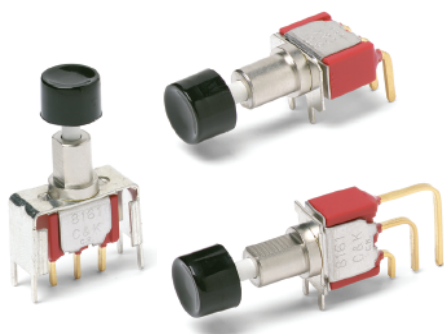


**A****Pushbutton**

## 8060 Series Alternate Action and Momentary Pushbutton Switches



### Features/Benefits

- Long travel
- Available with LED
- Long life contact design
- Epoxy terminal seal compatible with bottom wash cleaning
- RoHS compliant models available

### Typical Applications

- Instrumentation
- Computers and peripherals
- Telecommunications and networking equipment



Models Available

### Specifications

**CONTACT RATING:** Q contact material: 6 AMPS @ 120 V AC or 28 V DC; 3 AMPS @ 250 V AC. See page A-59 for additional ratings.

**ELECTRICAL LIFE:** 50,000 make-and-break cycles at full load.

**CONTACT RESISTANCE:** Below 20 mΩ typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 10<sup>9</sup>Ω min.

**DIELECTRIC STRENGTH:** 1,000 Vrms min. @ sea level.

**OPERATING TEMPERATURE:** -30°C to 65°C

**SOLDERABILITY:** Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

**CAP INSTALLATION FORCE:** 10 lbs. maximum permissible.

**NOTE:** Any models supplied with P, R, S, Q, B or G contact material are RoHS compliant.

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

### Materials

**CASE:** Glass filled nylon 6/6 or diallyl phthalate (DAP), flame retardant (UL 94V-0).

**PLUNGER:** S, S1, S2 Options: Glass filled nylon or glass filled polyester (PBT) (UL 94V-0). L, L1 Options: Brass, nickel plated.

**CAP & FRAME:** Nylon, black standard.

**BUSHING:** Brass or zinc, nickel plated.

**HOUSING:** Stainless steel.

**SWITCH SUPPORT:** Brass or steel, matte-tin plated.

**END CONTACTS:** Q contact material: Coin silver, silver plated. See page A-59 for additional contact materials.

**CENTER CONTACT & ALL TERMINALS:** Q contact material: Copper alloy, silver plated. See page A-59 for additional contact materials.

**TERMINAL SEAL:** Epoxy. Refer to soldering and cleaning in Technical Data Chapter.

**HARDWARE:** Nut & Locking Ring: Brass, nickel plated; Lockwasher: Steel, nickel plated.

### Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-53 thru A-61. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.

| Switch Function          | Actuator or Plunger                              | Bushing                                | Terminations                                           | Contact Material                     | Seal                       | Cap Color       | Frame Color    | LED Color                      |
|--------------------------|--------------------------------------------------|----------------------------------------|--------------------------------------------------------|--------------------------------------|----------------------------|-----------------|----------------|--------------------------------|
| <b>8161</b> SPDT On-On   | <b>S</b> .710" high plunger with .375" dia. cap  | <b>H</b> .300" high, flat, hi torque   | <b>A</b> Right angle, PC thru-hole                     | <b>B</b> Gold                        | <b>E</b> Epoxy             | <b>2</b> Black  | <b>2</b> Black | <b>3</b> Red                   |
| <b>8168</b> SPDT On-Mom. | <b>J80</b> Snap-in                               | <b>H9</b> .300" high, flat, hi torque  | <b>AV2</b> Vertical right angle, PC thru-hole          | <b>P</b> Gold, matte-tin             | <b>I</b> Epoxy potted base | <b>1</b> White  |                | <b>NONE</b> Models without LED |
| <b>8261</b> DPDT On-On   | <b>J81</b> Snap-in with frame                    | <b>NONE</b> No bushing choice required | <b>C</b> PC Thru-hole                                  | <b>Q</b> Silver                      |                            | <b>3</b> Red    |                |                                |
|                          | <b>J82</b> Snap-in with frame for LED            | <b>Y3</b> 7.6mm, keyway                | <b>Z</b> Solder lug                                    | <b>S</b> Silver, matte-tin           |                            | <b>4</b> Orange |                |                                |
|                          | <b>J86</b> Snap-in with frame & LED              |                                        | <b>A3</b> Right angle, snap-in, PC thru-hole           | <b>G</b> Gold over silver            |                            | <b>5</b> Yellow |                |                                |
|                          | <b>L</b> .740" high plunger with .395" dia. cap  |                                        | <b>AV3</b> Vertical right angle, snap-in, PC thru-hole | <b>R</b> Gold over silver, matte-tin |                            | <b>9</b> Gray   |                |                                |
|                          | <b>L1</b> .740" high plunger with .590" dia. cap |                                        | <b>V3</b> .460" high, V-bracket                        |                                      |                            |                 |                |                                |
|                          | <b>S1</b> .615" high plunger with .200" dia. cap |                                        | <b>V4</b> .630" high, V-bracket                        |                                      |                            |                 |                |                                |
|                          | <b>S2</b> .710" high plunger with .310" dia. cap |                                        | <b>V6</b> .460" high, V-bracket                        |                                      |                            |                 |                |                                |
|                          |                                                  |                                        | <b>V21</b> .555" high, snap-in V-bracket               |                                      |                            |                 |                |                                |
|                          |                                                  |                                        | <b>V31</b> .460" high, snap-in V-bracket               |                                      |                            |                 |                |                                |
|                          |                                                  |                                        | <b>W</b> .750" long, wire wrap                         |                                      |                            |                 |                |                                |
|                          |                                                  |                                        | <b>Z3</b> Quick connect                                |                                      |                            |                 |                |                                |



