



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



**SPECIFICATION:**

**MAX. CURRENT/VOLTAGE RATING WITH RESISTIVE LOAD:**

|          |                                                                                       |
|----------|---------------------------------------------------------------------------------------|
| PA S6/S7 | 400mA 32VAC-100mA 50VDC-125mA 125VAC<br>500mA 48VAC - 200 mA 50VDC - 200mA 250VAC.    |
| PA L6    | 100mA 24VDC-life expectancy 200,000 cycles<br>2A 125VAC-life expectancy 10,000 cycles |

**INITIAL CONTACT RESISTANCE:** 50mΩ max.

**INSULATION RESISTANCE:** 1GΩ min.at 500VDC.

**DIELECTRIC STRENGTH:** 1,000 VAC rms.  
1,500 VAC rms. for metal material.

**ELECTRICAL LIFE AT FULL LOAD:**

|          |                 |
|----------|-----------------|
| PA S6/S7 | 500,000 cycles. |
| PA L6    | 200,000 cycles. |

**OPERATING TEMPERATURE:** -30°C to 85°C.

**PANEL THICKNESS:**

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)

**TOTAL TRAVEL:**

|          |              |
|----------|--------------|
| PA S6/S7 | 1.5 mm(.059) |
| PA L6    | 2.5 mm(.098) |

**OPERATING FORCE:** 2N~5N

**CONTACT BOUNCE:** 10 ms.

**MECHANICAL LIFE:** 1,000,000 cycles.

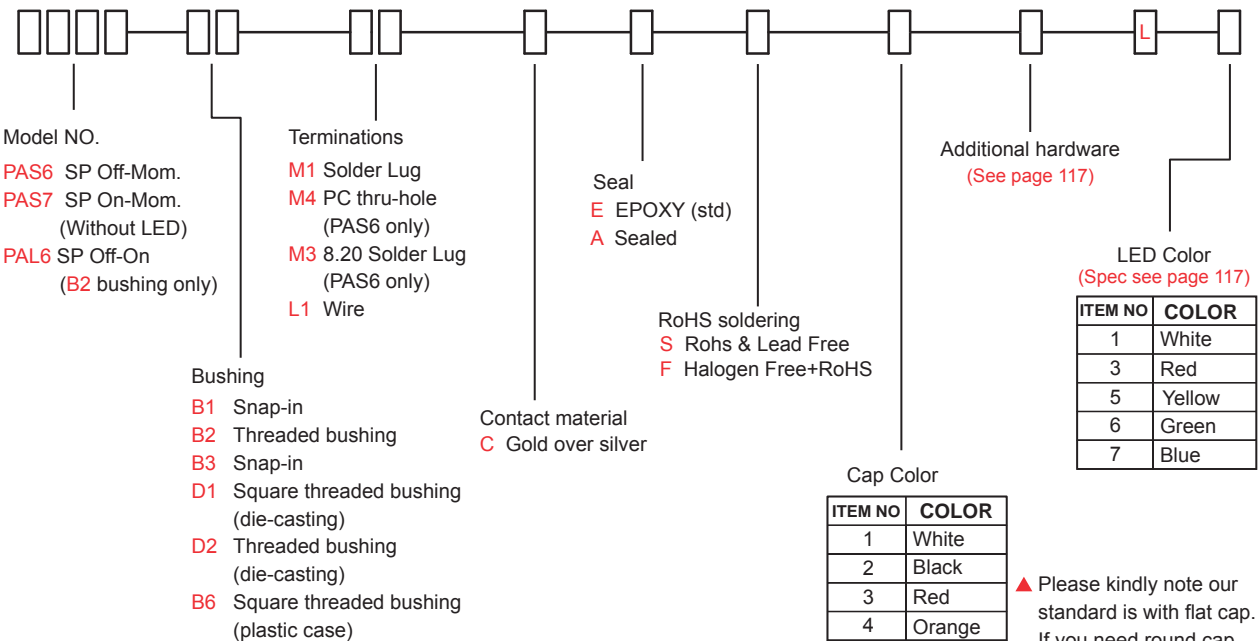
**TORQUE:** 0.5 Nm max.applied to nut,  
1.5 Nm max. for metal material.

