

**MATERIALS**

**FIXED CONTACTS AND TERNINALS:** 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.

**SPECIFICATIONS**

**ELECTRICAL**

**MAXIMUN POWER:** 3.5 VA.  
**MIN./MAX. VOLTAGE:** 20 mV - 50 VDC.  
**MIN./MAX. CURRENT:** 0.01mA - 250 mA.  
**INSULATION RESISTANCE:** ≥ 10<sup>9</sup> Ω.  
**CONTACT RESISTANCE:** ≥ 50 mΩ.  
**DIELECTRIC STRENGTH:** ≥ 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**

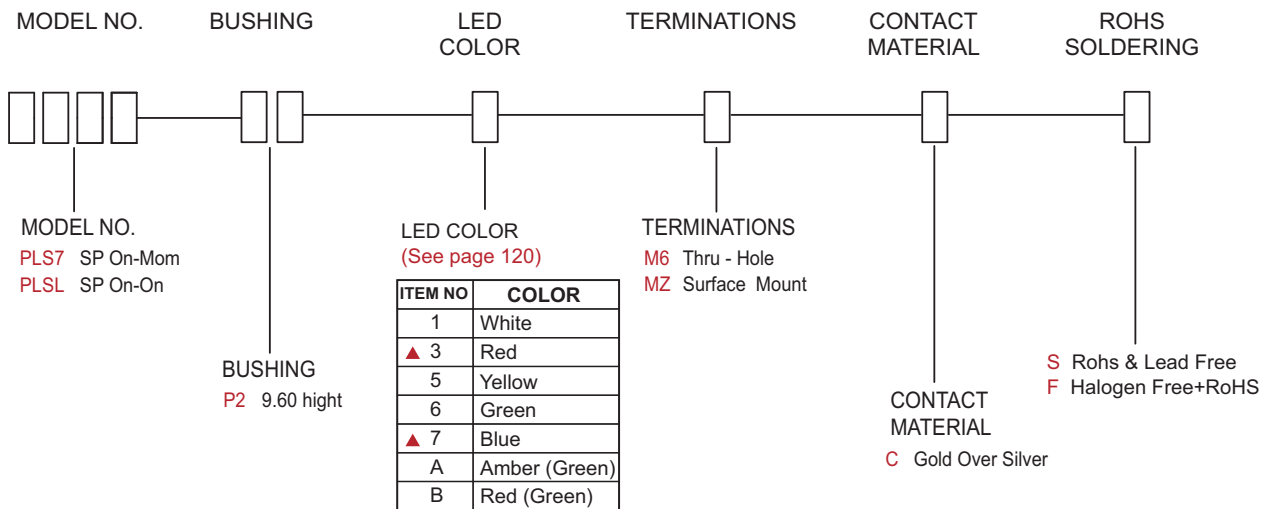
**OPERATING TEMPERATURE:** -30°C TO 85°C.  
**STORAGE TEMPERATURE:** -30°C TO 85°C.  
**RELATIVE HUMIDITY:** 90% R.H. @80°C.  
**OPERATING LIFE:** 30,000 Cycles.  
**VIBRATION:** Per EIA 186-E Methods 7 & 8.  
**MECHANICAL SHOCK:** Per EIA 186-E Methods 12.

**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.

PL Pushbutton Switches

**HOW TO ORDER**



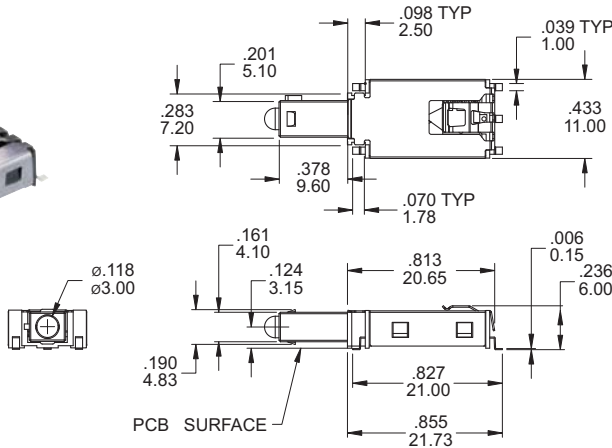
▲ Please check the availability in advance before order

