



## Illuminated Tactile Switches Series SPD



PAT. I 328824  
PAT. ZL 2007 2 0141338.4

### General Specifications

Switch circuit :SPST  
Switch contact rating :50mA @ 12V DC max  
LED rating :Limited forward current(IF) at 20mA max  
LED+IC control protocol :1-wire protocol control, 5V DC  
Contact Resistance :100mOhm Max.(initial)  
Insulation Resistance :100MOhm Min.  
Operating Force :220gf±50gf  
Total Travel :0.3mm±0.1mm  
Mechanical Life :1,000,000 cycles Min.  
Operating Temperature :-25 °C ~ +60 °C

### Materials

Cover :Polycarbonate (PC)  
Reflector :Polyamide(PA)  
Base :LCP  
Action Dome :Stainless steel with silver plating  
Terminal :Phosphor bronze (PBS) with gold plating

### Features

- Bright LEDs of Single, Dual or RGB colors available.
- Full face illumination.
- Small and short body for mounting in tight spaces.
- Snap-actioning contact mechanism.
- Build your own legend.
- Long operating Life.

### RGB+IC Feature

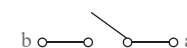
- Uses WS2812B 5V RGB led with programmable .
- RGB Led Can be connected in series to reduce wiring.

### Contact configuration

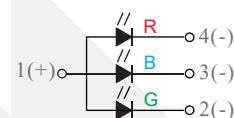
#### / Single LED



#### / Switch



#### / RGB LED



Recommend add resistor to limited each LED forward current at 20mA

#### / RGB+IC LED



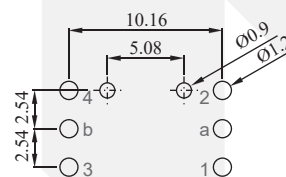
Pin	Function	Description
1	GND	GROUND
2	DIN	DATA IN
3	DOUT	DATA OUT
4	VDD	POWER VOLTAGE,5V

RGB+IC  
Control protocol: 1-wire protocol control, 5V DC

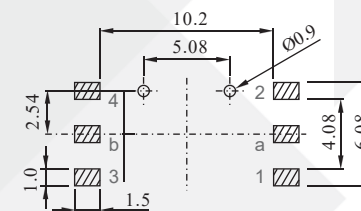
### Note

- ⚠ Pin2,3 suggest avoiding high frequency signal to avoid interference.
- ⚠ Wrong polarity may cause damage to the function.

