SPC | Push Button Switch Series

RJS Electronics

Specifications

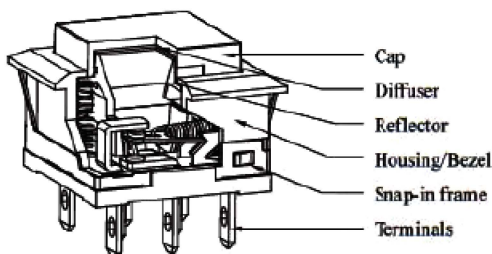|	
Circuit	:SPDT or DPDT
Rating	:5A. 125/250 V AC or 5A@ 30 V DC
Contact Resistance	:50 m Ohm Max(initial)
Insulation Resistance	:200 M Ohm Min
Operating Force	:Single pole: 190gf±50gf
	Double pole: 200gf±50gf
Total Travel	:2.3mm±0.5mm
Mechanical Life	:1,000,000 cycles min. for Momentary.
	200,000 cycles min. for Alternate.
Electrical Life	:10,000 cycles min. for silver alloy contact
Operating Temperature	:-25deg~+50deg
Function	:Momentary or Alternate

Features
- Bright LEDs of Single, 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-action contact mechanism.
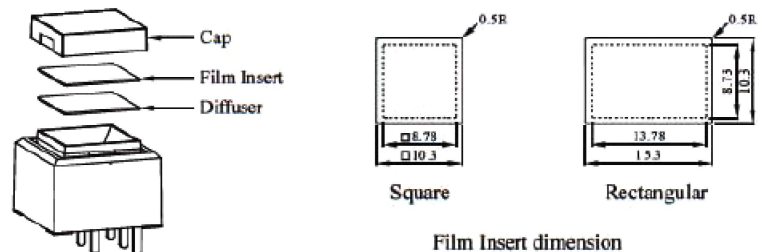- Momentary and Alternate available.

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

Drawing

- Cap
- Diffuser
- Reflector
- Housing/Bezel
- Snap-in frame
- Terminals

DIY Legends

- Cap
- Film Insert
- Diffuser

Square
□8.78
□10.3

Rectangular
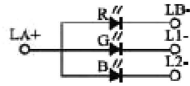0.5R
8.73
10.3
13.78
15.3

Film Insert dimension

*The dotted line area is suggested printable area for SPC film insert.
*Recommended film insert: Clear Polyester, 0.2mm Max. thickness.
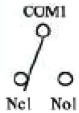
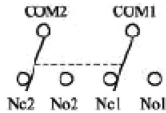## Contact Configuration & LED Schematics

Single color LED

Full (RGB) Colors LED

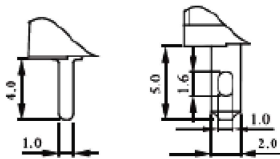Notes: LED circuit is isolated and requires external power source.

COM1
Nc1   No1
SPDT

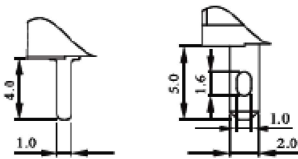COM2   COM1
Nc2   No2   Nc1   No1
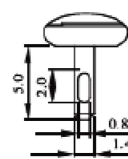DPDT

Terminals

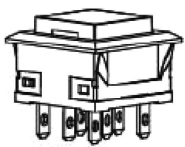Straight PC

Soldering

Straight PC

Soldering Single

Soldering RGB
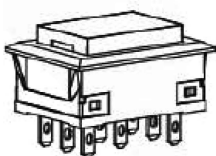
Switch pins, Thickness=0.5mm

LED pins, Thickness=0.3mm

Panel Cutting

Square、Solder Lug

Min.18.8

Min.18.8   16.2   16.2
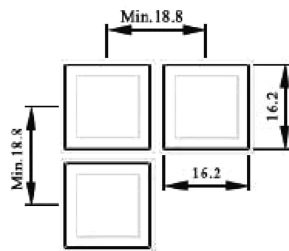
Panel Thickness: 1.0~3.2mm

