

## SPECIFICATIONS

### ELECTRICAL

**MAXIMUM POWER:** 3.5 VA.  
**MIN./MAX. VOLTAGE:** 20 mV - 50 VDC.  
**MIN./MAX. CURRENT:** 0.01mA - 250 mA.  
**INSULATION RESISTANCE:**  $\geq 10^9 \Omega$ .  
**CONTACT RESISTANCE:**  $\geq 50 m\Omega$ .  
**DIELECTRIC STRENGTH:**  $\geq 250 Vrms$ .

### MECHANICAL

**OPERATING FORCE:** 2.5 N at Full Travel.  
**SWITCHING TRAVEL:** .130" (2.95mm).  
**LATCH TRAVEL:** .131" (3.3mm).  
**FULL TRAVEL:** .200" (5.1mm).

### OPERATING ENVIRONMENT

**OPERATING TEMPERATURE:** -30°C TO 85°C.  
**STORAGE TEMPERATURE:** -30°C TO 85°C.  
**RELATIVE HUMIDITY:** 90% R.H. @80°C.  
**OPERATING LIFE:** 30,000 Cycles.  
**VIBRATION:** Per EIA 186-E Methods 7 & 8.  
**MECHANICAL SHOCK:** Per EIA 186-E Methods 12.

### PROCESS ENVIRONMENT

**SOLDERABILITY:** According to Mil STD 202F Method 208D or EIA RS-186E Method 9.  
**LEAD FREE PROCESS COMPATIBLE:** 260°C peak, 10 seconds Max. above 250°C.

