### Features/Benefits

- Process sealed with disposable splashproof boot
- Long life contact design
- Snap-fitting plunger available
- RoHS compliant models available



Models Available

### Specifications

- CONTACT RATING: B contact material (EX25 Models): 0.4 VA max. @ 20 V AC or DC max. G contact material (EX21 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-26 for additional ratings.
- ELECTRICAL LIFE: 60,000 make-and-break cycles at full load.
- CONTACT RESISTANCE: Below 50 m21Ω typ. initial @
- 2-4 V DC, 100 mA, for both silver and gold plated contacts. INSULATION RESISTANCE:  $10^{9}\Omega$  min.
- DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to 75°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 P, R, 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.

### **Typical Applications**

- Instrumentation
- Telecommunications and networking equipment
- Computers and peripherals



### Materials

- CASE & BUSHING: Glass filled nylon 6/6, flame retardant (UL 94V-0).
- PLUNGER: Glass filled nylon or glass filled polyester (PBT) (UL 94V-0).

SWITCH SUPPORT: Brass or steel, matte-tin.

SWITCH SUPPORT RETAINER: Stainless steel.

- N.O. & N.C. CONTACTS: EX25 MODELS: B contact material: Copper alloy, with gold plate over nickel plate. EX21 MODELS: G contact material: Coin silver, with gold plate over nickel plate. See page A-26 for additional contact materials.
- COMMON CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate. See page A-26 for additional contact materials.

TERMINAL SEAL: Epoxy.

DISPOSABLE BOOT: Vinyl splashproof boot supplied standard. Remove and discard only after soldering and cleaning processes are complete.

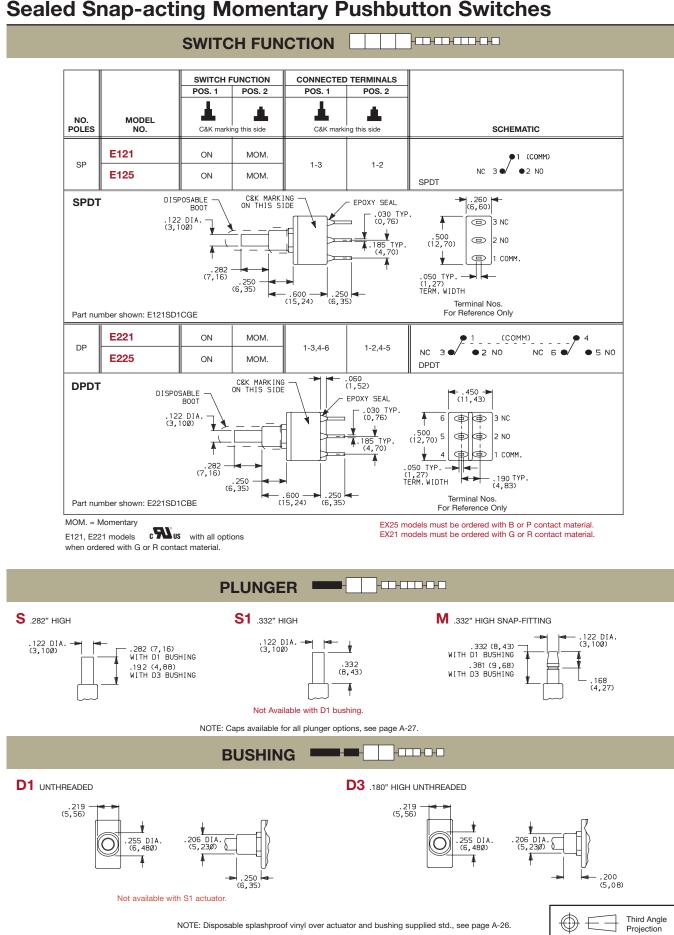
### **Build-A-Switch**

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-22 thru A-28. For additional options not shown in catalog, consult our Customer Service Center. All models are process sealed to withstand machine soldering temperatures and pressure wash cleaning methods.

