

# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

查询 012551ABE 供应商

## Features/Benefits

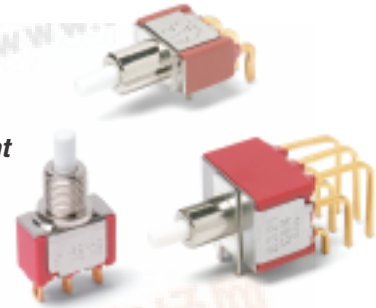
- **Positive tactile feel**
- **Multi-positions available**
- **Wide variety of termination options**
- **Epoxy terminal seal compatible with bottom wash cleaning**
- **RoHS compliant models available**



Models Available

## Typical Applications

- **Instrumentation**
- **Computer peripherals**
- **Telecommunications equipment**



A

Pushbutton

## Specifications

**CONTACT RATING:** B contact material (8X25 Models): 0.4 VA max. @ 20 V AC or DC maximum. G contact material (8X21, U8X1 Models): 1 AMP @ 120 V AC or 28 V DC or 0.4 VA max. @ 20 V AC or DC max. Note: Break-before-make contacts. Multi-pole contacts do not make and break simultaneously. See page A-41 for additional ratings.

**ELECTRICAL LIFE:** 60,000 make-and-break cycles at full load.

**CONTACT RESISTANCE:** Below 50 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:** 8X2X MODELS: -30°C to 75°C. U8X1 MODELS: -30°C to 65°C.

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

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

**NOTE:** Any models supplied with B, P, R, or G contact material are RoHS compliant. For the latest information regarding RoHS compliance, please go to: [www.itcannon.com/rohs](http://www.itcannon.com/rohs).

**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:** Glass filled nylon or glass filled polyester (PBT) (UL 94V-0).

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

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

**HOUSING:** Stainless steel.

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

**N.O. & N.C. CONTACTS:** 8X21, U8X1 MODELS: G contact material: Coin silver, with gold plate over nickel plate. See page A-41 for additional contact materials.

8X25 MODELS: B contact material: Copper alloy, with gold plate over nickel plate. See page A-41 for additional contact materials.

**COMMON CONTACT & ALL TERMINALS:** Copper alloy, with gold plate over nickel plate.

**TERMINAL SEAL:** Epoxy. Refer to soldering and cleaning

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-28 thru A-43. 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

- 8121** SPDT On-Mom. 1 Amp
- 8125** SPDT On-Mom. 0.4VA
- 8221** DPDT On-Mom. 1 Amp
- 8225** DPDT On-Mom. 0.4VA
- 8321** 3PDT On-Mom. 1 Amp
- 8325** 3PDT On-Mom. 0.4VA
- 8421** 4PDT On-Mom. 1 Amp
- 8425** 4PDT On-Mom. 0.4VA

**Note:** UL/CSA models available, see page A-28 and A-29.

### Actuator or Plunger

- S** Plunger
- NONE** Snap-in
- J80** Snap-in
- J81** Snap-in w/frame
- J82** Snap-in w/frame for LED
- J83** Snap-in w/frame & flush cap
- J84** Snap-in w/frame for LED, flush cap
- J85** Snap-in w/frame & LED
- J95** PC w/V-bracket & LED
- L** Plunger
- M** Snap-fitting plunger

### Bushing

- D9** .280" high, keyway
- H** .250" high, flat
- NONE** No bushing choice required
- D** .280" high, keyway
- D2** .288" high, flat
- D3** .180" high
- D8** .288" high, flat
- H9** .250" high, flat, hi torque
- Y** .350" high, keyway
- Y3** 6.35mm high, keyway, hi torque
- Y4** .378" high, flat, hi torque
- Y9** .350" high, keyway

### Contact Material

- B** Gold
- K** Gold, tin-lead
- P** Gold, matte-tin
- G** Gold over silver
- L** Gold over silver, tin-lead
- R** Gold over silver, matte-tin

### Seal

- E** Epoxy
- I** Epoxy potted base

### Cap Color

- 2** Black
- NONE** Models without caps
- 1** White
- 3** Red
- 4** Orange
- 5** Yellow
- 6** Green
- 7** Blue
- 9** Gray

### Frame Color

- 2** Black
- NONE** Models without frame
- 1** White
- 3** Red
- 5** Yellow
- 6** Green
- 9** Gray

### LED Color

- 3** Red
- NONE** Models without LED
- 5** Yellow
- 6** Green

### Terminations

- A** Right angle, PC thru-hole
- AV2** Vertical right angle, PC thru-hole
- C** PC Thru-hole
- Z** Solder lug
- A2** Right angle, PC thru-hole
- A3** Right angle, snap-in, PC thru-hole
- A4** Right angle, PC thru-hole, reversed terminals
- A6** Right angle, PC thru-hole
- AV** Vertical right angle, PC thru-hole
- AV1** Vertical right angle, PC thru-hole
- AV3** Vertical right angle, snap-in, PC thru-hole
- R** Right angle with PCB
- R2** Right angle with PCB, reversed terminals

- V2** .555" high, V-bracket
- V3** .460" high, V-bracket
- V4** .630" high, V-bracket
- V6** .460" high, V-bracket
- V7** .630" high, V-bracket
- V8** .953" high, V-bracket
- V9** 1.150" high, V-bracket
- V31** .460" high, snap-in V-bracket
- V61** .460" high, snap-in V-bracket
- W** .750" long, wire wrap
- W1** .964" long, wire wrap
- W3** .425" long, wire wrap
- W4** 1.062" long, wire wrap
- Z3** Quick connect

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



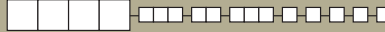


# C&K 8020 Series

## Snap-acting Momentary Pushbutton Switches





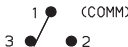
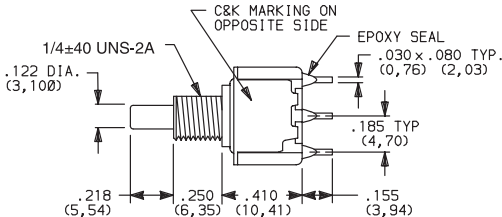
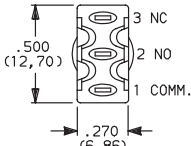
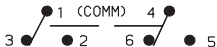
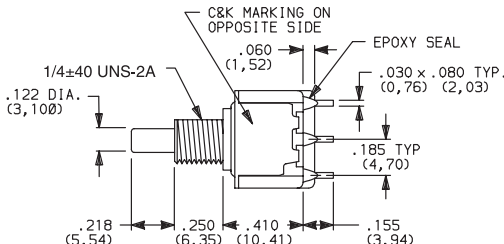
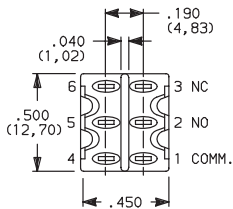
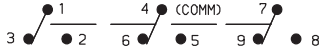
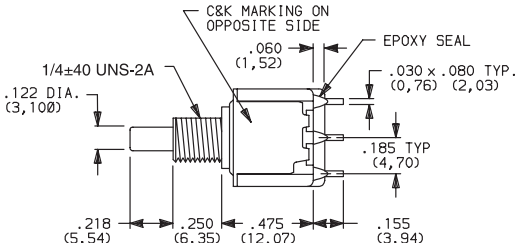
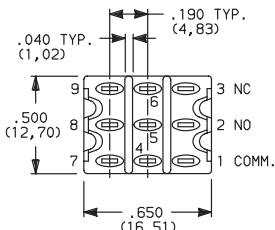
查询"8125SHZGE"供应商

### SWITCH FUNCTION



Pushbutton

A

NO. POLES	MODEL NO.	UL/CSA* MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS		SCHEMATIC
			POS. 1	POS. 2	POS. 1	POS. 2	
							
			C&K marking on opposite side		C&K marking on opposite side		
SP	8121	U811	ON	MOM.	1-3	1-2	
	8125		ON	MOM.			
SPDT							
<div><div></div><div></div></div> <p>Part number shown: 8121SHZGE</p> <p>Terminal Nos. For Reference Only</p>							
DP	8221	U821	ON	MOM.	1-3,4-6	1-2,4-5	
	8225		ON	MOM.			
DPDT							
<div><div></div><div></div></div> <p>Part number shown: 8221SHZGE</p> <p>Terminal Nos. For Reference Only</p>							
3P	8321	U831	ON	MOM.	1-3,4-6,7-9	1-2,4-5,7-8	
	8325		ON	MOM.			
3PDT							
<div><div></div><div></div></div> <p>Part number shown: 8321SHZGE</p> <p>Terminal Nos. For Reference Only</p>							

MOM. = Momentary

\*U811 thru U841 model numbers with all options (except R, R2 terminations) when ordered with G, L or R contact material.

8X25 models must be ordered with B, K or P contact material.

8X21 and U8X1 models must be ordered with G, L or R contact material.