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

# 8060 Series Alternate Action and Momentary Pushbutton Switches



A

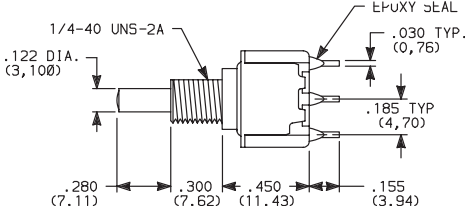
Pushbutton

## SWITCH FUNCTION

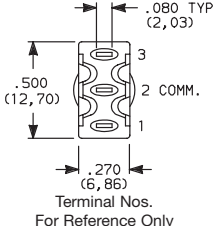


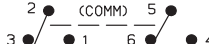
| NO.<br>POLES | MODEL NO.                  | SWITCH FUNCTION                                                                   |                                                                                   | CONNECTED TERMINALS                                                               |                                                                                   | SCHEMATIC                                                                           |
|--------------|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              |                            | POS. 1                                                                            | POS. 2                                                                            | POS. 1                                                                            | POS. 2                                                                            |                                                                                     |
|              |                            |  |  |  |  |                                                                                     |
|              |                            | C&K marking this side                                                             |                                                                                   | C&K marking this side                                                             |                                                                                   |                                                                                     |
| SP           | <b>8161</b><br><b>8168</b> | ON                                                                                | ON                                                                                | 2-3                                                                               | 2-1                                                                               |  |
|              |                            | ON                                                                                | MOM.                                                                              | 2-3                                                                               | 2-1                                                                               |                                                                                     |
| SPDT         |                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |

### SPDT

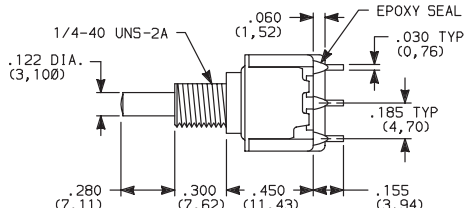


Part number shown: 8161SHZQE

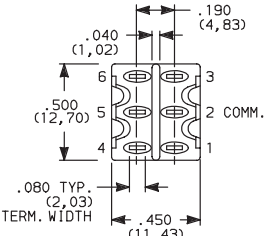


| NO.<br>POLES | MODEL NO.   | SWITCH FUNCTION                                                                   |                                                                                   | CONNECTED TERMINALS                                                               |                                                                                   | SCHEMATIC                                                                           |
|--------------|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              |             | POS. 1                                                                            | POS. 2                                                                            | POS. 1                                                                            | POS. 2                                                                            |                                                                                     |
|              |             |  |  |  |  |                                                                                     |
|              |             | C&K marking this side                                                             |                                                                                   | C&K marking this side                                                             |                                                                                   |                                                                                     |
| DP           | <b>8261</b> | ON                                                                                | ON                                                                                | 2-3,5-6                                                                           | 2-1,5-4                                                                           |  |
|              |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
| DPDT         |             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |

### DPDT



Part number shown: 8261SHZQE



MOM. = Momentary

All models **C&K** with all options when ordered with G or Q contact material.

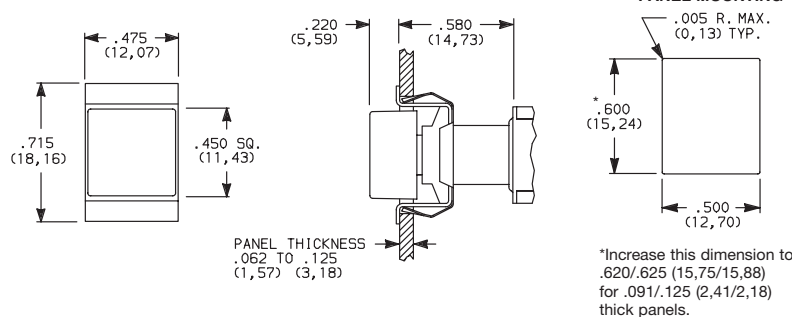
## ACTUATOR—SNAP-IN FRONT MOUNT



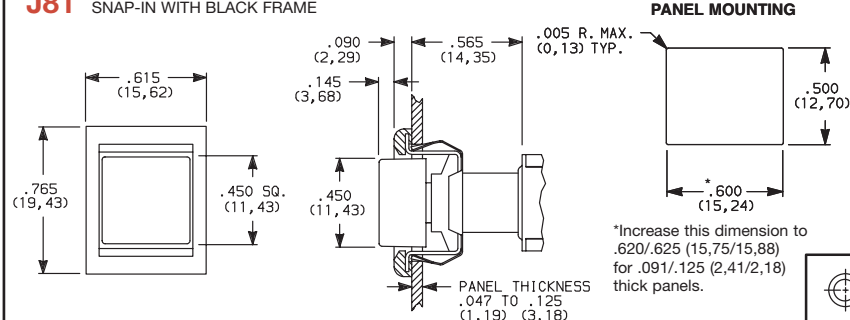
| OPTION CODE | CAP COLOR |
|-------------|-----------|
| <b>2</b>    | BLACK     |
| <b>1</b>    | WHITE     |
| <b>3</b>    | RED       |
| <b>4</b>    | ORANGE    |
| <b>5</b>    | YELLOW    |
| <b>9</b>    | GRAY      |

Cap Finish: matte.  
Other colors available, consult Customer Service Center.  
Available with C, W, Z or Z3 terminations.  
**NOTE:** Caps & frames available separately, see pages A-60 and A-61.

