

SPECIFICATION
FOR
SUB MINIATURE BASIC SWITCH

TYPE NAME D2FC-F-7N (STD)

SPECIFICATION No. 2739879-5
OUTLINE DRAWING No. 4328413-9

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1. CONSTRUCTION

- 1-1 Functional type : Snap action
- 1-2 Configuration : Single pole single throw
- 1-3 Structure : Standard
- 1-4 Terminal form : For PC board

2. OPERATING CHARACTERISTICS

Item	Abb.	Standard
2-1 Operating Force	OF	0.44~0.74 N
2-2 Release Force	RF	0.24 N MIN.
2-3 Pretravel	PT	0.3±0.2 mm
2-4 Overtravel	OT	0.2 mm MIN.
2-5 Movement Differential	MD	0.12 mm MAX.
2-6 Operating Position	OP	6.9±0.2 mm
2-7 Free Position	FP	7.35 ⁰ _{-0.4} mm

3. ELECTRICAL CHARACTERISTICS**3-1 Contact Resistance**

100 mΩ MAX. (Initial value)

Measuring method : Milliohm meter at TTP.

3-2 Insulation resistance and dielectric strength

Items	Insulation resistance (500V DC megger)	Dielectric strength (50 to 60 Hz 1 min)
Measuring parts		
Between same pole terminals	100 M Ω MIN.	AC 600 V
Between terminals and earth	100 M Ω MIN.	AC 1,500 V (With separator)

3-3 Switching capacity ratings

DC 6V 1mA (Resistive load)

4. MECHANICAL CHARACTERISTICS

4-1 Vibration

- (1) Miss contact : Not open 1 ms MAX.
- (2) Conditions (at TTP)
 - Vibration frequency range : 10 to 55 Hz
 - Double amplitude : 1.5 mm
 - Time : 2 h

4-2 Shock

- (1) Miss contact : Not open 1 ms MAX.
- (2) Conditions (at TTP)
 - 300 m/s² MIN.

4-3 Strength

Actuator strength
A force 10 times of the specified OF 7.35 N/min to the operating direction vertically.

5. ENVIRONMENT IN AVAILABLE

5-1 Temperature range -45 °C ~ +85 °C (Relative humidity : under 60%Rh)

5-2 Humidity range 95 % RH MAX. (0 °C ~ 65 °C)

6. OPERATION SERVICE LIFE

6-1 Allowable operating frequency
 Mechanical : 200 times/min MAX.
 Electrical : 200 times/min MAX.

6-2 Allowable operating speed
 1 ~ 500 mm/s

6-3 Service life

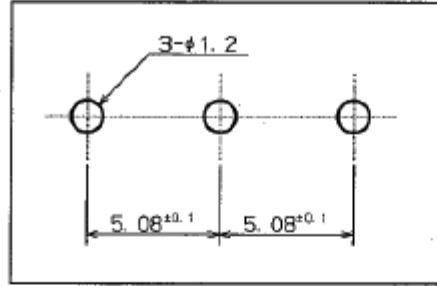
Item	The number of operations	Displacement of actuator
Electrical	5,000,000 MIN.	DC 6V 1mA 120 operatings/min. (O. T. 0.2mm)
Mechanical	5,000,000 MIN.	O. T. 0.2mm

7. SPECIAL NOTES

7-1 Switch mounting

(1) Mounting of the panel

·Process based on right figure which shows processing of the mounting holes.



(2) Notes on the switch operating and setting

·In the free position of a switch actuator, where an external force is exerted upon the actuator.
 ·Sufficiently take a stroke of the actuator in operation.

(3) Soldering for PC board

·Use the soldering iron rated at 30W.
 ·Process time in soldering should be 3 seconds MAX
 ·Be careful not to apply the external force within 1 min. after soldering.
 ·The solder is suitable to use a kind of containing rosin type flux, approx. Sn of 60% and Zn of 40%.

7-2 Conservation of products

Avoid to keep in the atmosphere, where happens organic gases and dusts, with high temperature and humidity.

The products stocked for 3 to 6 months and more would be recommended to be re-checked.

7-3 The term of validity

This specification will be invalid if we receive no approval or no order placement of yours within one year since this is submitted.

SYM	DATE	COTENTS	SIGN