



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



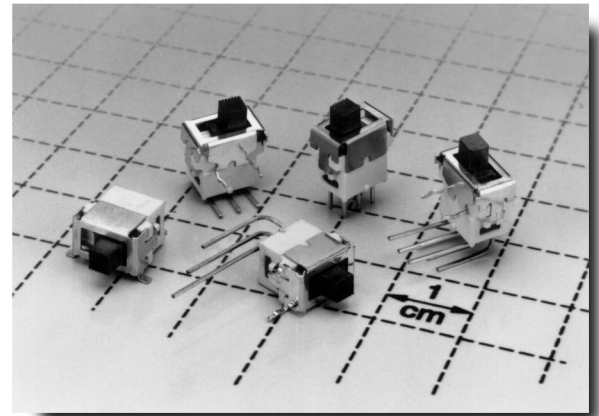
Patent Pending

Features/Benefits

- **Process compatible**—internal o-ring and epoxy base seal
- **Thru-hole and surface mount models**
- **Reliable contact design ensures long electrical life**
- **Robust actuator for easy actuation**

Typical Applications

- **Computer peripherals & network products**
- **Test & measurement equipment**
- **Telephone & cable modems**



How To Order

Complete part numbers for ES Series Sealed Tiny Slide Switches are shown on pages E-3 thru E-6. These unique tiny slide switches are process compatible. An internal o-ring and epoxy base seal protects the switch from wave and reflow soldering, as well as cleaning processes.

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 @ 2-4 V DC, 100 mA.

INSULATION RESISTANCE: 10^9 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.

DEGREE OF PROTECTION: IP57; Protection against harmful dust deposit, full-scale voltage protection, temporary immersion.

ESD ENDURANCE: 8kv min. (EIA 545).

PACKAGING: Thru-hole switches supplied in anti-static trays. Surface mount switches available in tape and reel packaging, see page L-39 for drawings and reel information.

Materials

HOUSING & BASE: Nylon (UL 94V-0).

ACTUATOR: LCP (UL 94V-0) black, standard.

SURFACE PLATE: Stainless steel with tin plate.

MOVABLE CONTACT: Phosphor bronze with gold plate over nickel plate.

STATIONARY CONTACTS: Copper alloy, with gold plate over nickel plate.

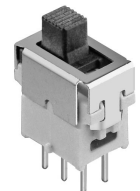
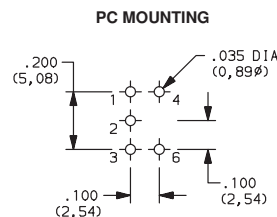
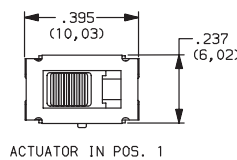
TERMINALS: Copper alloy, with tin-lead alloy over nickel plate.

All terminals insert molded.

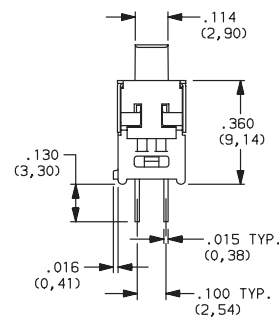
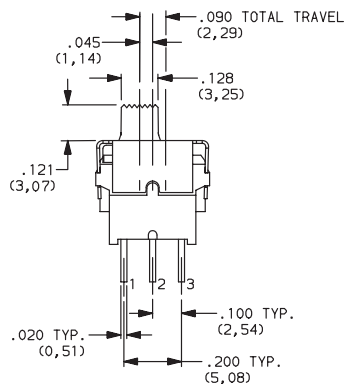
TERMINAL SEAL: Epoxy.

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

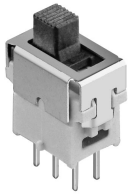
PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES01MCKE	ON	NONE	ON
ES03MCKE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC SPDT 			
ES02MCKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC SPST 			



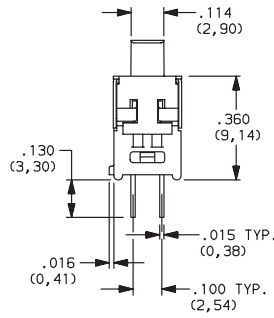
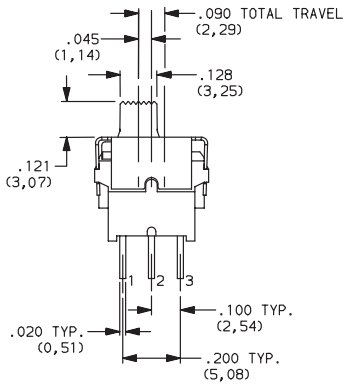
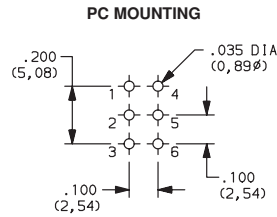
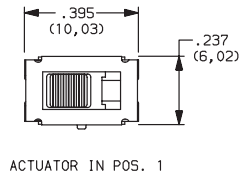
ES01MCKE
SPDT