### SWITCH FUNCTION

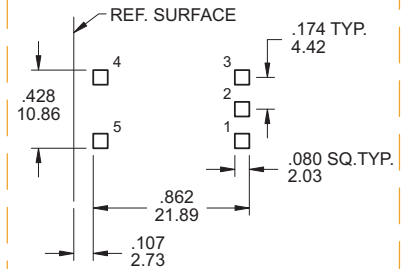
NO. POLES	MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS		SCHEMATIC	
		POS.1	POS.2	POS.1	POS.2	Single colors LED	Dual colors LED
SP	PLS7	ON	ON(MOM)	3-4	2-3		
SP	PLSL	ON	ON	3-4	2-3		

MOM=MOMENTARY

MZ



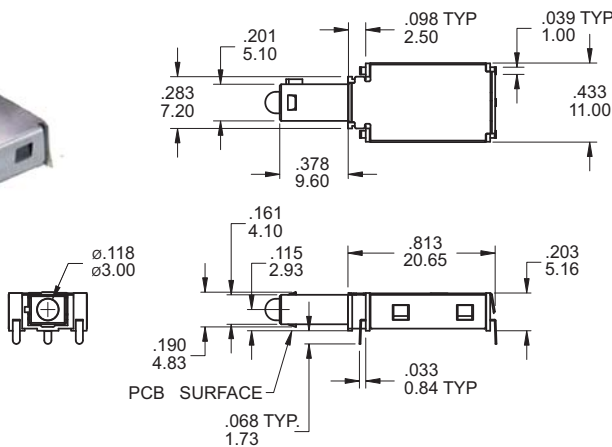
P.C. MOUNTING



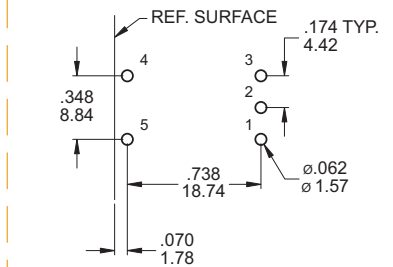
SPDT

Part No. Shown : PLSLP2XMZCS

M6



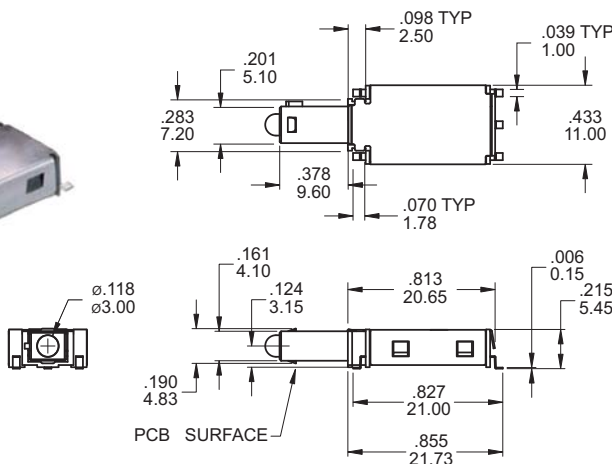
P.C. MOUNTING



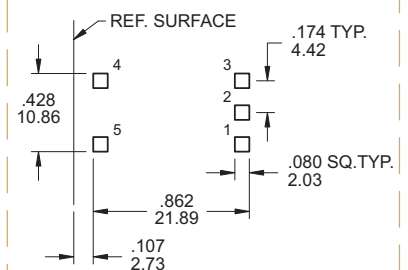
SPDT

Part No. Shown : PLS7P2XM6CS

MZ



P.C. MOUNTING



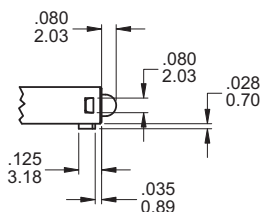
SPDT

Part No. Shown : PLS7P2XMZCS

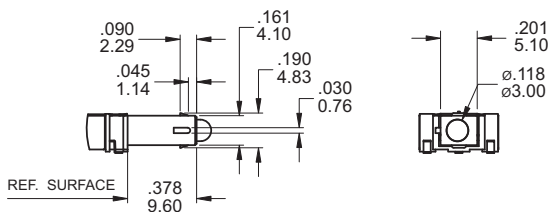
PL Pushbutton Switches

**ACTUATOR OPTIONS**

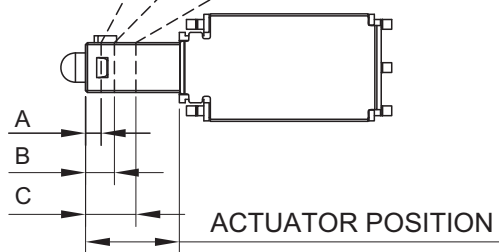