Rectangular、Solder Lug

Min.25.0

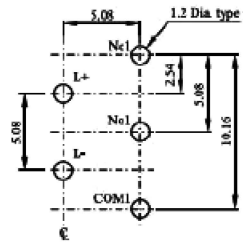Min.18.8   16.2   22.4

Panel Thickness: 1.0~3.2mm
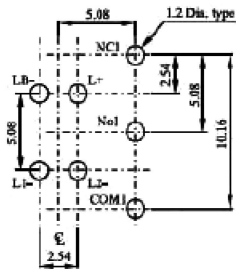
SPC | Push Button Switch Series
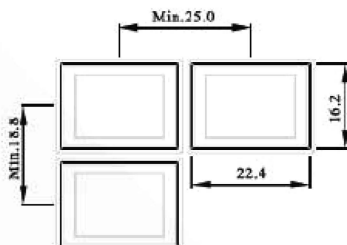
■ PCB Layout of Square Type

Single Pole

Single color LED

Full colors (RGB) LED

Double Pole

Single color LED

Full colors (RGB) LED

■ PCB Layout of Rectangular Type
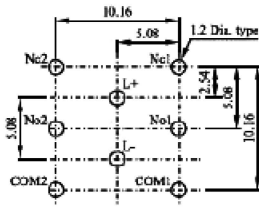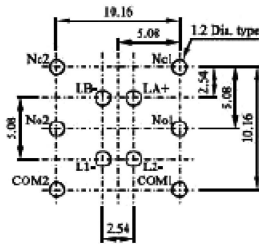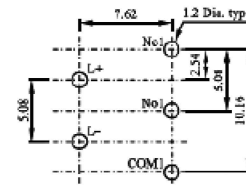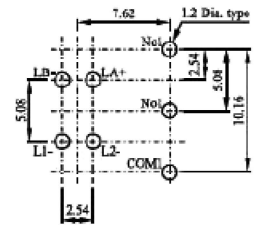
Single Pole
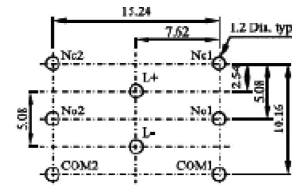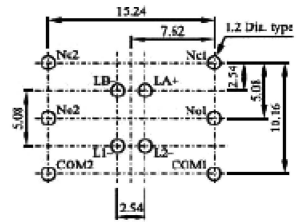
Single color LED

Full colors (RGB) LED

Double Poles

Single color LED

Full colors (RGB) LED

■ Dimensions of Square PCB type

Full Color(RGB) LED

Single & Double Pole:Single pole do not have terminal Com2, NO.2. and NC2
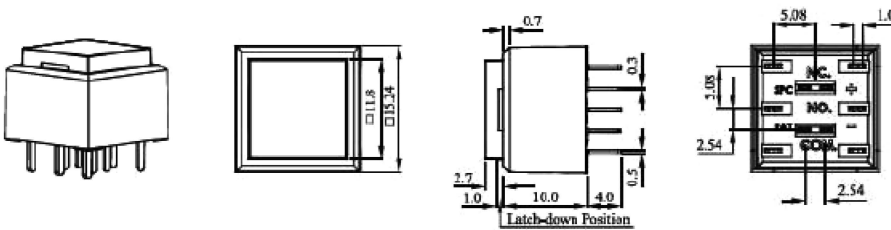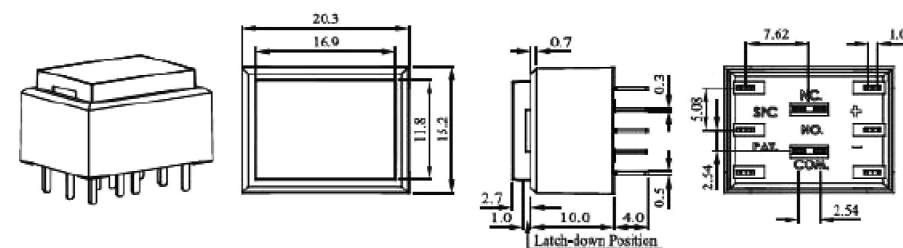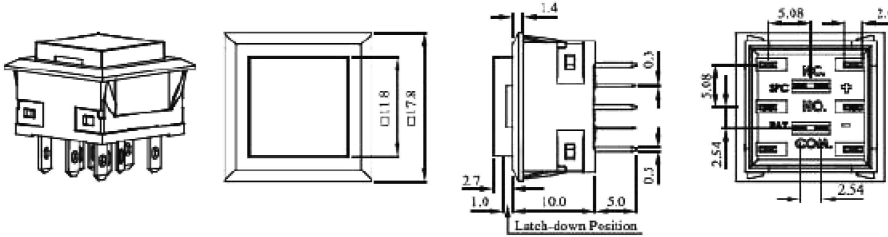

