

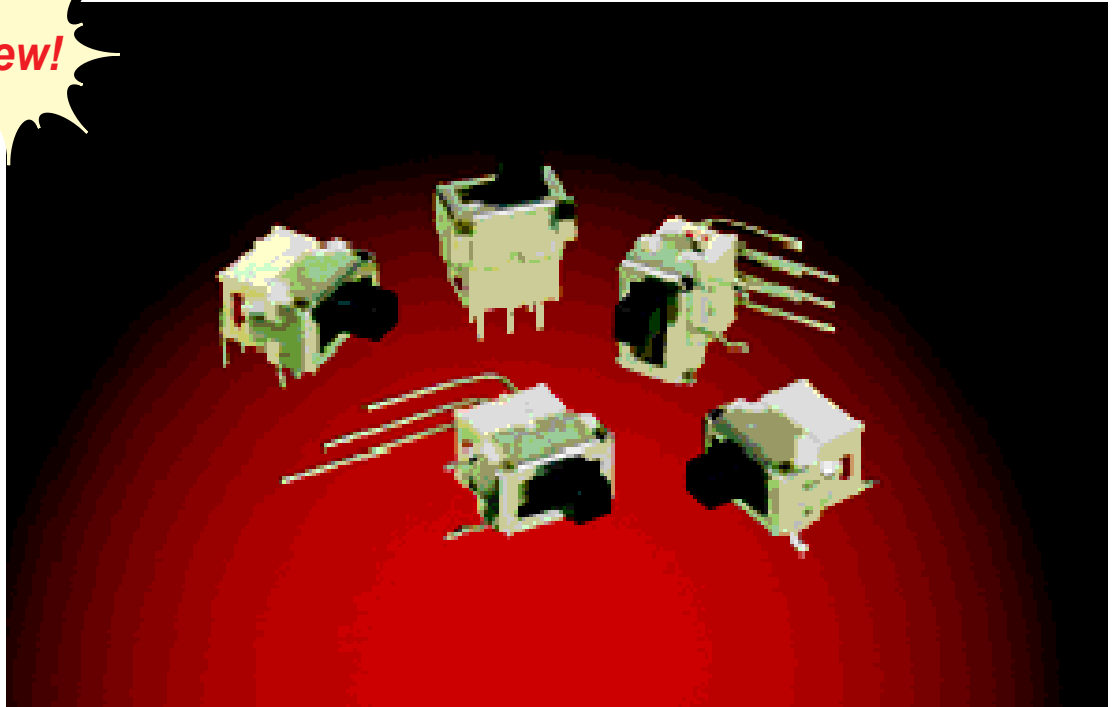


# ES Series

## Sealed Sub-miniature Slide Switches

**New!**

*Internally sealed...  
No boot seal  
required!*



C&K introduces a uniquely sealed sub-miniature slide switch that is process compatible. The ES Series offers an internal o-ring and epoxy base seal that protects the switch from wave and reflow soldering as well as cleaning processes. The compact design of these slide switches make them ideal for applications where space is limited. A variety of models are available including surface mount, thru-hole and right angle.

### Features

- Sealed construction, internal o-ring, epoxy base seal
- Process compatible — withstands wave & reflow soldering and cleaning processes
- High temperature materials (UL 94V-0) for processing flexibility
- Compact size saves PCB space
- Tin-lead alloy coats all sides of terminals for solder joint integrity

### Applications

- Computers
- Modems
- Telecommunication devices
- Test equipment

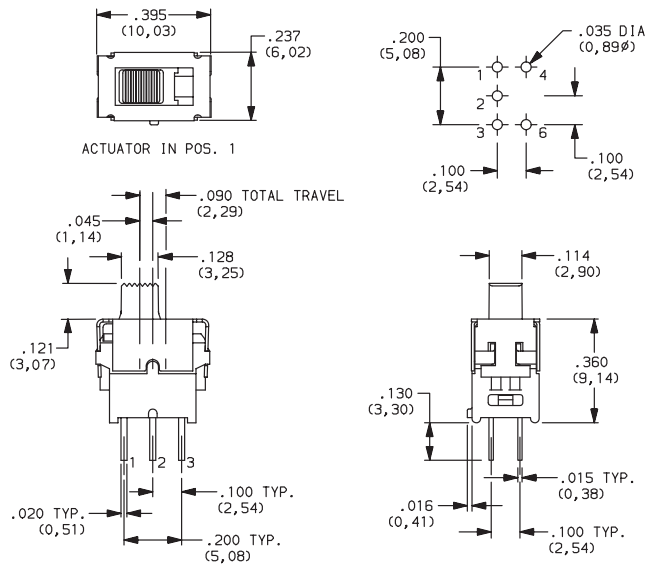
C&K's ES Series Sealed Sub-miniature Slide Switches complements the broadest line of sub-miniature switches in the industry. For additional information, free samples or our latest catalog, call today. Or make your request online at [www.ckcorp.com](http://www.ckcorp.com).

