

DP1 • 2

Directing Switches



RoHS Compliant

■ Features

1. PC Board Mount

Direct mounting to PC board. The terminal pin layout is in inch pitch.

2. High Contact Reliability

Self-cleaning, twin contact mechanism provides high contact reliability.

3. Light Tactile Feel

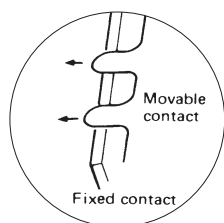
Metal contacts provide light tactile feel.

4. Designed For High Density Mounting

The height to the top of the cap from the PCB surface is as low as 11 to 11.5 mm, and the case profile is designed to allow side-by-side mounting.

5. Wide Variations

The cap style, color are available in many variations. A clear cap is available for DP1 to insert a label or letter printing inside. (Recommended label size and thickness: 7 x 7 mm and 0.3 mm for DP1-100 and 10 x 10 mm and 0.3 mm for DP1-120)



● Twin contacts

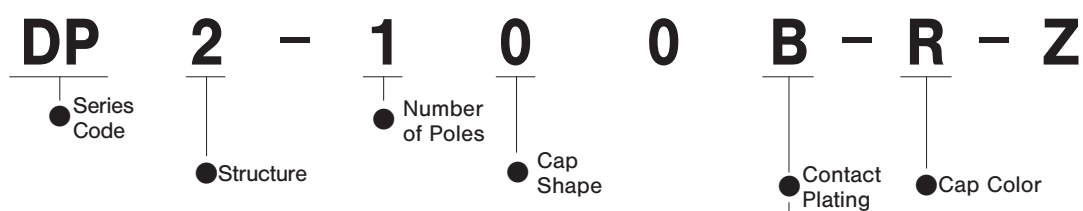
● Self cleaning mechanism

When the switch is activated, movable contacts slide in the direction of the arrow to clean the contact points.

■ Specifications

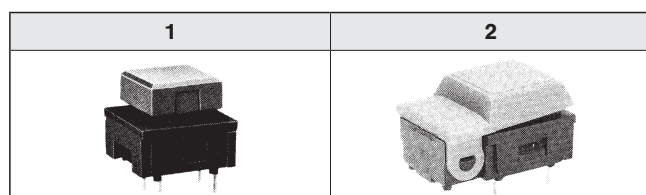
Rating	Max.	50 mA 24 VDC
	Min.	0.5 mA 20 mVDC (Silver plated contacts) 10 μ A 20 mVDC (Gold plated contacts)
Initial Contact Resistance	20 m Ω max. (1.5 mA 200 μ VAC)	
Dielectric Strength	250 VAC 1 minute	
Insulation Resistance	100 M Ω min. (250 VDC)	
Electrical Life	200,000 operations	
Travel	DP1 : 0.8 $\pm$ 0.3 mm DP2 : 1 $\pm$ 0.3 mm	
Operating Force	0.93 $\pm$ 0.29 N	
Operating Temperature Range	-25 $\sim$ +75 $^{\circ}$ C	
Storage Temperature Range	-25 $\sim$ +85 $^{\circ}$ C	

Part Numbering



Code	Contact Plating
None	Silver Plated
B	Gold Plated

Structure



Cap Shape

Fig.	Cap shape
0	Standard
2	DP1 Wide cap

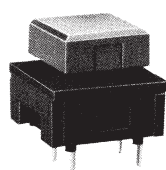
Cap Color

Code	C	G	B
Color	Clear	Gray	Blue

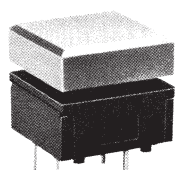
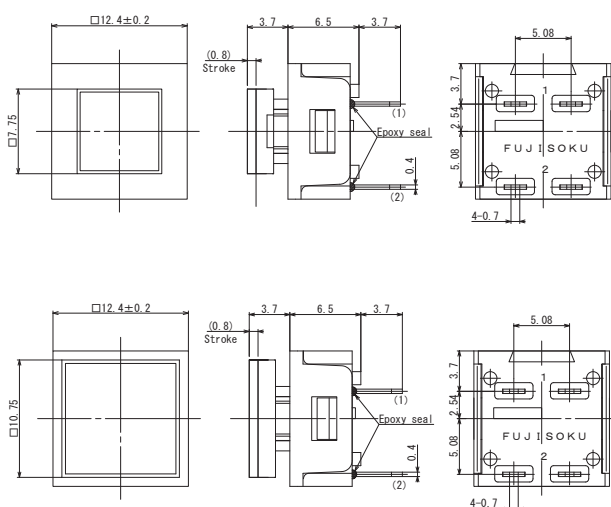
Code	R	K	W
Color	Red	Black	White

