HOW TO ORDER

SPL12P — □ — □□ — □□

Cap Colors	
1	Red
2	Yellow
3	Green
4	White
5	Transparent
6	Orange
7	Blue

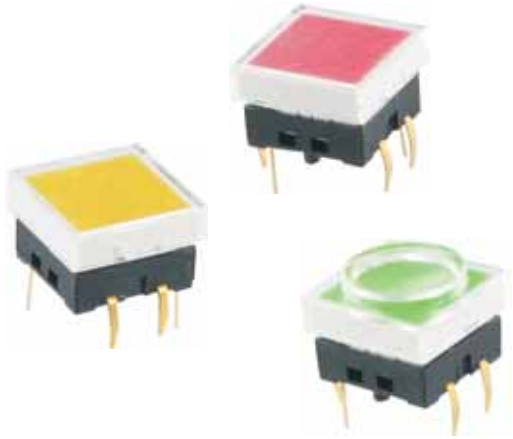
LED Colors	
00	Without LED
01	Red
5V1	Red 5V DC*
02	Yellow
5V2	Yellow 5V DC*
S2	Super Yellow
03	Green
5V3	Green 5V DC*
S3	Super Green
P3	Pure Green*
P3S	Pure Green(single)*
04	White*
4S	White (single)*
07	Blue*
7S	Blue (single)*
17	Red/Blue*
1P3	Red/Pure Green*
P37	Pure Green/Blue*

"*" not standard type
please inquire first

Cover style / Color	
00	Without Cover
FC	Flat/clear
RC	Round h=4.9mm/clear
RH	Round h=6.9mm/clear
SC	Square h=4.9mm/clear
SH	Square h=6.9mm/clear
UT	UP Triangle/clear
DT	Down Triangle/clear
RT	Right Triangle/clear
LT	Left Triangle/clear
C4	Flat cover/white
C5	Flat cover/Foggy
B4	Raised cover/white

"B4" type not available

EXAMPLE : SPL12P-2-02-FC
Illuminated tact switch PCB type - Yellow cap - Yellow led-Flat cover



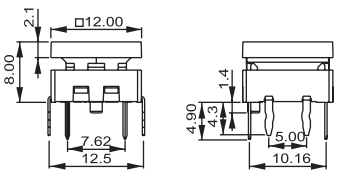
General Specifications

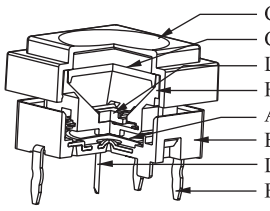
Circuit	:SPST
Current Rating	:50mA @ 12VDC
Contact Resistance	:100mOhm Max.(inital)
Insulation Resistance	:100MOhm Min.
Operating Force	:250gf +50gf
Total Travel	:0.3mm+0.1mm
Operating Life	:5,000,000 cycles Min.
Operating Temperature	:-25 deg.~+60 deg.
Solder Specifications	:260 deg. for 3 seconds

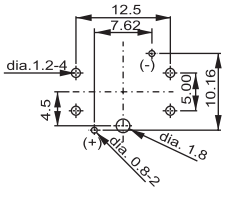
Materials

Cover	:Polycarbonate (PC)
Cap	:Polycarbonate (PC)
Housing	:Polycarbonate (PC)
Base	:Polyamide (PA)
Lamp Term.	:Phosphor bronze (PBS) with gold plating
Act. Dome	:Phosphor bronze (PBS) with silver plating
End Term.	:Brass with gold plating
LED	:Surface Mount Chip LED

SPL12P Illuminated tactile switch

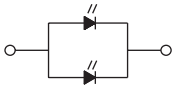




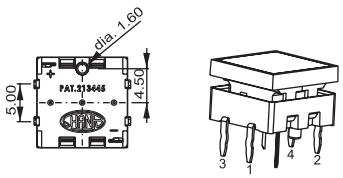


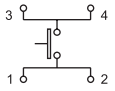
P.C.B. Mounting Holes

SPL12P tact switch
Single color single chip LED

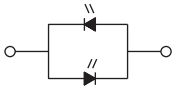


SPL12P tact switch
Single Color LED





(SPST)
Contact Configuration



SPL12P tact switch
Dual Colors LED only

Dimension unit in mm

HOW TO ORDER

SPL12I — □ — □□ — □□

Cap Colors	
1	Red
2	Yellow
3	Green
4	White
5	Transparent
6	Orange
7	Blue

LED Colors	
01	Red
02	Orange
03	YellowGreen
07	Blue
12	Red-Orange
13	Red-YellowGreen
23	Orange-YellowGreen
71	Blue-Red
73	Blue-YellowGreen

Transparent Cover	
00	Without Cover
FC	Flat
RC	Round h=4.9mm
RH	Round h=6.9mm
SC	Square h=4.9mm
SH	Square h=6.9mm
UT	UP Triangle
DT	Down Triangle
RT	Right Triangle
LT	Left Triangle

