

## TP & TS Series Pushbutton Switches



### Features -

- Momentary and locking switch action
- Shorting and non-shorting contacts
- Silver or Gold contact types
- Optional LED illumination
- Wide variety of accessories available including colour buttons and mounting frames

### Description -

A series of through hole, PCB mounted, sub miniature pushbutton switches available with either momentary or locking action. Silver or gold plated versions to suit a large number of applications. LED illumination is available to indicate the system state. The LEDs are offered in red, green and yellow and accessories include circular and square shaped buttons in seven solid and four clear colours. The PCB mounting height to the panel is the same as the L series allowing both types of switch to be combined in an application.

### Ordering information

Series Code		Operation Type		Construction		Contacts Material		Registration No.					
Code	LED Colour	IF	V <sub>F</sub> nom	V <sub>F</sub> max	V <sub>R</sub>	Code	LED Colour	IF	V <sub>F</sub> nom	V <sub>F</sub> max	V <sub>R</sub>		
P	Non-Shorting	None	Momentary	1	No LED	None	Silver	L2	Red	30mA	2.0V	2.8V	5VDC
S	Shorting	L	Push to Lock	2	For LED	G	Gold	L5	Green	20mA	1.95V	2.5V	5VDC

i.e. TP2-01G-L2 = LED construction, momentary gold contacts with Red LED.

## TECHNICAL SPECIFICATION

### Electrical TP/TS Series (momentary)

Rating - 0.1A 30V DC

Contact Resistance

Silver plated contacts - 50mΩ max (200μV AC 1.5mA)

Gold plated contacts - 100mΩ max (200μV AC 1.5mA)

Insulation Resistance - 100mΩ min @ 500V DC

Dielectric Strength - 500V AC for 1 Minute

### Mechanical

Operating life 10,000 operations

Operating temperature -10°C to +70°C

Operating Force 1.5N +/- 1.0N

### Soldering

Jet wave or Dip type 245 +/- 10°C 3 sec max Hand soldering 20W max 270° Max 3 sec max **Not Suitable for immersion washing**

### Electric TPL/TSL Series (alternate)

Rating - 0.1A 30V DC

Contact Resistance

Silver plated contacts - 50mΩ max (200μV AC 1.5mA)

Gold plated contacts - 100mΩ max (200μV AC 1.5mA)

Insulation Resistance - 100mΩ min @ 500V DC

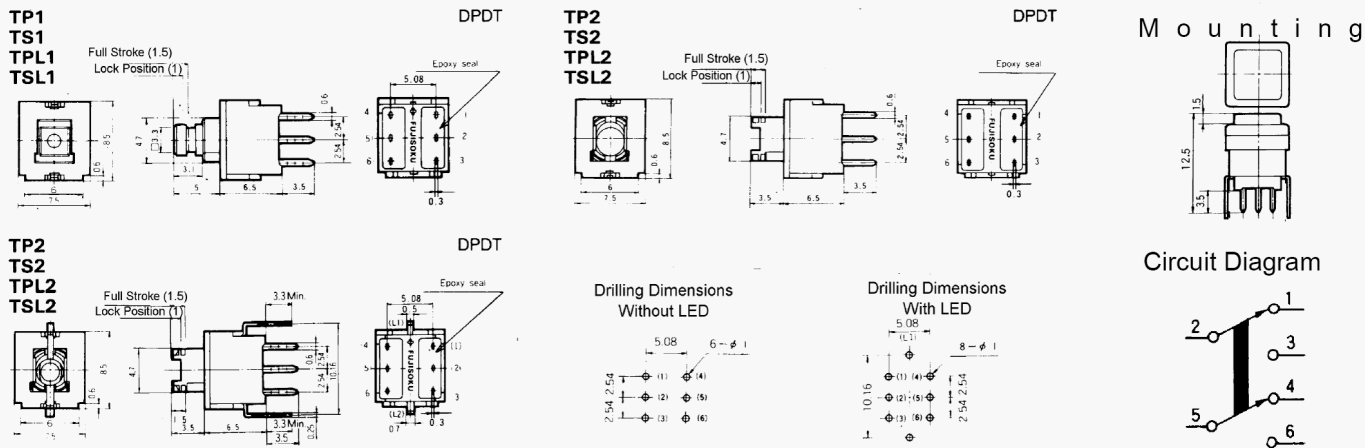
Dielectric Strength - 500V AC for 1 Minute

### Electrical - LED

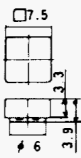
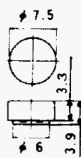

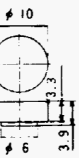
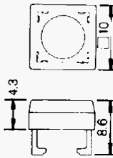
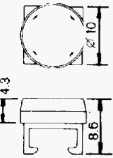
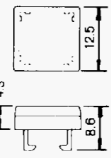
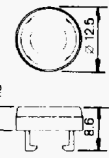
	Red	Green
I <sub>f</sub>	30mA	20mA
V <sub>f</sub> nom	2.0V	1.95V
V <sub>f</sub> max	2.8V	2.5V
V <sub>R</sub>	5VDC	5VDC

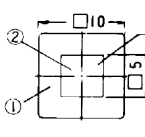
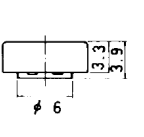
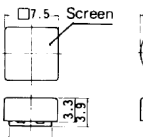
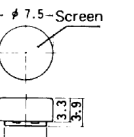
# TP & TS Series Pushbutton Switches

## Dimensions



## Optional Accessories

	Colour Button - Non-illuminated				Mounting Frame			
								
Dark Grey	PZ0010	PZ1010	PZ0110	PZ1110	PZ2310	PZ3310	PZ2010	PZ3010
Grey	PZ0004	PZ1004	PZ0104	PZ1104	PZ2304	PZ3304	PZ2004	PZ3004
Light Grey	PZ0011	PZ1011	PZ0111	PZ1111	PZ2311	PZ3311	PZ2011	PZ3011
Ivory	PZ0012	PZ1012	PZ0112	PZ1112	PZ2312	PZ3312	PZ2012	PZ3012
Red	PZ0002	PZ1002	PZ0102	PZ1102	-	-	-	-
Green	PZ0005	PZ1005	PZ0105	PZ1105	-	-	-	-
Blue	PZ0006	PZ1006	PZ0106	PZ1106	-	-	-	-

	Colour Button - illuminated										
											
Dark Grey	Clear	Red Clear	Green Clear	Yellow Clear	Clear	Red Clear	Green Clear	Yellow Clear	Clear	PZ6000	PZ7000
Grey	PZ6140	PZ6210	PZ6510	PZ6810	PZ7140	PZ7210	PZ7510	PZ7810	Red Clear	PZ6002	PZ7002
Light Grey	PZ6137	PZ6204	PZ6504	PZ6804	PZ7137	PZ7204	PZ7504	PZ7804	Green Clear	PZ6005	PZ7005
Ivory	PZ6141	PZ6211	PZ6511	PZ6811	PZ7141	PZ7211	PZ7511	PZ7811	Yellow Clear	PZ6008	PZ7008
Red	PZ6142	PZ6212	PZ6512	PZ6812	PZ7142	PZ7212	PZ7512	PZ7812			
Green	PZ6136	PZ6202	PZ6502	PZ6802	PZ7136	PZ7202	PZ7502	PZ7802			
Blue	PZ6138	PZ6205	PZ6505	PZ6805	PZ7138	PZ7205	PZ7505	PZ7805			
	PZ6139	PZ6206	PZ6506	PZ6806	PZ7139	PZ7206	PZ7506	PZ7806			