

HOW TO ORDER

SP86N
SP86L (Latching)

CAP Styles	
Small CAP	
A0	Without LED
A1	One-LED
A2	Two-LED
Large CAP	
B0	Without LED
B1	One-LED
B2	Two-LED
Transparent Small CAP	
C0	Without LED
C1	One-LED
C2	Two-LED
Transparent Large CAP	
D0	Without LED
D1	One-LED
D2	Two-LED

*Latching only for style "A" & "B"

CAP Colors	
1	Red
2	Yellow
3	Green
4	White
5	Black
6	Orange
7	Blue
9	Grey

*Color only for cap Style "A" & "B"

LED Colors	
00	Without LED
One LED	
01	Red
02	Yellow
03	Green
07	Blue
Left Right	
11	Red Red
12	Red Yellow
13	Red Green
17	Red Blue
21	Yellow Red
22	Yellow Yellow
23	Yellow Green
27	Yellow Blue
31	Green Red
32	Green Yellow
33	Green Green
37	Green Blue
71	Blue Red
72	Blue Yellow
73	Blue Green
77	Blue Blue

Special Option	
LED Terminal	
B	+ ◦ - Bend
LED electrode direction	
Single LED	
-	◦ + - ◦ standard
2	◦ - + ◦
Two LEDs	
-	+ - - + standard
4	- + + -
5	- - + -
6	+ - + -

**B" single LED only
* standard type do not need.
**+="-anode
*="-cathode
*o"=none this pin

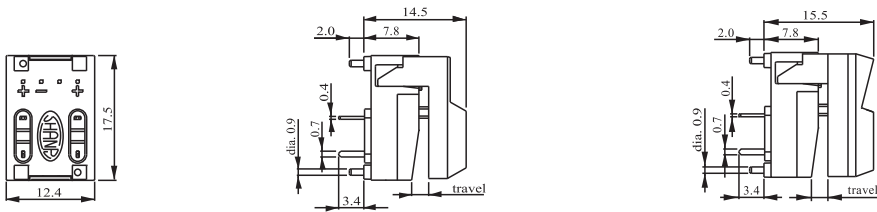
LED pins →

Mounting holes

Left side LED Right side LED

EXAMPLE : SP86N-B1-1-01
SP86N pushbutton switch large red cap single red LED.

DIMENSION

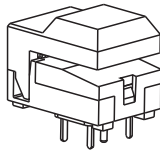
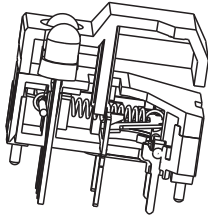


General Specifications	
Circuit	:SPDT
Current Rating	:12 mA.
Voltage Rating	:24 V DC
Contact Resistance	:50 m Ohm Max(initial)
Insulation Resistance	:100 M Ohm Min
Operating Force	:170 gf+50 gf
Total Travel	:2.5 mm +0.5 mm
Operating Life	:1,000,000 Cycles Min.
Solder Specifications	:260 deg for 3 seconds
Operating Temperature	:-10 deg~+60 deg
Function	:Momentary
LED Rating	:See the table below

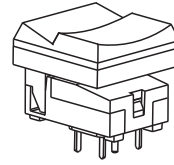
Material	
Cap	:Acrylonitrile Butadine Styrene (ABS)
Case	:Polyamide (PA)
Fixed Support	:Stainless steel wire
Terminal	:Phosphor bronze (PBS) with gold plating
Moving Contact	:Phosphor bronze (PBS) with gold plating
Spring	:Piano wire
LED	:3mm Diameter LED Lamp

SP86N(L) Series

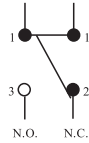
Pushbutton Switches



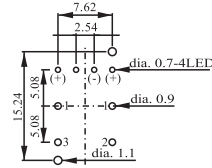
A & B cap type dimension



C & D cap type dimension



(SPDT)
Contact Configuration
SP86N Type



P.C.B. Mounting Holes

Dimension unit in mm

LED CHARACTERISTICS

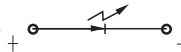
The electrical specifications shown are determined at a basic temperature of 25 C. If the source voltage exceeds the rated voltage of LED, a ballast resistor must be connected in series with the LED.

LED Characteristics

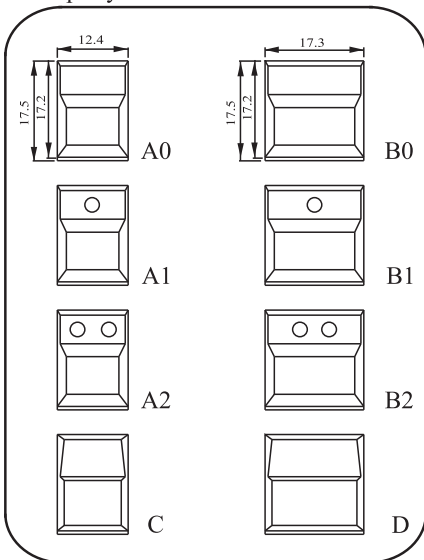
Parameter	Symbol(Unit)	Red	Yellow	Green	Blue
Forward Voltage	V_f (V)	2.0	2.1	2.2	3.5
Forward Current	I_f (mA)	20	20	20	20
Permissible loss	P_D (mW)	80	80	80	120
Luminous Intensity	I_v (mcd)	60	50	60	600
Peak Wave Length	λ_p (nm)	635	585	568	470
Reverse Voltage	V_R (V)	5			
Reverse Current) $V_R=5V$	(μA)	100			
Solder ng Temperature	(degree)	260 for 5 Seconds			



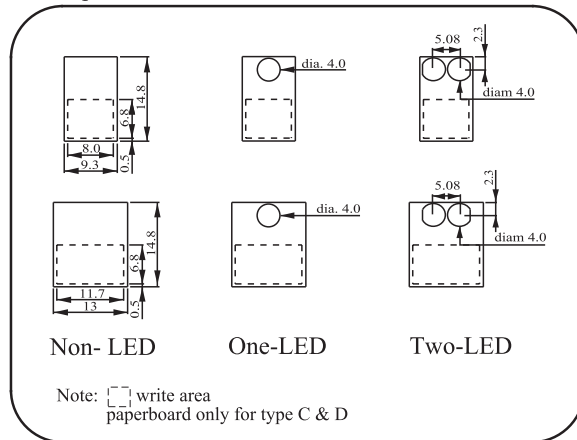
Attention: LED are electrostatic sensitive devices



Cap Style



Paperboard



Dimension unit in mm