

# ZMA Series Subminiature Snap-acting Switches



## Features/Benefits

- **Reliable snap-acting mechanism**
- **Long electrical and mechanical life**
- **Compact size—Ideal when space is limited**
- **Various PCB terminals and actuators**
- **RoHS compatible & compliant**

## Typical Applications

- **PCB detection switch**
- **Communication devices**
- **Testing equipment**
- **Security/Alarm systems**
- **Consumer electronics**



## Specifications

CONTACT RATING: 3A @ 125 V AC / 0.1A @ 30 V DC.  
 ELECTRICAL LIFE: 300,000 cycles @ 0.1A / 10,000 cycles @ 3A.  
 MECHANICAL LIFE: 1,000,000 cycles.  
 INSULATION RESISTANCE: 100 M ohm min.  
 DIELECTRIC STRENGTH: 500 Vrms.  
 OPERATING TEMPERATURE: -40°C to +85°C  
 OPERATING FORCE: 80 or 150 grams.

\* Low Level=conditions where no arcing occurs during switching, i.e., 0.4 VA max.  
 @ 20 V AC or DC max.

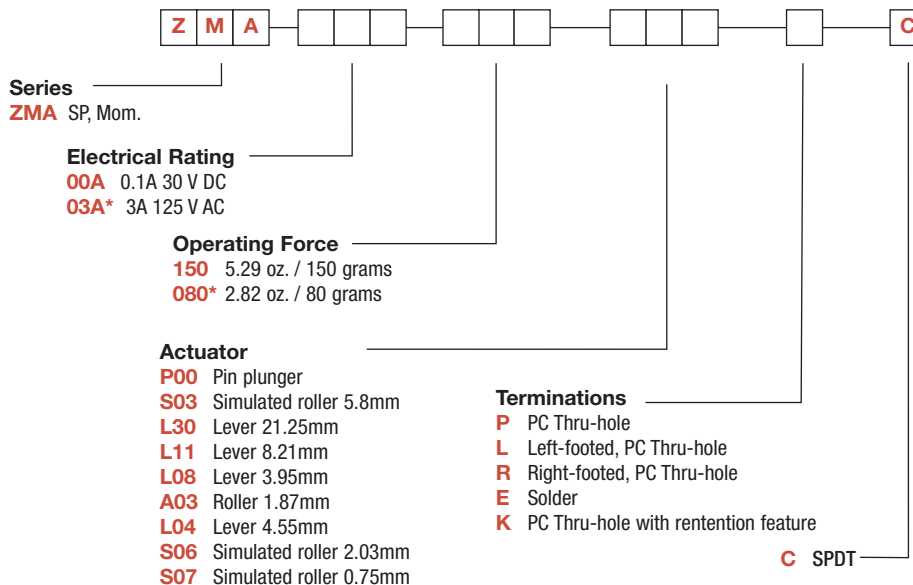
## Materials

CASE/COVER: PBT  
 ACTUATOR: Nylon 6/6  
 MOVABLE CONTACTS: Silver.  
 STATIONARY CONTACTS: Silver.  
 TERMINALS: Brass, silver plated.

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

## 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 J-37 and J-38. For additional options not shown in catalog, consult Customer Service Center.



\*Electrical rating 03A is not available with Operating Force rating of 080.

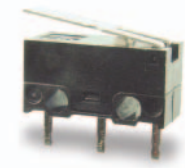
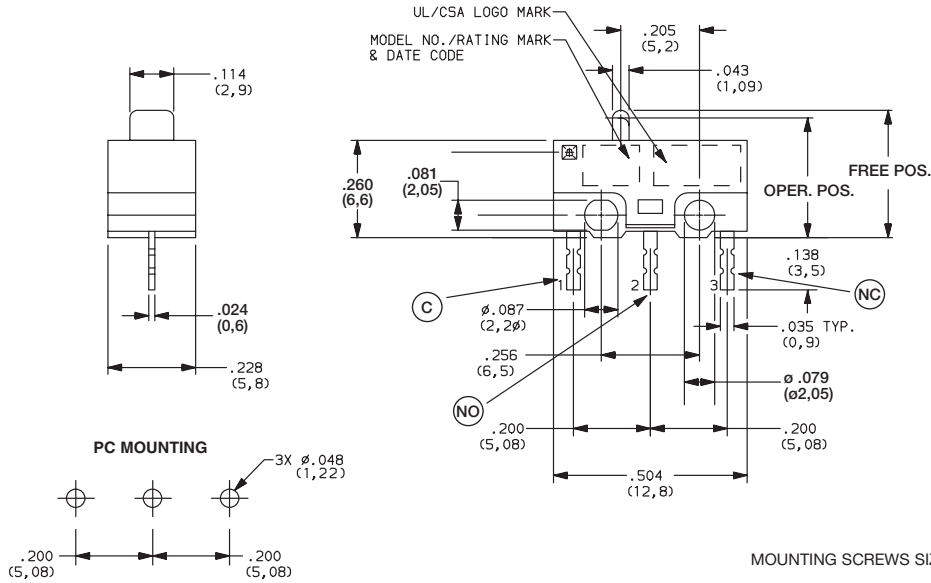


