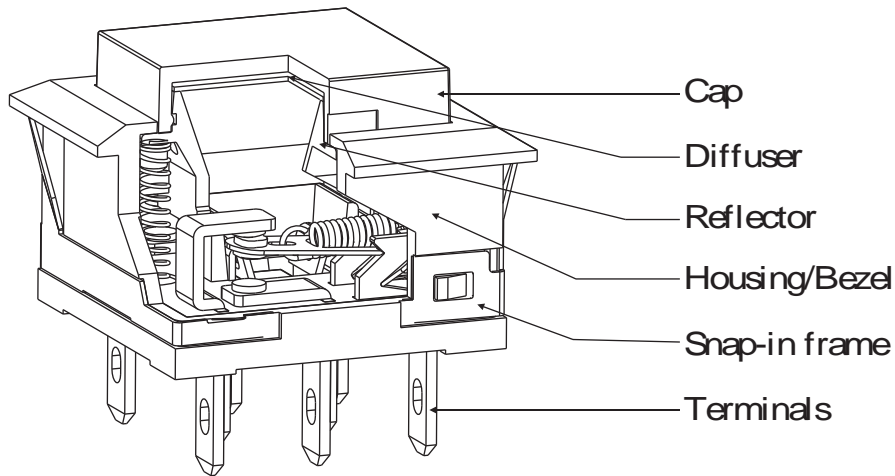


General Specifications

Circuit	: SPDT or DPDT
Current Rating	: 5A.
Voltage Rating	: 125/250 V AC
Contact Resistance	: 50 milli-Ohm Max(initial)
Insulation Resistance	: 200 Meg-Ohm Min
Operating Force	: Single pole: 190gf±50gf for Square 190gf±50gf for Rectangular Double pole: 250gf±50gf for Square 300gf±50gf for Rectangular
Total Travel	: 2.3mm ±0.5mm
Mechanical Life	: 1,000,000 cycles min. for Momentary. 200,000 cycles min. for Alternate.
Electrical Life	: 10,000 cycles min. for silver alloy contact
Solder Specifications	: Manual solder, 360 deg. for 4 seconds Wave solder for Through hole 260deg for 3 seconds
Operating Temperature	: -25deg--+50deg
Function	: Momentary or Alternate
LED Rating	: See the table at below

Material

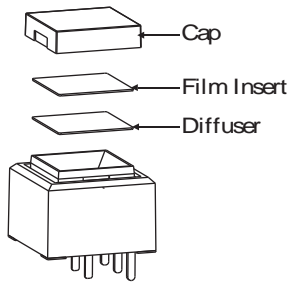
Cap	: Polycarbonate(PC)
Housing	: Polyamide (PA)
Snap-in Frame	: Stainless steel
Switch/LED Terminal	: Phosphor bronze (PBS) with gold plating
Movable Contacts	: Silver alloy
Spring	: Piano wire
Base	: Polyamide(PA)
LED	: Surface type LED



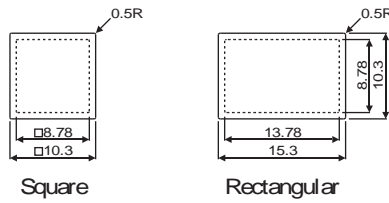
Features

- Bright LEDs of Single, Dual or RGB colors available.
- Full face illumination plus in square or rectangular models.
- Combination of PCB mounting and Panel snap-in.
- Small and short body for mounting in tight spaces.
- Snap-actiong contact mechanism.
- Momentary and Alternate available.

## How to build your own Legends



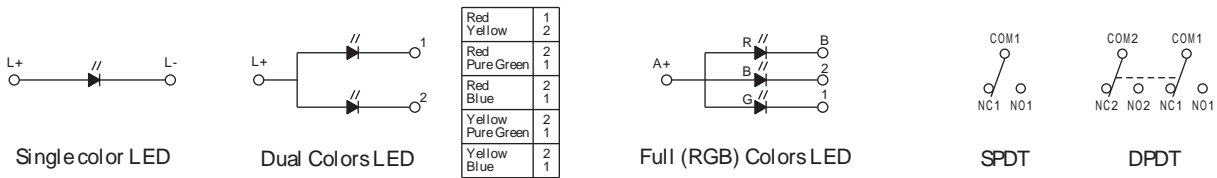
\* The dotted line area is suggested printable area for SPC film insert.  
 \* Recommended film insert: Clear Polyester, 0.2mm Max. thickness.