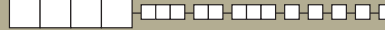


Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

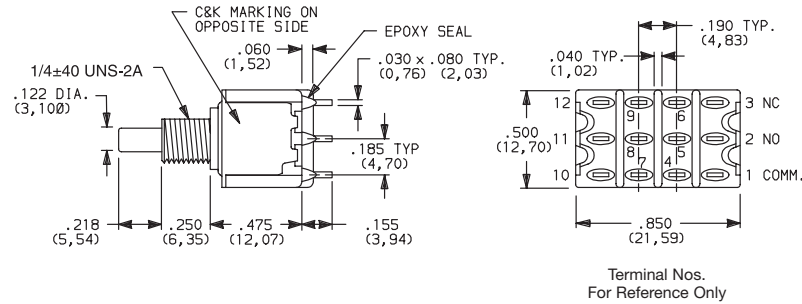


## SWITCH FUNCTION



NO. POLES	MODEL NO.	UL/CSA* MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS		SCHEMATIC
			POS. 1	POS. 2	POS. 1	POS. 2	
4P	8421	U841	ON	MOM.	1-3,4-6,7-9,10-12	1-2,4-5,7-8,10-11	
	8425		ON	MOM.			

### 4PDT



Part number shown: 8421SHZGE

Terminal Nos.  
For Reference Only

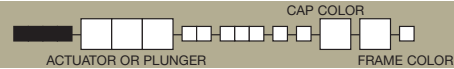
MOM. = Momentary

\* U811 thru U841 model numbers with all options (except R, R2 terminations) when ordered with G, L or R contact material.

8X25 models must be ordered with B, K or P contact material.

8X21 and U8X1 models must be ordered with G, L or K contact material.

## ACTUATOR—SNAP-IN FRONT MOUNT

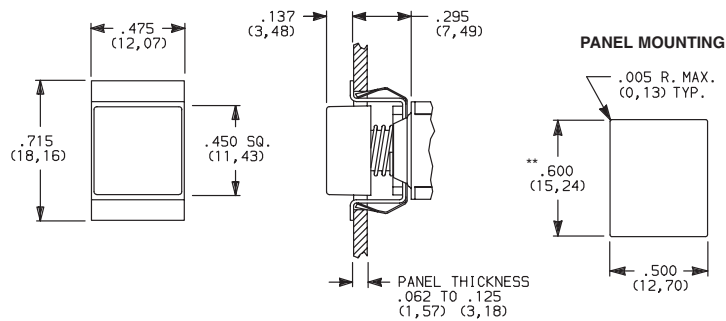


OPTION CODE	CAP AND FRAME COLOR
2	BLACK
NONE	No Frame Color (J80 option)
1	WHITE
3	RED
4	ORANGE
5	YELLOW
6	GREEN
7	BLUE
9	GRAY

Other colors available, consult Customer Service Center. Cap and Frame Finish: matte.

**NOTE:** Caps and frames available separately, see pages A-42 and A-43.

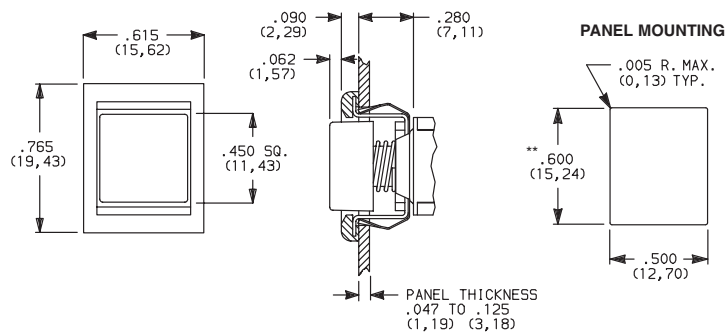
### J80 SNAP-IN



**NOTE:** No frame color choice required.

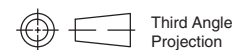
\*\* Increase this dim. to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.

### J81 SNAP-IN WITH FRAME



**NOTE:** Available with C, W-W4, Z or Z3 terminations and SPDT and DPDT models only.

\*\* Increase this dim. to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.



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





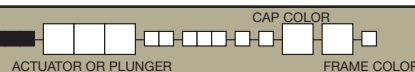
A

Pushbutton

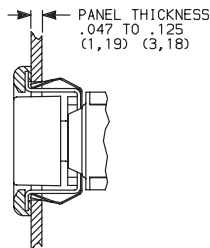
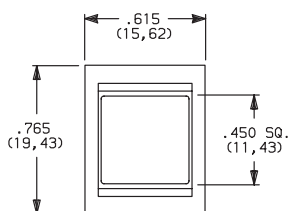
# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

[查询"8125SHAB2"供应商](#)

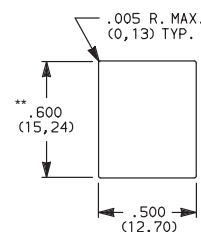
## ACTUATOR—SNAP-IN FRONT MOUNT



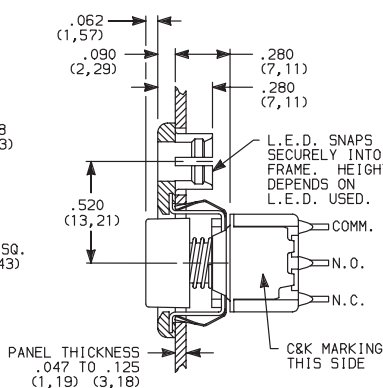
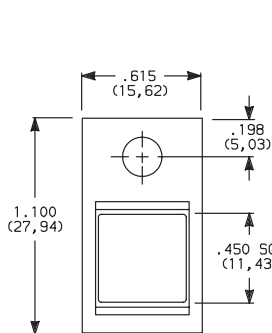
### J83 SNAP-IN WITH FRAME AND FLUSH CAP



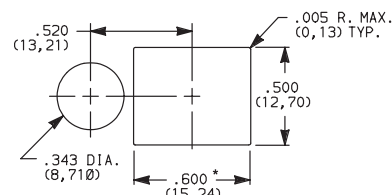
#### PANEL MOUNTING



### J82 SNAP-IN WITH FRAME FOR LED



#### PANEL MOUNTING

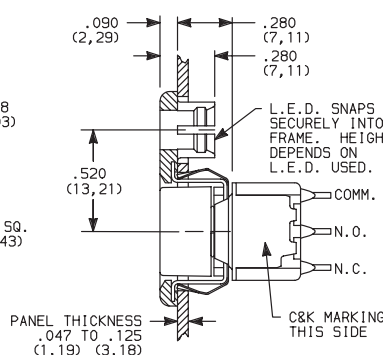
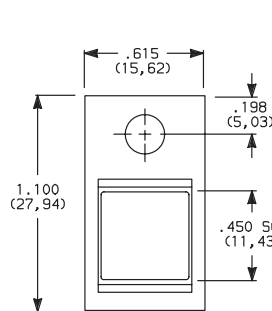


\* Increase this dim. to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.

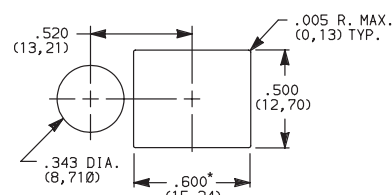
LED not included.

For LED information, see page A-43.

### J84 SNAP-IN WITH FRAME FOR LED, FLUSH CAP



#### PANEL MOUNTING



\* Increase this dim. to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.

LED not included.

For LED information, see page A-43.

OPTION CODE	CAP AND FRAME COLOR
2	BLACK
1	WHITE
3	RED
4	ORANGE
5	YELLOW
6	GREEN
7	BLUE
9	GRAY

Other colors available, consult Customer Service Center.  
Cap and Frame Finish: matte.

Available with C, W-W4, Z or Z3 terminations and SPDT and DPDT models only.

**NOTE:** Caps and frames available separately, see pages A-42 and A-43.



Third Angle Projection

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

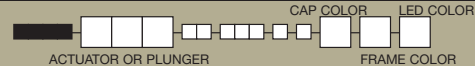


# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

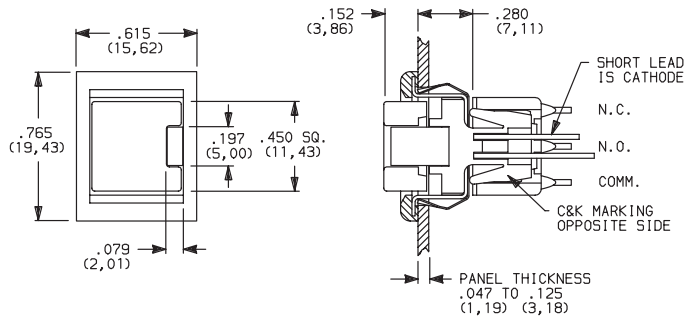


Pushbutton

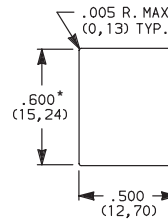
## ACTUATOR—SNAP-IN FRONT MOUNT



### J85 SNAP-IN WITH FRAME AND LED



### PANEL MOUNTING



\* Increase this dim. to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.