■ Dimensions of Rectangular PCB type

Full Color(RGB) LED

Dimensions of Square Snap-in type

Full Color(RGB) LED

Single & Double Pole: Single pole do not have terminal Com2, NO.2. and NC2

Latch-down Position

Dimensions of Rectangular Snap-in type

Full Color(RGB) LED

Latch-down Position
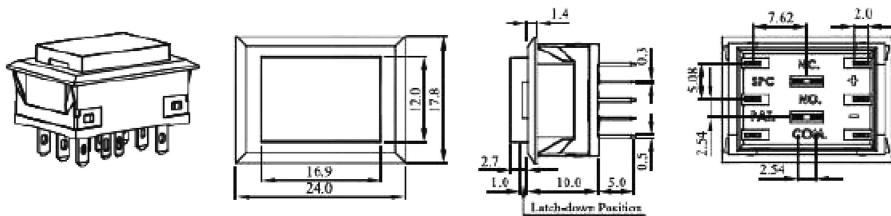
Dimensions of Square PCB type

How to Order

S P C

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	Snap-in type
RS	Rectangular	Snap-in type
WS	Protective Wall -Rectangular	Snap-in type

CAP Color	/ Diffuser Color	
T	Transparent	White
T1	Red Transparent	White
T2	Yellow Transparent	White
T3	Green Transparent	White
T5	Black Transparent	White
T7	Blue Transparent	White
1T	Transparent	Red
2T	Transparent	Yellow
3T	Transparent	Green
6T	Transparent	Orange
7T	Transparent	Blue

LED Colors	
00	Without LED
Single Colors	
01	Red
S2S	Super Yellow
P3S	Pure Green
7S	Blue
4S	White
Tri-colors LED	
RGB	RGB Full color