Film Insert dimension

Dimension unit in mm

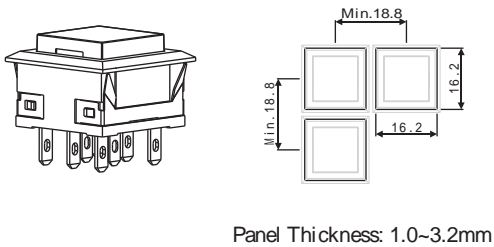
## Contact Configuration & LED Schematics



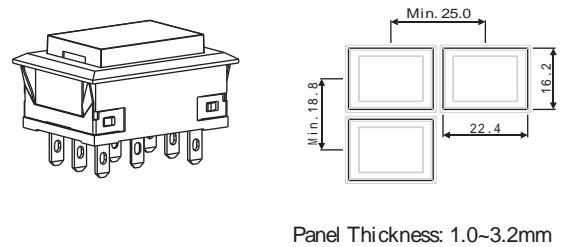
Notes: LED circuit is isolated and requires external power source.

## Panel cutting

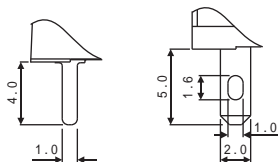
Square, Solder Lug



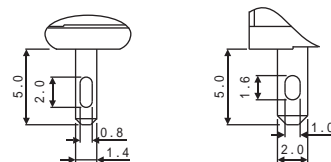
Rectangular, Solder Lug



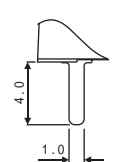
## Terminals



Straight PC type Soldering type  
 Switch pins, Thickness=0.5mm



Soldering type Dual & RGB LED pins  
 Soldering type Single & Dual LED pins  
 LED pins, Thickness=0.3mm