### J80 SNAP-IN



### J81 SNAP-IN WITH BLACK FRAME



**C&K**

Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

www.ckswitches.com



A

Pushbutton

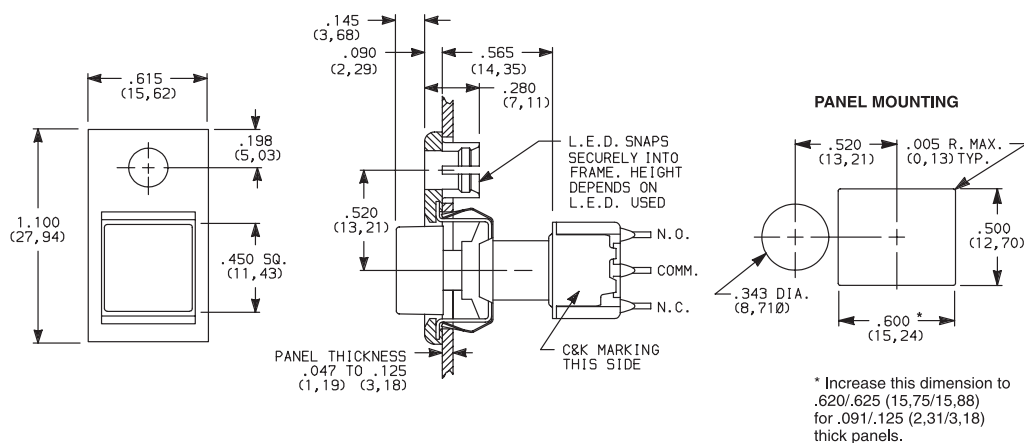
# 8060 Series

## Alternate Action and Momentary Pushbutton Switches

### ACTUATOR—SNAP-IN FRONT MOUNT



**J82** SNAP-IN WITH BLACK FRAME FOR LED



**LED not included.**

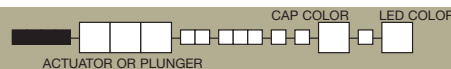
For LED information, see page A-61.

**NOTE:** Caps & frames available separately, see pages A-60 and A-61.

Other colors available, consult Customer Service Center.

| OPTION CODE | CAP COLOR |
|-------------|-----------|
| 2           | BLACK     |
| 1           | WHITE     |
| 3           | RED       |
| 4           | ORANGE    |
| 5           | YELLOW    |
| 9           | GRAY      |

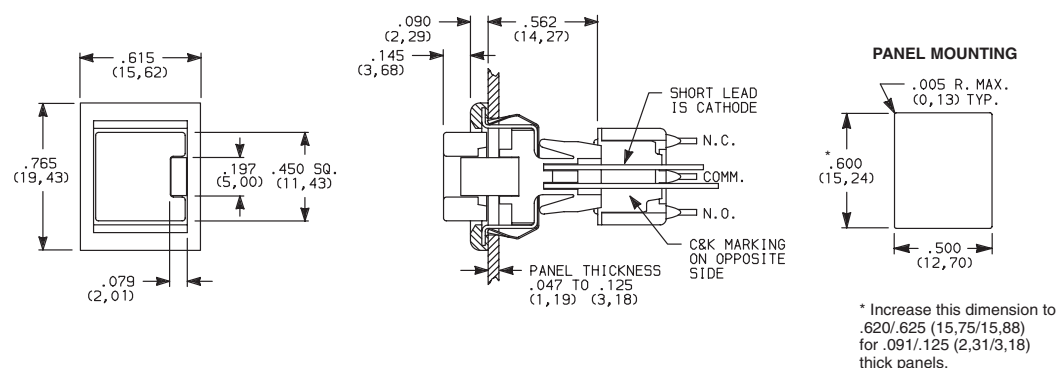
### ACTUATOR—SNAP-IN FRONT MOUNT



**J86** SNAP-IN WITH BLACK FRAME AND LED



8161J86ZQE223  
SPDT



**NOTE:** Caps & frames available separately, see pages A-60 and A-61.

Other colors available, consult Customer Service Center.

| OPTION CODE | CAP COLOR |
|-------------|-----------|
| 2           | BLACK     |
| 1           | WHITE     |
| 3           | RED       |
| 4           | ORANGE    |
| 5           | YELLOW    |
| 9           | GRAY      |

| OPTION CODE | LED COLOR |
|-------------|-----------|
| 3           | RED       |

For LED information, see page A-61.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**

# 8060 Series Alternate Action and Momentary Pushbutton Switches

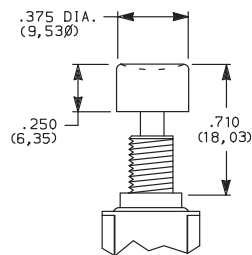


A

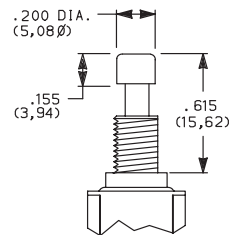
Pushbutton

PLUNGER CAP COLOR  
ACTUATOR OR PLUNGER

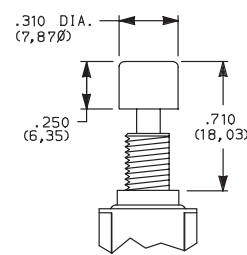
**S** PLUNGER WITH CAP P/N 7527



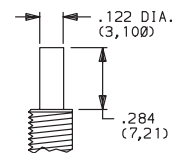
**S1** PLUNGER WITH CAP P/N 7089



**S2** PLUNGER WITH CAP P/N 8018

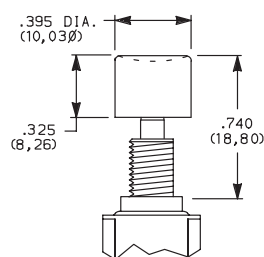


**S, S1, S2 plunger dimensions.**

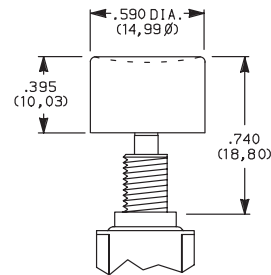


Plunger material: Glass filled nylon or glass filled polyester (UL 94V-0).

