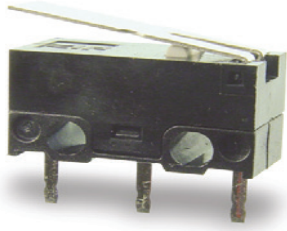


# KSD-ZMA Series Mini Size Snap-acting Switches



UL61058-1



## Features/Benefits

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

## Typical Applications

- PCB detection switch
- Communication devices
- Testing equipment
- Security/Alarm systems
- Consumer electronics
- Automotive: door latch, seat position detection, EV charging

## Specifications

CONTACT RATING: 3A @ 125 V AC 24 V DC  
 1 A @ 125 / 250 V AC 24 V DC  
 0.1A @ 125 V AC 60 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.

## Materials

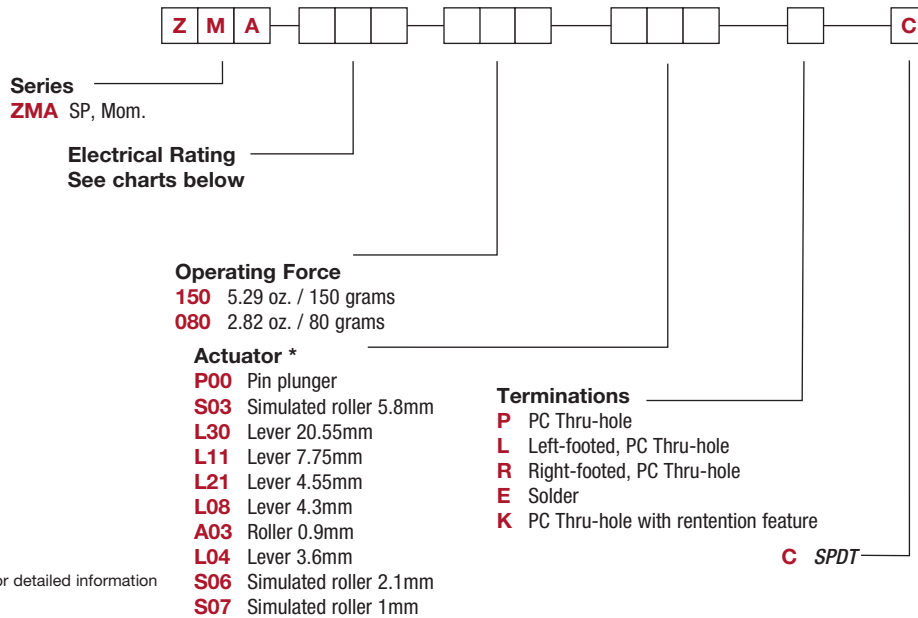
CASE/COVER: PBT  
 ACTUATOR: Button nylon 6/6  
 MOVABLE CONTACTS: Silver alloy or gold plated  
 STATIONARY CONTACTS: Silver alloy or gold plated  
 TERMINALS: Brass, silver plated.

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

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

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center.



\* Dim. E  
 See chart on following pages for detailed information

### Silver Contacts

Option Code	UL 1054	UL 61058-1	EL14	EL15
<b>00A</b>	0.1A 60 V DC 0.1A 125 V AC	0.1A 60 V DC 0.1A 125 V AC	0.1A 125 V AC	
<b>03A</b>	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
<b>01A</b>		1 A 24 V DC 1 A 125 / 250 V AC		1 A 24 V DC 1 A 125 / 250 V AC

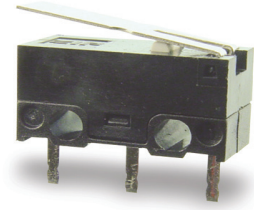
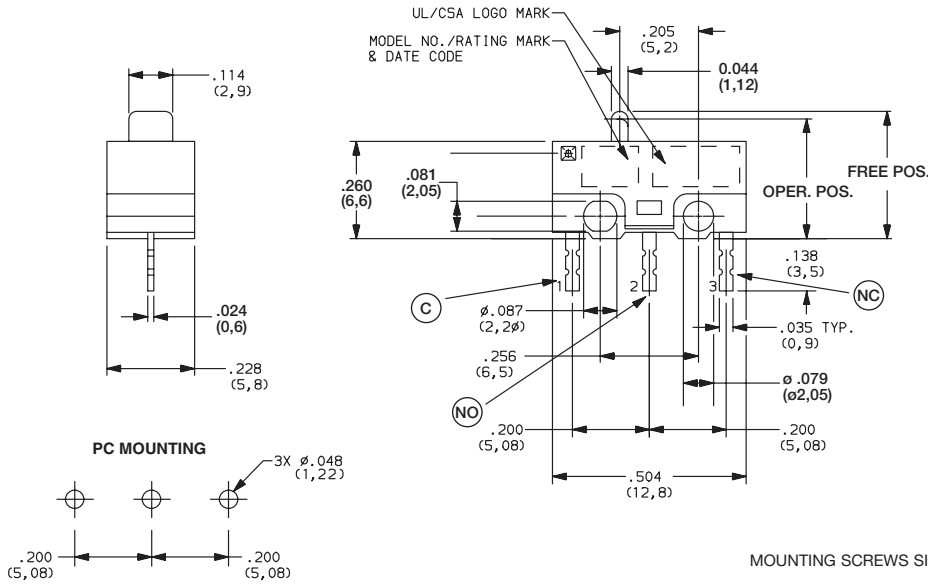
### Gold Plated Contacts

