

Sub-Miniature Pushbutton Switches **PA SERIES**



WITH LED ELECTRO-OPTICAL DATA:

Model No.	Lens Appearance	Color	Electro-potical Data (AT 20mA)				Peak Wavelength	Viewing Angle 2θ 1/2 (deg)	
			Vf (V)		Iv (mcd)				
			Typ.	Max.	Typ.	Max.			
PAS6 & PAS7	Water Clear	White (AT 5mA)	3.2	3.6	250	94	X=0.28 Y=0.29	35°	
		Super Red	1.7	2.6	60	28	660		
		Super Yellow	2.1	2.6	200	94	590		
		Super Green	2.0	2.6	100	42	570		
		Super Blue	3.2	3.6	150	63	470		
		Super Yellow	Y	2.1	2.6	200	94		590
		(Super Green)	YG	2.0	2.6	80	42		570
		Super Yellow	Y	2.1	2.6	200	94		590
		(Super Blue)	B	3.2	3.6	200	94		460
		Super Yellow	Y	2.1	2.6	100	63		590
		(Super Red)	R	2	2.6	90	42		630
		Super Red	R	2	2.6	90	42		630
		(Super Green)	G	2.0	2.6	90	42		570
		Super Red	R	2	2.6	90	42		630
		(Super Blue)	B	3.2	3.6	200	94		460
Super Green	G	2.0	2.6	100	42	570			
(Super Blue)	B	3.2	3.6	200	94	460			
PAL6	Water Clear	White	3.5	4.0	370	—	X=0.32 Y=0.31	80°	
		Super Red	2.0	2.6	85	—	625		
		Super Yellow	2.1	2.6	80	—	590		
		Super Green	2.0	2.6	30	—	575		
		Super Blue	3.5	4	250	—	470		
		Super Yellow	Y	2.0	2.6	40	—	590	
		(Yellow Green)	YG	2.0	2.6	20	—	570	
		Super Yellow	Y	2.0	2.6	35	—	590	
		(Yellow Red)	R	2.0	2.6	40	—	625	
		Yellow Red	R	2.0	2.6	50	—	625	
		(Yellow Green)	YG	2.0	2.6	13	—	570	
		130°							

SPECIFICATION:

PA S6/S7	400mA 32VAC-100mA 50VDC-125mA 125VAC
PA L6	100mA 24VDC-life expectancy 200,000 cycles 2A 125VAC-life expectancy 10,000 cycles

INITIAL CONTACT RESISTANCE:

PA S6/S7	50mΩ max.
PA L6	100mΩ max.

INSULATION RESISTANCE: 1GΩ min.at 500VDC.

DIELECTRIC STRENGTH: 1,000 VAC rms.

ELECTRICAL LIFE AT FULL LOAD: 500,000 cycles.

OPERATING TEMPERATURE: -30°C to 85°C.

PANEL THICKNESS:

PA S6/S7	- B1 series : 0.8 mm (.031) min. -1.8 mm (.071) max. - B2 series : 1.5 mm (.059) min. -4 mm (.157) max. - B3 series : 3.0±0.25 mm (.118)
PA L6	- B2 series : 1.5 mm (.059) min. -5.5 mm (.217) max.

TOTAL TRAVEL:

PA S6/S7	1.5 mm(.59)
PA L6	2.5 mm(.98)

OPERATING FORCE:

PA S6/S7	2N~5N
PA L6	5.5N+/-1.5N.

CONTACT BOUNCE: 10 ms.

MECHANICAL LIFE: 1,000,000 cycles.

TORQUE: 0.5 Nm max.applied to nut,
1.5 Nm max. for metal material.

SOLDERING: 350°C max.for 5 seconds.