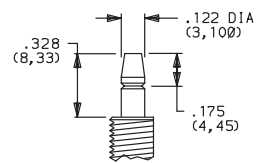
**L** PLUNGER WITH CAP P/N 8941



**L1** PLUNGER WITH CAP P/N 8940



**L, L1 plunger dimensions.**



Plunger Material: Brass, chrome plated.

| OPTION CODE | CAP COLOR |
|-------------|-----------|
| 2           | BLACK     |
| 1           | WHITE     |
| 3           | RED       |
| 4           | ORANGE    |
| 5           | YELLOW    |
| 9           | GRAY      |

Cap Finish: gloss. Cap supplied not installed. Other colors available, consult Customer Service Center.

**NOTE:** When selecting plunger and cap option, bushing selection must also be made, see below.

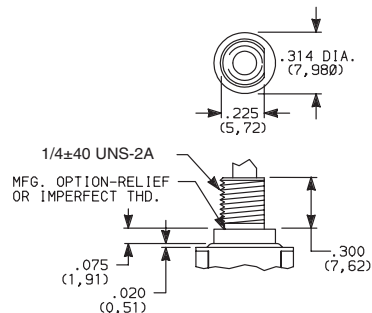
BUSHING CAP COLOR

**H** .300" HIGH THREADED, FLAT

**NONE** NO BUSHING CHOICE REQUIRED (JXX ACTUATORS)

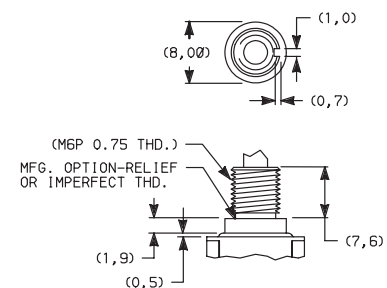
**Y3** 7.6mm THREADED, KEYWAY

**H9** .300" HIGH UNTHREADED, FLAT



H bushing standard with C, W, Z or Z3 terminations. H9 bushing standard with A, A3, AV2, AV3, or V3-V31 terminations.

Withstands 12 in./lbs. of torque with no distortion.

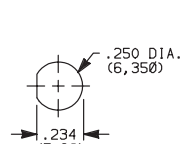


Withstands 12 in./lbs. of torque with no distortion.

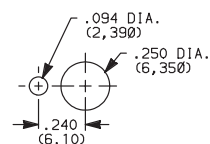
**NOTE:** When selecting bushing option, plunger selection must also be made, see above. No bushing option choice required when any JXX actuator option is selected.

## PANEL MOUNTING

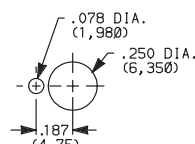
### 1/4 IN. BUSHING



Without Locking Ring

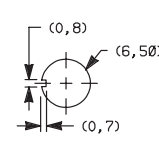


With Standard Locking Ring

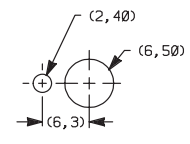


With Small Locking Ring

### METRIC BUSHING

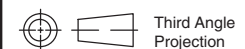


Without Locking Ring



With Locking Ring

**NOTE:** Two mounting nuts, locking ring and lockwasher supplied standard with threaded bushings. Optional mounting nut and locking ring styles and finishes available, see section "Technical Data and Additional Hardware".



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**



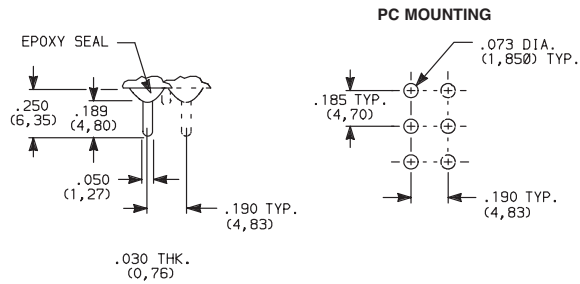
Pushbutton

# 8060 Series Alternate Action and Momentary Pushbutton Switches

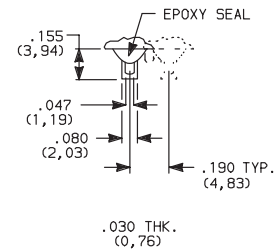
## TERMINATIONS



### C PC THRU-HOLE



### Z SOLDER LUG



### SPDT and DPDT

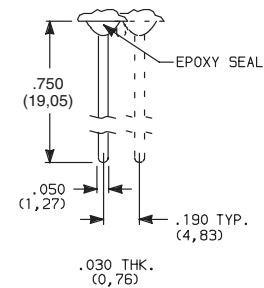
### SPDT and DPDT

Not available with P, S or R contact material.

### Z3 QUICK CONNECT



### W WIRE WRAP

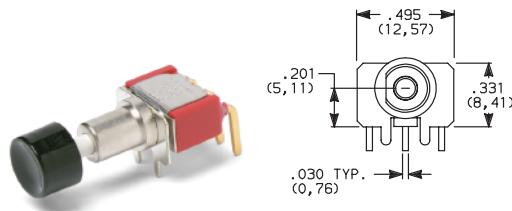


### SPDT and DPDT

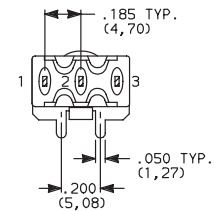
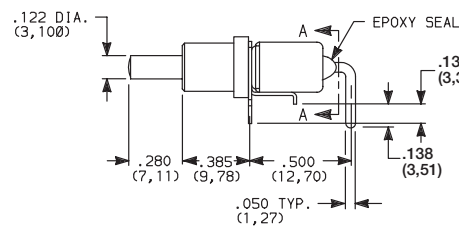
### SPDT and DPDT

Not available with P, S or R contact material.  
Mating quick connector available;  
order part number 530100000, page A-61.