8121J85ZGE223  
SPST

Available with C, W-W4, Z or Z3 terminations and SPDT models only. For LED information see page A-43.

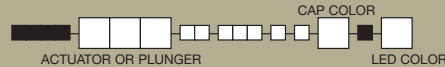
**NOTE:** Caps & frames available separately, see pages A-42 and A-43.

OPTION CODE	CAP AND FRAME COLOR
2	BLACK
1	WHITE
3	RED
4	ORANGE
5	YELLOW
6	GREEN
7	BLUE
9	GRAY

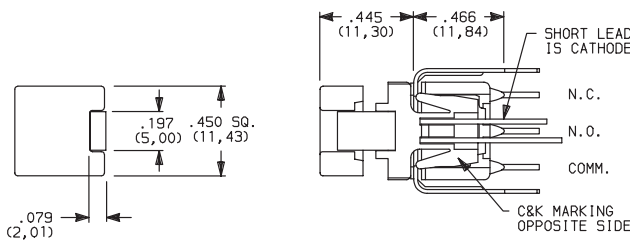
OPTION CODE	LED COLOR
3	RED
5	YELLOW
6	GREEN

For LED information see page A-43.

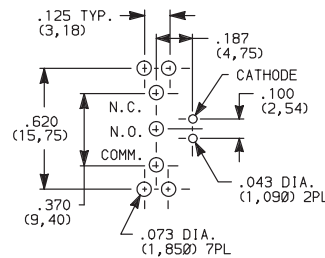
## ACTUATOR—PC MOUNT



### J95 PC WITH V-BRACKET AND LED



### PC MOUNTING



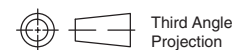
8121J95V3GE23  
SPST

OPTION CODE	CAP AND FRAME COLOR
2	BLACK
1	WHITE
3	RED
4	ORANGE
5	YELLOW
6	GREEN
7	BLUE
9	GRAY

OPTION CODE	LED COLOR
3	RED
5	YELLOW
6	GREEN

For LED information see page A-43.

**NOTE:** Caps available separately, see page A-42. Available with V3 terminations and SPDT models only.



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



# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

查询"61255HAB2"供应商

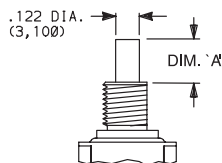
## PLUNGER

ACTUATOR OR PLUNGER

Pushbutton

A

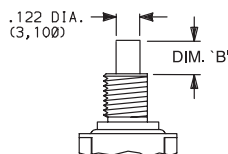
### S PLUNGER



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

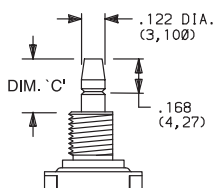
AVAILABLE BUSHINGS	DIM. 'A' FOR C, W-W4, Z & Z3 TERMINATIONS	DIM. 'A' FOR A, A2, A3, A4, A6, AV-A3, R & R2 TERMINATIONS	DIM. 'A' FOR V3-V61 TERMINATIONS
D, D9	.244 (6,20)	.228 (5,79)	.224 (5,69)
H, H9	.218 (5,54)	.202 (5,13)	.198 (5,03)
Y, Y9	.203 (5,16)	.187 (4,75)	.183 (4,65)
Y3	(5,54)	(5,13)	(5,03)
Y4	.185 (4,70)	.169 (4,29)	.165 (4,19)
D2, D8	N/A	.232 (5,89)	.228 (5,79)
D3	N/A	.162 (4,11)	.158 (4,01)

### L PLUNGER



AVAILABLE BUSHINGS	DIM. 'B' FOR C, W-W4, Z & Z3 TERMINATIONS	DIM. 'B' FOR A, A2, A3, A4, A6, AV-A3, R & R2 TERMINATIONS	DIM. 'B' FOR V3-V61 TERMINATIONS
Y, Y9	.178 (4,52)	.162 (4,11)	.158 (4,01)
Y4	.090 (2,29)	.074 (1,88)	.070 (1,78)

### M SNAP-FITTING PLUNGER



AVAILABLE BUSHINGS	DIM. 'C' FOR C, W-W4, Z & Z3 TERMINATIONS	DIM. 'C' FOR A, A2, A3, A4, A6, AV-A3, R & R2 TERMINATIONS	DIM. 'C' FOR V3-V61 TERMINATIONS
D, D9	.297 (7,54)	.281 (7,14)	.277 (7,04)
H, H9	.267 (6,78)	.251 (6,38)	.247 (6,27)
Y, Y9	.259 (6,58)	.243 (6,17)	.239 (6,07)
Y3	(6,78)	(6,37)	(6,27)
Y4	.259 (6,58)	.243 (6,17)	.239 (6,07)
D2, D8	N/A	.273 (6,93)	.269 (6,83)
D3	N/A	.361 (9,17)	.357 (9,07)

N/A = NOT AVAILABLE

**NOTE:** When selecting plunger option, bushing selection must also be made, see next page. No plunger option is required when any JXX actuator option is selected. Additional plunger lengths are available on SPDT and DPDT models, consult Customer Service Center. Not all plunger lengths sufficient for use with caps, see page A-42.

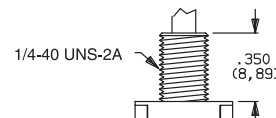
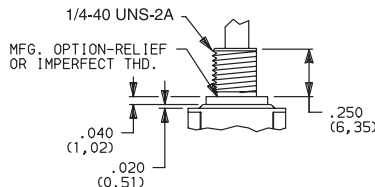
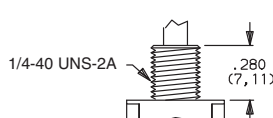
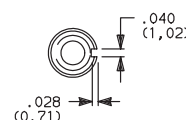
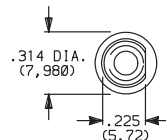
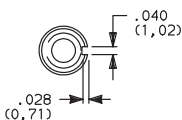
## BUSHING

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

**D** .280" HIGH THREADED, KEYWAY  
**D9** .280" HIGH UNTHREADED,  
KEYWAY

**H** .250" HIGH THREADED, FLAT  
**H9** .250" HIGH UNTHREADED, FLAT

**Y** .350" HIGH THREADED, KEYWAY  
**Y9** .350" HIGH UNTHREADED, KEYWAY



D9 bushing standard with A-A6,  
R, R2 AV-AV3 terminations.

H bushing standard with C, W-W4, Z or Z3 terminations.  
H, H9 bushings not available on single pole models with  
A3-A6, R, R2 terminations.

**Will withstand 12 in./lbs. of torque with  
no distortion.**



Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change





# C&K 8020 Series Snap-acting Momentary Pushbutton Switches



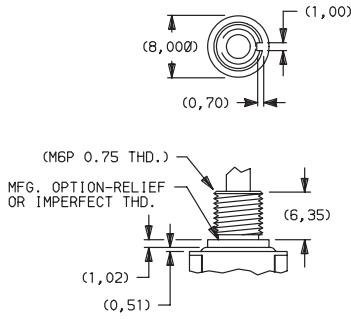
A

Pushbutton

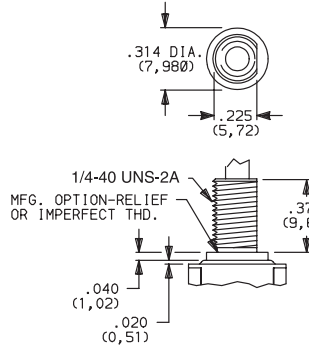
## BUSHING



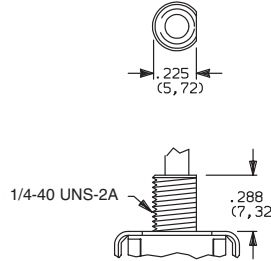
**Y3** 6.35mm THREADED, KEYWAY



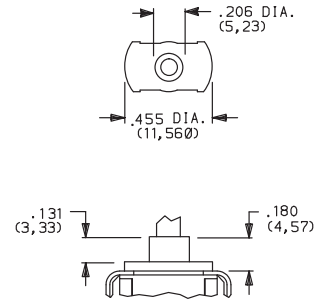
**Y4** .378" HIGH THREADED, FLAT



**D2** .288" HIGH THREADED, FLAT  
**D8** .288" HIGH UNTHREADED, FLAT



**D3** .180" HIGH UNTHREADED



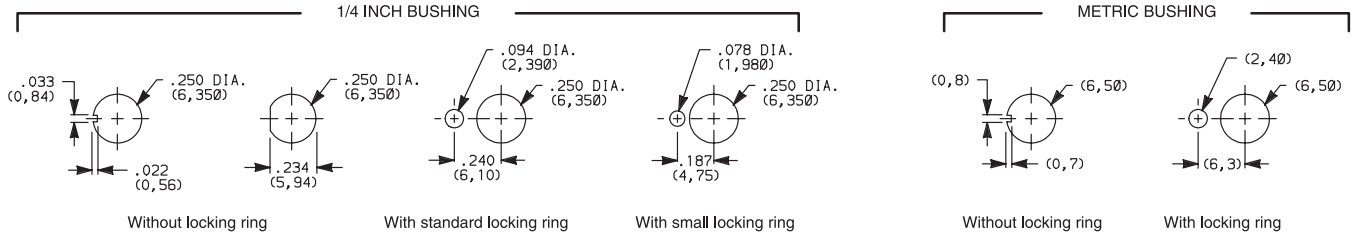
Y3 & Y4 bushings not available on single pole models with A3-A6, R, R2 terminations. Will withstand 12 in./lbs. of torque with no distortion.