■ SCB

Cover	
SPC Soldering Series	
BASE	
Ring	
Panel	

■ Dimensions of SCB

SCB-S for Square's

SCB-R for Rectangular's
Not for Protective Wall type

SPC | Push Button Switch Series

SPCG

- **Dimensions**

□ 11.5
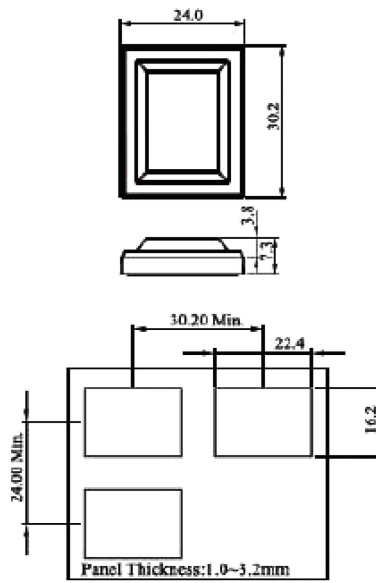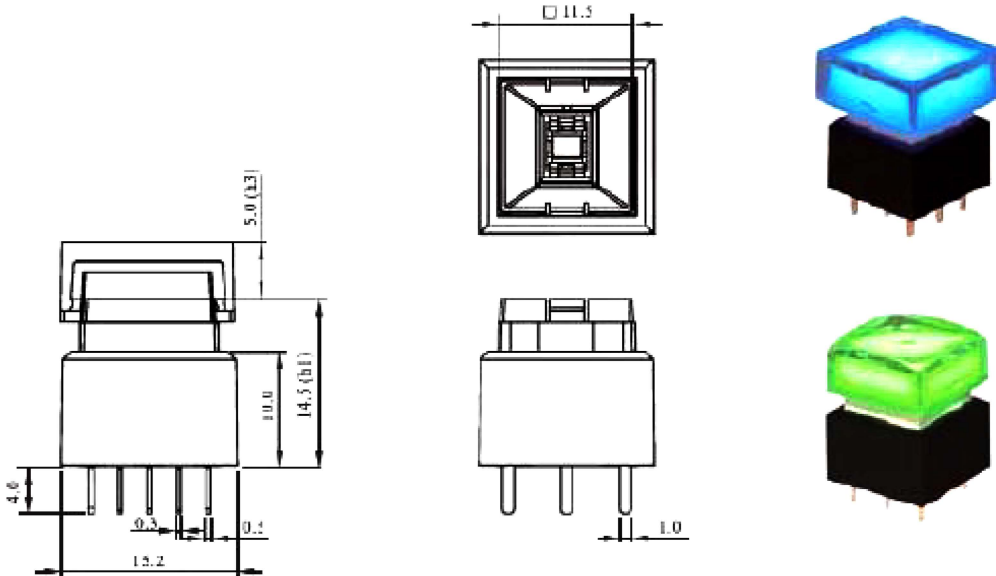
Single color Led

EXAMPLE:
(h1) 14.5mm + (h3) 5.0mm
= (h)19.5mm

From Page 36

- **How to Order**

S P C G ☐☐ ☐

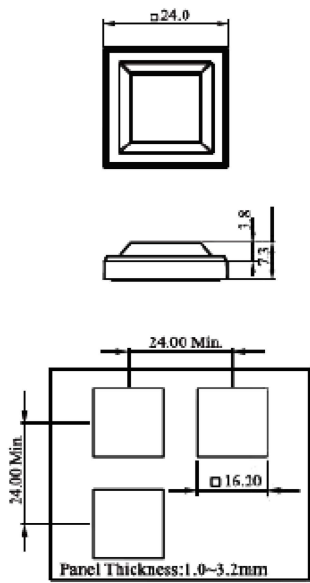| Function Code	
MS	Momentary, SPDT
MD	Momentary, DPDT
AS	Alternate, SPDT
AD	Alternate, DPDT

LED Colors	
0	Without LED
Single Colors	
1	Red
2	Super Yellow
4	White
5	Pure Green
7	Blue
Tri-colors LED	
9	RGB Full color

SMART CAP

SPC | Push Button Switch Series
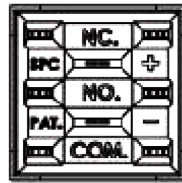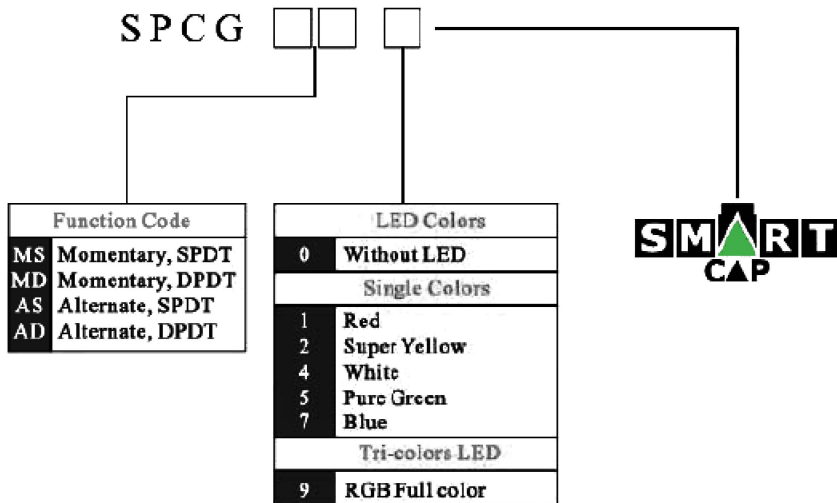
SPCGSA