### A RIGHT ANGLE, PC THRU-HOLE

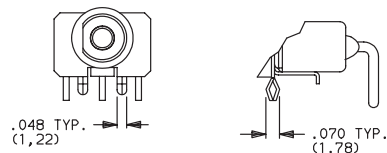


8161SH9ABE2  
SPDT

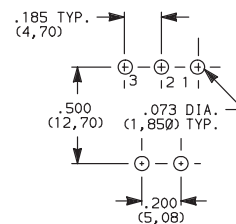


SECTION A-A

### A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE

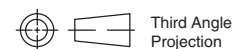


### PC MOUNTING



Not available with I seal.  
Terminal bend radii and lead-in manufacturing option.

NOTE: PC pattern must clear switch support leg.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**

# 8060 Series Alternate Action and Momentary Pushbutton Switches

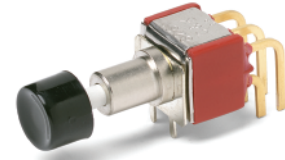
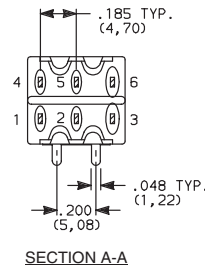
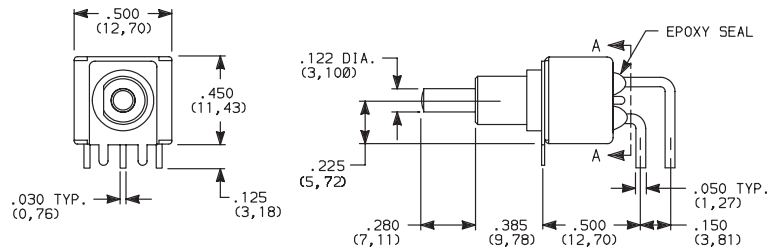
## TERMINATIONS



A

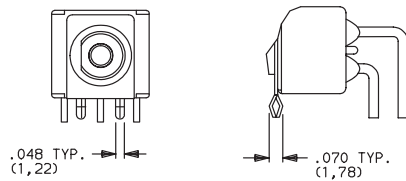
Pushbutton

### A RIGHT ANGLE, PC THRU-HOLE

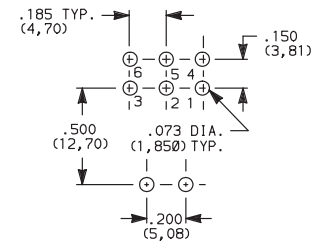


8261SH9ABE2  
DPDT

### A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE

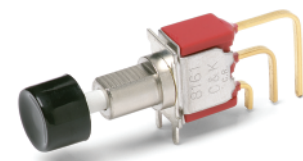
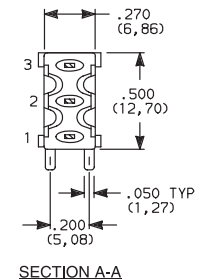
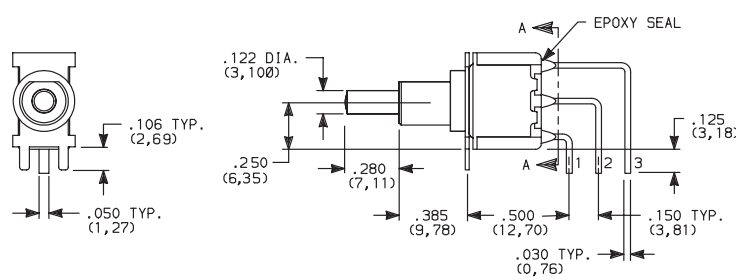


#### PC MOUNTING



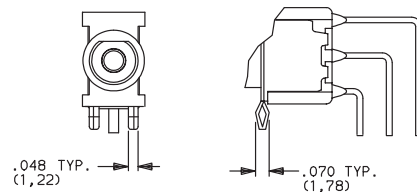
Not available with I seal.  
Terminal bend radii and lead-in manufacturing option.

### AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150° PITCH

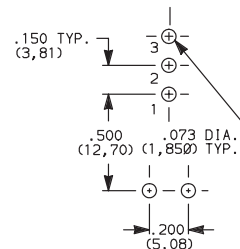


8161SH9AV2BE2  
SPDT

### AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150° PITCH



#### PC MOUNTING



Not available with I seal.  
Terminal bend radii and lead-in manufacturing option.



Third Angle  
Projection

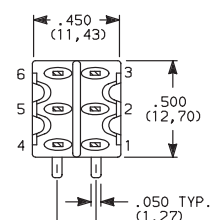
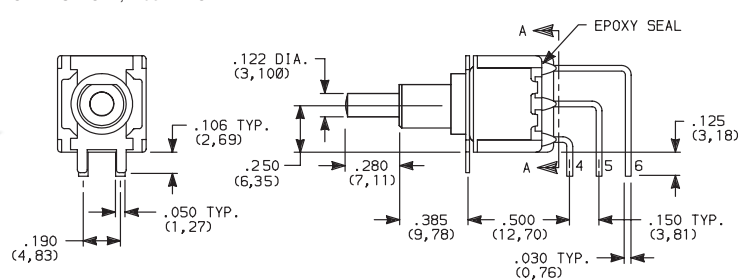
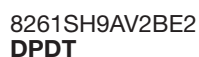
**C&K**

Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

www.ckswitches.com

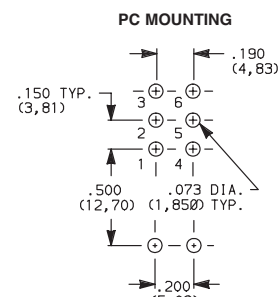
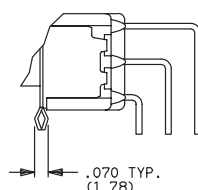
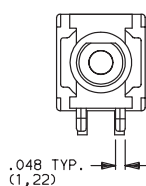