HOW TO ORDER

MODEL NO. BUSHING TERMINATIONS CONTACT MATERIAL SEAL ROHS SOLDERING CAP COLOR LED LED COLOR

MODEL NO. PAS6 SP Off-Mom PAS7 DP On-Mom (Without LED)	BUSHING B1 Snap-in B2 Threaded bushing B3 Snap-in D1 Threaded bushing (die-casting) D2 Threaded bushing (die-casting)	TERMINATIONS M1 Solder Lug L1 Wire	CONTACT MATERIAL C Gold over silver	SEAL E EPOXY (std) A Sealed	ROHS SOLDERING S Rohs & Lead Free F Halogen Free+RoHS +REACH	CAP COLOR ITEM NO COLOR 1 White 2 Black 3 Red 4 Orange 5 Yellow 6 Green 7 Blue	LED L	LED COLOR ITEM NO COLOR 1 White 3 Red 5 Yellow 6 Green 7 Blue
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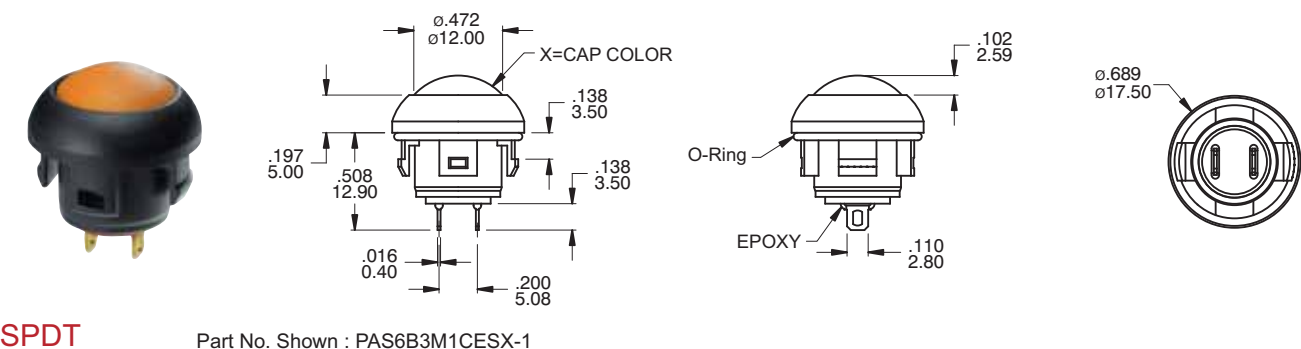
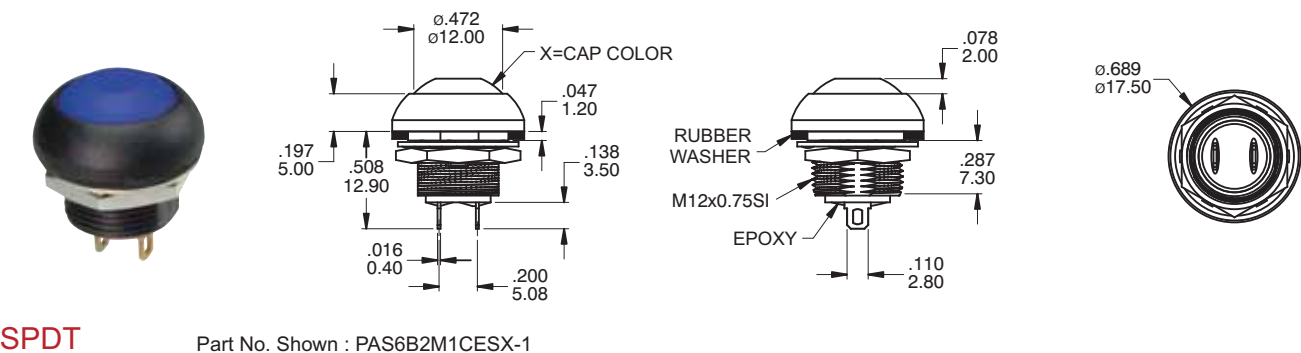
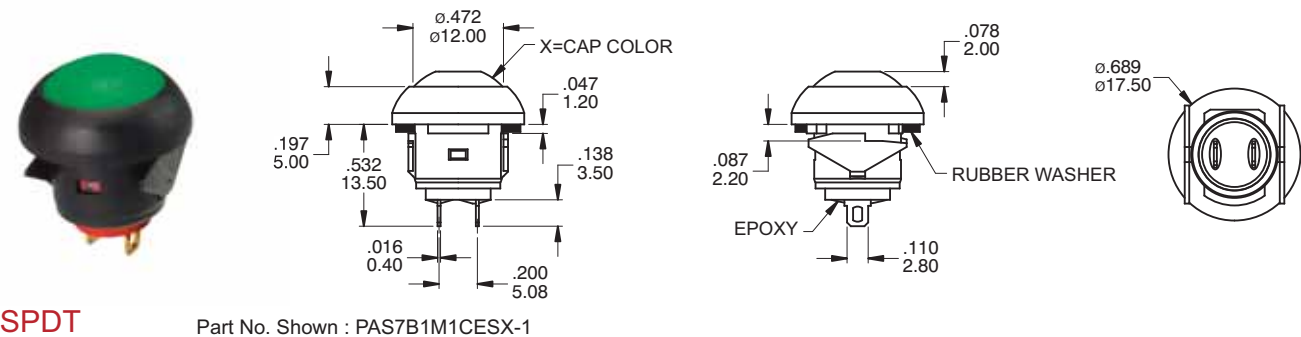
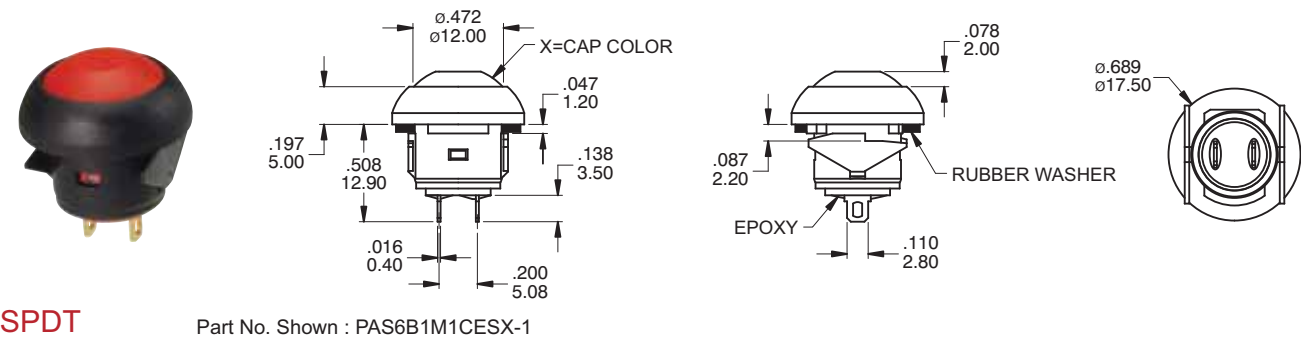
PAL6 SP Off-On B2 Threaded bushing

