D2F-L3	D2F-L3-T	D2F-L3-D	D2F-L3-A	D2F-L3-A1
Roller lever	Microvoltage/ current	Low force	40 g	D2F-01FL2	D2F-01FL2-T	D2F-01FL2-D	D2F-01FL2-A	D2F-01FL2-A1
		Standard	80 g	D2F-01L2	D2F-01L2-T	D2F-01L2-D	D2F-01L2-A	D2F-01L2-A1
	General- purpose	Low force	40 g	D2F-FL2	D2F-FL2-T	D2F-FL2-D	D2F-FL2-A	D2F-FL2-A1
		Standard	80 g	D2F-L2	D2F-L2-T	D2F-L2-D	D2F-L2-A	D2F-L2-A1

CONTACT FORM



D2F **OMRON** D2F

Specifications

Rated Voltage	Resistive load			
	Microvoltage/current		General-purpose	
	Low force	Standard	Low force	Standard
125 VAC	—	—	1 A	3 A
30 VDC	0.1 A	0.1 A	0.5 A	2 A

Note: When using an inductive load or motor load, consult OMRON.

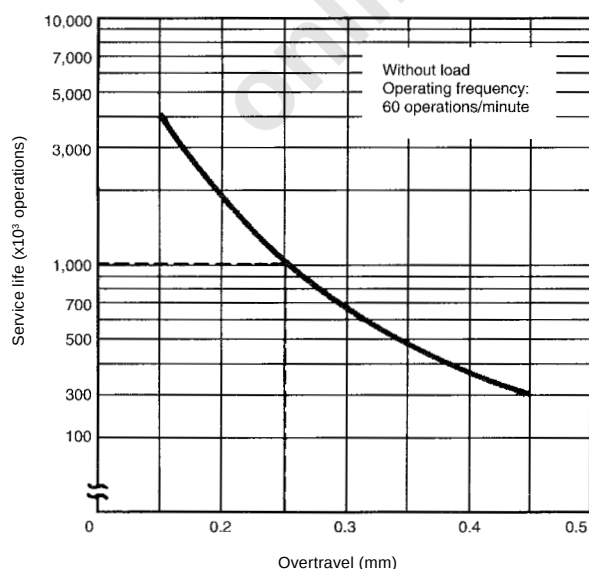
Characteristics

Operating speed		1 to 500 mm/second (0.04 to 19.7 in./second)
Operating frequency	Mechanical	200 operations per minute (pin plunger actuator type)
	Electrical	30 operations per minute (pin plunger actuator type)
Contact resistance	General-purpose type	30 mΩ max. (initial)
	Microvoltage/ microcurrent load type	100 mΩ max. (initial)
Insulation resistance		100 MΩ min. at 500 VDC
Dielectric strength		600 VAC, 50/60 Hz for 1 minute between terminals of same polarity
		1,500 VAC, 50/60 Hz for 1 minute between current-carrying parts and ground
Vibration	Malfunction durability	10 to 55 Hz, 1.5 mm double amplitude
Shock	Malfunction durability	300 m/s ² min. (approx. 30 g min.)
Ambient temperature	Operating	-25° to 65°C with no icing
Humidity	Operating	45% to 85% ay 5° to 35°C
Service life	Mechanical	1 million operations min. (OT: full stroke)
	Electrical	30,000 operations min. (rated load)
Weight		Approx. 0.5 g

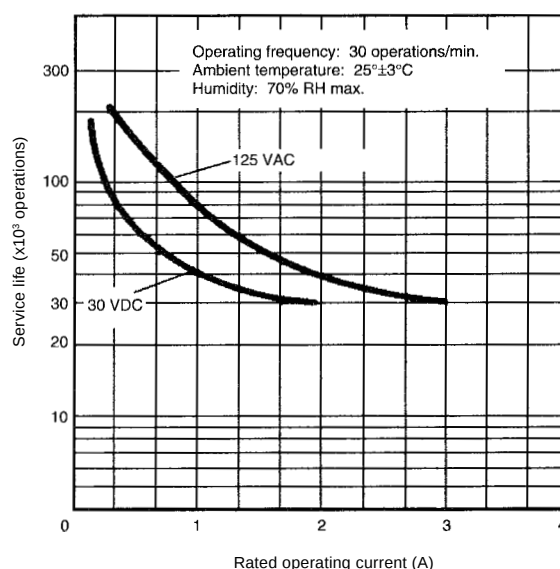
Note: Data shown are of initial value.

■ CHARACTERISTIC DATA

Mechanical service life



Electrical service life



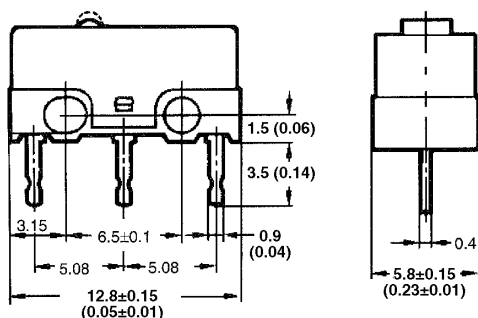
Note: 1. Values are for pin plunger actuator type.