## TERMINATIONS

**AV2**

SECTION A-A

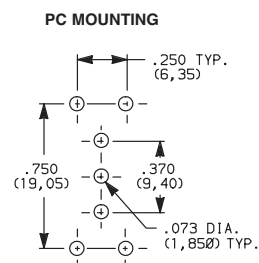
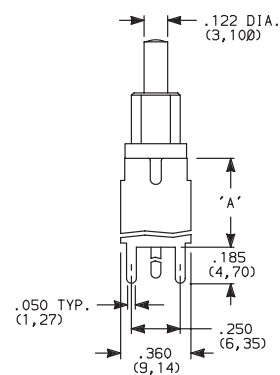
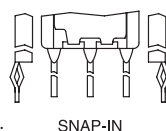
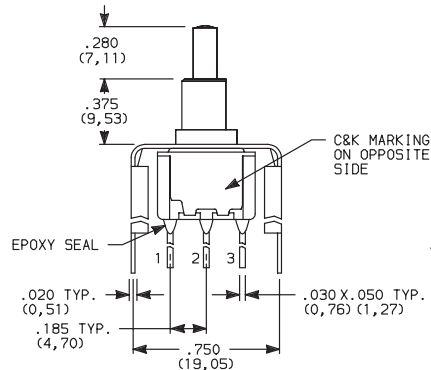
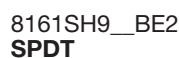
### AV3



Not available with I seal.  
Terminal bend radii and lead-in manufacturing option.

## V6

## V21

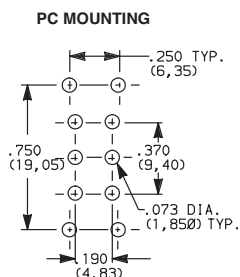
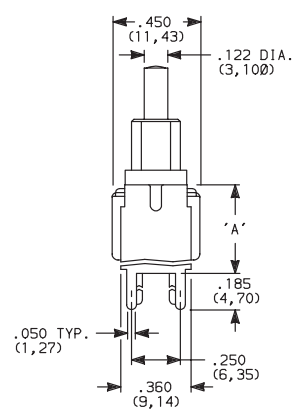
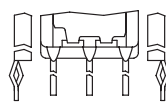
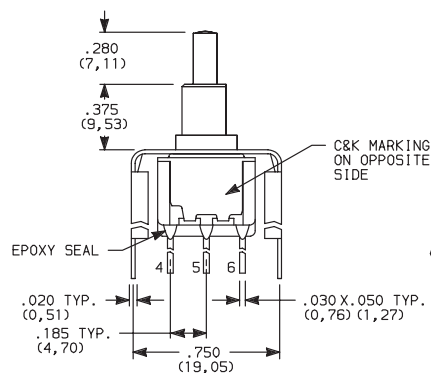
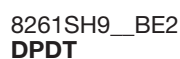


| OPTION CODE | DIM 'A'      |
|-------------|--------------|
| V21         | .555 (14,10) |
| V6          | .460 (11,68) |

Not available with I seal.

## V6

## V21



| OPTION CODE | DIM 'A'      |
|-------------|--------------|
| V21         | .555 (14,10) |
| V6          | .460 (11,68) |

Not available with I seal.



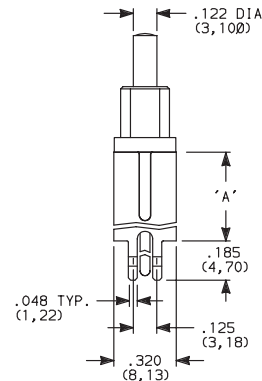
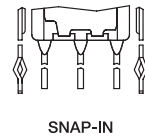
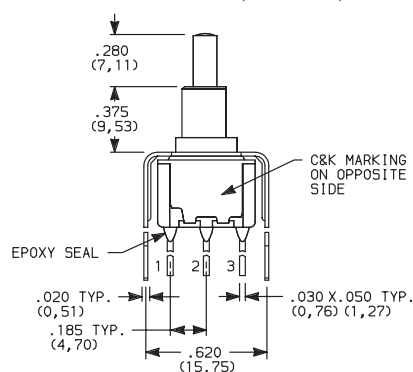
Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

# 8060 Series Alternate Action and Momentary Pushbutton Switches

## TERMINATIONS

**V3, V4** VERTICAL MOUNT, V-BRACKET

**V31** VERTICAL MOUNT, V-BRACKET, SNAP-IN



### PC MOUNTING



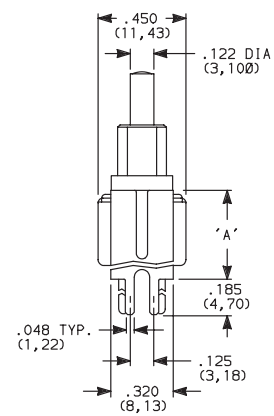
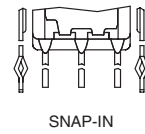
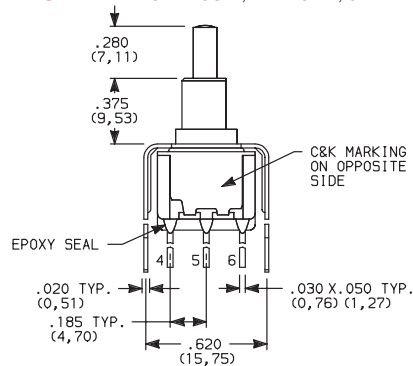
**8161SH9\_BE2  
SPDT**

| OPTION CODE    | DIM 'A'      |
|----------------|--------------|
| <b>V3, V31</b> | .460 (11,68) |
| <b>V4</b>      | .630 (16,00) |

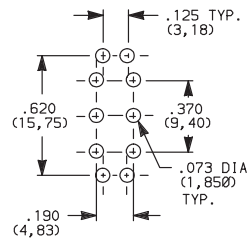
Not available with I seal.