▲ Please kindly note our standard is with flat cap.
If you need round cap, please add "A" before cap color option.

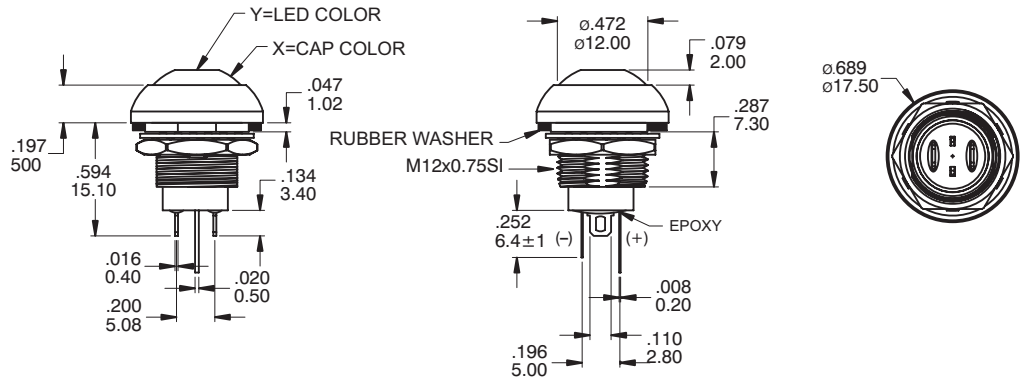
SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS		SCHEMATIC
		POS.1	POS.2	POS.1	POS.2	
						