■ Dimensions

■ Panel

Panel thickness: 1.0~3.2mm
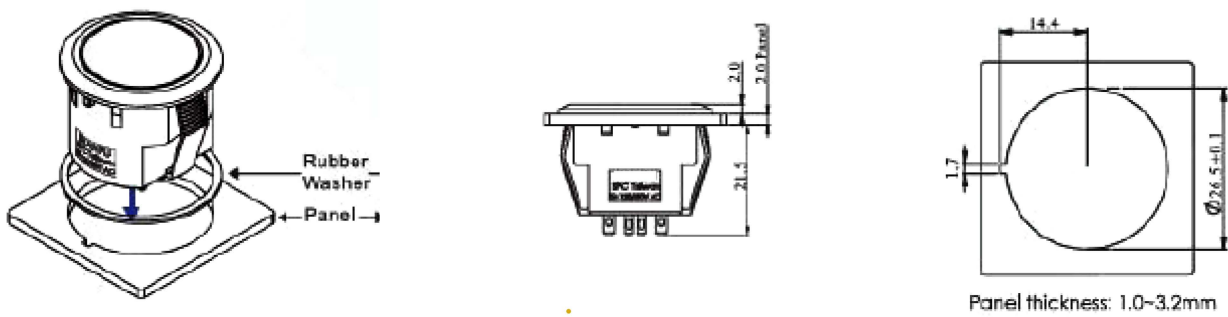
SPCGSB

■ Dimensions

■ Panel

Panel thickness: 1.0~3.2mm
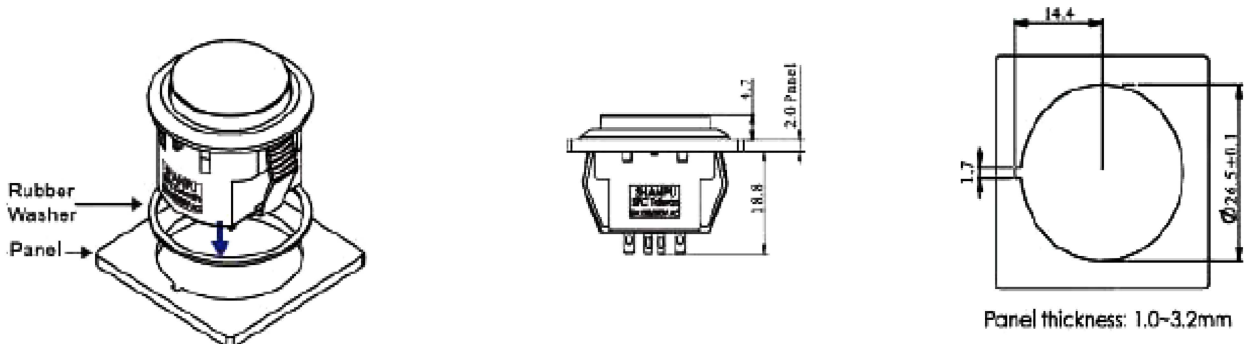
SPCGS

■ How to Order (Snap-in Round Cap)

S P C G S ☐☐ ☐ ☐ ☐ ☐☐☐

Cap Type	
A	Flat CAP
B	Convex CAP

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

LED Colors	
0	Without LED
Single Colors	
1	Red
2	Super Yellow
4	White
5	Pure Green
7	Blue
Tri-colors LED	
9	RGB Full color