**V3, V4** VERTICAL MOUNT, V-BRACKET

**V31** VERTICAL MOUNT, V-BRACKET, SNAP-IN



### PC MOUNTING



**8261SH9\_BE2  
DPDT**

| OPTION CODE    | DIM 'A'      |
|----------------|--------------|
| <b>V3, V31</b> | .460 (11,68) |
| <b>V4</b>      | .630 (16,00) |

Not available with I seal.

## CONTACT MATERIAL

| OPTION CODE | CONTACT MATERIAL                | TERMINAL PLATING       | RATINGS                        |                                                                                           |
|-------------|---------------------------------|------------------------|--------------------------------|-------------------------------------------------------------------------------------------|
| <b>B</b>    | GOLD <sup>1</sup>               | GOLD <sup>1</sup>      | LOW LEVEL/DRY CIRCUIT          | 0.4 VA MAX. @ 20 V AC OR DC MAX.                                                          |
| <b>P</b>    |                                 | MATTE-TIN <sup>6</sup> |                                |                                                                                           |
| <b>Q</b>    | SILVER <sup>4,5</sup>           | SILVER <sup>5</sup>    | POWER                          | 6 AMPS @ 120 V AC OR 28 V DC;<br>3 AMPS @ 250 V AC.                                       |
| <b>S</b>    |                                 | MATTE-TIN <sup>6</sup> |                                |                                                                                           |
| <b>G</b>    | GOLD OVER SILVER <sup>2,3</sup> | GOLD <sup>3</sup>      | LOW LEVEL/DRY CIRCUIT OR POWER | 0.4 VA MAX @ 20 V AC OR DC MAX. OR<br>6 AMPS @ 120 V AC OR 28 V DC;<br>3 AMPS @ 250 V AC. |
| <b>R</b>    |                                 | MATTE-TIN <sup>6</sup> |                                |                                                                                           |

\* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

<sup>1</sup> CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.

<sup>2</sup> END CONTACTS: Coin silver, with gold plate over nickel plate.

<sup>3</sup> CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.

<sup>4</sup> END CONTACTS: Coin silver, silver plated.

<sup>5</sup> CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.

<sup>6</sup> TERMINALS: Copper alloy, with matte-tin over nickel plate.

All models **C&K** with all options when ordered with S, R, G, or Q contact material.

B contact material standard with all terminations except C, Z & Z3.

Q contact material standard with C, Z & Z3 terminations.

**P, S & R contact materials not available with Z & Z3 terminations.**

**NOTE:** Any models supplied with P, S, R, Q, B or G contact material are RoHS compliant.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change



A

Pushbutton



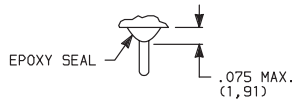
A

Pushbutton

# 8060 Series

## Alternate Action and Momentary Pushbutton Switches

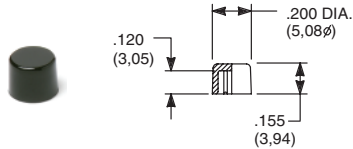
SEAL

**E** EPOXY SEAL**I** EPOXY POTTED BASE

NOTE: Available with C, W, Z, Z3 terminations only.