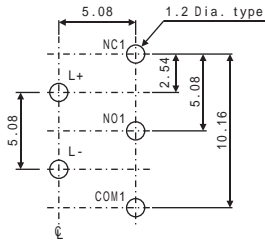


Straight PC type

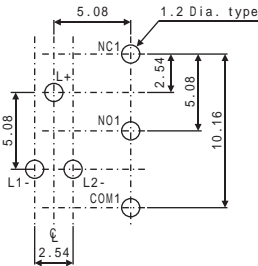
Print Circuit Board Layout

Square type/ Single Pole

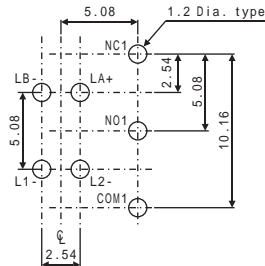
Single color LED



Dual colors LED

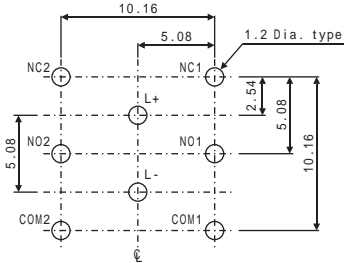


Full colors (RGB) LED

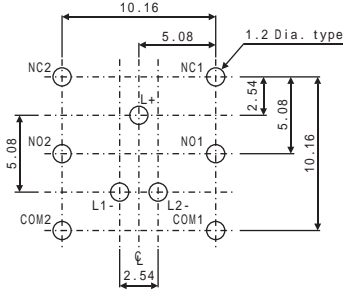


Square type/ Double Poles

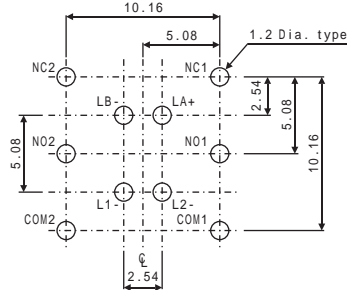
Single color LED



Dual colors LED

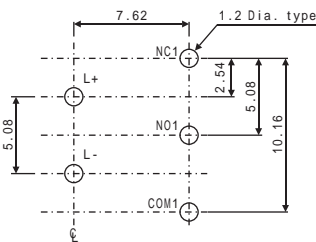


Full colors (RGB) LED

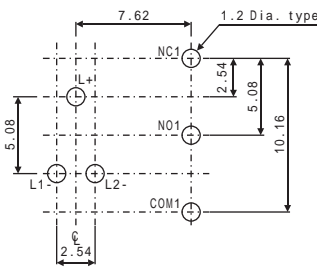


Rectangular type/ Single Pole

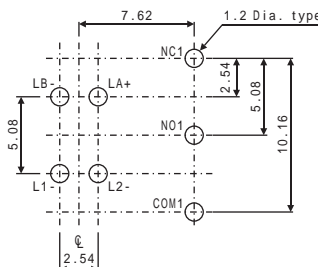
Single color LED



Dual colors LED

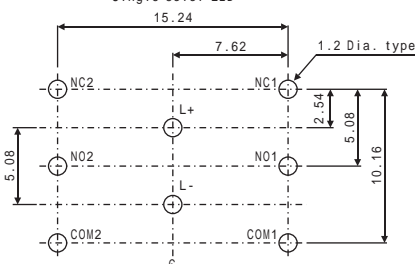


Full colors (RGB) LED

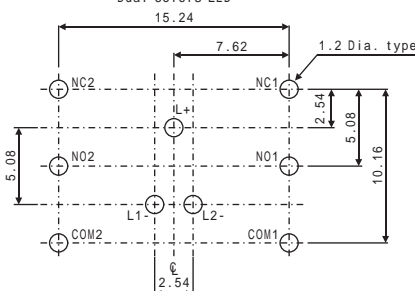


Rectangular type/ Double Poles

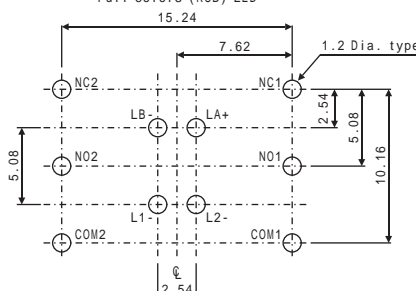
Single color LED



Dual colors LED



Full colors (RGB) LED

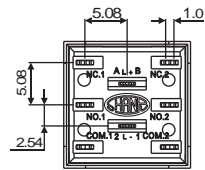
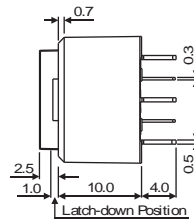
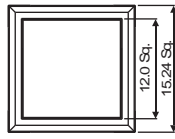
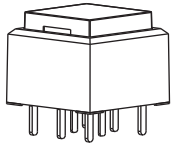


# Pushbutton Switches Series SPC

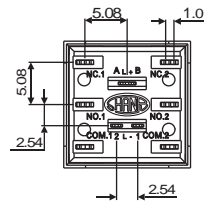
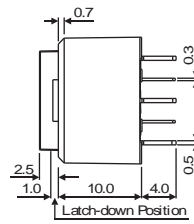
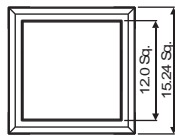
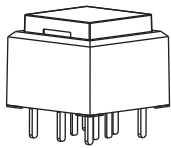
## Square -- PCB type

Single & Double Pole : Single pole do not have terminals Com.2, NO.2 and NC.2

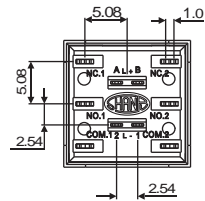
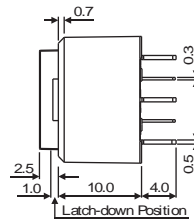
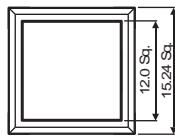
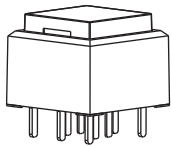
### Single Color LED



### Dual Colors LED

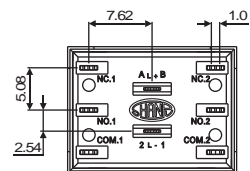
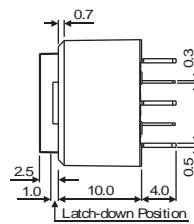
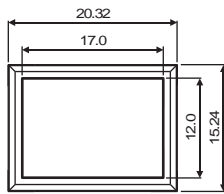
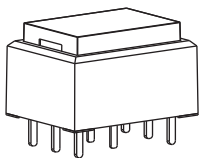


### Full Color(RGB) LED

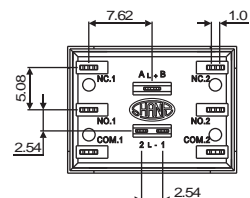
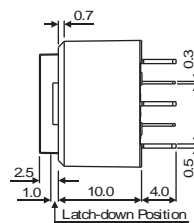
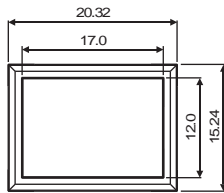
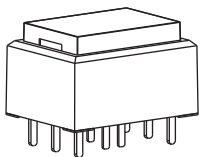