DP1

SPST
Without LED (Non-illuminated)



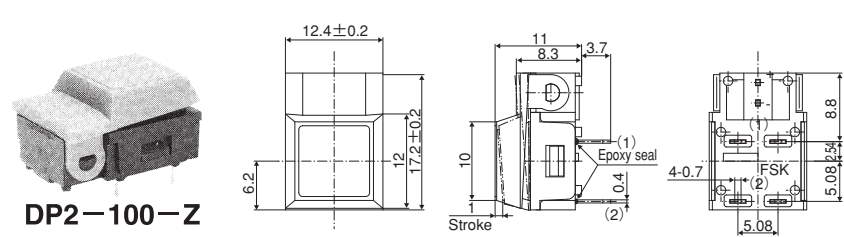
DP1-100-Z



DP1-120-Z

Part No.	Switching function	
DP1-100-Z ☆ DP1-100B-Z DP1-120-Z ★ DP1-120B-Z	OFF	(ON)
Connecting terminals	—	1-2

DP2 SPST



Part No.	Switching function	
DP2-100-□-Z	OFF	(ON)
Connecting terminals	—	1-2

Table of Part Numbers

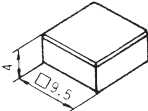
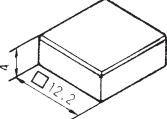
Series	DP1-100		DP1-120		DP2-100-□-Z
Contact plating	Silver	Gold	Silver	Gold	Silver
Part number	DP1-100-Z	☆DP1-100B-Z	DP1-120-Z	★DP1-120B-Z	★DP2-100-G-Z ★DP2-100-K-Z ☆DP2-100-R-Z ☆DP2-100-W-Z

Notes Upon Ordering

Caps for DP1 are standard accessories. Please designate a cap upon ordering the switch.
Clear cap is not available for DP2.

Standard Accessories

《Supplied with switch》

Part Name	Cap		Color code
Type	DP1-100-Z	DP1-120-Z	
Dimensions Materials : Polycarbonate resin			
Clear	140000470157	140000470188	
White	140000470184	140000470217	
Red	140000470158	140000470189	
Black	140000470166	140000470216	
Gray	140000470159	140000470190	
Blue	140000470160	140000470191	

PCB Footprints & Mounting

Part No.	DP1-100-Z	DP1-120-Z	DP2-100-Z
Footprint Dimensions			
	: panel cut-out dimensions		
Mounting			

Precautions

Effective operating range	To operate DP1-120-Z, depress the center of the cap.
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■ Soldering (DP1 ~ 2)

1. Manual soldering

Device : Soldering iron

380°C, Max. 3 seconds, Max.

2. Auto soldering

Device: Jet wave or dip type

275±10°C 6 sec, Max.

- Preheat time shall be 120 seconds max. at 80~120°C max.

■ Flux Cleaning (DP1 ~ 2)

(1) Solvents : Fluorine or Alcohol type

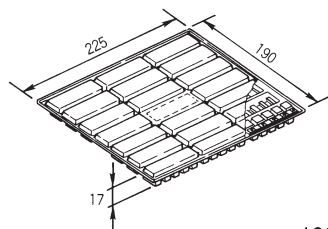
(2) DP1~2 series are not washable. To wash the PC board, clean the soldering surface of the PC board with a brush so that the switch is not exposed to the cleaning solution.

(3) After soldering, wait until the temperature of the terminals cool down to 90°C or below or until the parts are exposed to room temperature for more than 5 min. before washing.

■ Packaging Specifications

DP1 • DP2-100

Plastic Pack



100 pcs./pack