D2, D8 bushings not available with C, W-W4, Z, Z3 terminations.

D3 bushing available with A, A2, A3, AV, AV2, AV3 and V2-V61 terminations only.

**NOTE:** No bushing option choice required when JXX actuator option is selected. When selecting bushing option, plunger selection must also be made, see previous page. Plunger lengths vary with bushing and termination options selected.

## PANEL MOUNTING

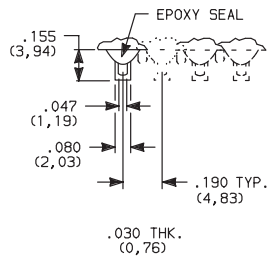


**NOTE:** Two mounting nuts, locking ring and lockwasher supplied standard with threaded bushings. Optional mounting nut and locking ring styles available, see section "Technical Data and Additional Hardware".

## TERMINATIONS



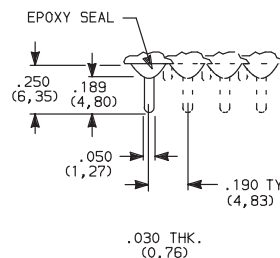
**Z** SOLDER LUG



Not available with J95 actuator, K, L, P or R contact material.

**SPDT thru 4PDT**

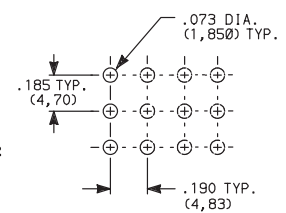
**C** PC THRU-HOLE



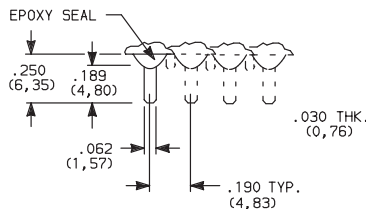
**SPDT thru 4PDT**

Not available with J95 actuator option.

**PC MOUNTING**



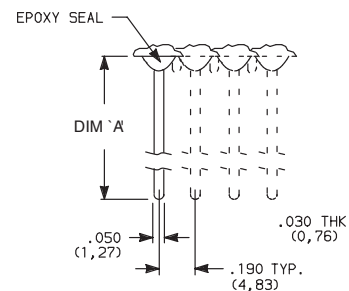
**Z3** QUICK CONNECT



**SPDT thru 4PDT**

Not available with J95 actuator, K, L, P or R contact material. Mating quick connector available, order part number 530100000, page A-42.

**W W1, W3, W4** WIRE WRAP



**SPDT thru 4PDT**

Not available with J95 actuator option.

OPTION CODE	DIM 'A'
<b>W</b>	.750 (19,05)
<b>W1</b>	.964 (24,49)
<b>W3</b>	.425 (10,80)
<b>W4</b>	1.062 (26,97)



Third Angle Projection



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



A

Pushbutton

# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

[查询"8125SHAB2"供应商](#)

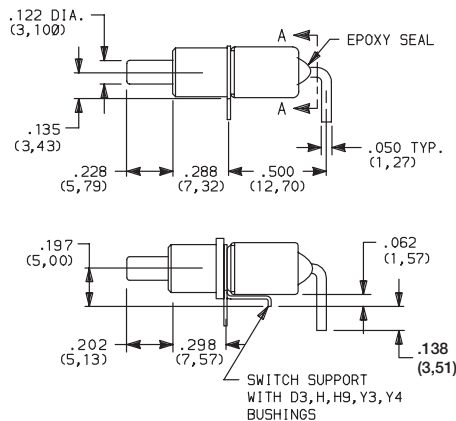
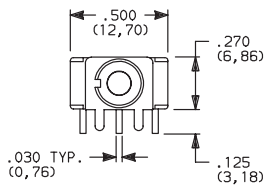
## TERMINATIONS



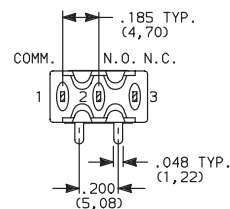
### A RIGHT ANGLE, PC THRU-HOLE



8121SD9AGE  
SPDT



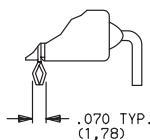
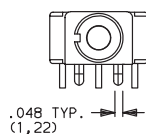
Part Number 8121SH9AGE



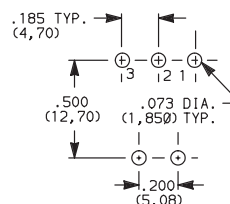
### SECTION A-A

Terminal Nos.  
For Reference Only.

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



### PC MOUNTING

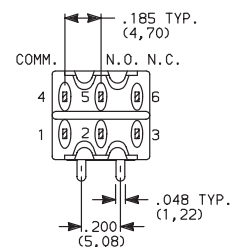
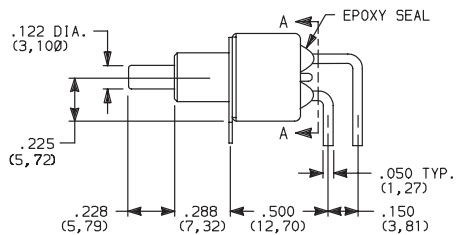
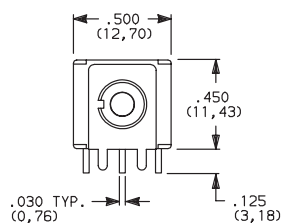


Not available with JXX actuators and I seal.  
Terminal bend radii and lead-in manufacturing option.

### A RIGHT ANGLE, PC THRU-HOLE

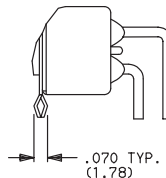
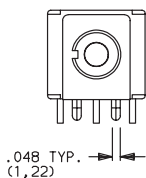


8221SD9AGE  
DPDT

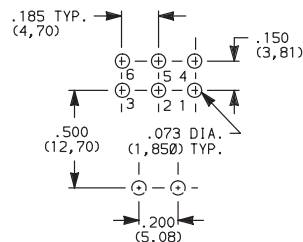


### SECTION A-A

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



### PC MOUNTING



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

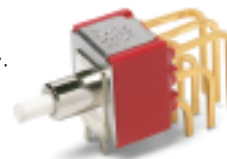
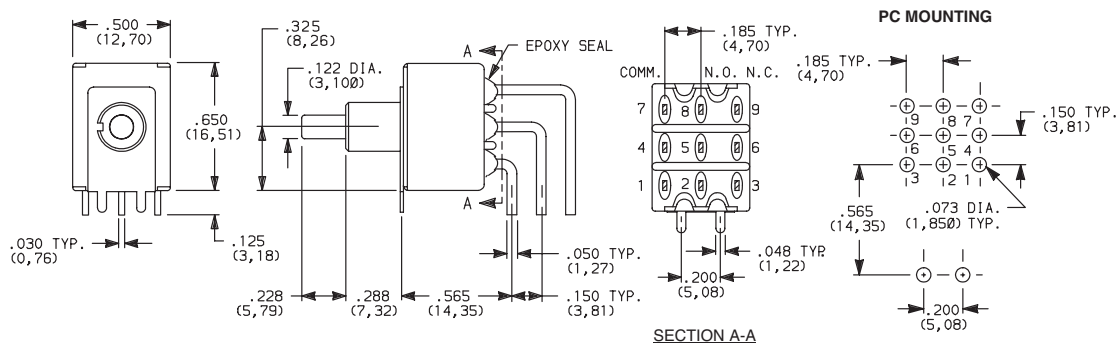


Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change



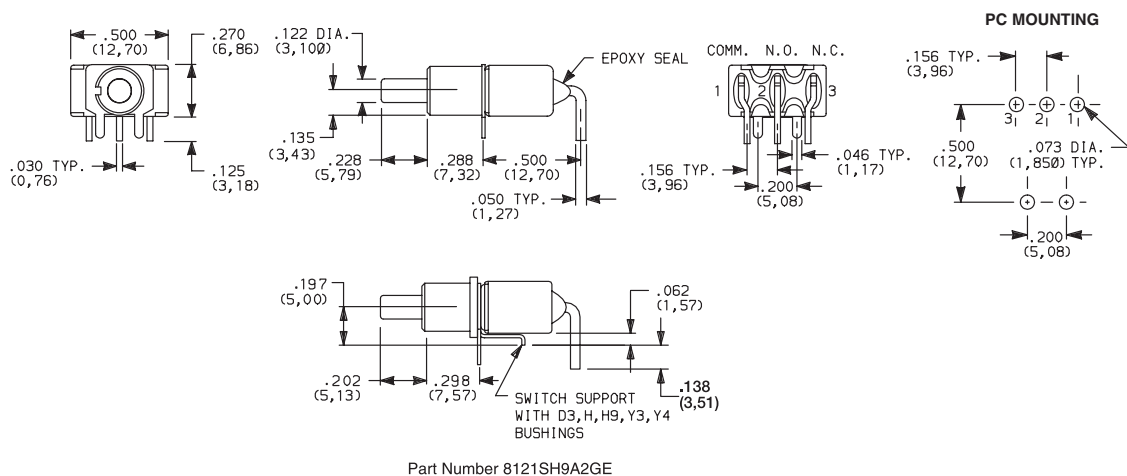
## TERMINATIONS

### A RIGHT ANGLE, PC THRU-HOLE

8321SD9AGE  
3PDT

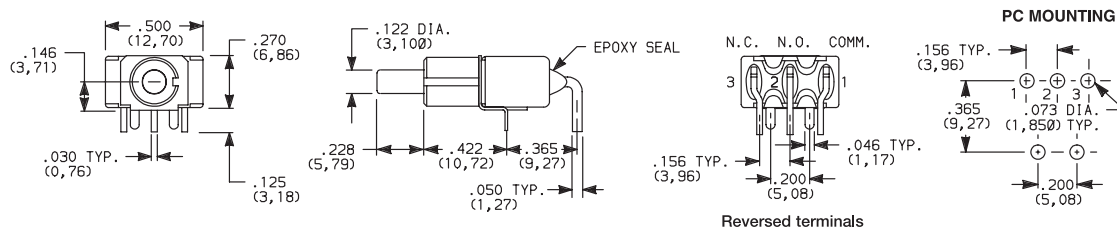
Not available with JXX actuators and I seal option.  
Terminal bend radii and lead-in manufacturing option.

**A2** RIGHT ANGLE, PC THRU-HOLE

8121SD9A2GE  
SPDT

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

**A4** RIGHT ANGLE, PC THRU-HOLE, REVERSED TERMINALS

8121SD9A4GE  
SPDT

Not available with JXX actuators, D3, H, H9, Y3, Y4 bushings and I seal.  
Terminal bend radii and lead-in manufacturing option.

The A4 and R2 termination options are functionally identical and fit the same PC mounting pattern. The switches, however, are shifted relative to the mounting holes. The PC pattern must clear the switch support legs. Unlike the R2, the A4 option is available with UL/CSA.



A

Pushbutton

# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

[查询"8125SHAB2"供应商](#)

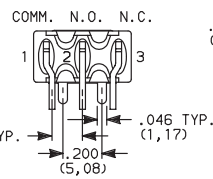
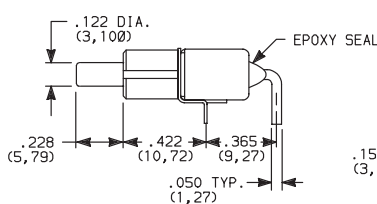
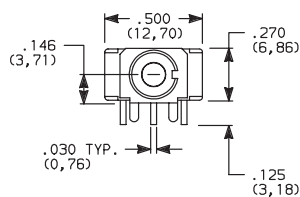
## TERMINATIONS



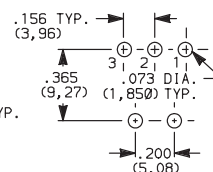
### A6 RIGHT ANGLE, PC THRU-HOLE



**8121SD9A6GE  
SPDT**



#### PC MOUNTING



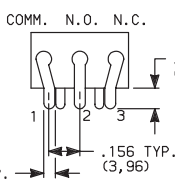
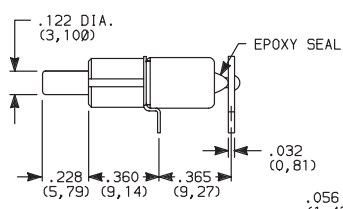
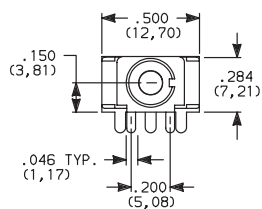
The A6 and R termination options are functionally identical and fit the same PC mounting pattern. The switches, however, are shifted relative to the mounting holes. The PC pattern must clear the switch support legs. Unlike the R, the A6 option is available with UL/CSA.

Not available with JXX actuators, D3, H, H9, Y3, Y4 bushings and I seal. Terminal bend radii and lead-in manufacturing option.

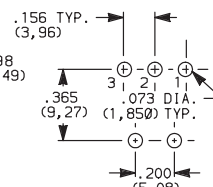
### R RIGHT ANGLE WITH PCB



**8121SD9RGE  
SPDT**



#### PC MOUNTING

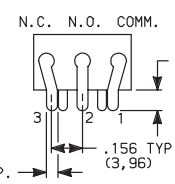
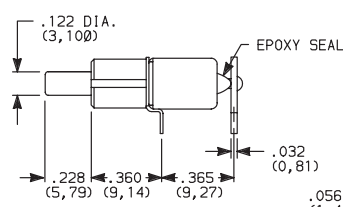
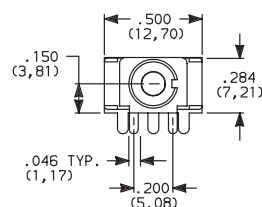


Not available with JXX actuators, D3, H, H9, Y3, Y4 bushings, I seal option. R termination not UL/CSA approved.

### R2 RIGHT ANGLE WITH PCB, REVERSED TERMINALS

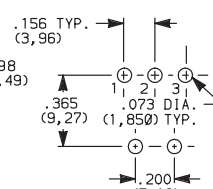


**8121SD9R2GE  
SPDT**



Reversed terminals

#### PC MOUNTING

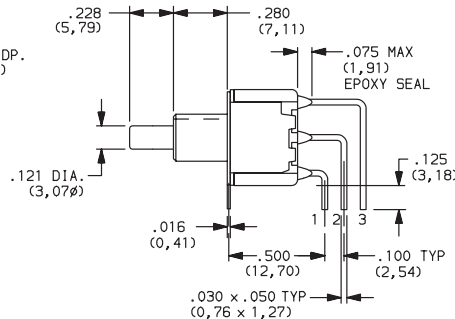
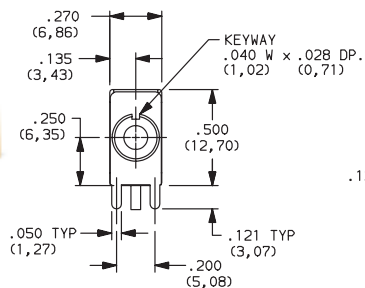


Not available with JXX actuators, D3, H, H9, Y3, Y4 bushings, I seal option. R2 termination not UL/CSA approved.

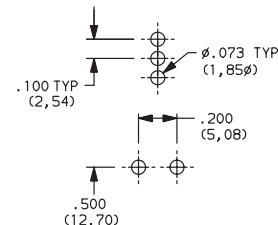
### AV VERTICAL RIGHT ANGLE, PC THRU-HOLE, .100" PITCH



**8121SD9AVGE  
SPDT**



#### PC MOUNTING



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



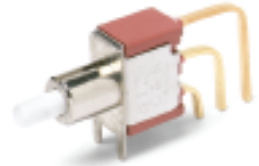
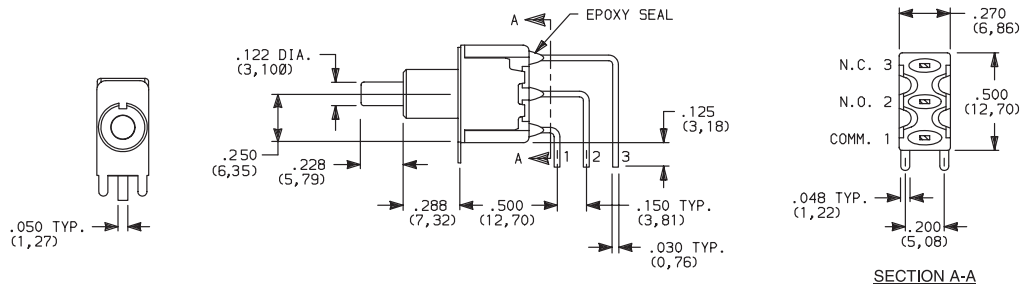
A

