



# ShanPu

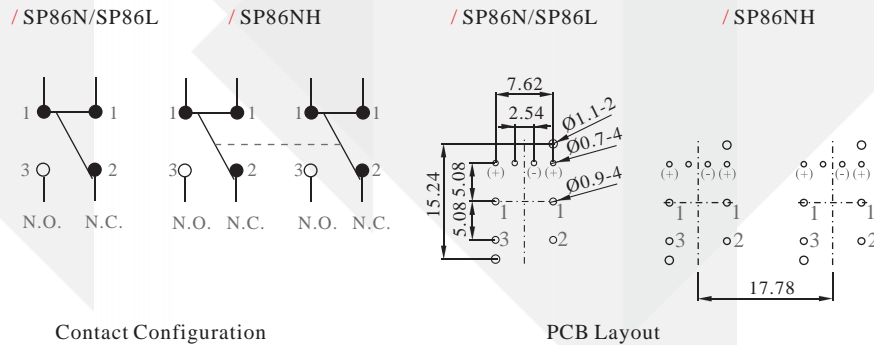
## Pushbutton Switches Series SP86N / SP86NH / SP86L



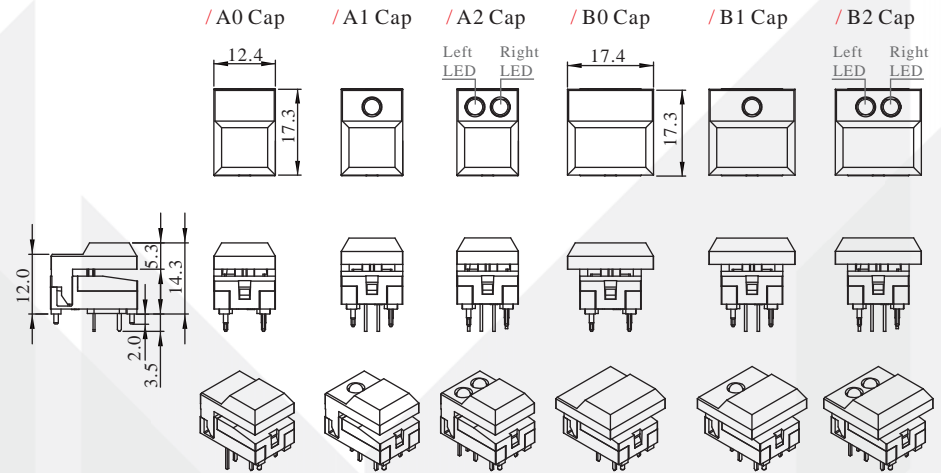
### General Specifications

Circuit	:SPDT
Current Rating	:12mA.
Voltage Rating	:24 V DC
Contact Resistance	:50m Ohm Max(initial)
Insulation Resistance	:100M Ohm Min
Operating Force	:170gf±50gf (SP86N / SP86L) 400gf±100gf (SP86NH)
Total Travel	:2.5mm±0.5mm
Mechanical Life	:1,000,000 Cycles Min. (SP86N / SP86NH) 500,000 Cycles Min. (SP86L)
Solder Specifications	:260°C for 3 seconds
Operating Temperature	:-10 °C ~ +60 °C
Function	:Momentary (SP86N / SP86NH) :Alternate (SP86L)
<b>Material</b>	
Cap	:Acrylonitrile Butadiene Styrene (ABS)
Case	:Polyamide (PA)
Fixed Support	:Stainless steel wire
Terminal	:Phosphor bronze (PBS) with gold plating
Moving Contact	:Phosphor bronze (PBS) with gold plating
Spring	:Piano wire
LED	:3mm Diameter LED Lamp

### ▶ Circuit & PCB Layout



### ▶ Dimension (SP86N)



### ▶ How to order (SP86N)

SP86N — [ ] — [ ] — [ ] — [ ]

