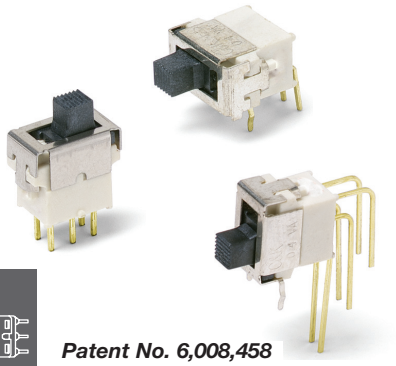
ES Series
Sealed Tiny Slide Switches



Patent No. 6,008,458

Features/Benefits

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

Typical Applications

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

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 m Ω max. initial @ 2-4 V DC, 100 mA

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 500 Vrms 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

Materials

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

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

SURFACE PLATE: Stainless steel with tin plate

MOVABLE CONTACT: Bronze with gold plate over nickel plate

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

TERMINALS: Copper alloy, with gold over nickel plate. All terminals insert molded

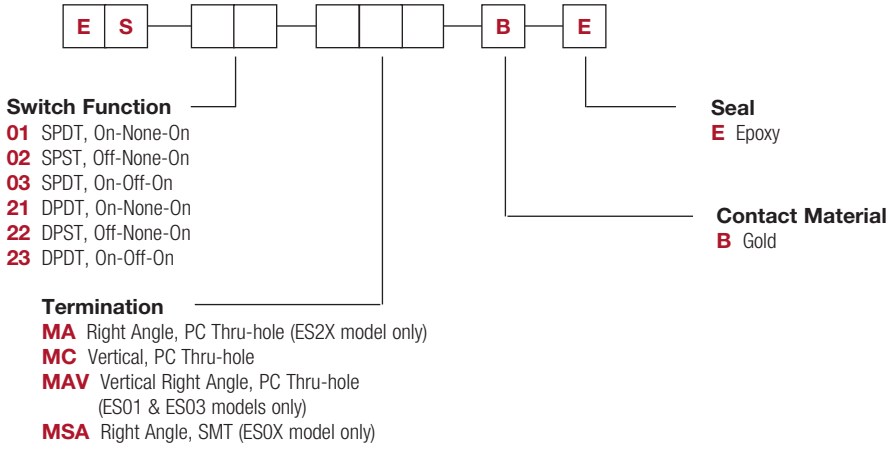
BASE & TERMINAL SEAL: Epoxy

NOTE: All models RoHS compliant and compatible with all options.

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

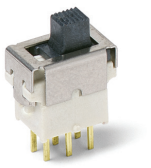
How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.

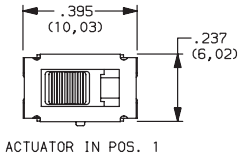


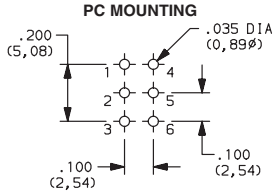
Third Angle Projection

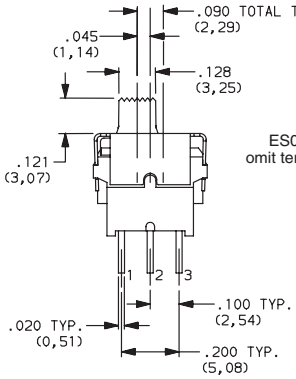
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

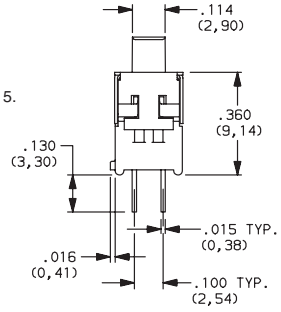


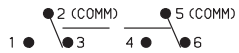
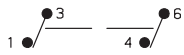
ES21MCBE
DPDT

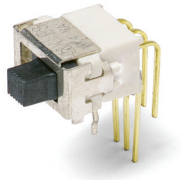




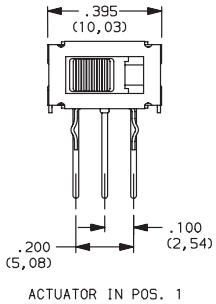


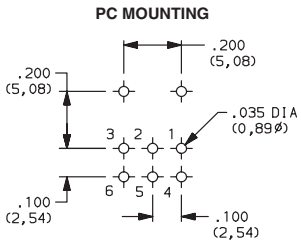


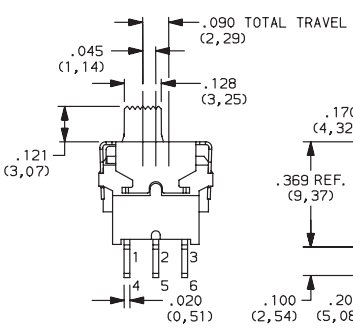
PART NUMBER	SWITCH FUNCTION POS. 1	POS. 2	POS. 3
ES21MCBE	ON	NONE	ON
ES23MCBE	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC DPDT			
ES22MCBE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC DPST			