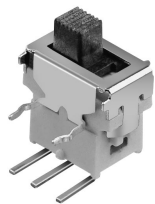
ES Series Sealed Tiny Slide Switches *New!*



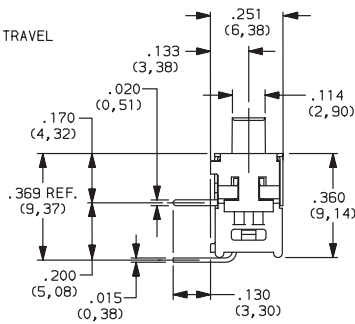
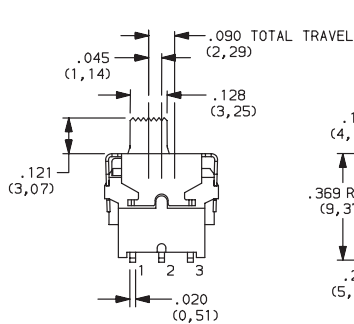
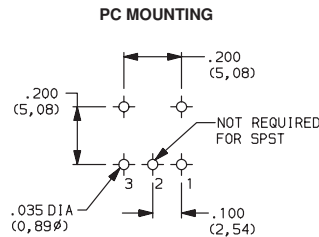
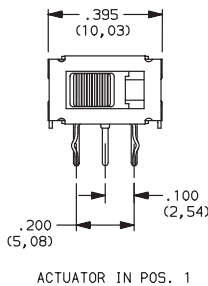
ES21MCKE
DPDT



PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES21MCKE	ON	NONE	ON
ES23MCKE	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC			
DPDT			
ES22MCKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC			
DPST			



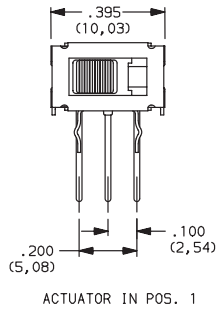
ES01MAKE
SPDT



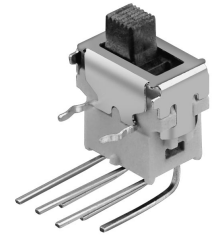
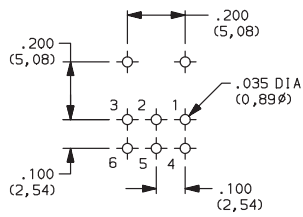
PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES01MAKE	ON	NONE	ON
ES03MAKE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
ES02MAKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			



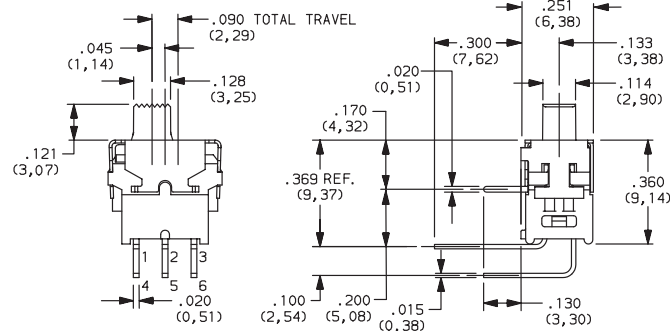
PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES21MAKE	ON	NONE	ON
ES23MAKE	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC			
DPDT			
ES22MAKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC			
DPST			



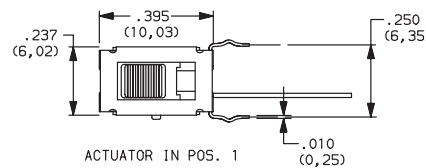
PC MOUNTING



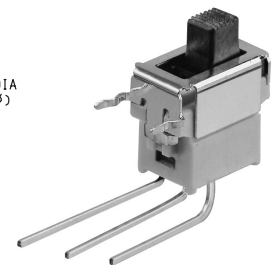
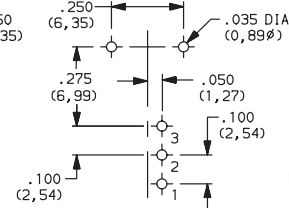
ES21MAKE
DPDT



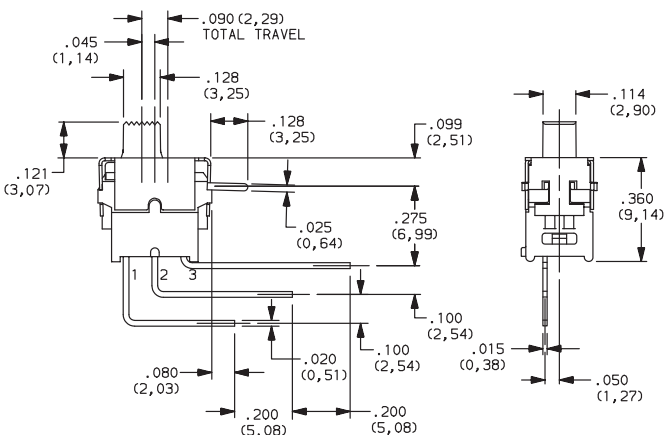
PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES01MAVKE	ON	NONE	ON
ES03MAVKE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
ES02MAVKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			