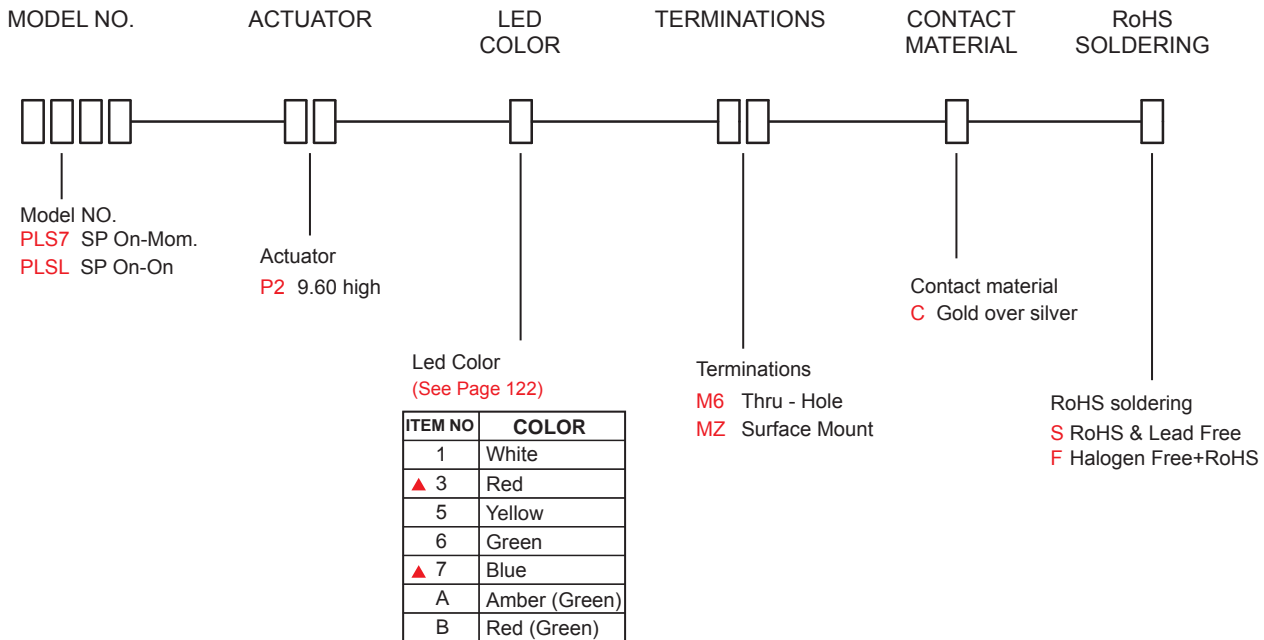
## MATERIALS

**FIXED CONTACTS AND TERMINALS:**  
 Stainless steel, silver plated with gold flash (STD.)  
**MOVABLE CONTACTS:**  
 Copper alloy, silver plated with gold flash (STD.).  
**ACTUATOR:** Glass filled LCP (UL94V-0).  
**BASE:** Glass filled LCP (UL94V-0).  
**COVER:** Stainless steel.



PL Pushbutton Switches

## HOW TO ORDER



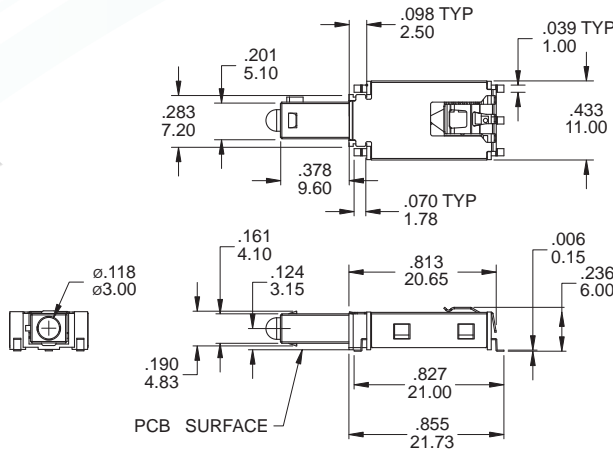
▲ Please check the availability in advance before order

## SWITCH FUNCTION

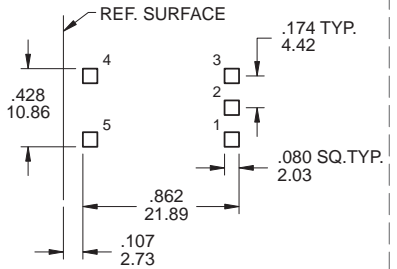
| NO. POLES | MODEL NO. | SWITCH FUNCTION |         | CONNECTED TERMINALS |       |          |
|-----------|-----------|-----------------|---------|---------------------|-------|----------|
|           |           | POS.1           | POS.2   | POS.1               | POS.2 | SCHMATIC |
| SP        | PLS7      | ON              | ON(MOM) | 3-4                 | 2-3   |          |
| SP        | PLSL      | ON              | ON      | 3-4                 | 2-3   |          |