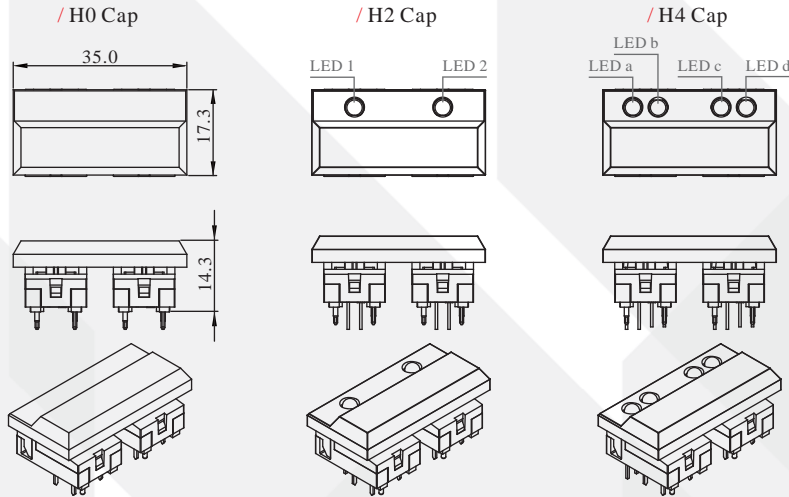
CAP Styles		CAP Colors		LED Colors	
<b>Small CAP</b>		1	Red	00 Without LED	
A0	Without LED	2	Yellow	<b>One LED</b>	
A1	One-LED	4	White	01	Red
A2	Two-LED	5	Black	02	Yellow
<b>Large CAP</b>		6	Orange	03	Green
B0	Without LED	7	Blue	07	Blue
B1	One-LED	8	Dark grey	<b>2 LEDs</b>	
B2	Two-LED	9	Grey	<b>Left</b>	<b>Right</b>
		* Cap color Black, Grey is standard parts.			
1	Red	1	Red		
2	Yellow	2	Yellow		
3	Green	3	Green		
7	Blue	7	Blue		

EXAMPLE :  
SP86N-B0-1-01  
SP86N-A2-5-13



## Pushbutton Switches Series SP86N / SP86NH / SP86L

### Dimension (SP86NH)



### How to order (SP86NH)

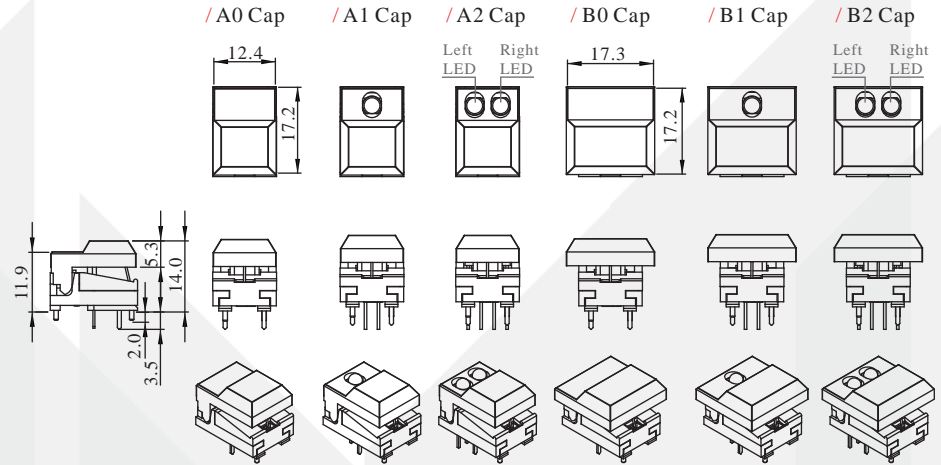
SP86N — **H** — — — — —

Double wide CAP		CAP Colors		LED Colors Option				
H0	Without LED	5	Black	2 LEDs				
H2	Two-LED	9	Grey	Led 1	Led 2			
H4	Four-LED			1	1	Red		
				2	2	Yellow		
				3	3	Green		
				7	7	Blue		
				4 LEDs				
				Led a	Led b	Led c	Led d	
				1	1	1	1	Red
				2	2	2	2	Yellow
				3	3	3	3	Green
				7	7	7	7	Blue

EXAMPLE : SP86NH2511

\*Repeat the code for the following LED(s)

### Dimension (SP86L)



### How to order (SP86L)

SP86L — — — — —

CAP Styles		CAP Colors		LED Colors			
Small CAP		5	Black	Without LED			
A0	Without LED	9	Grey	One LED			
A1	One-LED			01	Red		
A2	Two-LED			02	Yellow		
Large CAP				03	Green		
B0	Without LED			07	Blue		
B1	One-LED			2 LEDs			
B2	Two-LED			Left		Right	
				1	Red	1	Red
				2	Yellow	2	Yellow
				3	Green	3	Green
				7	Blue	7	Blue

EXAMPLE : SP86L-B2-9-12