

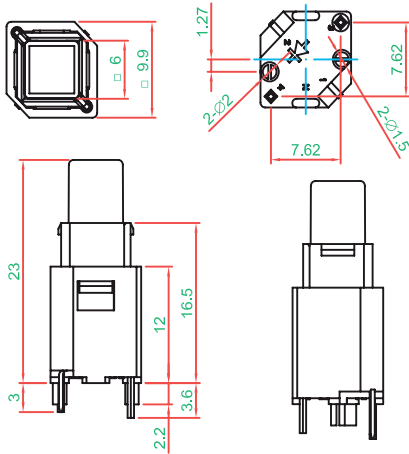
# Tactile Switches

## Bi-Color THT Tactile Switches

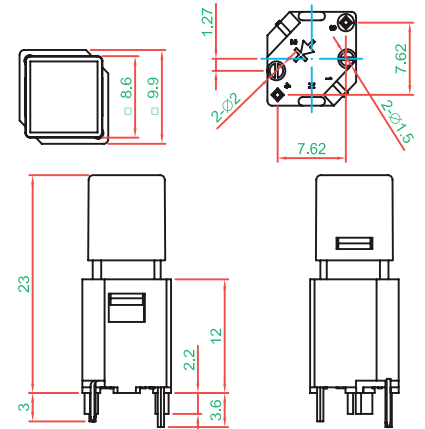
## TPN Series



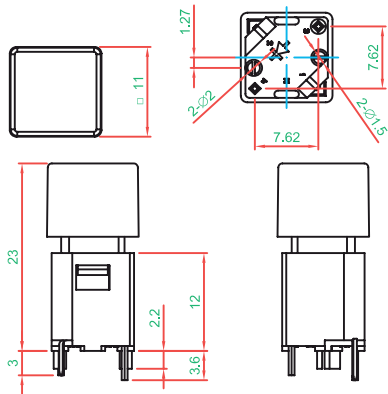
1 Type



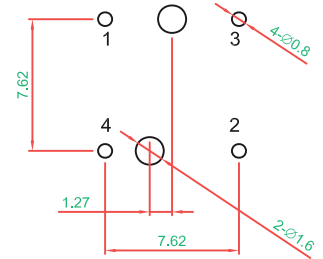
2 Type



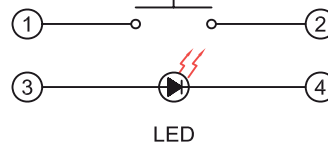
3 Type



### ► P.C.B. LAYOUT



### ► CIRCUIT DIAGRAM



## How to order:

TPN

- |          |                      |          |                              |
|----------|----------------------|----------|------------------------------|
| <b>1</b> | <b>CAP:</b>          | <b>5</b> | <b>LEFT LED BRIGHTNESS:</b>  |
| 1        | 1 Type (s. drawings) | U        | Ultra Bright                 |
| 2        | 2 Type (s. drawings) | R        | Regular                      |
| 3        | 3 Type (s. drawings) | N        | Without LED                  |
| <b>2</b> | <b>CAP COLOR:</b>    | <b>6</b> | <b>LEFT LED COLORS:</b>      |
| B        | White                | G        | Blue                         |
| C        | Red                  | F        | Green                        |
| G        | Blue                 | B        | White                        |
| J        | Transparent          | E        | Yellow                       |
|          |                      | C        | Red                          |
| <b>3</b> | <b>CAP SURFACE:</b>  | <b>7</b> | <b>RIGHT LED BRIGHTNESS:</b> |
| S        | Silver               | U        | Ultra Bright                 |
| N        | Without              | R        | Regular                      |
|          |                      | N        | Without LED                  |
| <b>4</b> | <b>CAP SYMBOL:</b>   | <b>8</b> | <b>RIGHT LED COLOR:</b>      |
|          |                      | G        | Blue                         |
|          |                      | F        | Green                        |
|          |                      | B        | White                        |
|          |                      | E        | Yellow                       |
|          |                      | C        | Red                          |

N	WITHOUT
01	02
03	04
05	06
07	08
09	10

## 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