



Tactile Switches Series SPF



PAT. 1515757

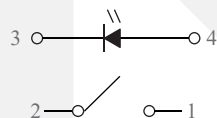
General Specifications

Switch circuit	: SPST
Switch contact rating	: 50mA @ 12V DC max
LED rating	: Limited forward current(IF) at 20mA max
Dielectric Withstanding Voltage	: 250VAC for 1 minute
Contact Resistance	: 100m Ohm Max.(initial)
Insulation Resistance	: 100M Ohm Min.
Operating Force	: 200gf±50gf
Total Travel	: 0.2mm±0.1mm
Mechanical Life	: 100,000 cycles Min.
Function	: Momentary
Operating Temperature	: -10 °C ~ +60 °C

Materials

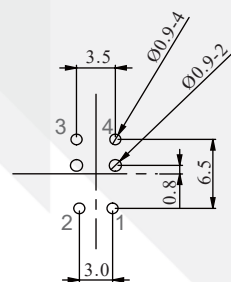
Cap	: Polycarbonate (PC) Acrylonitrile Butadiene Styrene (ABS) Polyamide (PA)
Diffuser	: Polycarbonate (PC) Polyamide (PA)
Housing	: Acrylonitrile Butadiene Styrene (ABS)
Stem	: Polyamide (PA)
Base	: Polyamide (PA)
Terminal	: Bronze with gold plating

PCB layout & Circuit Diagram

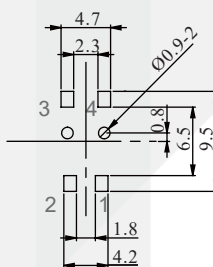


Pin	Function
1	SW COM.
2	SW N.O.
3	LED-
4	LED+

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



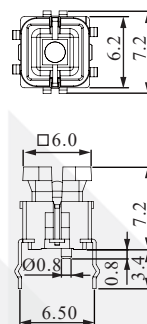
P.C.B. Mounting Holes for SPFSP



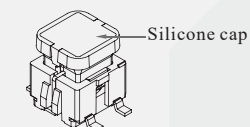
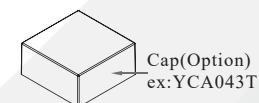
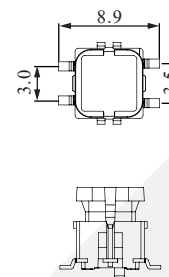
P.C.B. Layout for SPFSC

Dimension

/ SPFSP



/ SPFSC



Note:

- ① With silicone cap suit for pick and place machine.
- ② Fit the Cap **AFTER** soldering process.

How to Order

SPF

Terminal Type	
SP	DIP
SC	SMD Silicone cap
SA	SMD PI tape

LED Color	
0	Without LED
1	Red
2	Yellow
3	Green
4	White
5	Pure Green
7	Blue

EXAMPLE : SPFSP7YCA0434

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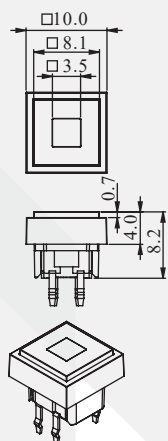


ShanPu

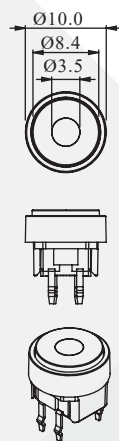
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Dimension of Housing

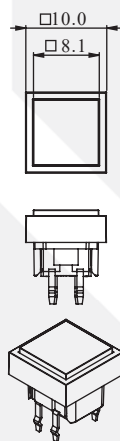
/ Cap Type 1
/ Square Housing



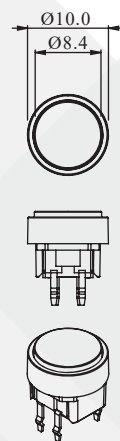
/ Cap Type 2
/ Round Housing



/ Cap Type 3
/ Square Housing



/ Cap Type 4
/ Round Housing



How to Order (Housing)