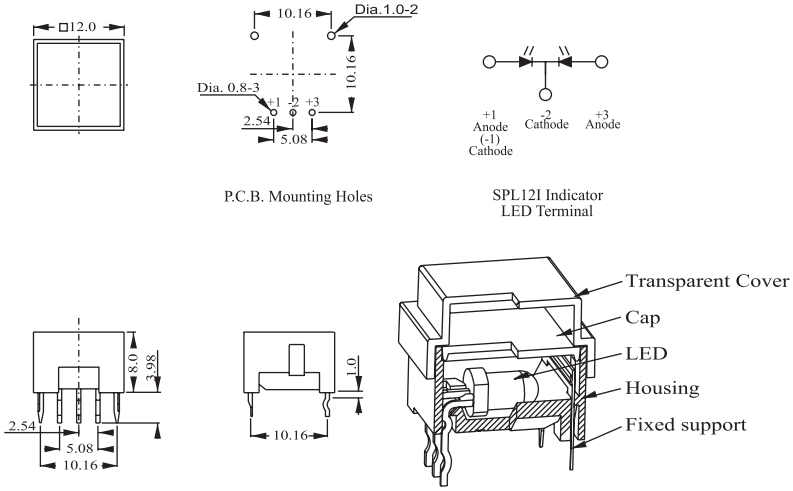
EXAMPLE : SPL12I-4-12-RH
12*12 Indicator-White cap - Red-Yellow LED-RH type cover

General Specifications
The source of Indicator using 3mm diameter LED, it provide low rating votage and amp, long operation life and high performance.

Materials

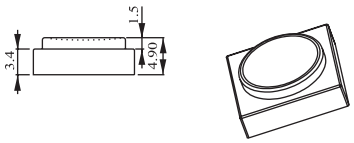
Cap	:Polycarbonate (PC)
Base	:Polycarbonate (PC)
Cover	:Polycarbonate (PC)
Fixed supprot	:Brass with Tin plating
LED	:3mm Diameter LED Lamp

SPL12I Indicator

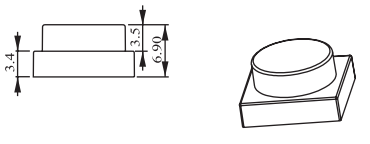


LED's color Terminal Position	
Single Color	
Red	23
Orange(Yellow)	23
Yellow Green(Green)	23
Blue	13
Dual Colors	
Red-Orange(Yellow)	23-21
Red-Yellow Green(Green)	23-21
Orange-YellowGreen(Green)	23-21
Blue-Red	23-21
Blue-YellowGreen(Green)	23-21

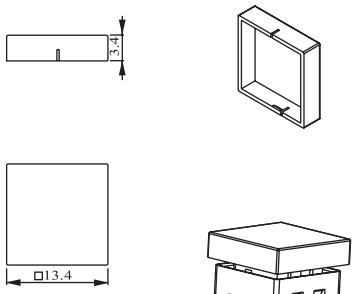
ACCESSORY - COVER STYLE



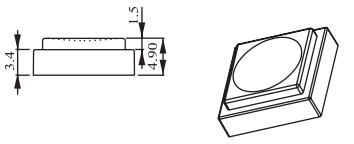
Round Cover(RC)
h=4.9mm



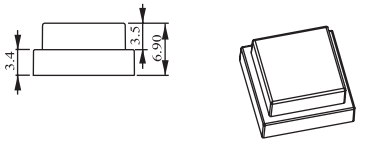
Round Cover(RH)
h=6.9mm



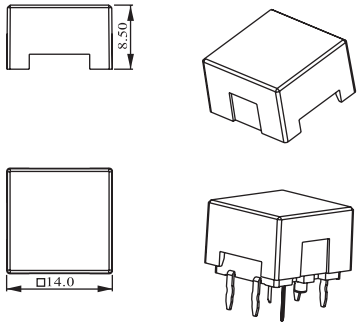
Flat Cover(FC)



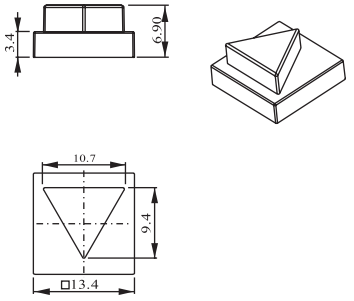
Square Cover(SC)
h=4.9mm



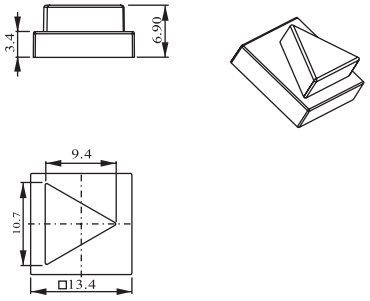
Square Cover(SH)
h=6.9mm



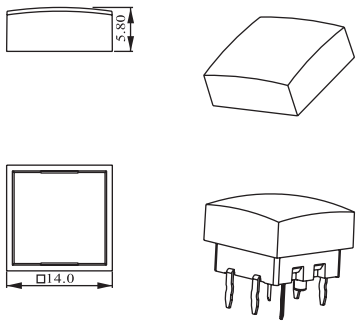
Flat cover(white C4 or clear C5)