**SOLDERING:** 350°C max.for 5 seconds.

PA Pushbutton Switches

**HOW TO ORDER**








MODEL NO. BUSHING TERMINATIONS CONTACT MATERIAL SEAL RoHS SOLDERING CAP COLOR ADDITIONAL HARDWARE LED LED COLOR



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



## SWITCH FUNCTION

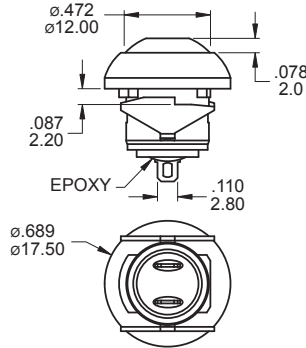
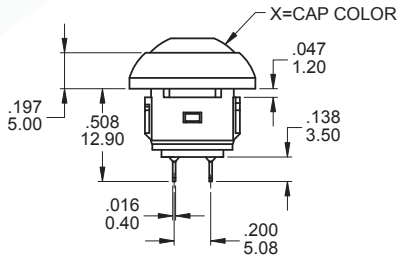
| NO. POLES | MODEL NO. | SWITCH FUNCTION                                                                   |                                                                                   | CONNECTED TERMINALS                                                               |                                                                                     | 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

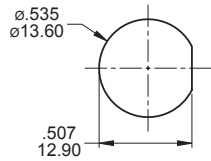


PA  
Sub-Miniature Pushbutton Switches

**B1**



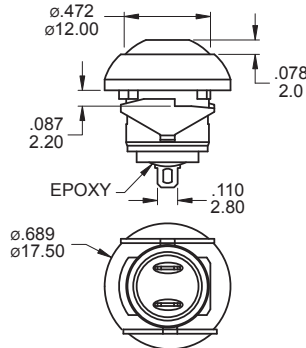
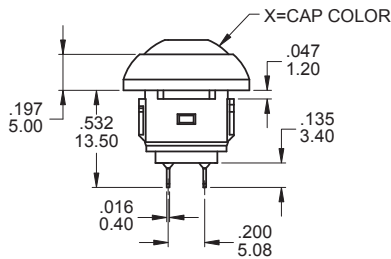
PANEL MOUNTING



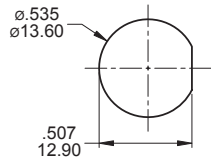
**SPST**

Part No. Shown : PAS6B1M1CESX-5

**B1**



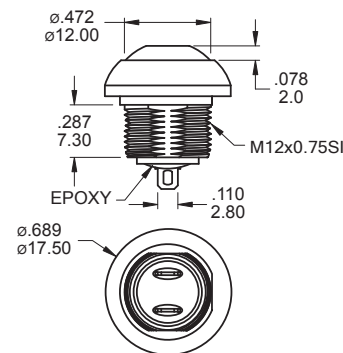
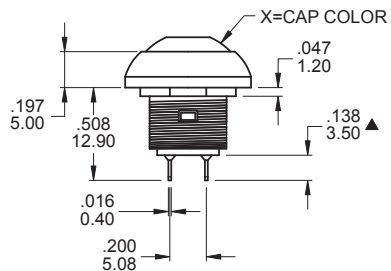
PANEL MOUNTING



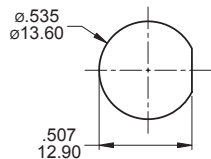
**SPST**

Part No. Shown : PAS7B1M1CESX-5

**B2**



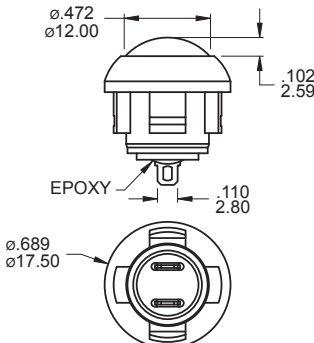
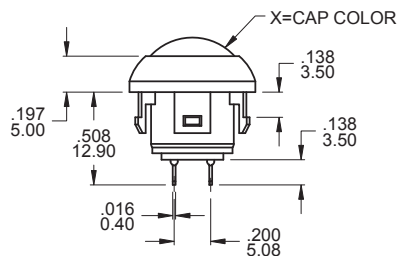
PANEL MOUNTING



