

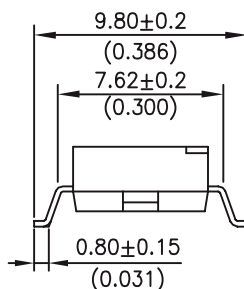
DIP Switches

Machine Insertable Type DIP Switches

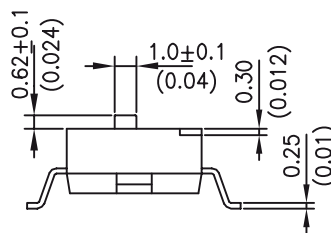
DX12 Series



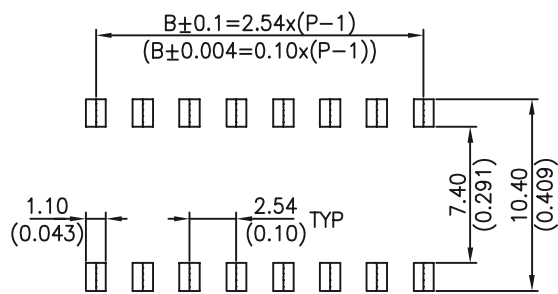
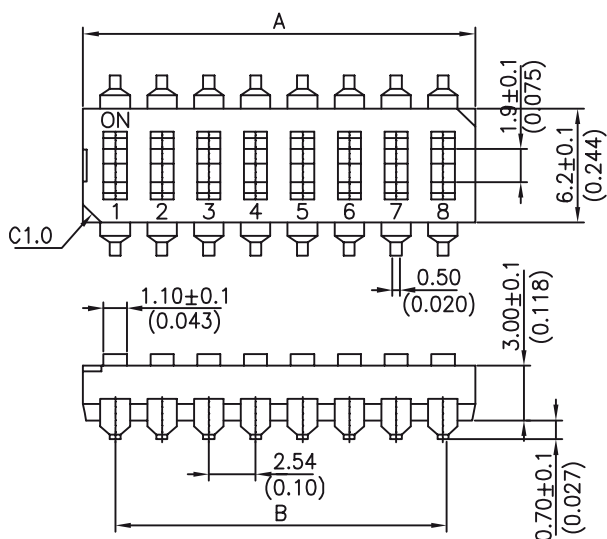
DIMENSION:(UNIT:mm/inches)



DX12SC_

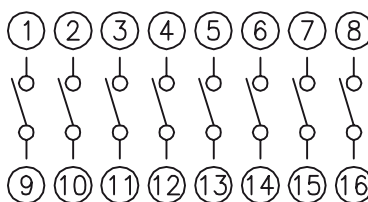


DX12SA_

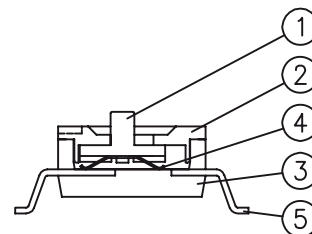


P.C.B. LAYOUT

ITEM	DES	MATERIALS	TREATMENT
1	ACTUATOR	UL94V-0 NYLON	MOLDED WHITE
2	COVER	UL94V-0 NYLON	MOLDED BLACK
3	BASE	UL94V-0 NYLON	MOLDED BLACK
4	CONTACT	BERYLLIUM COPPER	GOLD PLATED AT CONTACT AREA
5	TERMINAL	BRASS	GOLD PLATING



CIRCUIT DIAGRAM



CONSTRUCTION

General Tolerance

0-4	±0.05
4-16	±0.1
16-50	±0.15

How to order:

DX12

- | | | |
|-----------------------------|----------------------------|-------------------------|
| 1 TYPE OF TERMINALS: | 3 NO. OF POSITIONS: | 4 SEAL: |
| S SMT Terminal | 01 1 Positions | — Regular (Standard) |
| 2 ACTUATOR TYPE: | 02 2 Positions | T Top Tape Sealed |
| A Raised Actuator | 03 3 Positions | 5 PACKAGE STYLE: |
| C Recessed Actuator | 04 4 Positions | TB Tube |
| | 05 5 Positions | TR Tape & Reel |
| | 06 6 Positions | |
| | 07 7 Positions | |
| | 08 8 Positions | |
| | 09 9 Positions | |
| | 10 10 Positions | |
| | 12 12 Positions | |