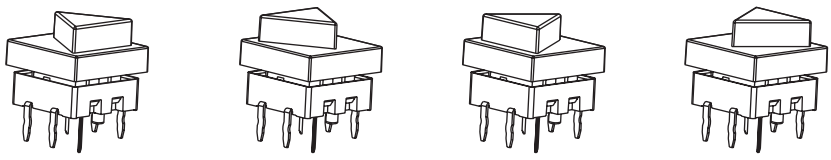
UP Triangle(UT)
Down Triangle(DT)



Right Triangle(RT)
Left Triangle(LT)



Raised cover(white B4)



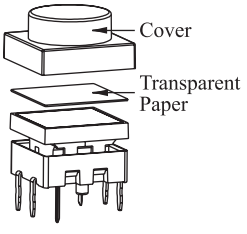
UP Triangle(UT) | Down Triangle(DT) | Right Triangle(RT) | Left Triangle(LT)

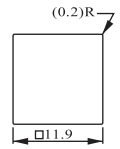
ACCESSORY - TRANSPARENCY PAPER

	0	1	2	3	4	5	6	7	8	9
A	0	1	2	3	4	5	6	7	8	9
B	A	B	C	D	E	F	G	H	I	J
C	K	L	M	N	O	P	Q	R	S	T
D	U	V	W	X	Y	Z	Power	ON OFF	ON	OFF
E	⏻	⏻	Auto	Enter	Star	STOP	OPEN	CLOSE	Exit	Move
F	SET	Reset	Light	Alarm	Menu	Next	Back	Delete	Motor	Save
G	Up	Down	Right	Left	Test	End	Insert	Lock	Print	+/-
H	F1	F2	F3	F4	+	−	×	÷	=	↵
I	↑	↓	←	→	▲	▼	◀|	|▶	✥	✖
J	◜	◝	◞	◟	‖	|	|	—	—	

Example : E0
Transparency Paper the image on the position "E0" is ⏻

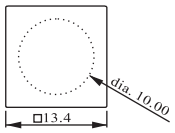
HOW TO BUILD YOUR OWN TRANSPARENCY PAPER



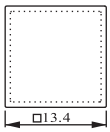


Transparent Paper dimension

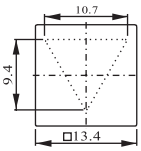
the dotted line area is printable area

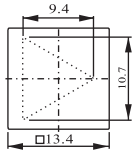


Round Cover



Flat Cover Square Cover





Triangle type Transparency paper

Suggested insert Material and thickness: Clear Polyester, 0.2mm max.

LED BRIGHTNESS

for SPL12P Illuminated tactile switch

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 V_F(V) at 20mA	Forward Current I_F(mA)	Reverse Voltage V_R(V)	Reverse Current I_R(uA) at V_R=5V
bi-Red bi-Yellow bi-Super Yellow bi-Green bi-Super Green bi-Pure Green bi-Blue bi-White	1.8~2.6 2.1~2.6 2.1~2.6 2.2~2.6 2.0~2.6 3.2~3.6 3.5~4.0 3.2~3.8	Typical 20mA 30 mA max.	5V	100uA max.
Single color build in resistor for 5 V DC	5V DC max.	Typical 7mA 12 mA max.		
bi-Red 5V DC bi-Yellow 5V DC bi-Green 5V DC				
Bicolor LED				
Red & Blue	Red 1.8~2.6 Blue 3.5~4.0	Typical 20mA 30 mA max.		
Red & Pure Green	Red 1.8~2.6 Pure Green 3.2~3.6			
Pure Green & Blue	Pure Green 3.2~3.6 Blue 3.5~4.0			

Attention: LED are electrostatic sensitive devices + _

for SPL12P Illuminated tactile switch

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 V_F(V) at 20mA	Forward Current I_F(mA)	Reverse Voltage V_R(V)	Reverse Current I_R(uA) at V_R=5V
Red Yellow Green Blue	2.0~2.6 2.1~2.6 2.0~2.6 3.5~4.0	30 mA max.	5V	100uA
Bicolor LED				
Red & Yellow	Red 2.0~2.4 Yellow 2.1~2.4	30 mA max.		
Red & Green	Red 2.0~2.4 Green 2.0~2.4			
Red & Blue	Red 2.0~2.6 Blue 3.5~4.0			
Yellow & Green	Yellow 2.0~2.6 Green 2.0~2.6			
Yellow & Blue	Yellow 2.1~2.6 Blue 3.5~4.0			
Green & Blue	Green 2.0~2.6 Blue 3.5~4.0			

Attention: LED are electrostatic sensitive devices + _