Housing color	
5	Black

Cover Size	
A	φ 22.0

Cover Style / Color	
FC	Flat Clear Transparent
FCC	Flat Clear Transparent Black
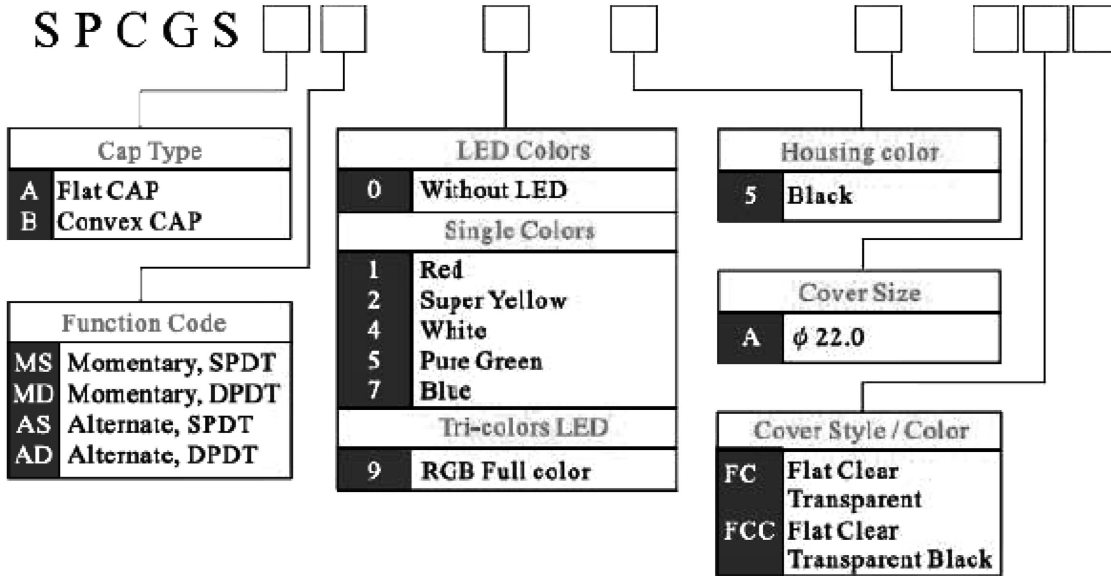
EXAMPLE:
SPCGSAMD95AFCC

Smart Cap Assembly

SPDG

SPCG

SPLG

(h) = (h1) + (h3)

Page 51~56 — 8.0 (h1)

Page 65~72 — 14.5 (h1)

Page 64 — 8.0 (h1)