Switch Function           E121         SPDT On-Mom. 1 Amp           E221         DPDT On-Mom. 1 Amp           E125         SPDT On-Mom. 0.4VA           E225         DPDT On-Mom. 0.4VA		
Plunger S .282" high M .331" high, snap-fitting S1 .332" high	Bushing         D1       Unthreaded         D3       .180" high, unthreaded         Terminations	Contact Material B Gold G Gold over silver P Gold, matte-tin R Gold over silver, matte-tin
	<ul> <li>V6 .460" high, V-bracket</li> <li>V8 .953" high, V-bracket</li> <li>V31 .460" high, snap-in V-bracket</li> <li>V41 .630" high, snap-in V-bracket</li> <li>V61 .460" high, snap-in V-bracket</li> </ul>	Seal E Epoxy and disposable splashproof boot



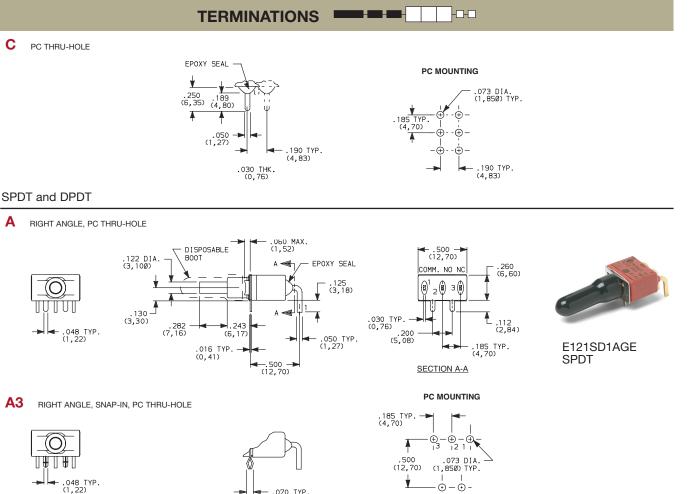
www.ckswitches.com



**C&K** 5 A

Pushbutton >

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



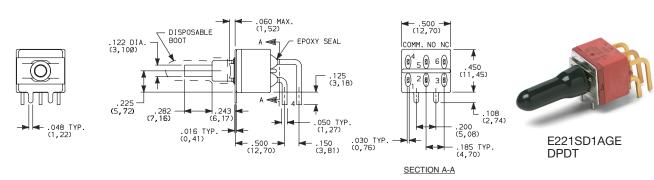
NOTE: Terminal bend radii and lead-in manufacturing option.

Α RIGHT ANGLE, PC THRU-HOLE

С

Α

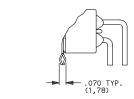
**A3** 



.070 TYP. (1,78)

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

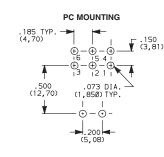




NOTE: Terminal bend radii and lead-in manufacturing option.



5 Aug 20

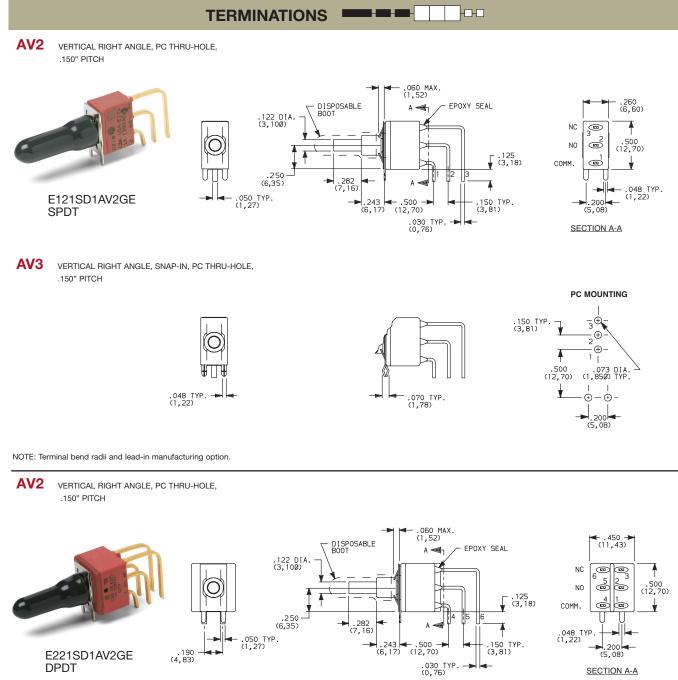


 $(\mathbf{f})$ - (+) -

⊨.<sub>200</sub>⊧ (5,08)

Third Angle Projection

www.ckswitches.com



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



NOTE: Terminal bend radii and lead-in manufacturing option.