### AVAILABLE HARDWARE

Cap

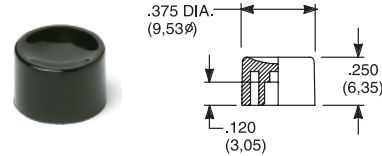


## PART NO.

708901000 WHITE  
708902000 BLACK  
708903000 RED  
708904000 ORANGE  
708905000 YELLOW  
708909000 GRAY

Material: Nylon  
Finish: Gloss

Cap

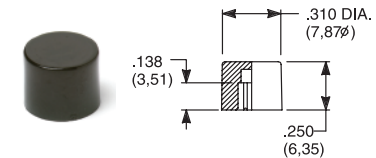


## PART NO.

752701000 WHITE  
752702000 BLACK  
752703000 RED  
752704000 ORANGE  
752705000 YELLOW  
752709000 GRAY

Material: Nylon  
Finish: Gloss

Cap

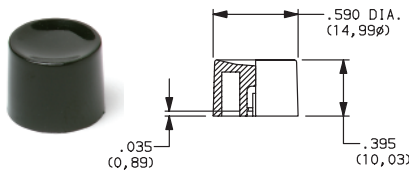


## PART NO.

801801000 WHITE  
801802000 BLACK  
801803000 RED  
801804000 ORANGE  
801805000 YELLOW  
801809000 GRAY

Material: Nylon  
Finish: Gloss

Cap, Snap-fitting plunger

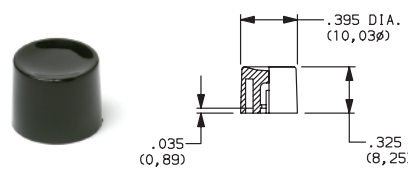


## PART NO.

452D01000 WHITE  
452D02000 BLACK  
452D03000 RED  
452D04000 ORANGE  
452D05000 YELLOW  
452D09000 GRAY

Material: Nylon  
Finish: Gloss

Cap, Snap-fitting plunger

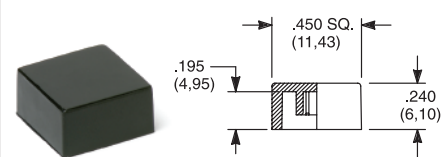


## PART NO.

894101000 WHITE  
894102000 BLACK  
894103000 RED  
894104000 ORANGE  
894105000 YELLOW  
894109000 GRAY

Material: Nylon  
Finish: Gloss

Cap, J80, J81 &amp; J82 options only



## PART NO.

484601000 WHITE  
484602000 BLACK  
484603000 RED  
484604000 ORANGE  
484605000 YELLOW  
484609000 GRAY

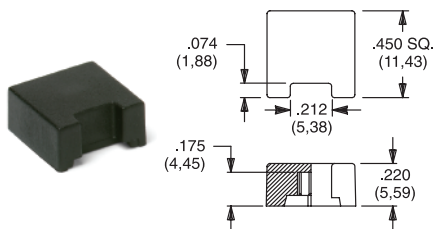
Material: Nylon  
Finish: Gloss

## PART NO.

798201000 WHITE  
798202263 BLACK  
798203000 RED  
798204000 ORANGE  
798205000 YELLOW  
798209000 GRAY

Material: Nylon  
Finish: Matte

Cap, J86 &amp; J96 options only



## PART NO.

459701000  
459702000  
459703000  
459704000  
459705000  
459709000

Material: Nylon  
Finish: Gloss

## PART NO.

476801000 WHITE  
476802000 BLACK  
476803000 RED  
476804000 ORANGE  
476805000 YELLOW  
476809000 GRAY

Material: Nylon  
Finish: Matte

Frame

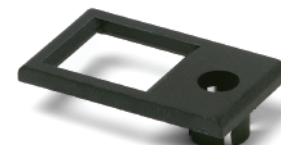


## PART NO.

615602263 BLACK

Material: Nylon  
Finish: Matte

Frame



## PART NO.

613302263 BLACK

Material: Nylon  
Finish: Matte

NOTE: Additional nuts, locking rings and lockwashers available separately, see section "Technical Data and Additional Hardware".  
Other cap & frame colors available, consult Customer Service Center.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**

# 8060 Series Alternate Action and Momentary Pushbutton Switches

## AVAILABLE HARDWARE

Fits Z3 Termination  
female connector

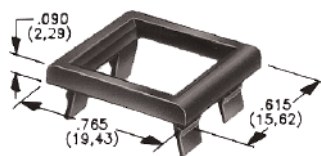
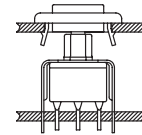
PART NO.  
**530100000**

Available in loose pieces.



Frames snap into panel opening and are independent from switch mounting. Accurate positioning of the PC mounted switch relative to the panel opening is necessary to provide proper clearance between actuator and frame. Available in two basic styles and four panel thicknesses .047-.125 in. Material: Nylon. Finish: Matte.

### TYPICAL APPLICATION



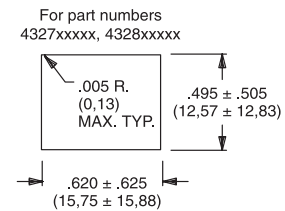
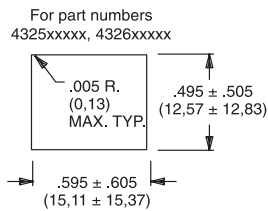
.090" (2,29) PANEL THK.

.125" (3,18) PANEL THK.

PART NO.  
**432702263**

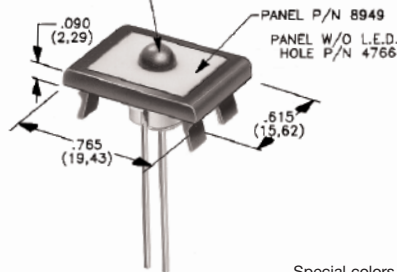
PART NO.  
**432802263** BLACK

### PANEL MOUNTING



### Panel Inserts

L.E.D. (.200 DIA. (5,08)) SNAPS  
SECURELY INTO INSERT (P/N 8949).  
HEIGHT DEPENDS ON L.E.D. USED.



Above frames (part nos. 432XXXXXX) are also available with insert which accepts LED for indicator light assembly. Order insert separately from frame. Blank insert panel (without hole for LED) also available. **LED not included.**

PANEL INSERT  
WITH HOLE FOR LED

PART NO.  
**894902000**

BLANK PANEL INSERT  
WITHOUT HOLE FOR LED

PART NO.  
**476602000** BLACK

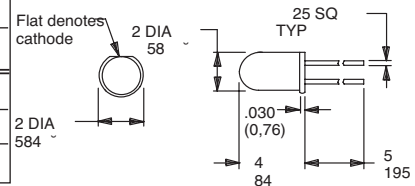
Special colors, custom markings available, consult Customer Service Center.

### LED INFORMATION

SWITCHES WITH LED SUPPLIED: J86 OPTION:

Rectangular LEDs are supplied on 8060 Series pushbutton switches with J86 option. These LEDs are factory installed and are not replaceable. The following specifications apply:

| OPTION CODE | COLOR  | TYP. INTENSITY | TYP. FORWARD VOLTAGE | TYP. FORWARD CURRENT | MAX RATINGS AT 25°C AMBIENT TEMPERATURE |                            |                   |
|-------------|--------|----------------|----------------------|----------------------|-----------------------------------------|----------------------------|-------------------|
|             |        |                |                      |                      | FORWARD VOLTAGE                         | CONTINUOUS FORWARD CURRENT | POWER DISSIPATION |
| 6           | Green  | 1.0 mcd        | 2.1 V                | 20 mA                | 2.5 V                                   | 50 mA                      | 125 mW            |
| 3           | Red*   | 0.5 mcd        |                      | 10 mA                |                                         | 30 mA                      | 75 mW             |
| 5           | Yellow | 4.0 mcd        |                      | 20 mA                |                                         | 50 mA                      | 125 mW            |



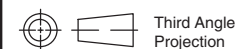
**Process Information:** Soldering to LED leads must be completed within 5 seconds at 500°F (260°C) maximum.

**Caution:** Circuit elements must limit forward current of LED to 50mA max. continuous.

\* Extra-bright red LED available (typ. intensity 4.5 mcd), consult Customer Service Center.

LEDs are not supplied with J82 & J84 options. LED snaps into switch frame surrounding actuator and is wired externally.

Suggested LED for J82 & J84 options  
Dimensions for reference only



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**



A

Pushbutton