+ ● + 5.0 (h3)
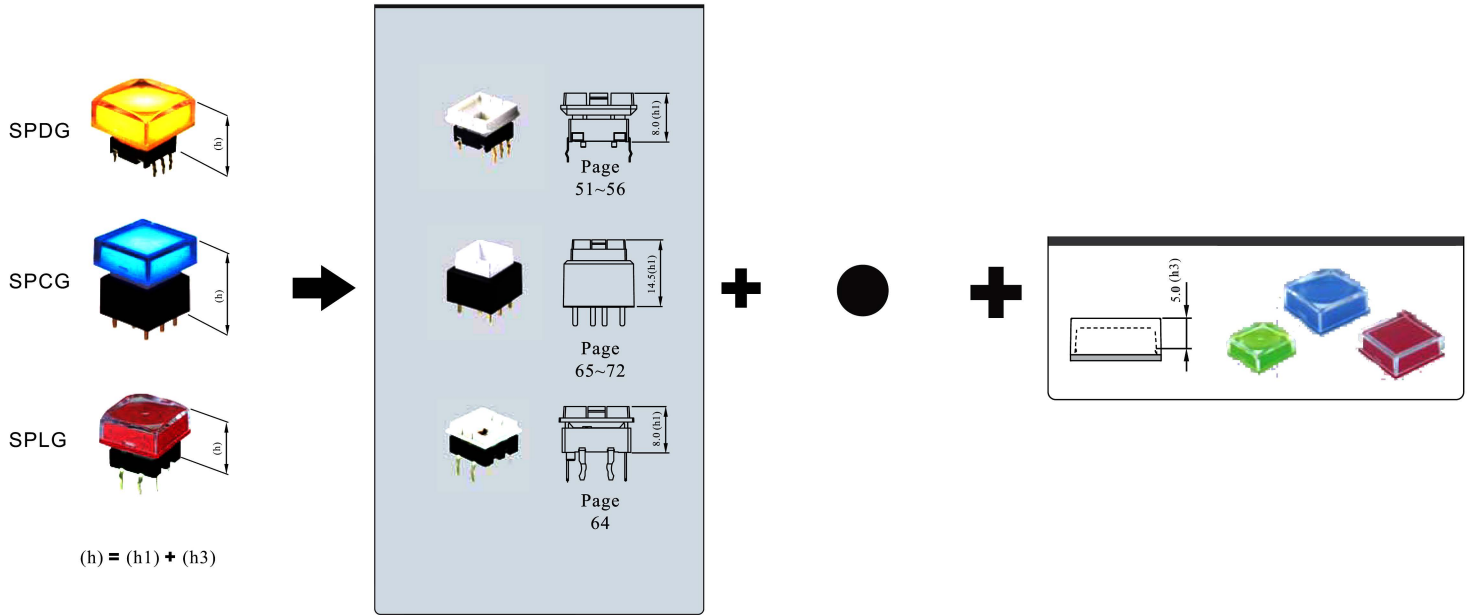
		□15.0	□15.0	□15.0	□17.4	□17.4	□17.4
Shape								
Dimension		5.0(h3) / 7.0	5.0(h3) / 7.0	5.0(h3) / 7.0	5.0(h3) / 7.0	5.0(h3) / 7.0	5.0(h3) / 7.0
Transparent		—	—	—	—	—	—
Ice		YCS004A	YCS005A	YCS006A	YCS001A	YCS002A	YCS003A
Snow		YCS004B	YCS005B	YCS006B	YCS001B	YCS002B	YCS003B
Transparent Black		—	—	—	—	—	—
Red		YCS0041	YCS0051	YCS0061	YCS0011	YCS0021	YCS0031
Yellow		YCS0042	YCS0052	YCS0062	YCS0012	YCS0022	YCS0032
Green		YCS0043	YCS0053	YCS0063	YCS0013	YCS0023	YCS0033
White		YCS0044	YCS0054	YCS0064	YCS0014	YCS0024	YCS0034
Orange		YCS0046	YCS0056	YCS0066	YCS0016	YCS0026	YCS0036
Blue		YCS0047	YCS0057	YCS0067	YCS0017	YCS0027	YCS0037
SPDG (h)		13.0mm	13.0mm	13.0mm	13.0mm	13.0mm	13.0mm
SPCG (h)		19.5mm	19.5mm	19.5mm	19.5mm	19.5mm	19.5mm
SPLG (h)		13.0mm	13.0mm	13.0mm	13.0mm	13.0mm	13.0mm

Smart Cap Assembly

Shape					
Dimension		Ø22.0	□ 14.0 / Ø13.0	Ø17.0	Ø17.0
		6.0(h3) 8.0	5.8(h3) 7.8 / 5.0	5.0(h3) 7.0	5.0(h3) 7.0
Transparent		—	—	—	—
Ice		—	—	—	—
Snow		—	—	—	—
Transparent Black		—	—	—	—
Red		—	—	—	—
Yellow		—	—	—	—
Green		—	—	—	—
White		YCS0284	YCV0574	YCS0354	YCS0364
Orange		—	—	—	—
Blue		—	—	—	—
SPDG (h)		14.0mm	13.8mm	13.0mm	13.0mm
SPCG (h)		20.5mm	20.3mm	19.5mm	19.5mm
SPLG (h)		14.0mm	13.8mm	13.0mm	13.0mm