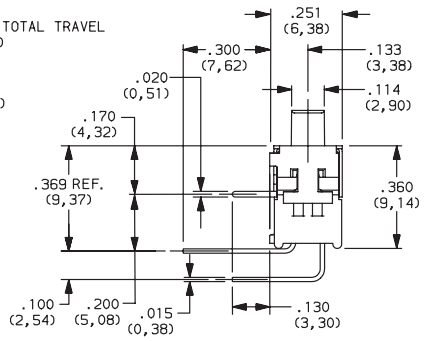


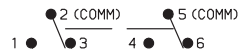
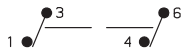
ES21MABE
DPDT





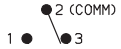


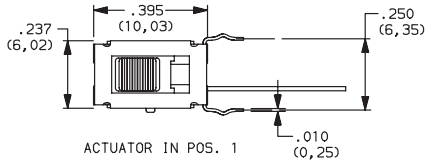


PART NUMBER	SWITCH FUNCTION POS. 1	POS. 2	POS. 3
ES21MABE	ON	NONE	ON
ES23MABE	ON	OFF	ON
CONN. TERMINALS	2-3, 5-6	OPEN	2-1, 5-4
SCHEMATIC DPDT			
ES22MABE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1, 6-4
SCHEMATIC DPST			

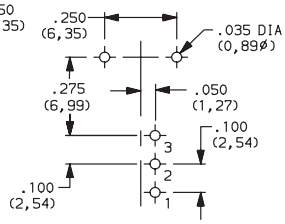
Third Angle Projection

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

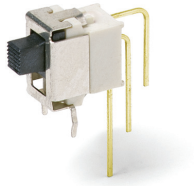
PART NUMBER	SWITCH FUNCTION POS. 1	POS. 2	POS. 3
ES01MAVBE	ON	NONE	ON
ES03MAVBE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			



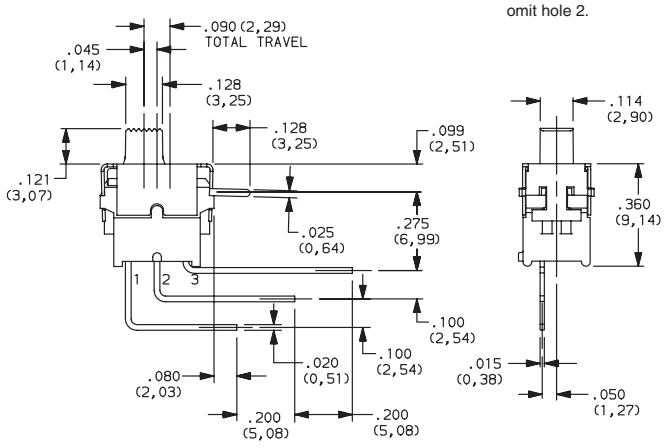
PC MOUNTING



ES02 Models:
omit hole 2.

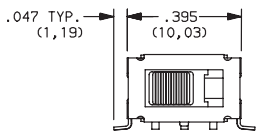


ES01MAVBE
SPDT

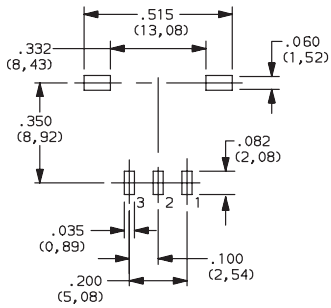


ES02 Models:
omit terminal 2.

PART NUMBER	SWITCH FUNCTION POS. 1	POS. 2	POS. 3
ES01MSABE	ON	NONE	ON
ES03MSABE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC			
SPDT			
ES02MSABE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC			
SPST			

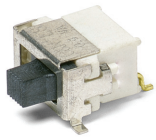


PC MOUNTING

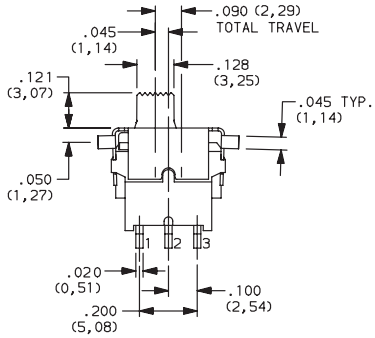


ES02 Models:
omit pad 2.