Dimensions are shown: Inch (mm)  
 Specifications and dimensions subject to change

# ZMA Series Subminiature Snap-acting Switches

SERIES **Z M** ■ ■ ■ ■ ■ ■ ■ ■

**ZMA** SUBMINIATURE SNAP-ACTING SWITCHES – SP MOMENTARY



ZMA03A150L04PC  
SPDT

ELECTRICAL RATING ■ ■ ■ ■ ■ ■ ■ ■

OPTION CODE	CONTACT MATERIAL		ELECTRICAL RATING
	MOVABLE CONTACT	STATIONARY CONTACT	
<b>00</b>	Silver plated	Silver plated	0.1 AMP @ 30 V DC
<b>03*</b>	Fine Silver	Fine silver	3 AMPS @ 125 V AC

\* Note: See Technical Data in section N of this catalog for RoHS compliant and compatible definition and specifications.

All models with all options.

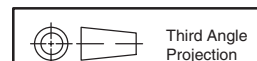
Consult Customer Service center for availability and delivery of nonstandard ratings.

\*Electrical rating 03A is not available with Operating Force rating of 080.

OPERATING FORCE ■ ■ ■ ■ ■ ■ ■ ■

OPTION CODE	BASIC SWITCH OPERATING FORCE (OZ./GRAMS)
<b>150</b>	5.29 150
<b>080*</b>	2.82 80

\*Electrical rating 03A is not available with Operating Force rating of 080.



Third Angle Projection

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

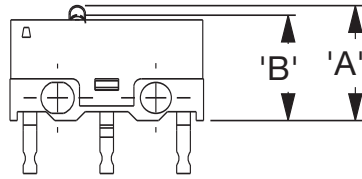


Snap-acting

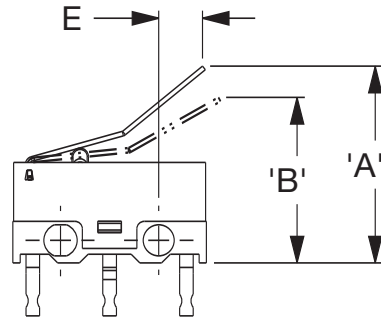
# ZMA Series Subminiature Snap-acting Switches