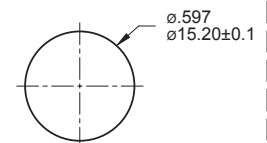
**SPST**

Part No. Shown : PAS6B2M1CESX-5

**B3**



PANEL MOUNTING



**SPST**

Part No. Shown : PAS6B3M1CESAX-5

**NEW**

Dimensions:  $\square .472$ ,  $\square 12.00$ ,  $.033$ ,  $1.20$ ,  $.197$ ,  $5.00$ ,  $.508$ ,  $12.90$ ,  $.138$ ,  $3.50$ ,  $.016$ ,  $0.40$ ,  $.200$ ,  $5.08$ ,  $.078$ ,  $2.0$ ,  $.343$ ,  $8.70$ ,  $.110$ ,  $2.80$ ,  $.039$ ,  $1.00$ ,  $\square .689$ ,  $\square 17.50$

Material: Square threaded busing, Glass filled Nylon 6/6

Panel Mounting:  $\phi .535$ ,  $\phi 13.60$ ,  $.507$ ,  $12.90$

Part No. Shown : PAS6B6M4CESX-5

Dimensions:  $\square .472$ ,  $\phi 12.00$ ,  $.078$ ,  $2.0$ ,  $.197$ ,  $5.00$ ,  $.594$ ,  $15.10$ ,  $.134$ ,  $3.40$ ,  $.047$ ,  $1.20$ ,  $.016$ ,  $0.40$ ,  $.200$ ,  $5.08$ ,  $.020$ ,  $0.50$ ,  $.252$ ,  $6.4 \pm 1$ ,  $.008$ ,  $0.20$ ,  $.110$ ,  $2.80$ ,  $.196$ ,  $5.00$ ,  $\phi .689$ ,  $\phi 17.50$

Material: EPOXY

Part No. Shown : PAS6B2M1CESX-5LY

Dimensions:  $\square .472$ ,  $\phi 12.00$ ,  $.078$ ,  $2.0$ ,  $.197$ ,  $5.00$ ,  $.370$ ,  $9.40$ ,  $3.94 \pm .197$ ,  $100 \pm 5$ ,  $\phi .689$ ,  $\phi 17.50$

Material: EPOXY

Part No. Shown : PAS6B2L3CESX-5

Dimensions:  $\square .472$ ,  $\phi 12.00$ ,  $.078$ ,  $2.0$ ,  $.197$ ,  $5.00$ ,  $.835$ ,  $21.20$ ,  $.500$ ,  $12.70$ ,  $\phi .689$ ,  $\phi 17.50$ ,  $19.7 \pm .394$ ,  $500 \pm 10$ ,  $\phi .413$ ,  $\phi 10.50$

Material: EPOXY, White cylinder

Part No. Shown : PAS6B2L1CASX-5

Dimensions:  $\square .472$ ,  $\phi 12.00$ ,  $.285$ ,  $7.22$ ,  $.291$ ,  $7.40$ ,  $.500$ ,  $12.7$ ,  $.130$ ,  $3.30$ ,  $\phi .689$ ,  $\phi 17.50$ ,  $.110$ ,  $2.80$

Material: EPOXY

Part No. Shown : PAL6B2M1CESX-5LY

PA Pushbutton Switches

## BUSHING PLATING



- PLATING
- A Chromium
  - B Tin-nickel Alloy
  - C Stain-chromium
  - D Stain-nickel



Chromium



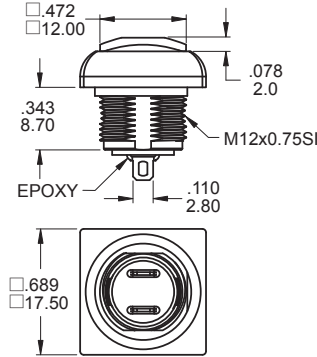
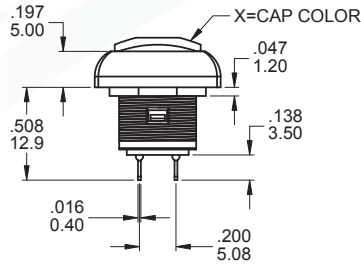
Tin-nickel Alloy