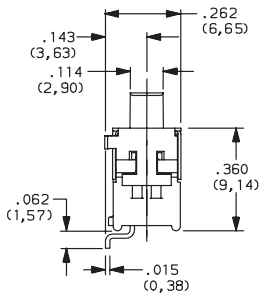
SMT



ES01MSABE
Horizontal Actuation
SPDT



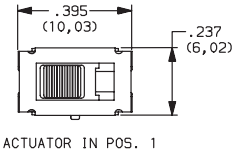
ES02 Models:
omit terminal 2.

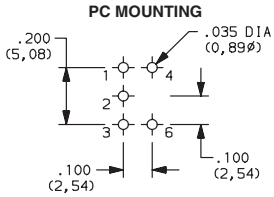


Third Angle Projection

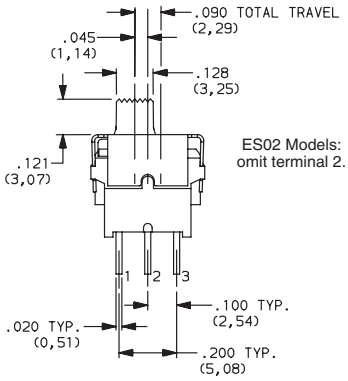
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

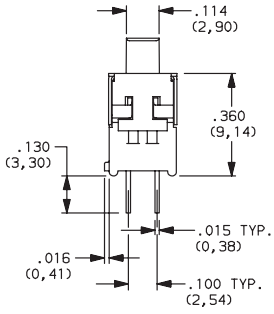
PART NUMBER	SWITCH FUNCTION POS. 1	POS. 2	POS. 3
ES01MCBE	ON	NONE	ON
ES03MCBE	ON	OFF	ON
CONN. TERMINALS	2-3	OPEN	2-1
SCHEMATIC SPDT		2 (COMM) 3	
ES02MCBE	OFF	NONE	ON
CONN. TERMINALS	OPEN	N/A	3-1
SCHEMATIC SPST		1 3	

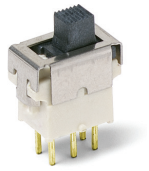




ES02 Models:
omit hole 2.



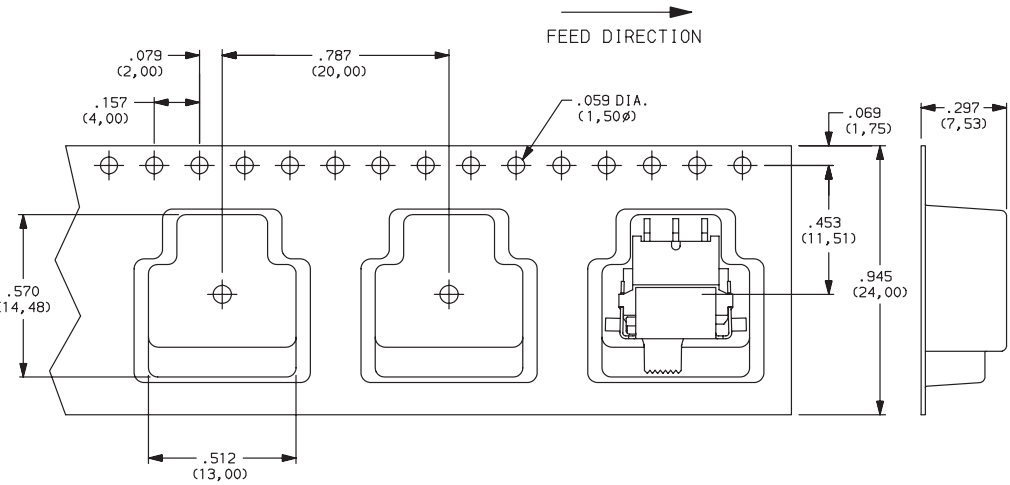




ES01MCBE
SPDT

TAPE & REEL

For part numbers ESXXMSABE



REEL INFORMATION	
OUTSIDE DIAMETER	13.00 (330,0)
PILOT HOLE	.512 (13,0)
QUANTITY PER REEL	300

Third Angle Projection

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Switches:

ES01MCBE ES21MCBE ES03MSABE ES21MABE ES02MCBE ES02MSABE ES23MABE ES23MCBE ES03MAVBE ES22MCBE ES01MAVBE ES01MSABE ES03MCBE ES22MABE