MOM=MOMENTARY

### MZ (Lock)



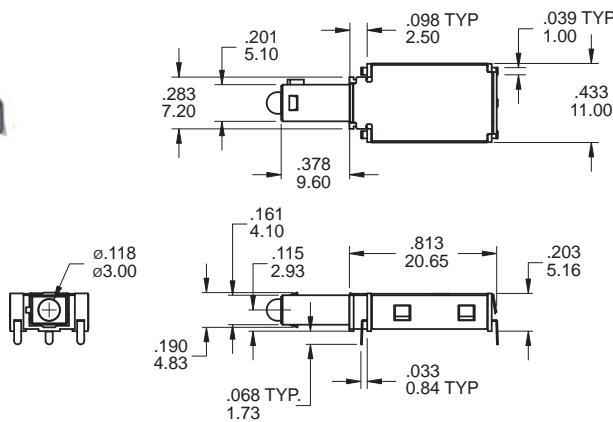
#### P.C. MOUNTING



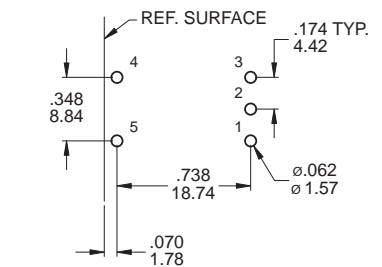
### SPDT

Part No. Shown : PLSLP2XMZCS

### M6



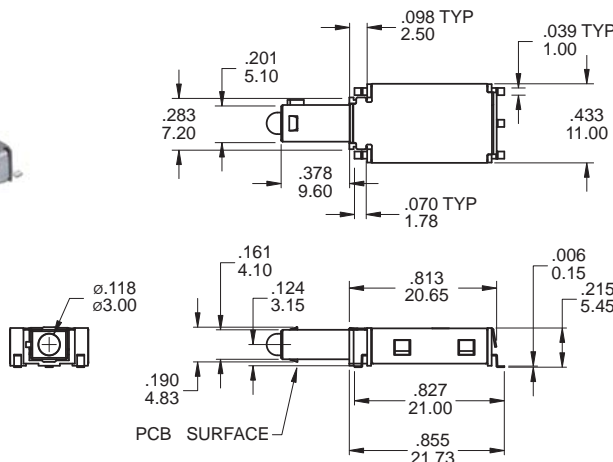
#### P.C. MOUNTING



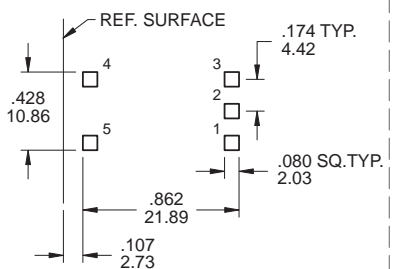
### SPDT

Part No. Shown : PLS7P2XM6CS

### MZ



#### P.C. MOUNTING



### SPDT

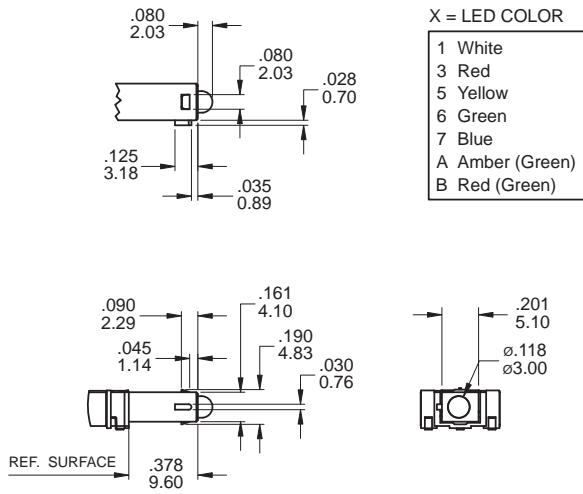
Part No. Shown : PLS7P2XMZCS



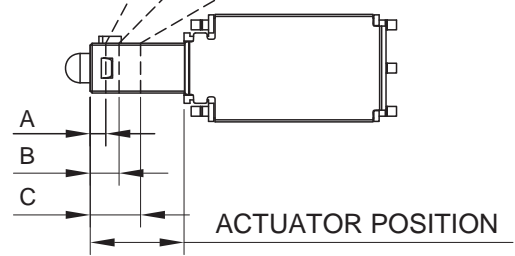
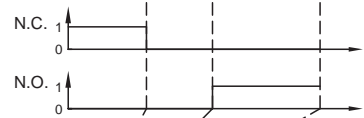
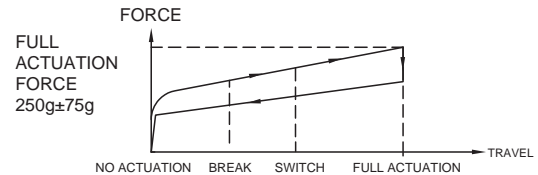
PL  
Right Angle Illuminated Latching Pushbutton Switches