Option Code	UL 1054	UL 61058-1	EL14	EL15
<b>G00</b>	0.1A 60 V DC 0.1A 125 V AC	0.1A 60 V DC 0.1A 125 V AC	0.1A 125 V AC	
<b>G03</b>	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
<b>G01</b>		1 A 24 V DC 1 A 125 / 250 V AC		1 A 24 V DC 1 A 125 / 250 V AC

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

## SERIES

**ZMA** MINI SIZE SNAP-ACTING SWITCHES – SP MOMENTARY



ZMA03A150L04PC  
**SPDT**

## ELECTRICAL RATING

### Silver Contacts

Option Code	UL c  US 1054	UL c  US 61058-1		
<b>00A</b>	0.1A 60 V DC 0.1A 125 V AC	0.1A 60 V DC 0.1A 125 V AC	0.1A 125 V AC	
<b>03A</b>	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
<b>01A</b>		1 A 24 V DC 1 A 125 / 250 V AC		1 A 24 V DC 1 A 125 / 250 V AC

### Gold Plated Contacts

Option Code	UL c  US 1054	UL c  US 61058-1		
<b>G00</b>	0.1A 60 V DC 0.1A 125 V AC	0.1A 60 V DC 0.1A 125 V AC	0.1A 125 V AC	
<b>G03</b>	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
<b>G01</b>		1 A 24 V DC 1 A 125 / 250 V AC		1 A 24 V DC 1 A 125 / 250 V AC

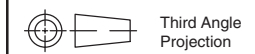
\* Note: See Technical Data in section N of this catalog for RoHS compliant and compatible definition and specifications.

All models with all options.

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

## OPERATING FORCE

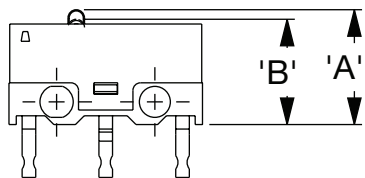
OPTION CODE	BASIC SWITCH OPERATING FORCE (OZ./GRAMS)
<b>080</b>	2.82 80
<b>150</b>	5.29 150



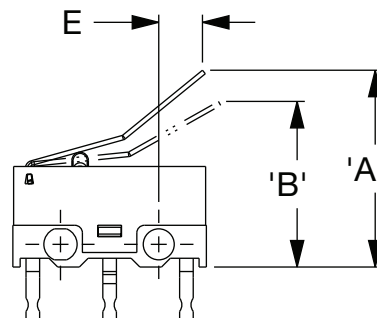
Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

