



SPECIFICATIONS

Circuit: SPDT
Current rating: 12mA.
Voltage rating: 24 V DC
Contact resistance: 50 m Ohm Max(initial)
Insulation resistance: 100M Ohm Min
Operating force: 170gf ± 50gf
Total travel: 2.5mm ± 0.5mm
Mechanical life: 1,000,000 cycles Min.(SP86N)
500,000 cycles Min.(SP86L)
Solder specifications: 260°C for 3 seconds
Operating temperature: -10°C ~ +60°C

MATERIALS

Cap: Acrylonitrile butadine 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

HOW TO ORDER

MODEL NO. - CAP STYLES - CAP COLORS - LED COLORS

SP86N (Momentary)
SP86L (Latching)

Small CAP	
A0	Without LED
A1	One-LED
A2	Two-LED

Large CAP	
B0	Without LED
B1	One-LED
B2	Two-LED

1 Red
2 Yellow
4 White
5 Black *
6 Orange
7 Blue
8 Dary gray
9 Gray *

Note:
1.Cap color Black, Grey is standard parts.
2.SP86L models are only available with black, grey caps.

Without LED	
One LED	
01	Red
02	Yellow
03	Green
07	Blue

2 LEDs	
Left	Right
1 Red	Red
2 Yellow	Yellow
3 Green	Green
7 Blue	Blue

Lert side LED Right side LED

EXAMPLE: SP86N-B0-1-01
SP86L-B2-9-12



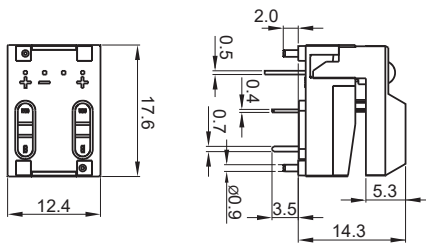
SP86N(L) Series

Pushbutton Switches

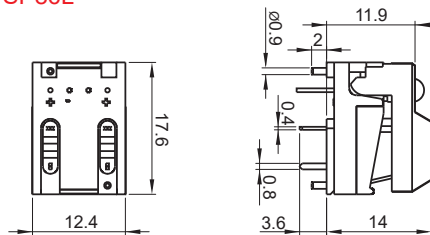
SP86N(L)
Pushbutton Switches

DIMENSION

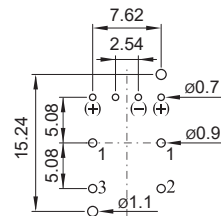
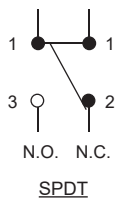
SP86N



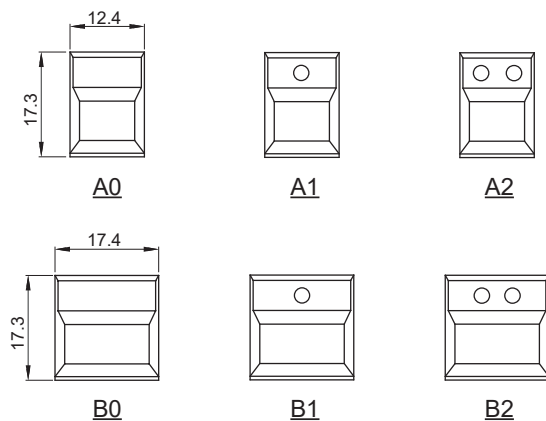
SP86L



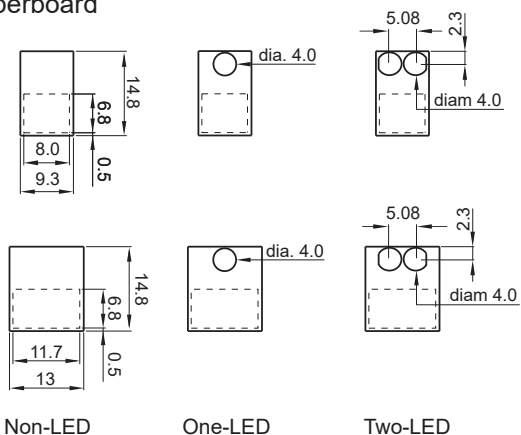
CIRCUIT & PCB LAYOUT



CAP STYLE



Paperboard



Note: [] wire area

LED CHARACTERISTICS

The electrical specifications shown are determined at a basic temperature of 25 C. If the source voltage exceeds the rated voltage of LED, a ballast resistor must be connected in series with the LED.

Parameter	Symbol(Unit)	Red	Yellow	Green	Blue
Forward Voltage	$V_F(V)$	2.0	2.1	2.2	3.5
Forward Current	$I_F(mA)$	20	20	20	20
Permissible loss	$P_D(mW)$	80	80	80	120
Luminous Intensity	$I_v(mcd)$	60	50	60	600
peak Wave Length	$\lambda_P(nm)$	635	585	568	470
Reverse Voltage	$V_R(V)$	5			
Reverse Current) $V_R=5V$	(μA)	100			
Soldering Temperature	(degree)	260 for 5 seconds			



Attention: LED are electrostatic sensitive devices