Pushbutton

## TERMINATIONS

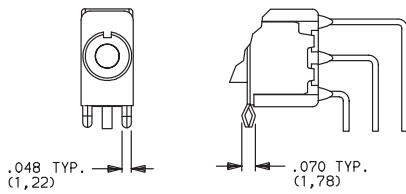


**AV2** VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

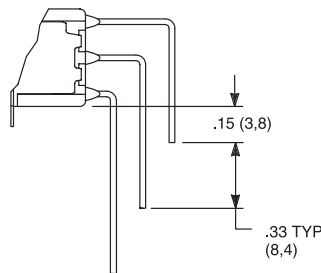


**8121SD9AV2GE  
SPDT**

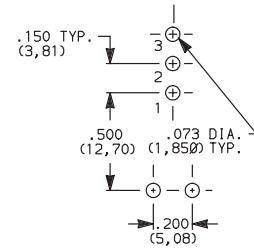
**AV3** VERTICAL RIGHT ANGLE, SNAP-IN,,  
PC THRU-HOLE, .150" PITCH



**AV1** VERTICAL RIGHT ANGLE, EXTENDED,  
PC THRU-HOLE, .150" PITCH

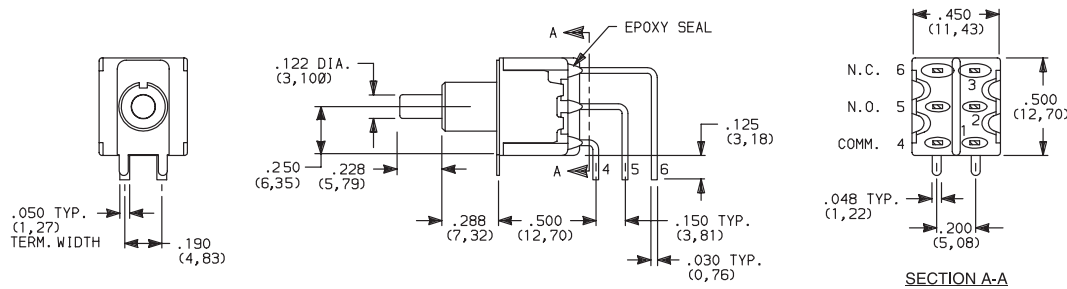


### PC MOUNTING



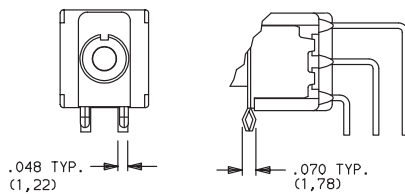
Not available with JXX actuators and I seal.  
Terminal bend radii and lead-in manufacturing option.

**AV2** VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

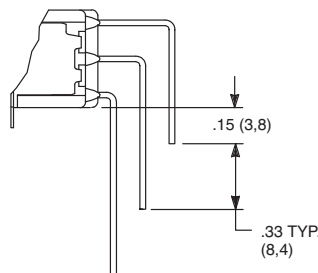


**8221SD9AV2GE  
DPDT**

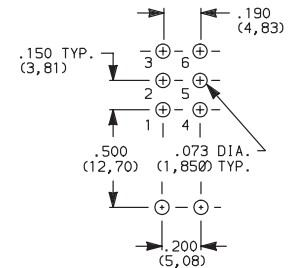
**AV3** VERTICAL RIGHT ANGLE, SNAP-IN,  
PC THRU-HOLE, .150" PITCH



**AV1** VERTICAL RIGHT ANGLE, EXTENDED,  
PC THRU-HOLE, .150" PITCH



### PC MOUNTING



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



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



A

Pushbutton

# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

[查询"812SD3HAB2"供应商](#)

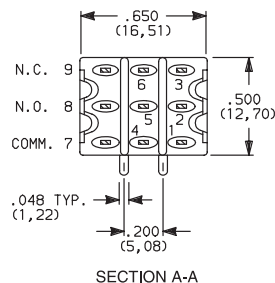
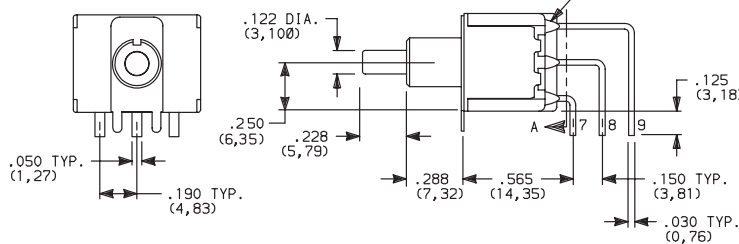
## TERMINATIONS



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

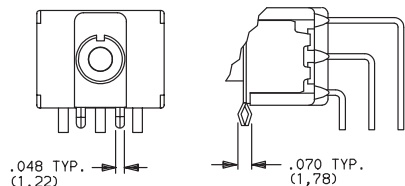


8321SD9AV2GE  
3PDT

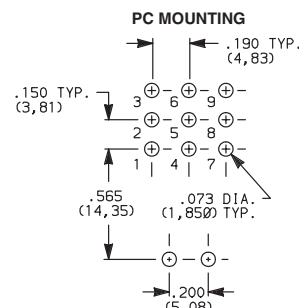
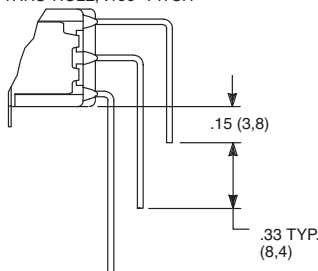


SECTION A-A

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



### AV1 VERTICAL RIGHT ANGLE, EXTENDED, PC THRU-HOLE, .150° PITCH



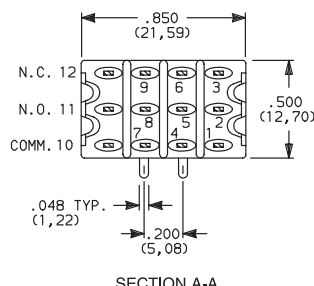
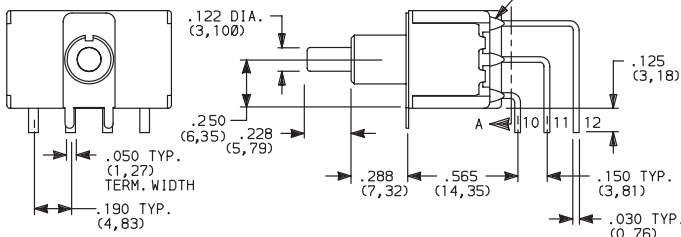
PC MOUNTING

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

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

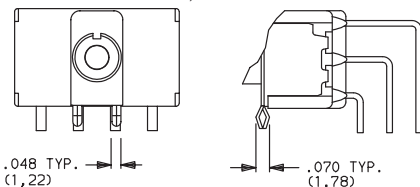


8421SD9AV2GE  
4PDT

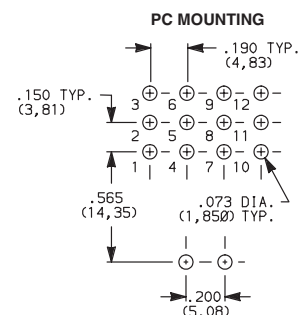
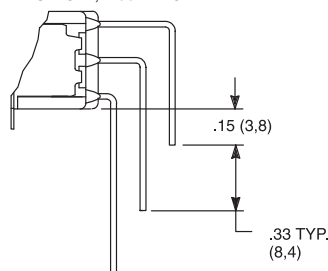


SECTION A-A

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



### AV1 VERTICAL RIGHT ANGLE, EXTENDED, PC THRU-HOLE, .150° PITCH



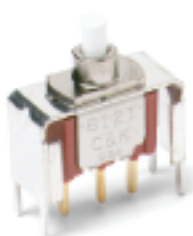
PC MOUNTING

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

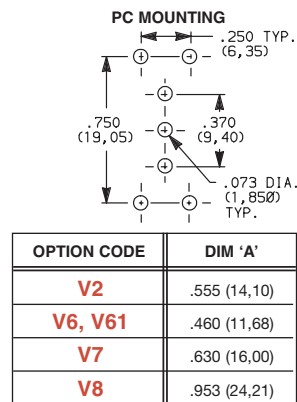
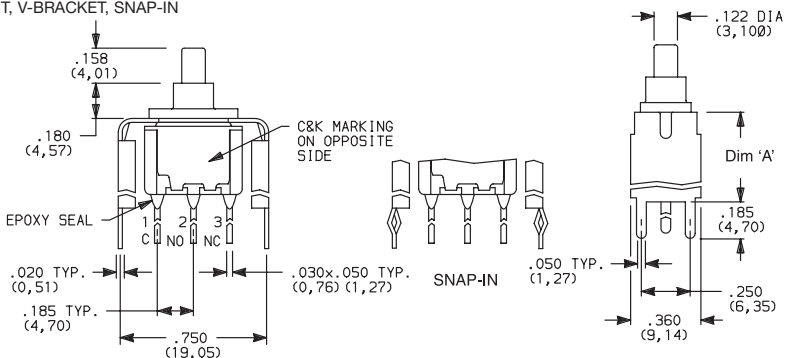
## V2, V6, V7, V8

VERTICAL MOUNT, V-BRACKET

### V61 VERTICAL MOUNT, V-BRACKET, SNAP-IN



8121SD3\_GE  
SPDT



OPTION CODE	DIM 'A'
V2	.555 (14,10)
V6, V61	.460 (11,68)
V7	.630 (16,00)
V8	.953 (24,21)

Not available with JXX actuators and I seal.



