OMRON

Basic Switch

D2T

Compact DPST-NO Basic Switch

- Incorporates circuits for power and low-level loads
- Approved by safety standards, such as UL, VDE, and SEMKO
- As compact as OMRON's V-series Snap-action switches
- Contact gap of 0.7 mm min.
- Panel or screw-mounted with ease
- Straight and angled terminals are available



Ordering Information



Pin plunger

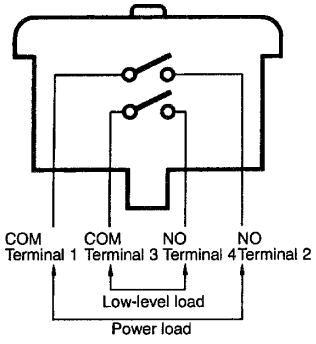


Hinge lever

Actuator	Part Number	
	Angled Terminal	Straight Terminal
Pin plunger	**D2T-T1**	**D2T-T1S**
Hinge lever	**D2T-LT1**	**D2T-LT1S**

Note: The actuator of the D2T is identical to that used for OMRON's V-series Snap-action Switches. The actuator can be replaced with other types of actuators. Contact your OMRON representative for details.

■ CONTACT FORM



Note: The circuit switching power load has a snap-action mechanism.
The circuit switching low-level load has a slow-action mechanism.

Characteristics

Electrical ratings		5 A at 125/250 VAC between terminals 1 and 2 0.1 A at 125 VAC between terminals 3 and 4
Operating speed		10 to 500 mm/second (0.39 to 19.7 in/second)
Operating frequency	Mechanical	120 operations per min.
	Electrical	60 operations per min.
Contact resistance		50 mΩ max. between terminals 1 and 2 100 mΩ max. between terminals 3 and 4
Insulation resistance		100 MΩ min. (at 500 VDC)
Dielectric strength (VAC)		1,000 VAC, for 1 minute between contacts of same polarity 1,500 VAC for 1 minute between current-carrying metal parts and ground, and between contacts of different polarity
Vibration resistance	Malfunction	10 to 55 Hz, 1.5 mm double amplitude
Shock resistance	Malfunction	300 m/s^2 (approx. 30 g min.)
Life expectancy	Mechanical	100,000 operations min. (at full OT value, operating frequency of 120 operations/min.)
	Electrical	100,000 operations min. (at rated OT value, operating frequency of 60 operations/min.)
Ambient temperature	Operating	-25° to 85°C (with no icing)
Ambient humidity	Operating	85% RH max.
Weight		Approx. 10 g

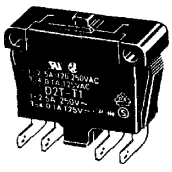
Operating characteristics	D2T-T1, D2T-T1S	D2T-LT1, D2T-LT1S
OF max.	330 g	150 g
RF min.	50 g	20 g
TTF max.	650 g	250 g
OT min.	0.8 mm	1.6 mm
OP	4.4±0.6 mm (see note)	6.9±1.3 mm (see note)

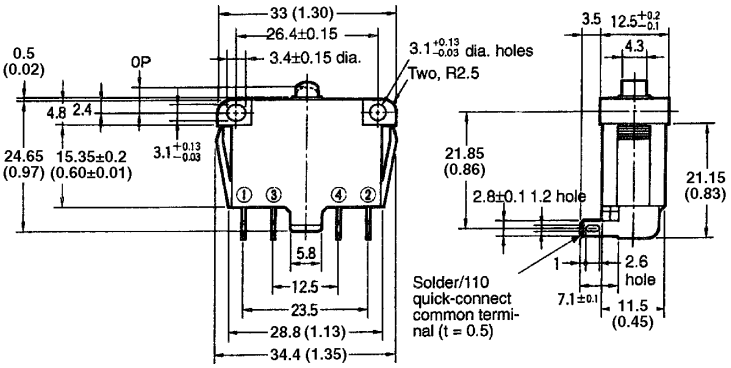
Note: There is no actuation order between terminals 1 and 2 and terminals 3 and 4.

Dimensions

Unit: mm (inch)

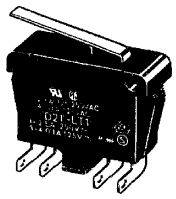
Pin plunger
D2T-T1, D2T-T1S

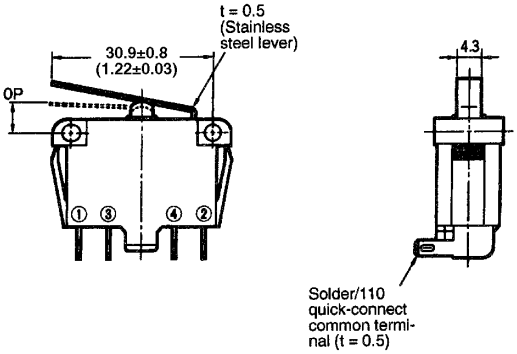




Note: 1. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.
2. The above illustrations and dimensions of the pin plunger and hinge lever are for D2T models with angled terminals. Refer to the dimensions in “Terminals” for the straight terminals of D2T.

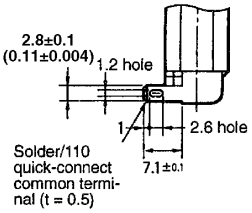
Hinge lever
D2T-LT1, D2T-LT1S



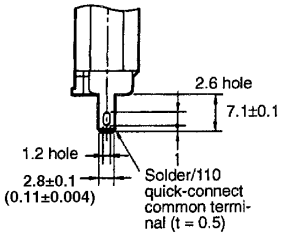


■ TERMINALS

Angled terminal



Straight terminal



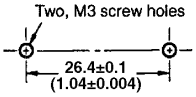
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Precautions

■ MOUNTING

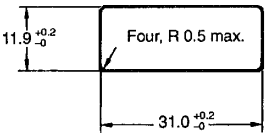
Use M3 mounting screws to mount the switch. Tighten the screws to a torque of 4 to 6 kgf • cm.

Mounting Holes



Panel Mounting Dimensions

(Panel thickness: 1.5 to 2 mm)



When mounting the D2T to a panel, be sure to insert an insulation separator between the D2T and the panel.

The actual OT of the D2T must be at least the specified value and within the permissible OP of the D2T.

■ SOLDERING

The following soldering conditions are recommended.

Soldering	Temperature	Time
Manual	350°C	3 s max.
Automatic	260°C	5 s max.

When soldering the D2T to a PCB, make sure that no flux will be on the surface of the PCB.

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