Tel: (800) 635-5936  
Fax: (617) 926-6846  
Web Site: [www.ckcorp.com](http://www.ckcorp.com)



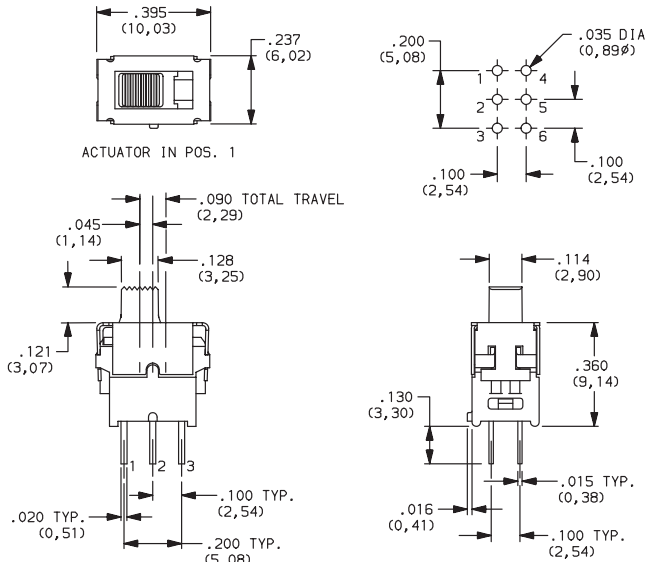
® C&K Components, Inc.  
57 Stanley Avenue  
Watertown, MA 02472-4802

**The Primary Source Worldwide®**



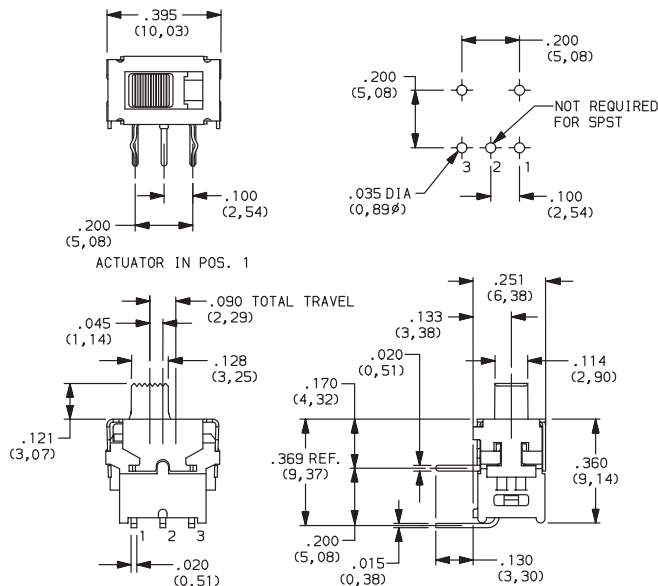
MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES01MCKE</b>	ON	NONE	ON
<b>ES03MCKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
<b>ES02MCKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			

**SPST & SPDT Models  
with "C" thru-hole terminals**



MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES21MCKE</b>	ON	NONE	ON
<b>ES23MCKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC			
DPDT			
<b>ES22MCKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC			
DPST			

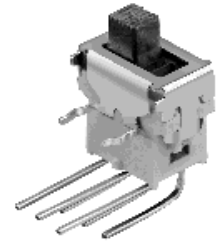
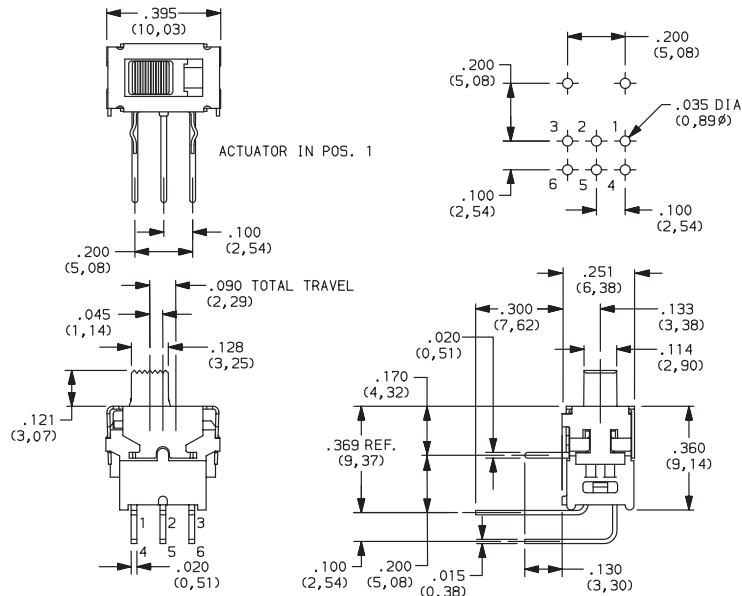
**DPST & DPDT Models  
with "C" thru-hole terminals**



MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES01MAKE</b>	ON	NONE	ON
<b>ES03MAKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
<b>ES02MAKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			

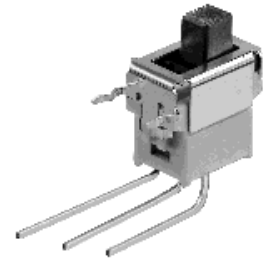
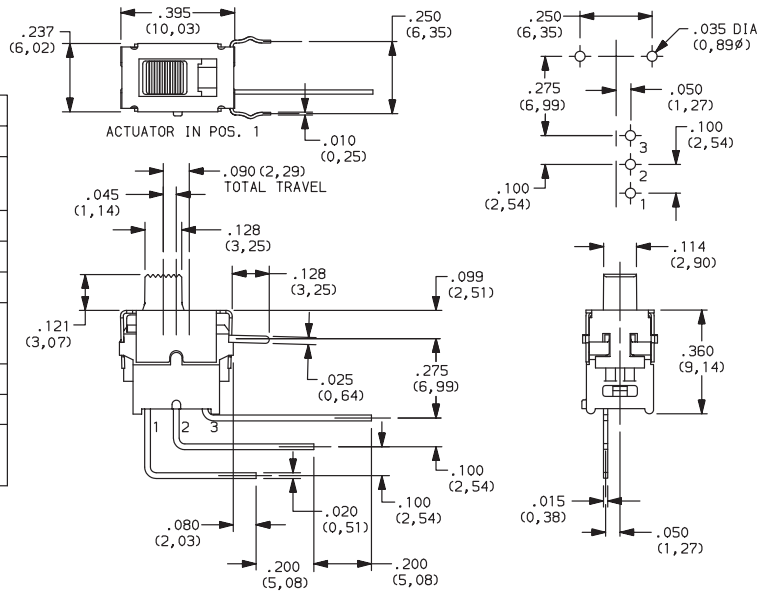
**SPST & SPDT Models  
with "A" thru-hole terminals**

MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES21MAKE</b>	ON	NONE	ON
<b>ES23MAKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC			
DPDT			
<b>ES22MAKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC			
DPST			



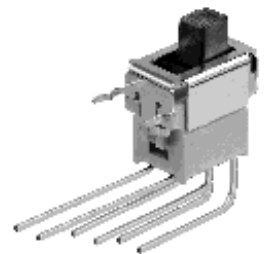
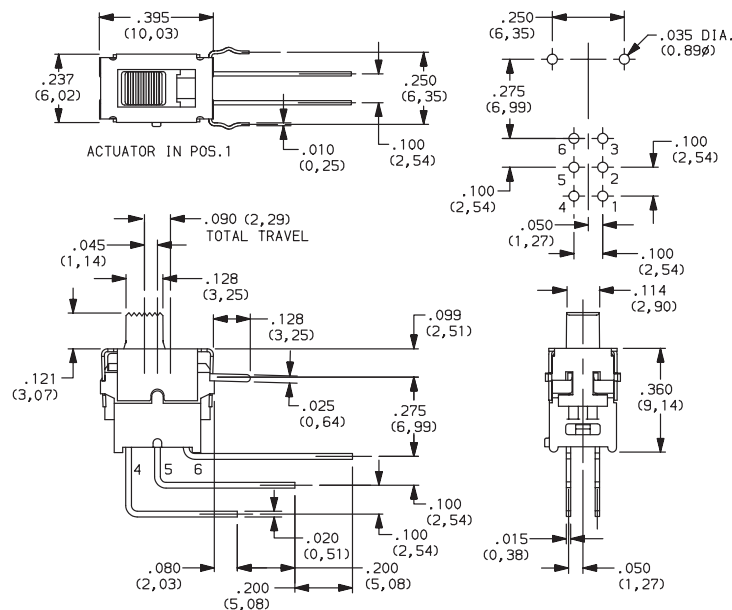
## DPST & DPDT Models with "A" thru-hole terminals

MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES01MAVKE</b>	ON	NONE	ON
<b>ES03MAVKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
<b>ES02MAVKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			

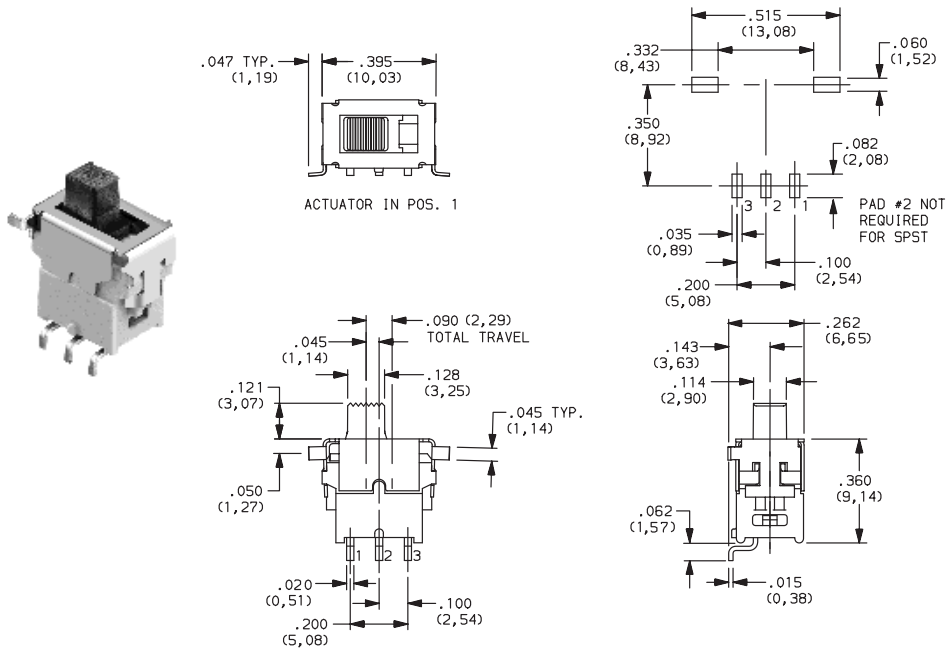


## SPST & SPDT Models with "AV" thru-hole terminals

MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES21MAVKE</b>	ON	NONE	ON
<b>ES23MAVKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC			
DPDT			
<b>ES22MAVKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC			
DPST			



## DPST & DPDT Models with "AV" thru-hole terminals



MODEL NO.	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
<b>ES01MSAKE</b>	ON	NONE	ON
<b>ES03MSAKE</b>	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
<b>ES02MSAKE</b>	ON	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			

## SPST & SPDT Models with "SA" surface mount terminals

### Specifications

CONTACT RATING: 0.4 VA max. @ 20 V AC or DC max.  
 MECHANICAL & ELECTRICAL LIFE: 40,000 make-and-break cycles at full load.  
 CONTACT RESISTANCE: 50 milliohms max. initial at 2-4 V DC, 1 00 mA.  
 INSULATION RESISTANCE: 10<sup>9</sup> ohms min.  
 DIELECTRIC STRENGTH: 500 V RMS min.  
 OPERATING TEMPERATURE: -30°C to 85°C.  
 SOLDERABILITY: Per MIL-STD 202F method 208D, or EIA RS-186E method 9.  
 ESD ENDURANCE: 8 kV min. (EIA 545).  
 PACKAGING: Standard packaging is anti-static trays.  
 Optional tape & reel packaging available for surface mount models, consult factory.

### Materials

HOUSING & BASE: Nylon (UL 94V-0).  
 ACTUATOR: LCP (UL 94V-0) black, std.  
 SURFACE PLATE: Stainless steel with tin plate.  
 MOVABLE CONTACTS: Phosphor bronze with gold plate over nickel plate.  
 STATIONARY CONTACTS: Copper alloy with gold plate over nickel plate.  
 TERMINALS: Copper alloy with tin-lead alloy over nickel plate.  
 All terminals insert molded.  
 TERMINAL SEAL: Epoxy.

## Other Slide Switches Available



- 1000 Series Miniature Slide Switches
- GS Series Ultra-miniature Slide Switches
- TS Series Tiny Slide Switches
- L Series Consumer Grade Slide Switches
- LP Series Snap-in Slide Switches
- S Series Power Slide Switches
- V Series Power & Line Voltage Select Slide Switches