## ACTUATOR OPTIONS

**P2X** WITHOUT WINDOW AND SNAP FEATURE TO ACCEPT CUSTOM CAP

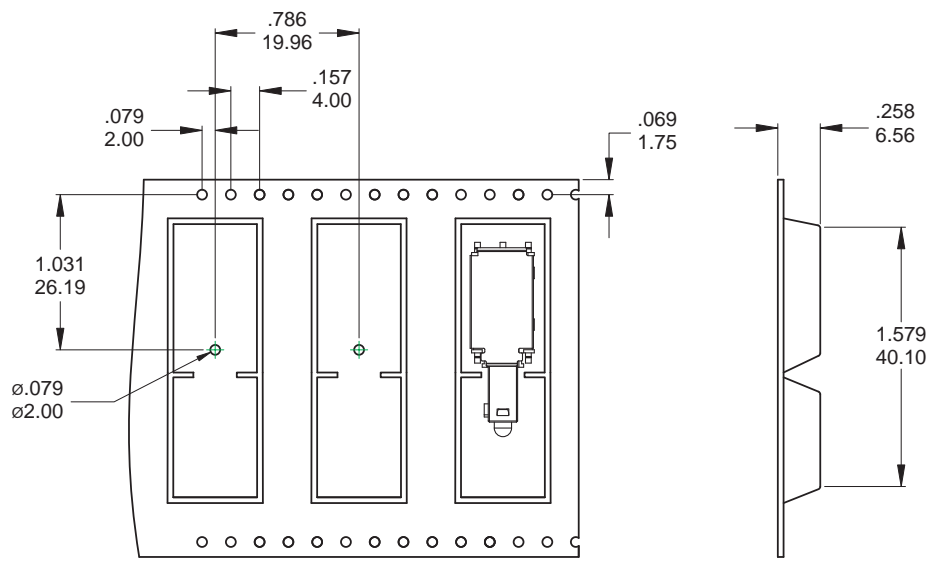


## FORCE AND TRAVEL DIAGRAM



| ACTUATOR POSITION |                |                      |
|-------------------|----------------|----------------------|
| A                 | BREAK          | .039±.020 1.0±0.5mm  |
| B                 | SWITCH         | .069±.020 1.75±0.5mm |
| C                 | FULL ACTUATION | .203±.020 5.15±0.5mm |

## TAPR & REEL



| REEL INFORMATION  |           |
|-------------------|-----------|
| QUANTITY PER REEL | 450 / pcs |

PL Pushbutton Switches

| Lens Appearance | Color         | Electro-optical Data(AT 20mA) |      |          |       | Peak wavelength | Viewing Angle 2θ 1/2 (deg) |     |
|-----------------|---------------|-------------------------------|------|----------|-------|-----------------|----------------------------|-----|
|                 |               | Vf (V)                        |      | Iv (mcd) |       |                 |                            |     |
|                 |               | Typ.                          | Max. | Min..    | Typ.  |                 |                            |     |
| Water Clear     | White         | 3.3                           | 3.8  | 4900     | 10000 |                 | 30°                        |     |
|                 | Red           | 2.35                          | 2.8  | 1        | 3     | 630             | 50°                        |     |
|                 | Yellow        | 2.1                           | 2.6  | 20       | 35    | 588             | 65°                        |     |
|                 | Green         | 2.2                           | 2.6  | 50       | 60    | 570             | 60°                        |     |
|                 | Blue          | 3.5                           | 3.8  | 210      | 550   | 470             | 75°                        |     |
|                 | Amber (Green) | A                             | 2.1  | 2.5      | 19    | 28              | 588                        | 55° |
|                 |               | G                             | 2.2  | 2.6      | 9     | 19              | 570                        | 50° |
|                 | Red (Green)   | R                             | 2.35 | 2.8      |       | 1               | 630                        |     |
| G               |               | 2.2                           | 2.6  | 6        | 13    | 570             |                            |     |



PL Right Angle Illuminated Latching Pushbutton Switches

### SOLDERING PROCESSES

**WAVE SOLDERING:** Recommended Soldering Temperature : 260 ± 5°C  
 Duration of Solder Immersion: Max 5 sec.  
 (PCB is 1.6mm in thickness)

**SOLDERING :** Vapor phase & IR-reflow soldering can be applied.