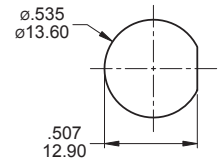
Stain-chromium



Stain-nickel

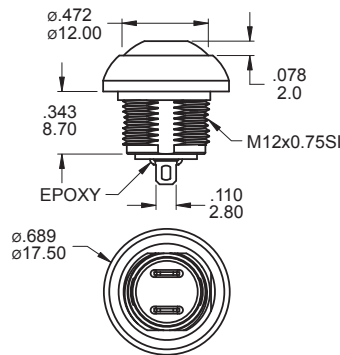
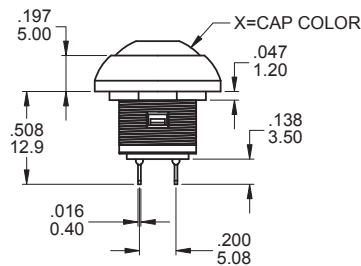


PANEL MOUNTING

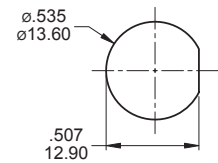


SPST

Part No. Shown : PAS6D1M1CESX-5

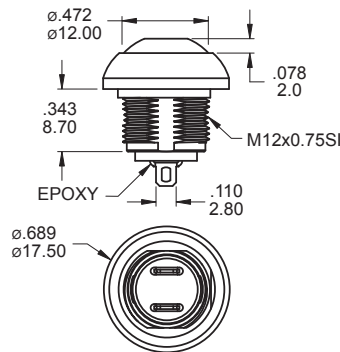
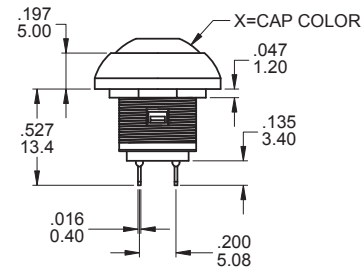


PANEL MOUNTING

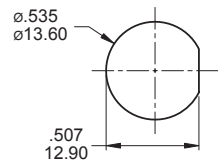


SPST

Part No. Shown : PAS6D2M1CESX-5

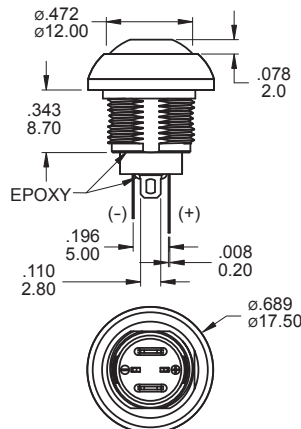
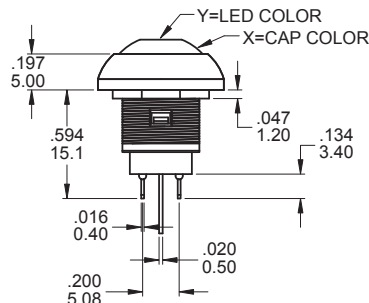


