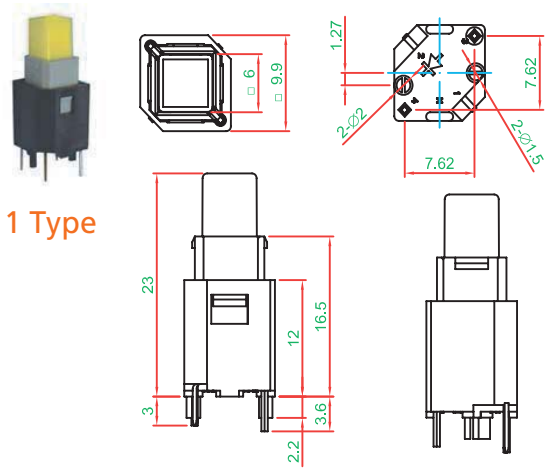
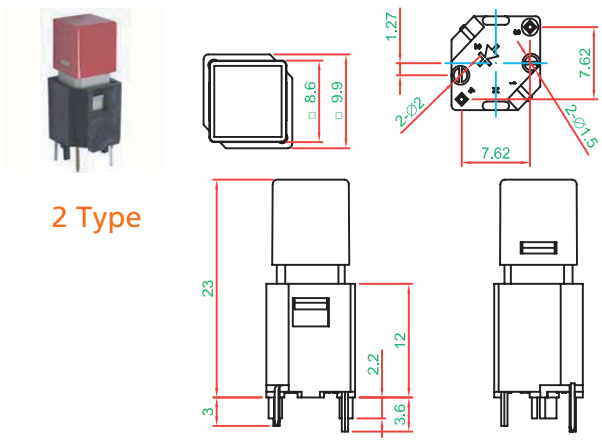
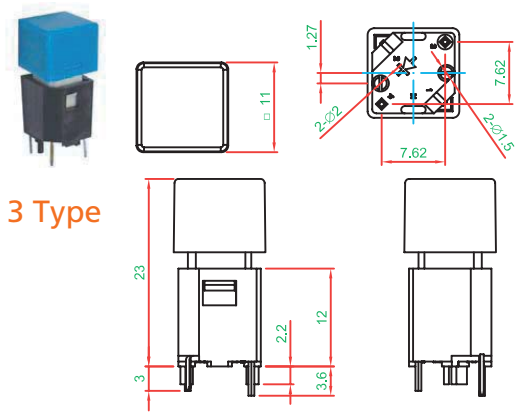
Tactile Switches

SPST THT Tactile Switches with LED

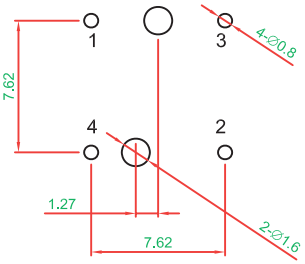
TPN Series



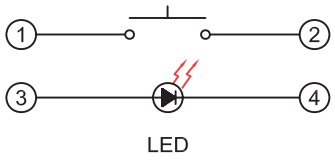




▶ P.C.B. LAYOUT



▶ CIRCUIT DIAGRAM



How to order:

TPN [1] [2] [3] [4] [5] [6] [7] [8]

1 CAP:
- 1 Type (s. drawings)
- 2 Type (s. drawings)
- 3 Type (s. drawings)

2 CAP COLOR:
- B White
- C Red
- G Blue
- J Transparent

3 CAP SURFACE:
- S Silver
- N Without

4 CAP SYMBOL:

N	WITHOUT		
01		02	+
03	−	04	⇧
05	⇩	06	⇦
07	⇨	08	⏻
09	OK	10	OK

5 LEFT LED BRIGHTNESS:
- U Ultra Bright
- R Regular
- N Without LED

6 LEFT LED COLORS:
- G Blue F Green B White
- E Yellow C Red

7 RIGHT LED BRIGHTNESS:
- U Ultra Bright
- R Regular
- N Without LED

8 RIGHT LED COLOR:
- G Blue F Green B White
- E Yellow C Red

General Specifications:

SWITCH SPECIFICATIONS	
POLE - POSITION	Momentary Type , SPST with LED
CONTACT RATING	12 V DC , 50 mA
CONTACT RESISTANCE	500 mΩ max . 1.5 V DC ; 100 mA , by Method of Voltage DROP
INSULATION RESISTANCE	100 MΩ min . 100 V DC for 1 minute
DIELECTRIC STRENGTH	Breakdown is not Allowable ; 250 V AC for 1 Minute
OPERATING FORCE	350 gf +/- 100gf
OPERATING LIFE	30,000 cycles
OPERATING TEMPERATURE RANGE	-20°C ~ 70°C
TOTAL TRAVEL	1.4 + 0.2 / - 0.1 mm

LED SPECIFICATIONS						
ATTENTION (+) (-) LEDs are Electrostatic Sensitive devices		Unit	Value / LED Color			
			Blue	Green	Red	Yellow
FORWARD CURRENT	If	mA	30	30	15	20
REVERSE VOLTAGE	Vr	V	5.0	5.0	5.0	5.0
REVERSE CURRENT	Ir	μA	10	10	10	10
FORWARD VOLTAGE@20mA	Vf	V	3.5-3.8	1.7-2.6	1.7-2.6	1.7-2.6
LUMINOUS INTENSITY@20mA	Iv	mcd	45	6	4	5