## ACTUATOR

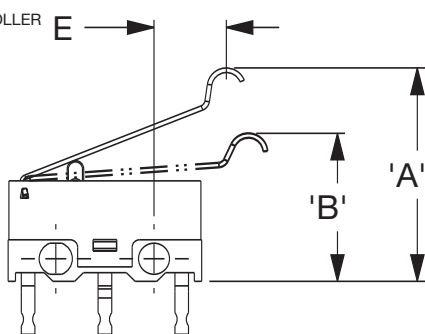
**P00** PIN PLUNGER



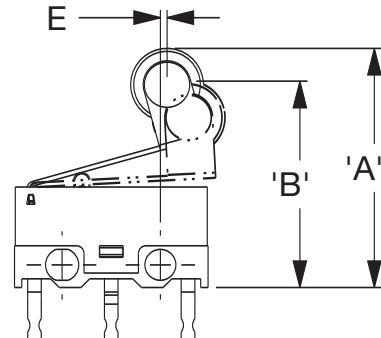
**L08** LEVER  
3.95MM



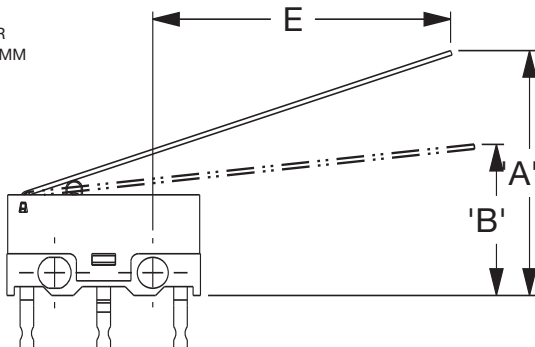
**S03** SIMULATED ROLLER  
6.03MM



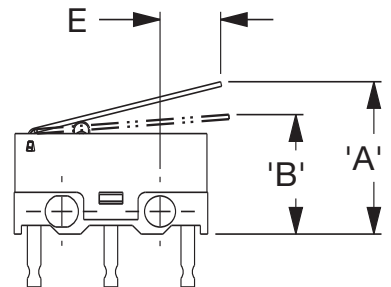
**A03** ROLLER  
1.87MM



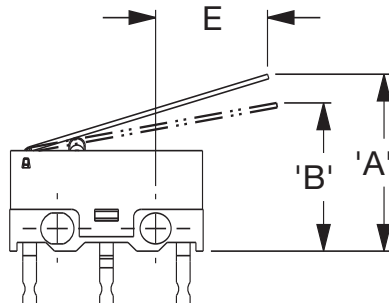
**L30** LEVER  
21.25MM



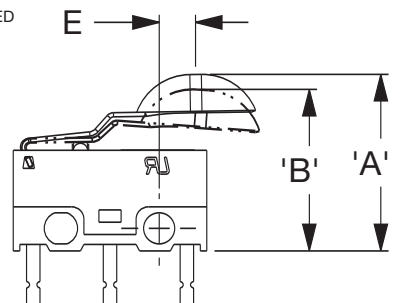
**L04** ROLLER  
4.55MM



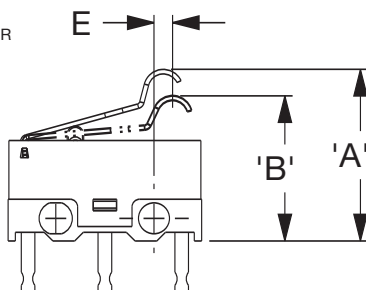
**L11** LEVER  
8.21MM



**S06** SIMULATED ROLLER  
2.03MM



**S07** SIMULATED ROLLER  
0.75MM

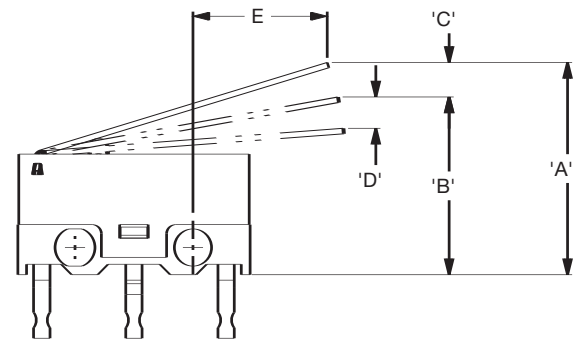


Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

# ZMA Series Subminiature Snap-acting Switches

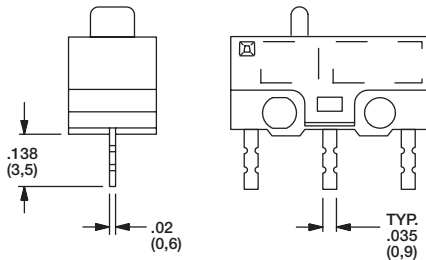
## SWITCH CHARACTERISTICS

CODE	OPER. FORCE MAX. (GRAMS)		REL. FORCE MIN. (GRAMS)		'A' FP MAX. (MM)	'B' OP MAX. (MM)	'C' PT MAX. (MM)	'D' OT MIN. (MM)	'E' MIN. (MM)
P00	80	150	21	35	7.35	6.9 ±0.2	0.62	0.2	
S03	25	43	5	7	14.2	9.8 ±0.9	3.5	0.7	5.8
L30	13	21	2	3	16.8	9.75 ±1.9	6.9	1.4	21.25
L11	25	39	4	6	11.7	8.7 ±1	4.4	0.6	8.21
L08	32	48	5	7	13.5	10.75 ±0.8	3.5	0.3	3.95
A03	34	65	6	10	16.55	13.7 ±1	3.9	0.5	1.87
L04	30	50	5	8	10.1	7.9 ±0.8	3.0	0.6	3.9
S06	33	49	5	11	12.43	10.7 ±0.8	1.43	1.25	2.03
S07	40	65	2	5	13.0	9.7 ±1	4.3	0.5	0.75

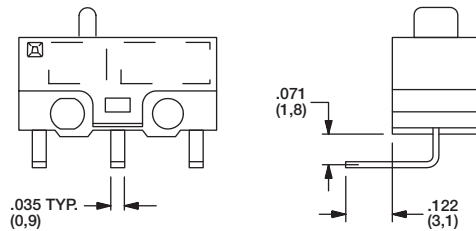


## TERMINATIONS

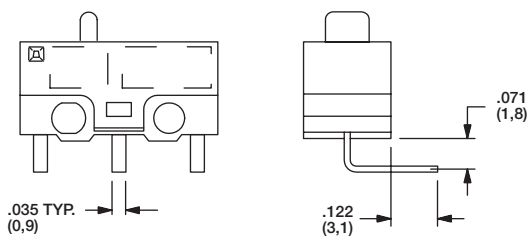
### P PC THRU-HOLE



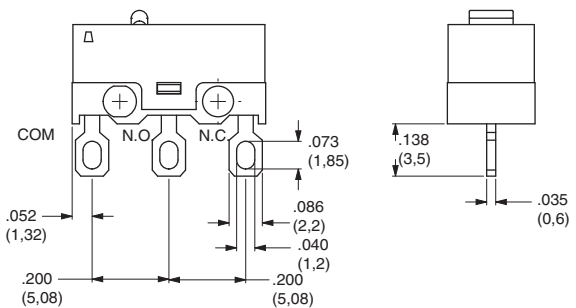
### L LEFT FOOTED, PC THRU-HOLE



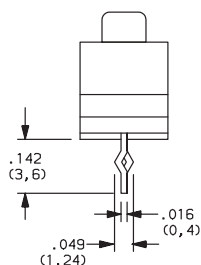
### R RIGHT FOOTED, PC THRU-HOLE



### E SOLDER



### K PC THRU-HOLE WITH RETENTION FEATURE



Snap-acting