## Rectangular -- PCB type

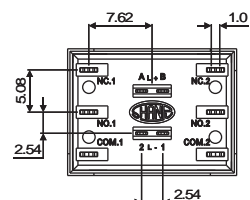
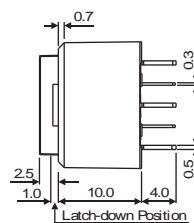
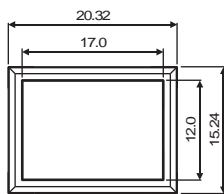
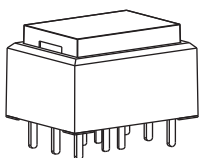
### Single Color LED



### Dual Colors LED



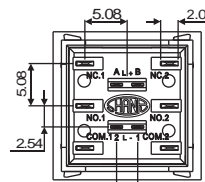
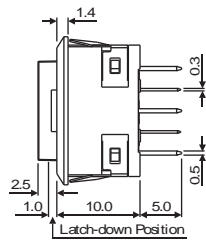
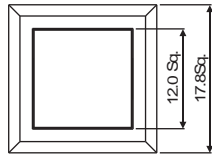
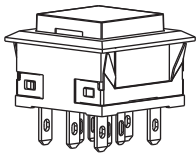
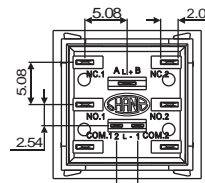
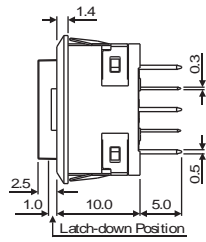
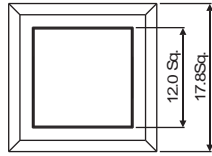
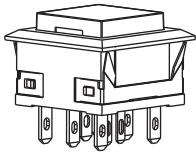
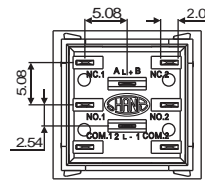
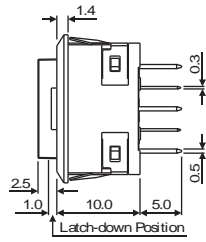
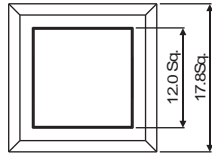
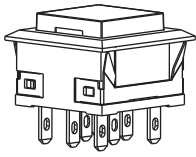
### Full Color(RGB) LED



Single & Double Pole: Single pole do not have terminals Com.2, NO.2 and NC.2

Square -- Solder pin type

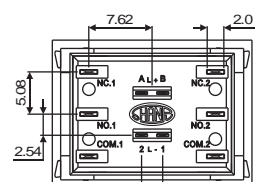
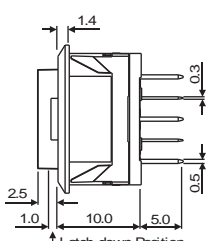
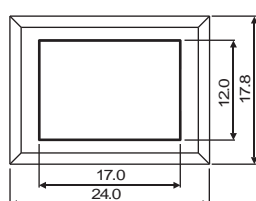
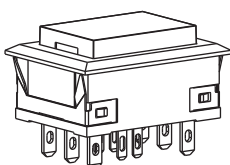
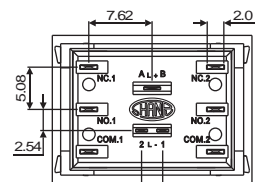
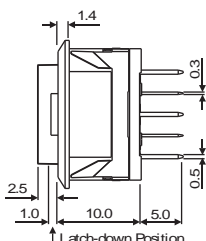
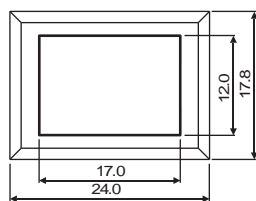
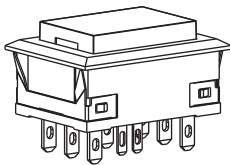
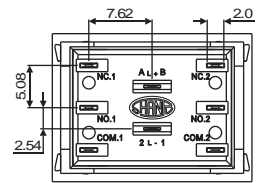
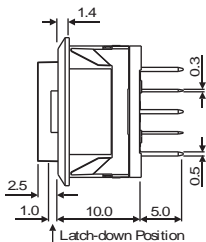
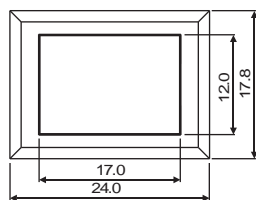
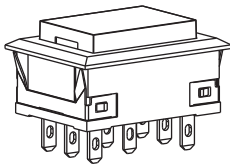
Single Color LED