Prod No.	No.ofPOS	DIM.A	DIM.B
DX12...01...	01	3.48(0.137)	—
DX12...02...	02	6.02(0.237)	2.54(0.100)
DX12...03...	03	8.56(0.337)	5.08(0.200)
DX12...04...	04	11.10(0.437)	7.62(0.300)
DX12...05...	05	13.64(0.537)	10.16(0.400)
DX12...06...	06	16.18(0.637)	12.70(0.500)
DX12...07...	07	18.72(0.737)	15.24(0.600)
DX12...08...	08	21.26(0.837)	17.78(0.700)
DX12...09...	09	23.80(0.937)	20.32(0.800)
DX12...10...	10	26.34(1.037)	22.86(0.900)
DX12...12...	12	31.42(1.237)	27.94(1.100)

1. SPECIFICATIONS.

- 1-1. External appearance: Ref. Attached print.
- 1-2. Material & treatment of parts: Ref. Attached print.
- 1-3. All materials are UL 94V-0 grade fire retardant plastics.

2. FEATURES

- 2-1. This switch is slide switch of one body type that each pole is parallel and it is constituted by one moving contact and two terminals.
- 2-2. DX2SRA_01 series (raised actuator) and DX2SRC_01 series (recessed actuator) available for different purposes.
- 2-3. Low contact resistance, self-clean on contact area.
- 2-4. Gold plated contact to ensure low contact resistance and gold plated terminal to prevent contamination during soldering
- 2-5. Double contacts offers high reliability.

3. ELECTRICAL

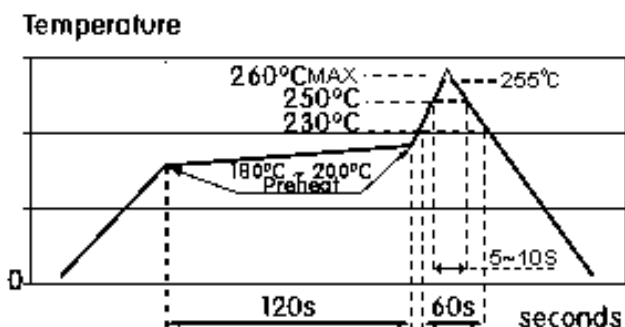
- 3-1. Electrical Life: 2000 operation cycles per switch –24VDC, 25mA.
- 3-2. Non-switching Rating: 100mA, 50VDC.
- 3-3. Switching Rating: 25mA, 24VDC.
- 3-4. Contact Resistance: (a) 50m Ω max. at initial.
(b) 100m Ω max. after life test.
- 3-5. Insulation Resistance: 100M Ω min. at 500VDC.
- 3-6. Dielectric Strength: 500VAC/1 minute.
- 3-7. Capacitance: 5pF max.
- 3-8. Circuit: Single pole single throw.

4. MECHANICAL

- 4-1. Mechanical life: 2000 operations per switch.
- 4-2. Operation Force: 600gf max.
- 4-3. Stroke: 0.9mm.
- 4-4. Operation Temp: -25°C to 70°C
- 4-5. Storage Temp: -40°C to 85°C
- 4-6. Vibration Test: MIL-STD-202F METHOD 201A
Frequency: 10-55-10 Hz/1 min
Directions: X, Y, Z, three mutually perpendicular directions.
Time: 2 hours each direction. High reliability.
- 4-7. Shock Test: MIL-STD-202F METHOD 213B CONDITION A.
- 4-8. Gravity: 50G (peak value), 11msec.
- 4-9. Direction and times: 6 sides and 3 times in each direction.
High reliability.

5. SOLDERING PROCESSES.

- 5-1. Keep all switch contacts in their "OFF" position for all operation.
- 5-2. Hand soldering: Use a soldering iron of 30 watts or less, controlled at 320°C, approximately 2 seconds while applying solder.



6. FLUX CLEANING :

- 6-1. Solvent: Fluorine or Alcohol type.
- 6-2. Cleaning shall be made when terminal temperature falls to 90°C or lower, or leave the switch at normal temperature for 5 minutes or longer, before cleaning.
- 6-3. Do not apply ultrasonic cleaning.
- 6-4. "LE" type are not washable.
- 6-5. Do not operate the switch during soldering and cleaning.

7. WEATHER-PROFF

- 7-1. Resistance Low Temperature:
 - (1) Temperature: -40°C +/- 3°C.
 - (2) Time: 96 hours.
- 7-2. Resistance High Temperature:
 - (1) Temperature: 85°C +/- 2°C.
 - (2) Time: 96 hours.
- 7-3. Resistance Humidity:
 - (1) Temperature: 85°C +/- 2°C.
 - (2) Relative Humidity: 90-95%
 - (3) Time: 96 hours.

8. PACKAGING:

All DIP switches are shipped in standard IC tubes or Tape & Reel Package with all poles in the "OFF" position. Tape and reel packaging: 800 pcs / reel.