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

A-24

.070 TYP. (1,78)

# Pushbutton >

.190 TYP. (4,83)

.200 (5,08)

Third Angle Projection

PC MOUNTING

-\_⊕-\_\_6⊕-

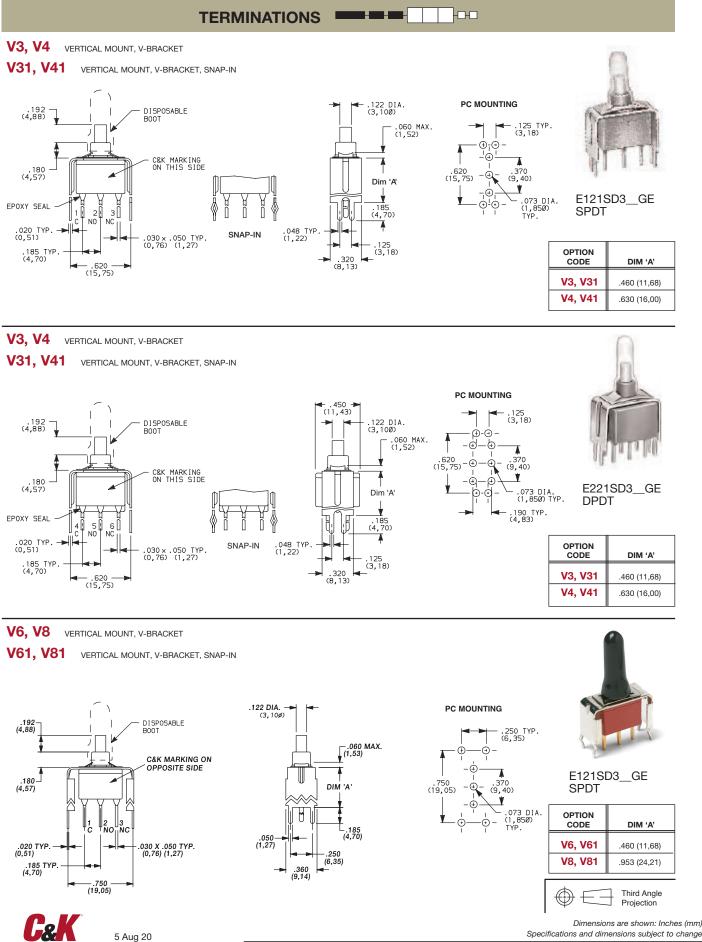
-<u>2</u>⊕-<u>5</u>⊕-€ ÷. 4 .073 DIA. (1,85Ø) TYP.

> (Ŧ) (<del>,</del>)

.150 TYP. (3,81)

V

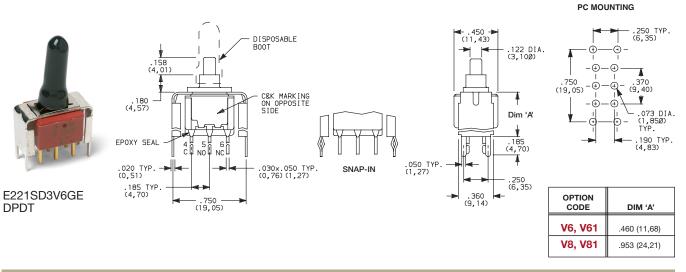
.500



www.ckswitches.com

TERMINATIONS

- V6, V8 VERTICAL MOUNT, V-BRACKET
- V61, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN



### CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
В	GOLD <sup>1</sup>	GOLD <sup>1</sup>	LOW LEVEL/DBY CIBCUIT	EX25 MODELS ONLY: 0.4 VA MAX.
Р		MATTE-TIN <sup>4</sup>		@ 20 V AC OR DC MAX.
G	GOLD OVER SILVER <sup>2,3</sup>	GOLD <sup>3</sup>	LOW LEVEL/DRY CIRCUIT OR POWER	EX21 MODELS ONLY: 0.4 VA MAX @ 20 V AC O
R		MATTE-TIN <sup>4</sup>		DC MAX. OR 1 AMP @ 120 V AC OR 28 V DC.

\* 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> N.O. AND N.C. CONTACTS: Coin silver, with gold plate over nickel plate.
- <sup>3</sup> COMMON CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>4</sup> TERMINALS: Copper alloy, with matte-tin alloy over nickel plate.