ITT



Third Angle  
Projection

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

www.ittcannon.com

## TERMINATIONS

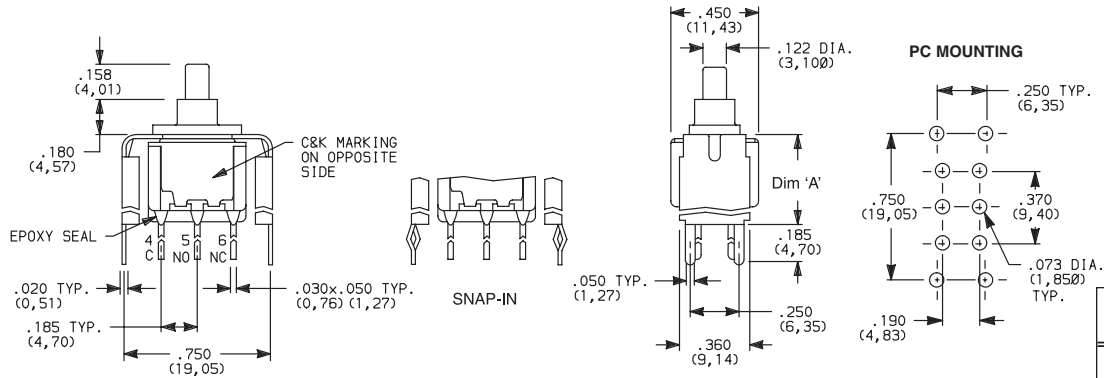


A

Pushbutton

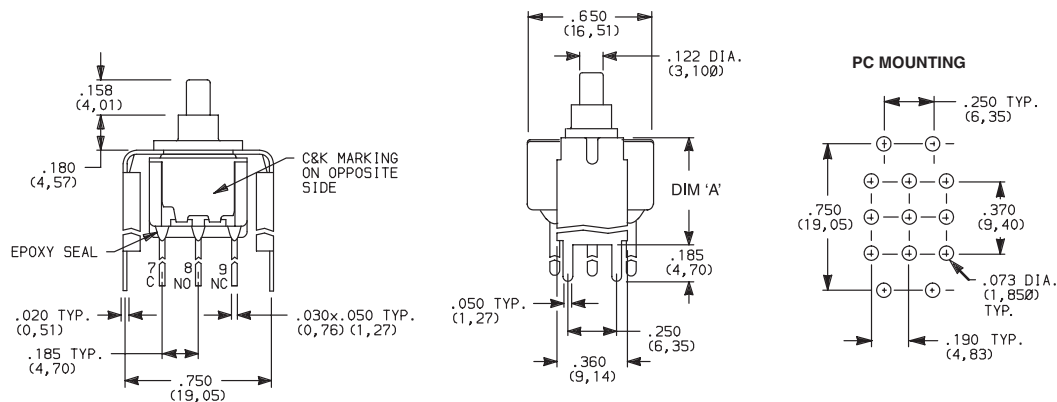
**V2, V6, V7, V8** VERTICAL MOUNT, V-BRACKET

**V61** VERTICAL MOUNT, V-BRACKET, SNAP-IN



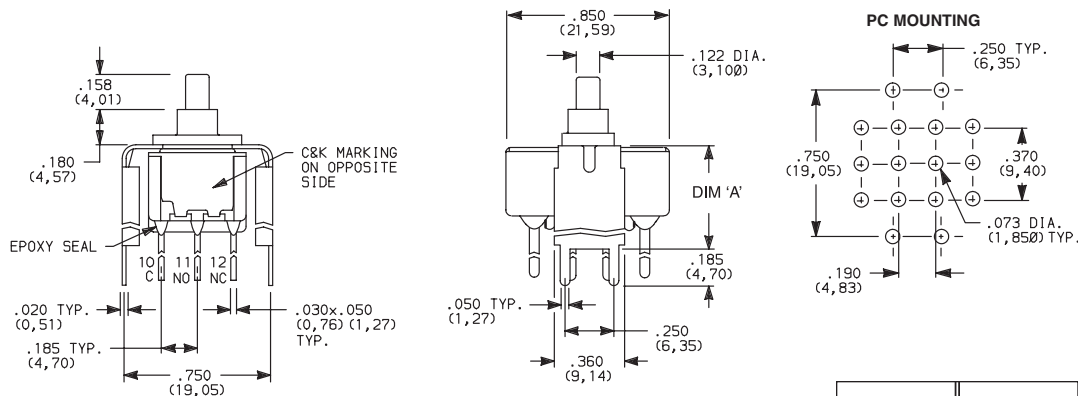
Not available with JXX actuators and I seal.

**V2, V7, V8** VERTICAL MOUNT, V-BRACKET

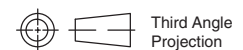


Not available with JXX actuators and I seal.

**V2, V7, V8** VERTICAL MOUNT, V-BRACKET



Not available with JXX actuators and I seal.



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



A

Pushbutton

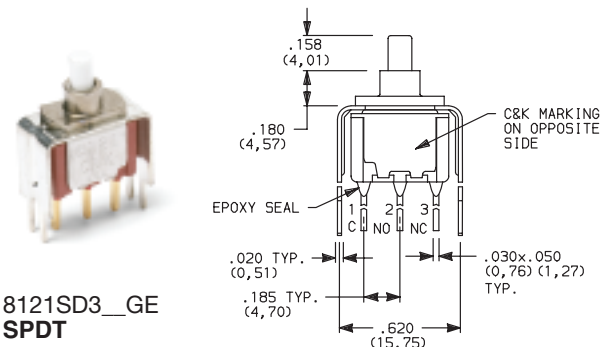
# C&K 8020 Series

## Snap-acting Momentary Pushbutton Switches

[查询"812SD3HAB2"供应商](#)

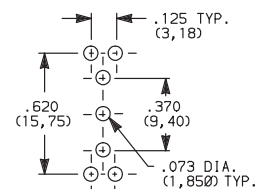
### TERMINATIONS


**V3, V4, V9** VERTICAL MOUNT, V-BRACKET

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


812SD3\_GE  
SPDT

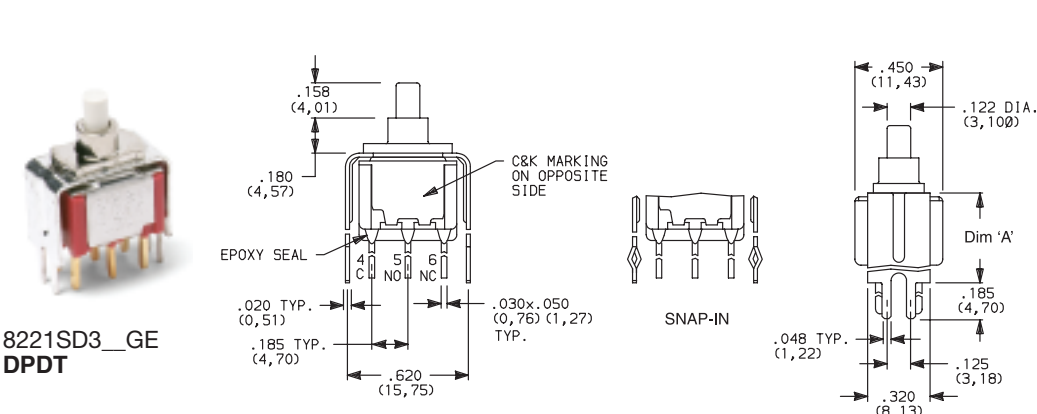
### PC MOUNTING



OPTION CODE	DIM 'A'
<b>V3, V31</b>	.460 (11,68)
<b>V4</b>	.630 (16,00)
<b>V9</b>	1.150 (29,21)

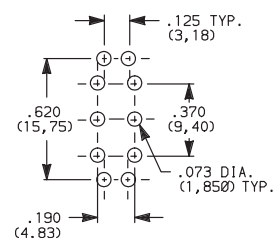
Not available with J8X actuators and I seal.