Single & Double Pole: Single pole do not have terminals Com.2, NO.2 and NC.2

Rectangular -- Solder pin type

Single Color LED



Dimension unit in mm

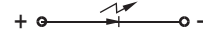
## LED Characteristics

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

Single color	Forward voltage Vf (V) at If=20mA			Dominant Wavelength λ dom(nm)			Luminous intensity Iv(mcd) at If=20mA			Power dissipation Pd (mW)
	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
Red	--	1.8	2.6	--	643	--	3.7	13	--	60
Super Yellow	--	2.0	2.5	585	590	595	80	125	--	75
Green	--	--	--	--	--	--	--	--	--	--
Pure Green	--	--	3.8	520	--	530	200	--	230	80
Blue	--	3.1	3.6	460	465	470	40	--	--	108
White	--	--	3.8	Chromaticity Coordinates			300	--	400	100
				X	Y					
				0.265		0.280				
<b>Dual colors</b>										
Red	1.7	--	2.5	630	--	650	50	--	100	75
Super Yellow	1.7	--	2.5	585	--	595	80	--	160	75
Red	1.7	--	2.5	630	--	650	50	--	100	75
Pure Green	2.8	--	3.7	520	--	530	200	--	500	111
Red	1.7	--	2.5	630	--	650	50	--	100	75
Blue	2.8	--	3.7	460	--	470	40	--	80	111
Super Yellow	1.7	--	2.5	580	--	595	80	--	160	75
Pure Green	2.8	--	3.7	520	--	530	200	--	500	111
Super Yellow	1.7	--	2.5	585	--	595	80	--	160	75
Blue	2.8	--	3.7	460	--	470	40	--	80	111
Pure Green	--	--	3.8	--	525	--	200	250	--	80
Blue	--	--	3.8	--	465	--	50	70	--	80
<b>RGB</b>										
Red	--	2.0	2.5	632	637	642	50	65	--	75
Green	--	3.1	3.6	520	525	530	100	125	--	114
Blue	--	3.1	3.6	460	465	470	30	35	--	114



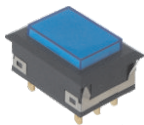
CAUTION:  
LED is static sensitive devices  
Not to be handled by unauthorised personnel.



- Notes:
- 1.LED circuit is isolated and requires external power source.
  - 2.LED an integral part of the switch.
  - 3.Emitting color:±20%
  - 4.Forward voltage:±0.1V
  - 5.Luminous intensity / luminous flux:±20%

Reverse voltage Vr (V) max.	Reverse current Ir (uA) at Vr=5V	Forward current If (mA) max.
5V	100uA	30mA

## How to Order



SPC — [ ] [ ] — [ ] [ ] — [ ] [ ] — [ ] [ ] [ ] [ ]

Function Code	
MS	Momentary, SPDT
MD	Momentary, DPDT
AS	Alternate, SPDT
AD	Alternate, DPDT
I	Indicator

Apparent shaped/Terminal type	
SP	Square/Straight PC
RP	Rectangular/ Straight PC
SS	Square/Soldering type
RS	Rectangular/Soldering type

Cap Color	
T1	Transparency Red
T2	Transparency Yellow
T3	Transparency Green
T5	Transparency Black
T7	Transparency Blue
T	Transparency

The diffuser inside the cap are all in white.

LED Colors	
00	Without LED
Single Colors	
01	Red
S2S	Super Yellow
P3S	Pure Green
7S	Blue
Bi-colors LED	
1S2	Red/Super Yellow
1P3	Red/Pure Green
17	Red/Blue
S2P3	Super Yellow/Pure Green
S27	Super Yellow/Blue
P37	Pure Green/Blue
Tri-colors LED	
RGB	RGB Full color

EXAMPLE : SPC-MS-SS-T-1P3  
SPC Pushbutton switch -Momentary-Square/Soldering type term.-Clear cap-Red+Pure Green LED illuminated.