SP	PAS6	OFF	MOM	OPEN	1-3	
SP	PAS7	ON	OFF(MOM)	1-3	OPEN	
SP	PAL6	OFF	ON	OPEN	1-3	

MOM=MOMENTARY

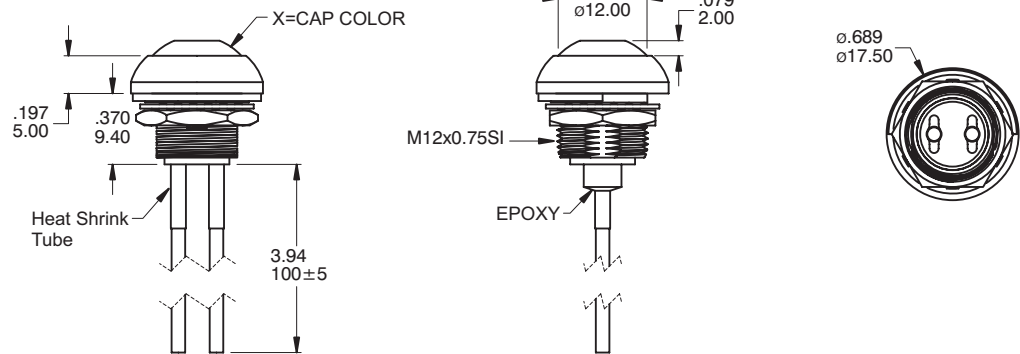


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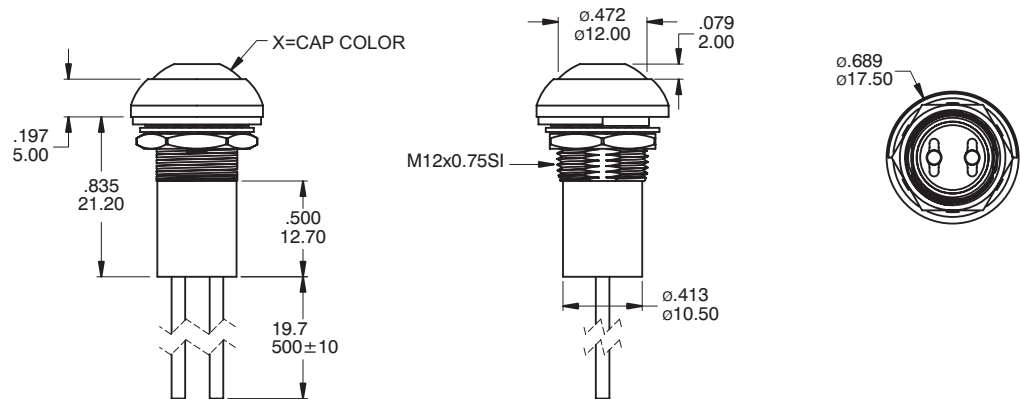
SPDT

Part No. Shown : PAS6B2M1CESX-1LY



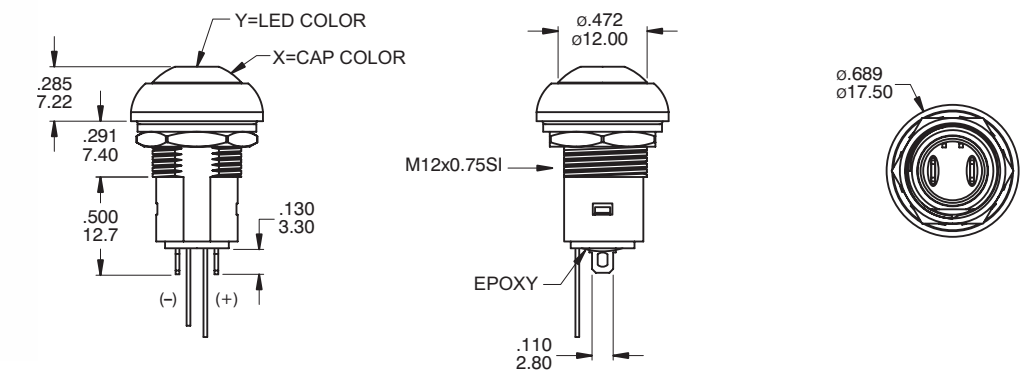
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Part No. Shown : PAS6B2L3CESX-1