**V3, V4, V9** VERTICAL MOUNT, V-BRACKET

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


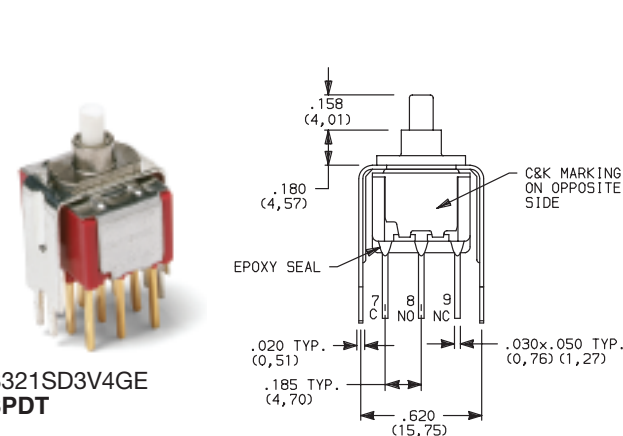
8221SD3\_GE  
DPDT

### PC MOUNTING



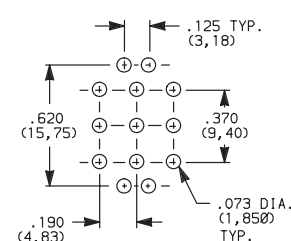
OPTION CODE	DIM 'A'
<b>V3, V31</b>	.460 (11,68)
<b>V4</b>	.630 (16,00)
<b>V9</b>	1.150 (29,21)

Not available with J8X actuators and I seal.

**V4, V9** VERTICAL MOUNT, V-BRACKET


8321SD3V4GE  
3PDT

### PC MOUNTING



OPTION CODE	DIM 'A'
<b>V4</b>	.630 (16,00)
<b>V9</b>	1.150 (29,21)

Not available with JXX actuators and I seal.



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

[www.ittcannon.com](http://www.ittcannon.com)



A

[www.ittcannon.com](http://www.ittcannon.com)



Pushbutton

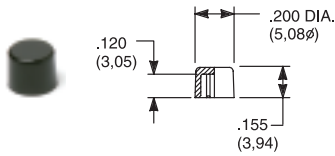
A

# C&K 8020 Series Snap-acting Momentary Pushbutton Switches

[查询"6125SHAB2"供应商](#)

## AVAILABLE HARDWARE

Cap

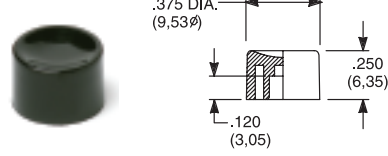


## PART NO.

708901000	WHITE
708902000	BLACK
708903000	RED
708904000	ORANGE
708905000	YELLOW
708906000	GREEN
708907000	BLUE
708909000	GRAY

Material: Nylon  
Finish: Gloss

Cap

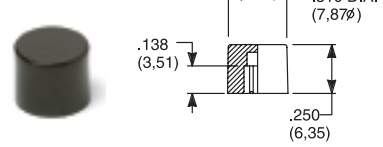


## PART NO.

752701000	WHITE
752702000	BLACK
752703000	RED
752704000	ORANGE
752705000	YELLOW
752706000	GREEN
752707000	BLUE
752709000	GRAY

Material: Nylon  
Finish: Gloss

Cap

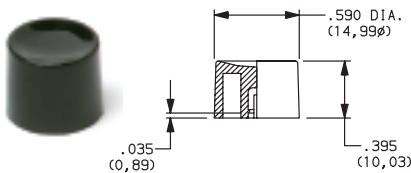


## PART NO.

801801000	WHITE
801802000	BLACK
801803000	RED
801804000	ORANGE
801805000	YELLOW
801806000	GREEN
801807000	BLUE
801809000	GRAY

Material: Nylon  
Finish: Gloss

Cap, Snap-fitting plunger

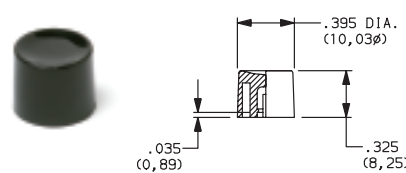


## PART NO.

894001000	WHITE
894002000	BLACK
894003000	RED
894004000	ORANGE
894005000	YELLOW
894006000	GREEN
894007000	BLUE
894009000	GRAY

Material: Nylon  
Finish: Gloss

Cap, Snap-fitting plunger

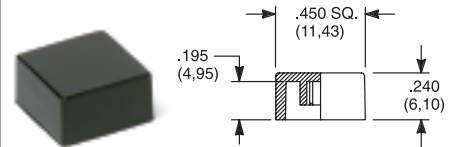


## PART NO.

894101000	WHITE
894102000	BLACK
894103000	RED
894104000	ORANGE
894105000	YELLOW
894106000	GREEN
894107000	BLUE
894109000	GRAY

Material: Nylon  
Finish: Gloss

Cap, J80, J81, J82, J83 &amp; J84 options only



## PART NO.

484601000	WHITE
484602000	BLACK
484603000	RED
484604000	ORANGE
484605000	YELLOW
484606000	GREEN
484607000	BLUE
484609000	GRAY

Material: Nylon  
Finish: Gloss

## PART NO.

798201000	WHITE
798202263	BLACK
798203000	RED
798204000	ORANGE
798205000	YELLOW
798206000	GREEN
798207000	BLUE
798209000	GRAY

Material: Nylon  
Finish: Matte

Frame



## PART NO.

615601000	WHITE
615602263	BLACK
615603000	RED
615605000	YELLOW
615606000	GREEN
615609000	GRAY

Material: Nylon  
Finish: Matte

Frame

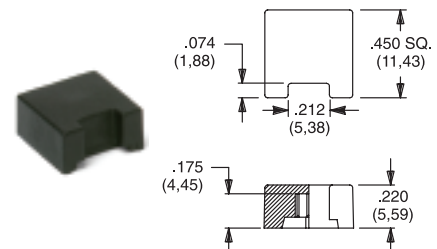


## PART NO.

613301000	WHITE
613302263	BLACK
613303000	RED
613305000	YELLOW
613306000	GREEN
613309000	GRAY

Material: Nylon  
Finish: Matte

Cap, J85 &amp; J95 options only



## PART NO.

459701000	WHITE
459702000	BLACK
459703000	RED
459704000	ORANGE
459705000	YELLOW
459706000	GREEN
459707000	BLUE
459709000	GRAY

Material: Nylon  
Finish: Gloss

## PART NO.

459701000	WHITE
459702000	BLACK
459703000	RED
459704000	ORANGE
459705000	YELLOW
459706000	GREEN
459707000	BLUE
459709000	GRAY

Material: Nylon  
Finish: Matte

Fits Z3 Termination  
female connector

## PART NO.

530100000

Available in loose pieces.

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.



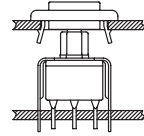
Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change



## AVAILABLE HARDWARE

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



.047" (1,19) PANEL THK.

.062" (1,57) PANEL THK.

.090" (2,29) PANEL THK.

.125" (3,18) PANEL THK.

#### PART NO.

432501000  
432502263  
432503000  
432505000  
432506000  
432509000

#### PART NO.

432601000  
432602263  
432603000  
432605000  
432606000  
432609000

#### PART NO.

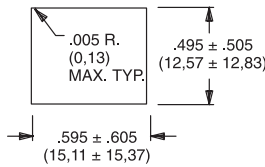
432701000  
432702263  
432703000  
432705000  
432706000  
432709000

#### PART NO.

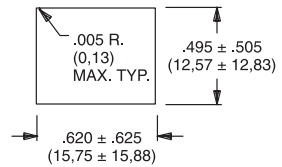
432801000 WHITE  
432802263 BLACK  
432803000 RED  
432805000 YELLOW  
432806000 GREEN  
432809000 GRAY

### PANEL MOUNTING

For part numbers  
4325xxxxx, 4326xxxxx

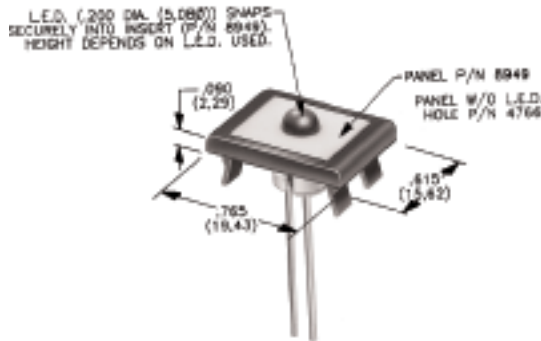


For part numbers  
4327xxxxx, 4328xxxxx



### Panel Inserts

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.

894901000  
894902000  
894903000  
894905000  
894906000  
894909000

BLANK PANEL INSERT  
WITHOUT HOLE FOR LED

#### PART NO.

476601000 WHITE  
476602000 BLACK  
476603000 RED  
476605000 YELLOW  
476606000 GREEN  
476609000 GRAY

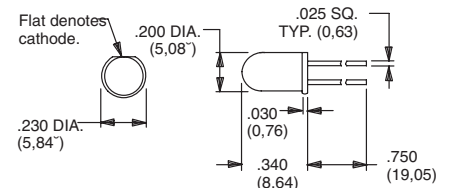
Special colors, custom markings available, consult Customer Service Center.

## LED INFORMATION

SWITCHES WITH LED SUPPLIED: J85, J95 OPTIONS:

Rectangular LEDs are supplied on 8020 Series pushbutton switches with J85 and J95 options. 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