### PCB. layout



Through hole Type

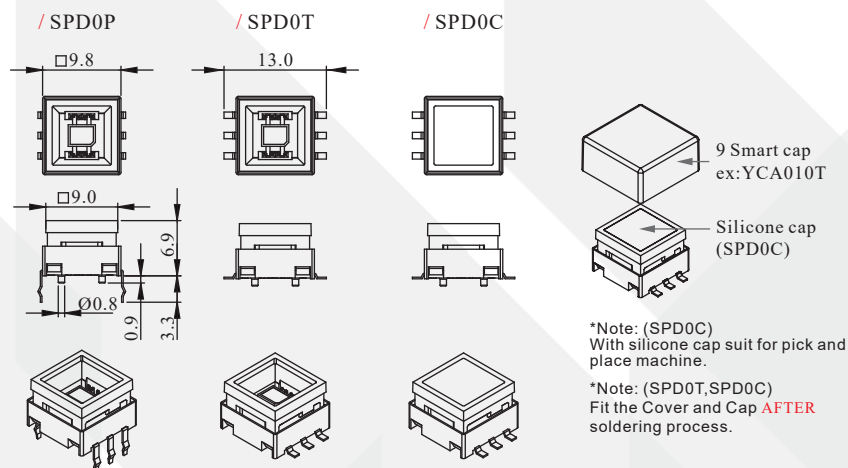


SMD Type

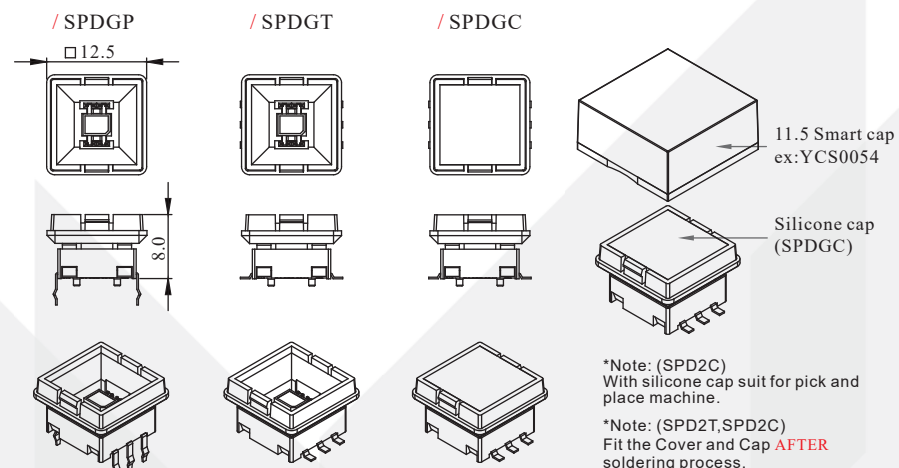


## Illuminated Tactile Switches Series SPD

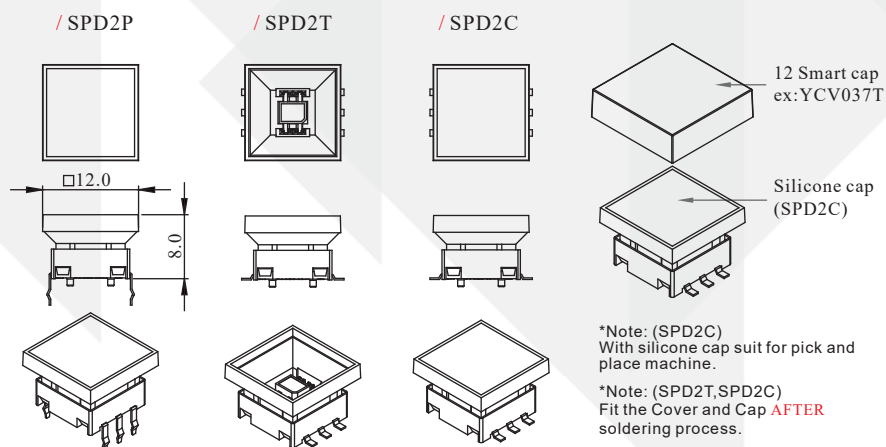
### Dimension of SPD0



### Dimension of SPDG



### Dimension of SPD2



### How to order

SPD

TYPE	
0	9
2	12
G	11.5

Terminal TYPE	
P	Through hole
T	SMD
	Taping reel (350PCS/reel)
C	SMD
	Silicone cap (350PCS/reel)

LED Colors	
0	Without LED
1	Red
2	Super Yellow
3	Green
5	Pure Green
4	White
7	Blue
9	RGB
V	RGB+IC

Cap Colors	
1	Red
2	Yellow
3	Green
4	White
7	Blue

※ Not to conform to SPD□C.  
 ※ Not to conform to SPDG.  
 ※ SPD0 with □9 Transparent Smart Cap, Standard option 4(White) only.

EXAMPLE:  
 SPD0P24YCA047T  
 From Page 39

**SMART CAP** Page 34

**9**  
 Page 42  
 (For SPD0)

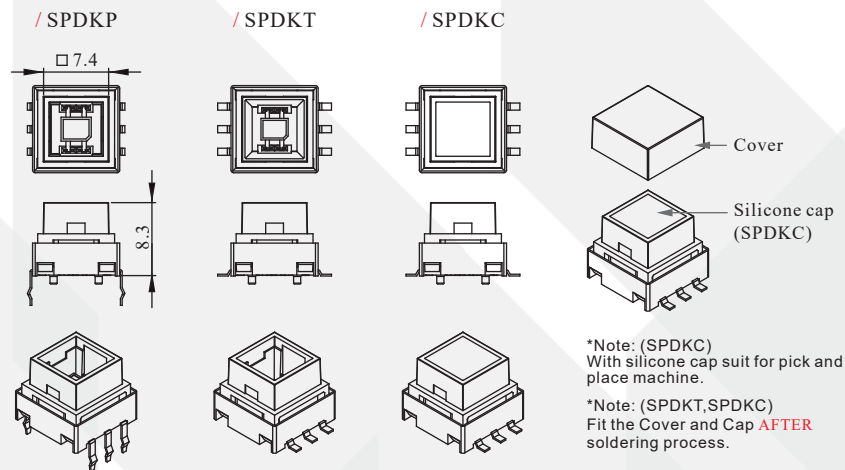
**12**  
 Page 49  
 (For SPD2)