PANEL MOUNTING

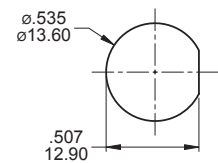


SPST

Part No. Shown : PAS7D2M1CESX-5



PANEL MOUNTING

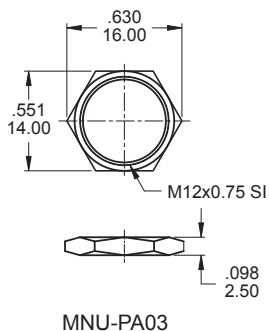


SPST

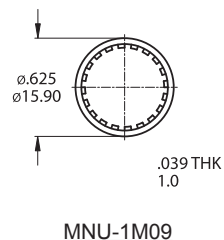
Part No. Shown : PAS6D2M1CESX-5LY

## HARDWARE

### M12 NUT

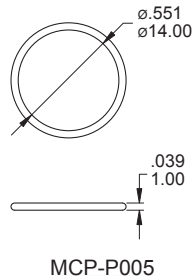


### LOCK WASHER



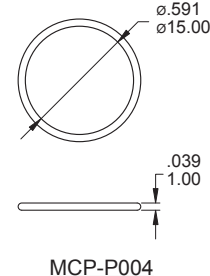
Supplied with B2 / D1 / D2 bushing

### O-RING



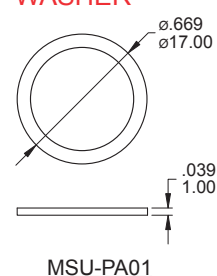
Supplied with PAL6 and D1 / D2 options

### O-RING



Supplied standard with B3 options

### RUBBER WASHER



Supplied standard with B1 / B2 options

## WITH LED ELECTRO-OPTICAL DATA

\* The LED specification for reference only

| Model No.                  | Lens Appearance | Color                        | Electro-optical Data (AT 20mA) |      |          |      | Peak Wavelength  | Viewing Angle 2θ 1/2 (deg) |      |
|----------------------------|-----------------|------------------------------|--------------------------------|------|----------|------|------------------|----------------------------|------|
|                            |                 |                              | Vf (V)                         |      | Iv (mcd) |      |                  |                            |      |
|                            |                 |                              | Typ.                           | Max. | Typ.     | Min. |                  |                            |      |
| PAS6 & PAS7                | Water Clear     | Super White                  | 2.8                            | 3.3  | 200      | 100  | X / Y=0.27       | 35°                        |      |
|                            |                 | Super Red                    | 2.0                            | 2.5  | 700      | 200  |                  |                            |      |
|                            |                 | Yellow                       | 2.1                            | 2.6  | 100      | 55   |                  |                            |      |
|                            |                 | Green                        | 2.2                            | 2.7  | 130      | 70   |                  |                            |      |
|                            |                 | Super Blue                   | 3.1                            | 3.6  | 580      | 250  |                  |                            |      |
|                            |                 | Super Yellow ( Super Green ) | Y                              | 2    | 2.6      | 475  |                  |                            | 210  |
|                            |                 |                              | G                              | 2    | 2.6      | 210  |                  |                            | 140  |
|                            |                 | Super Yellow ( Super Blue )  | Y                              | 2.1  | 2.6      | 200  |                  |                            | 94   |
|                            |                 |                              | B                              | 3.2  | 3.6      | 200  |                  |                            | 94   |
|                            |                 | Super Yellow ( Super Red )   | Y                              | 2.1  | 2.6      | 100  |                  |                            | 63   |
|                            |                 |                              | R                              | 2    | 2.6      | 90   |                  |                            | 42   |
|                            |                 | Super Red ( Super Green )    | R                              | 2    | 2.6      | 90   |                  |                            | 42   |
| G                          | 2.0             |                              | 2.6                            | 90   | 42       |      |                  |                            |      |
| Super Red ( Super Blue )   | R               | 2                            | 2.6                            | 90   | 42       |      |                  |                            |      |
|                            | B               | 3.2                          | 3.6                            | 200  | 94       |      |                  |                            |      |
| Super Green ( Super Blue ) | G               | 2.0                          | 2.6                            | 100  | 42       |      |                  |                            |      |
|                            | B               | 3.2                          | 3.6                            | 200  | 94       |      |                  |                            |      |
| PAL6                       | Water Clear     | White                        | 3.3                            | 4    | 250      | 50   | X=0.31<br>Y=0.31 | 90°                        |      |
|                            |                 | Super Red                    | 1.95                           | 2.5  | 350      | 70   |                  |                            |      |
|                            |                 | Super Yellow                 | 2                              | 2.5  | 160      | 70   |                  |                            |      |
|                            |                 | Super Green                  | 2.1                            | 2.5  | 70       | 18   |                  |                            |      |
|                            |                 | Super Blue                   | 3.3                            | 4    | 150      | 36   |                  |                            |      |
|                            |                 | Super Yellow ( Super Green ) | Y                              | 2    | 2.5      | 170  |                  | 50                         | 170° |
|                            |                 |                              | G                              | 2.1  | 2.5      | 50   |                  | 18                         |      |
|                            |                 | Super Yellow ( Super Red )   | Y                              | 1.95 | 2.5      | 220  |                  | 70                         |      |
|                            |                 |                              | R                              | 2    | 2.5      | 170  |                  | 50                         |      |
|                            |                 | Super Red ( Super Green )    | R                              | 1.95 | 2.5      | 220  |                  | 70                         |      |
| G                          | 2.1             |                              | 2.5                            | 50   | 18       |      |                  |                            |      |

PA Pushbutton Switches

## SOLDERING PROCESSES

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

**WAVE SOLDERING:**

Recommended Soldering Temperature: 260 ± 5°C

Duration of Solder Immersion: Max 5 sec.

(PCB is 1.6mm in thickness)

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