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

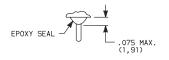
E121, E221 models CNUS with all options when ordered with mandatory G, or R contact material.

P or B contact material must be ordered with EX25 models.

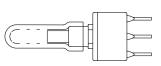
R or G contact material must be ordered with EX21 models.

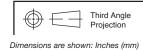


E EPOXY SEAL AND DISPOSABLE SPLASHPROOF BOOT



Disposable splashproof boot supplied standard. Remove and discard boot *only after* soldering and cleaning processes are complete.



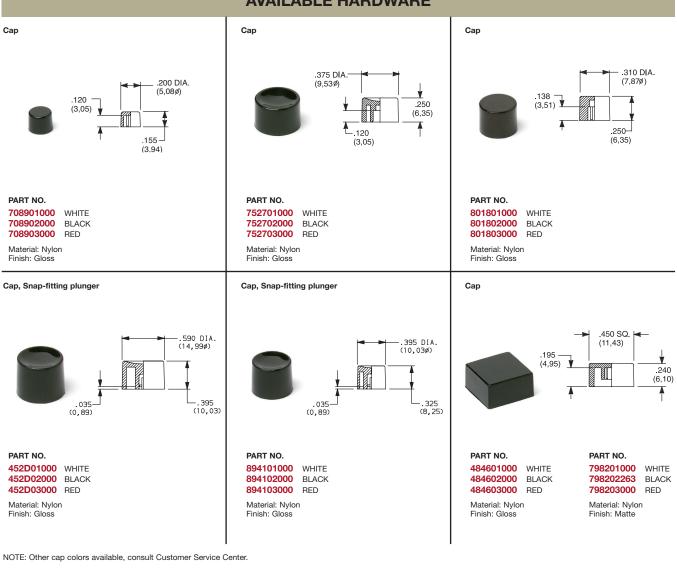


Specifications and dimensions subject to change



# A Pushbutton

**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.







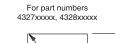
432702263	432802263	BLACK	
For part numbers 4325xxxxx, 4326xxxxx	PANEL MOUI	NTING 43	32
	5 ± .505 7 ± 12,83)		

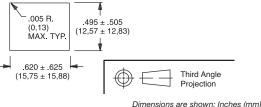
.595 ± .605  $(15.11 \pm 15.37)$ 



PART NO.

PART NO.





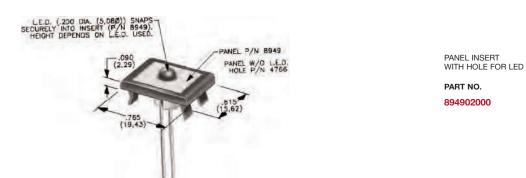


Specifications and dimensions subject to change

### **AVAILABLE HARDWARE**

PANEL INSERTS

Above frames (part nos. 432XXXXX) 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.



ERT BLAN E FOR LED WITH

BLANK PANEL INSERT WITHOUT HOLE FOR LED

**PART NO. 476602000** BLACK

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



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

 $\bigcirc$ 

Third Angle

Projection

# **Mouser Electronics**

Authorized Distributor

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### **C&K Switches:**

E221SD1CGE E121SD1CGE E121SD1AV2GE E121SD1AGE E121SD1V3GE E125SD1AV2BE E125SD1ABE E125SD1V3BE E121MD1AV3GE E121SD1AV3GE E125SD1CBE E125SD1V6BE E221SD1AV2GE E225SD1CBE E221SD1AGE E121SD3V3GE E125SD1A3BE E121SD3V6GE E121SD3V31GE E121SD1A3LE E121SD1A3RE E221SD1V4LE E121SD1V61GE E125SD1V31BE E125SD3V3BE E121SD3V61GE E125SD1AKE E225MD1V3BE E121SD1AV3LE E121MD1AV2GE E125SD3V3KE E225SD1V3BE E221SD1AV3LE E225SD1ABE E221SD1CLE E121SD1AV3GE E121SD3V4GE E221SD3V6GE E121SD1A3GE E125SD1AV3BE E121SD1V3LE E225SD3CBE E121SD1V6GE E125S1D3A3BE E125SD3V3PE E125SD1V8KE E125MD1CBE