**11.5**  
 Page 46  
 (For SPDG)

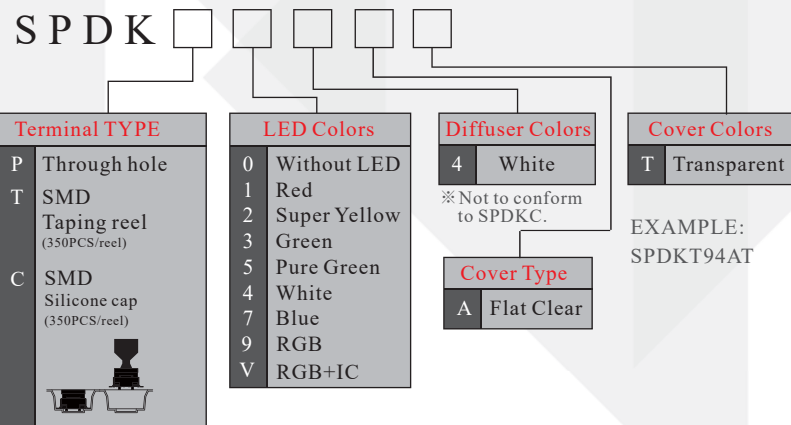


## Illuminated Tactile Switches Series SPDK

### Dimension of SPDK



### How to Order

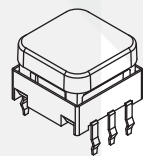
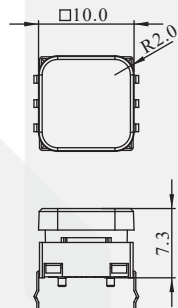




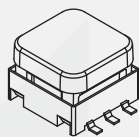
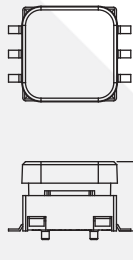
## Illuminated Tactile Switches Series SPD1

### Dimension of SPD1

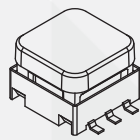
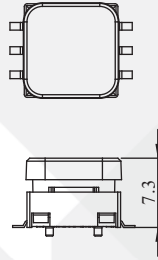
/ SPD1P□YCA1974



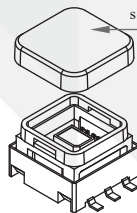
/ SPD1T□YCA1974



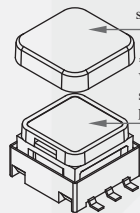
/ SPD1C□YCA1974



\*Note:  
Fit the Cap **AFTER**  
soldering process.



\*Note:  
Fit the Cap **AFTER**  
soldering process.



\*Note:  
With silicone cap  
suit for pick and  
place machine.

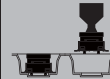
### How to order

SPD1 □ □ YCA1974

#### Terminal TYPE

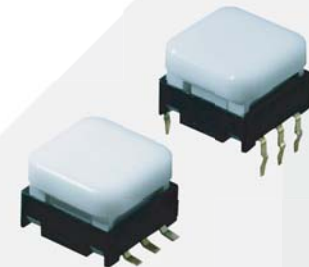
P Through hole  
T SMD  
Taping reel  
(350PCS/reel)

C SMD  
Silicone cap  
(350PCS/reel)



#### LED Colors

0 Without LED  
1 Red  
2 Super Yellow  
3 Green  
5 Pure Green  
4 White  
7 Blue  
9 RGB  
V RGB+IC



EXAMPLE:  
SPD1PYCA1974

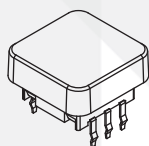
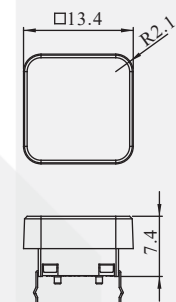


# ShanPu

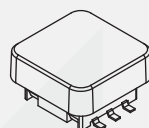
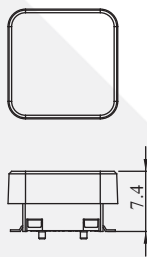
## Illuminated Tactile Switches Series SPD3

### Dimension of SPD3

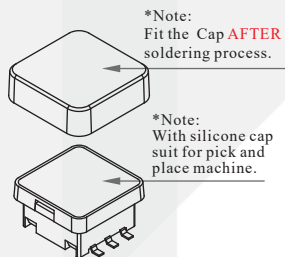
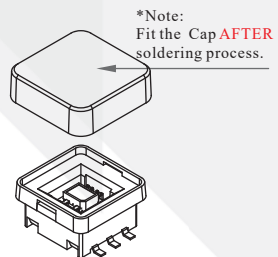
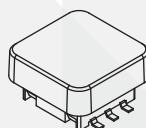
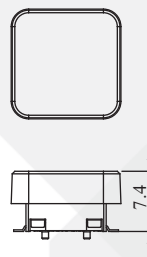
/ SPD3P□YCA1964



/ SPD3T□YCA1964



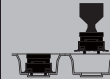
/ SPD3C□YCA1964



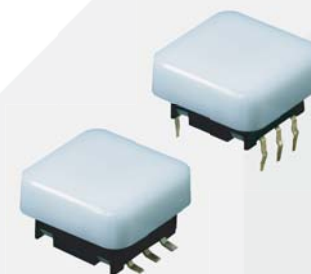
### How to order

SPD3 □ □ YCA1964

Terminal TYPE	
P	Through hole
T	SMD
Taping reel (350PCS/reel)	
C	SMD
Silicone cap (350PCS/reel)	



LED Colors	
0	Without LED
1	Red
2	Super Yellow
3	Green
5	Pure Green
4	White
7	Blue
9	RGB
V	RGB+IC



EXAMPLE:  
SPD3PYCA1964