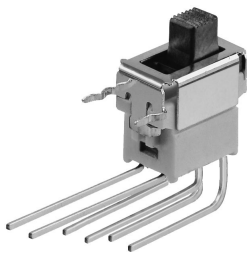
PC MOUNTING



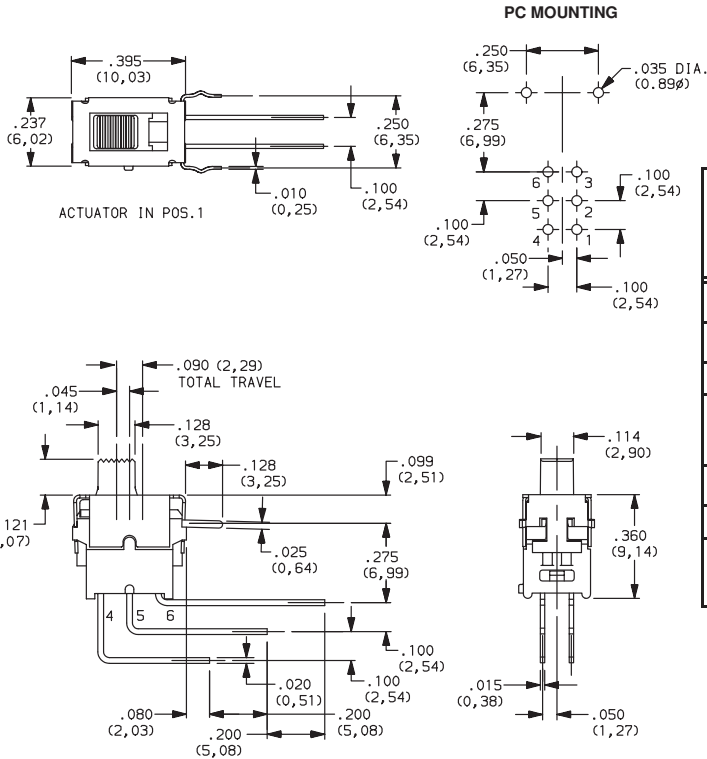
ES01MAVKE
SPDT



ES Series Sealed Tiny Slide Switches *New!*



ES21MAVKE
DPDT

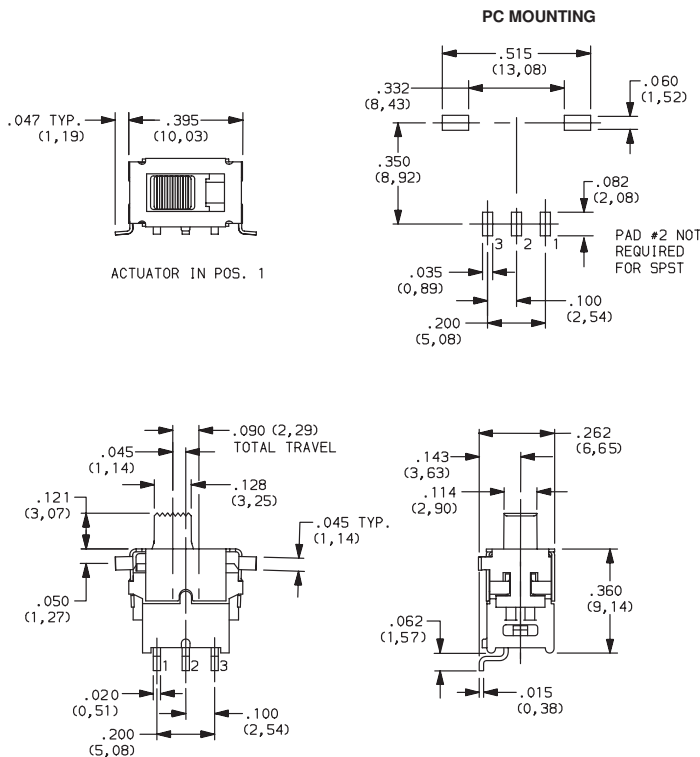


PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES21MAVKE	ON	NONE	ON
ES23MAVKE	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC			
DPDT			
ES22MAVKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC			
DPST			

SMT



ES01MSAKE
Horizontal Actuation
SPDT



PART NUMBER	SWITCH FUNCTION		
	POS. 1	POS. 2	POS. 3
ES01MSAKE	ON	NONE	ON
ES03MSAKE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
ES02MSAKE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			