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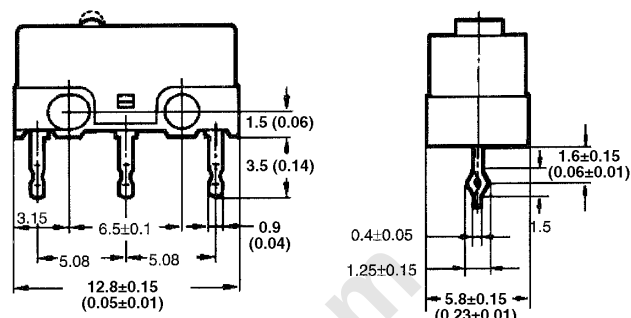
Unit: mm (inch)

■ TERMINALS

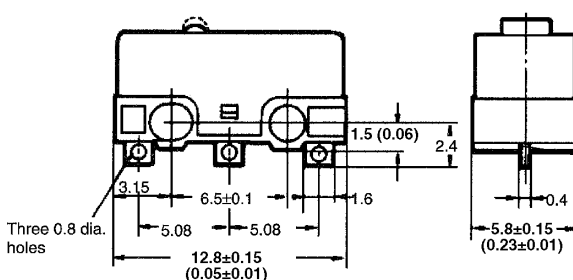
D2F type
PCB terminal



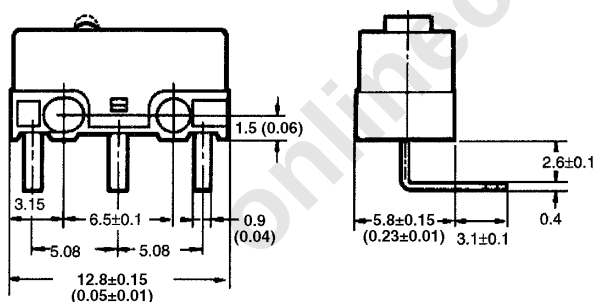
D2F-T type
Self-supporting terminal



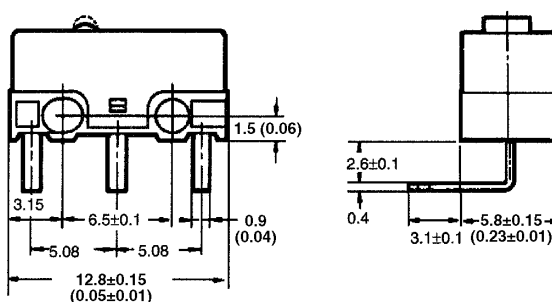
D2F-D type
Soldered terminal



D2F-A type
Right-angle terminal



D2F-A1 type
Left-angle terminal



■ APPROVALS

UL (File No. E41515) / CSA (File No. LR21642)

Type	Rating
D2F Series, D2F-01 Series	3 A, 125 VAC 1 A, 125 VAC 2 A, 30 VDC 0.5 A, 30 VDC 0.1 A, 30 VDC

Note: The rated values approved by each of the safety standards (e.g. UL, CSA) may be different from the performance characteristics individually defined in this catalog.

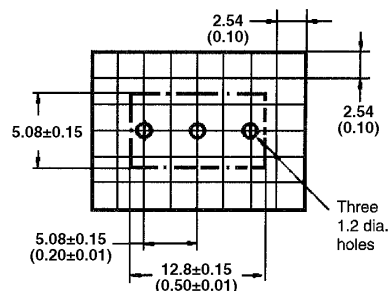
D2F OMRON D2F

Precautions

■ MOUNTING

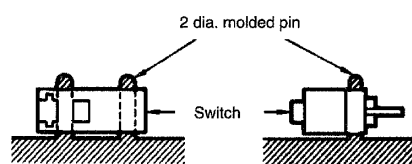
Mount the D2F switch onto the PC board as shown in the following diagram, using 2-pitch (2 x 2.54 mm) terminal spacing.

■ PC BOARD MACHINING



■ DIMENSIONS

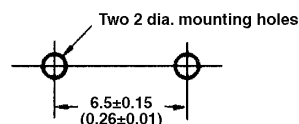
The use of molded components is recommended for mounting purposes.



■ MOLDED PIN MOUNTING DIAGRAM

When screw mounting, use M2 screws together with washers. Fasten the screws applying 0.8 to 1 kg-cm tightening torque.

■ MOUNTING HOLE MACHINING



■ DIMENSIONS

When soldering, use 6:4 solder and a 60 W soldering iron, and complete soldering within 3 seconds. After soldering, do not apply external force to the soldered area for about 1 minute.

Allow sufficient insulation distance between terminals and between terminals and ground.

OMRON

OMRON ELECTRONICS, INC.
One East Commerce Drive
Schaumburg, IL 60173
1-800-55-OMRON

OMRON CANADA, INC.
885 Milner Avenue
Scarborough, Ontario M1B 5V8
416-286-6465