SPDT

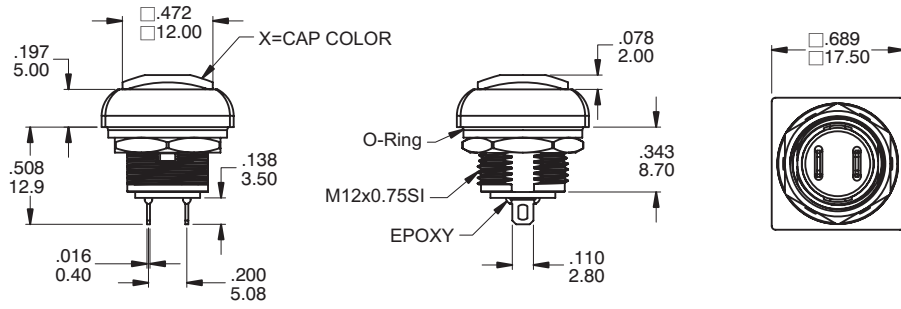
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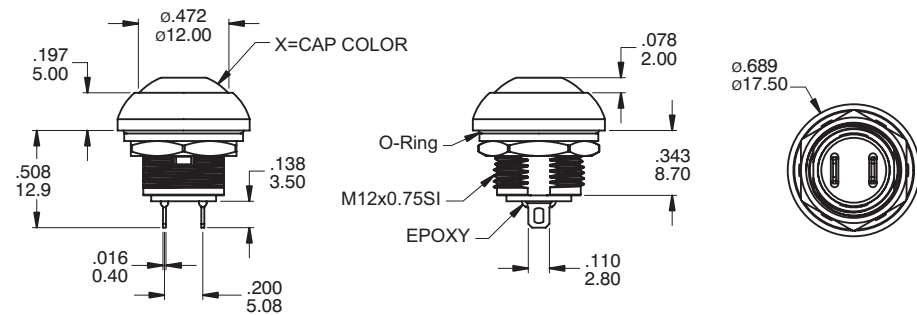
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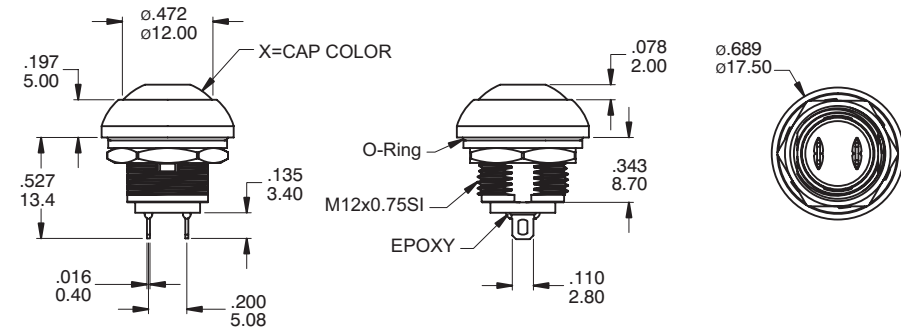
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Part No. Shown : PAS6D1M1CESX-1



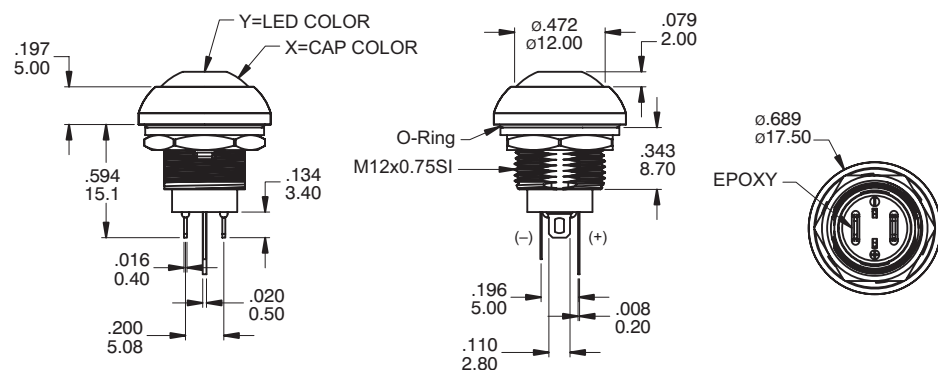
SPDT

Part No. Shown : PAS6D2M1CESX-1



SPDT

Part No. Shown : PAS7D2M1CESX-1



SPDT

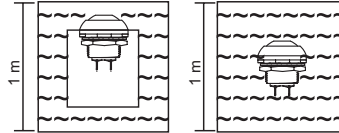
Part No. Shown : PAS6D2M1CESX-1LY



IP 67
 ACCORDING TO
 EN 60529:1991+A1:2001
 IEC 60529:2001



IP 67 for the whole series:
 Protected against the effects of
 immersion up to 1 m water(30mn)



SOLDERING PROCESSES

MANUAL SOLDERING : Use soldering iron of 30 watts, controlled st 350°C
 approximately 5 seconds while applying solder.

WAVE SOLDERING : Recommended Soldering Temperature : $260 \pm 5^{\circ}\text{C}$
 Duration of Solder Immersion : 5 ± 1 seconds
 (PCB is 1.6mm in thickness)

SOLDERING : Vapor phase

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	Min 10s