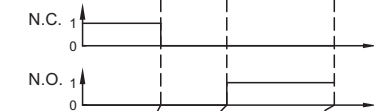
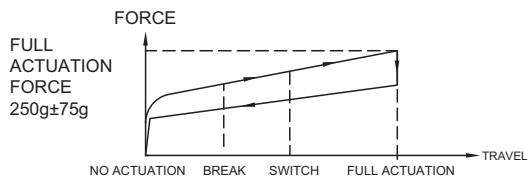
**P2X** WITHOUT WINDOW AND SNAP FEATURE TO ACCEPT CUSTOM CAP



- X = LED COLOR
- 1 White
  - 3 Red
  - 5 Yellow
  - 6 Green
  - 7 Blue
  - A Amber (Green)
  - B Red (Green)

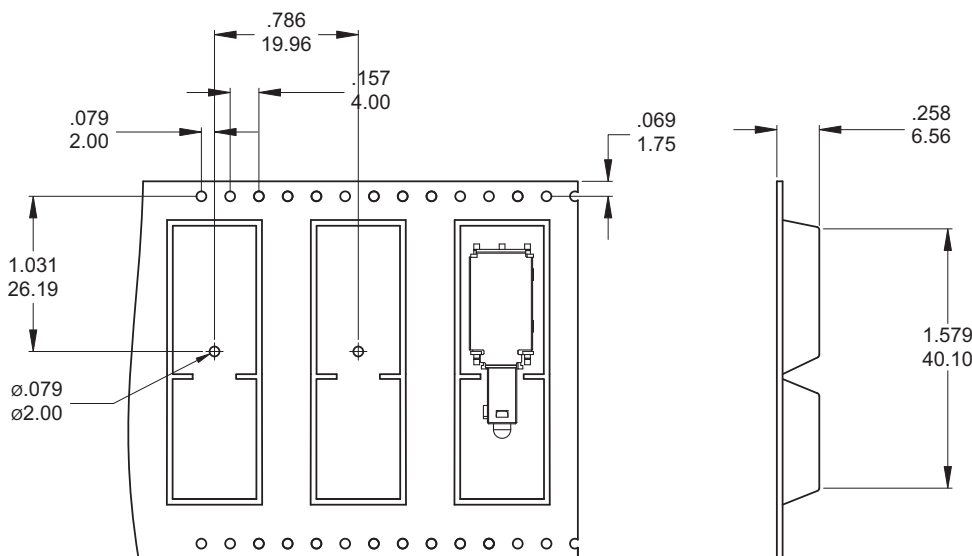


**FORCE AND TRAVEL DIAGRAM**



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

### WITH LED ELECTRO-OPTICAL DATA

\* The LED specification for reference only

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		

### 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.**

#### Temperature Profile

Zone	Room Temperature	Time (Sec)
Pre-heat (A)	150°C	Min 120s
Soak (B)	180°C ~ 200°C	Min 150s
Peak (C)	200°C ~ 235°C	Min 30s
Peak (D)	235°C ~ 260°C	Min 40s
Peak (E)	260°C	Max 5s