SPFSP

LED Color	
0	Without LED
1	Red
2	Yellow
3	Green
4	White
5	Pure Green
7	Blue

Housing Type	
S	Square
R	Round

Housing Color	
5	Black
L	Titanium silver

Cap Type with LED	
1	
2	
Cap Type without LED	
3	
4	

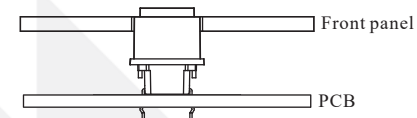
Cap Color	
5	Black
9	Grey

EXAMPLE:
SPFSP7R525

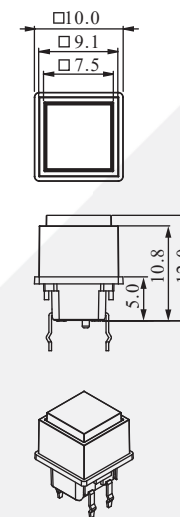
Dimension of □ 9.0 Housing

Features

- Illumination □ 7.5mm cap.
- Total height 12.0mm.
- Bushing structure embellish front panel.
- Customize graved or printed service.



Bushing with tab



How to Order(□ 9.0 Housing)

SPFSP

LED Color	
0	Without LED
1	Red
2	Yellow
3	Green
4	White
5	Pure Green
7	Blue

Housing Color	
5	Black
L	Titanium silver

Diffuser color	
4	White

Cap type	
1	Flat

Cap Color	
T	Transparent

EXAMPLE:
SPFSP5L41T

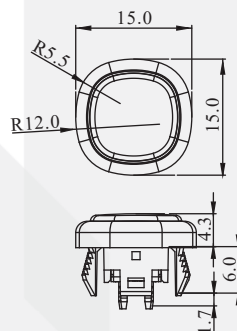


Shan Pu

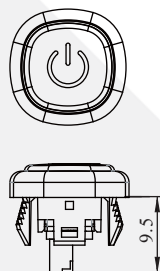
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Dimension of Ø12 Panel Housing

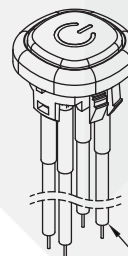
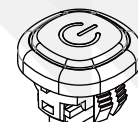
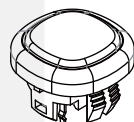
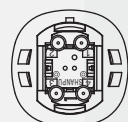
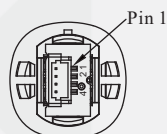
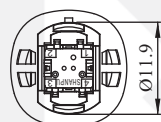
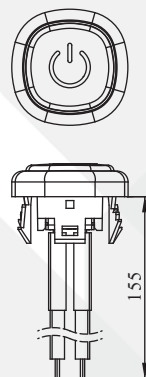
/ SPFSP0A551
/ SPFSP1A5501-L001



/ SPFS7A5501-L001



/ SPFSP1A5501-L001-1



The Connector similar
JST BM04B-SRSS-TB
Applicable Connector:
Conductor pitch / 1.0mm
Conductor width / 0.2mm

Pin	Function	Cable color
1	SW COM.	White
2	SW N.O.	White
3	LED-	Black
4	LED+	Red

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

UL 1007#22AWG

How to Order Ø12 Panel



SPFSP0A551

Manal solder / Without LED /
Ø12 Black Housing /
Red cap



SPFSP1A5501-L001

Manal solder / Red LED /
Ø12 Black Housing /
Paint Black cap with Marking



SPFS7A5501-L001

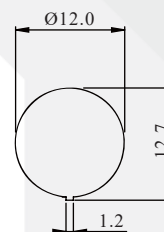
Connector / Blue LED /
Ø12 Black Housing /
Paint Black cap with Marking



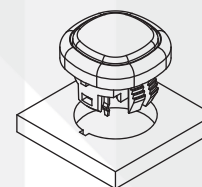
SPFSP1A5501-L001-1

Cable UL1007#22AWG / Red LED /
Ø12 Black Housing /
Paint Black cap with Marking

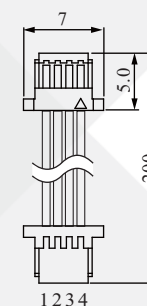
Panel cutting



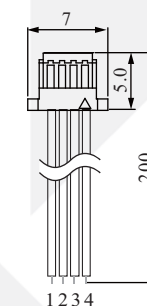
Panel thickness
1.0~3.0mm



Option for SPFS□A



Cable: YCW037
UL1571#28AWG



Cable: YCW040
UL1571#28AWG