## ACTUATOR

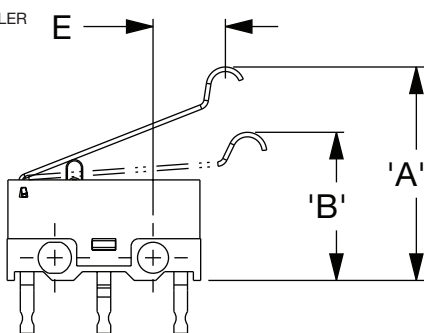
**P00** PIN PLUNGER



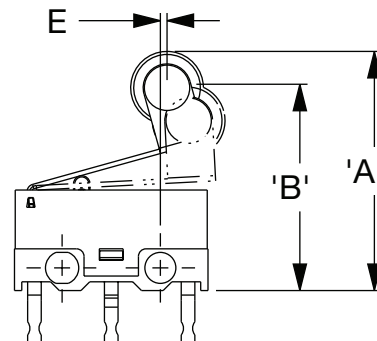
**L08** LEVER  
4.3MM



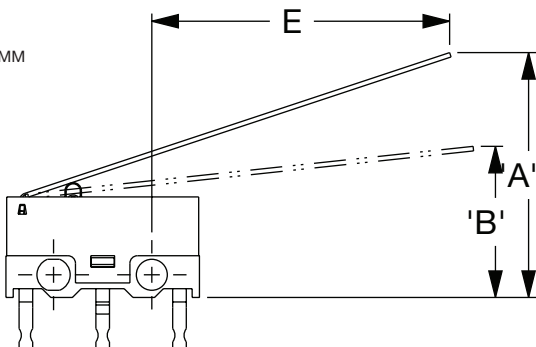
**S03** SIMULATED ROLLER  
5.8MM



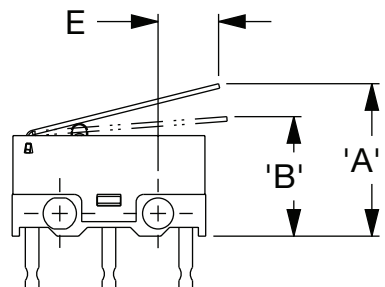
**A03** ROLLER  
0.9MM



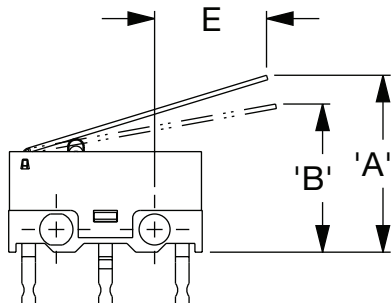
**L30** LEVER  
20.55MM



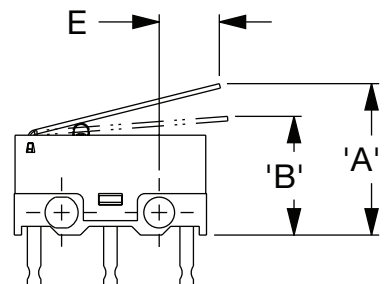
**L04** LEVER  
3.6MM



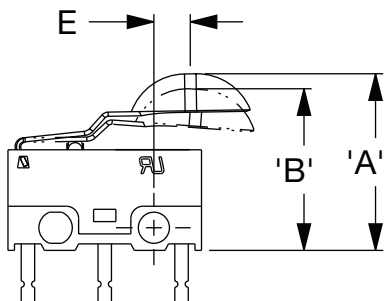
**L11** LEVER  
7.75MM



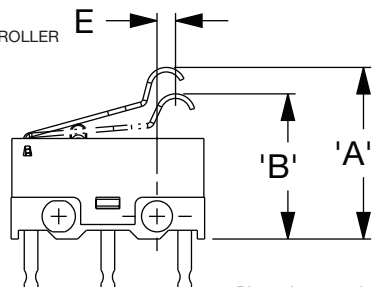
**L21** LEVER  
4.55MM



**S06** SIMULATED ROLLER  
2.1MM



**S07** SIMULATED ROLLER  
1MM

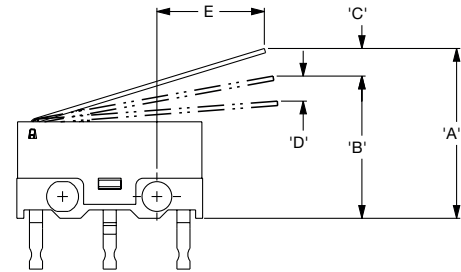


Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change



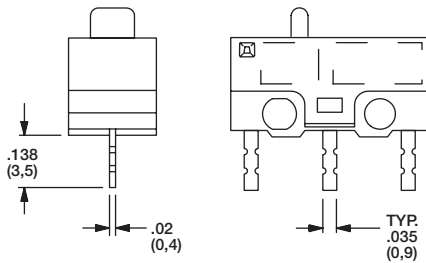
## SWITCH CHARACTERISTICS

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 ± 0.3	0.62	0.2
S03	25	43	5	7	14.2	9.8 ± 0.9	3.5	0.7	5.8
L30 (80 GF)	13	21	2	3	16.8	9.5 ± 1.9	6.9	0.55	20.55
L30 (150 GF)	13	21	2	3	16.8	9.75 ± 1.9	6.9	0.55	20.55
L11	25	39	4	6	11.7	8.68 ± 1	4.4	0.6	7.75
L21	30	47	2	7	10.0	8.35 ± 0.7	2.35	0.62	4.55
L08	27	48	3	8	13.5	10.75 ± 0.8	3.5	0.3	4.3
A03	34	65	6	10	16.55	13.65 ± 1	3.9	0.5	0.9
L04	30	50	5	8	10.1	7.9 ± 0.8	3.0	0.6	3.6
S06	33	49	5	11	12.43	10.7 ± 0.8	1.43	1.25	2.1
S07	40	65	2	5	13.0	9.7 ± 1	4.3	0.5	1

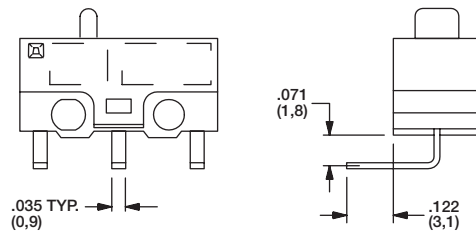


## TERMINATIONS

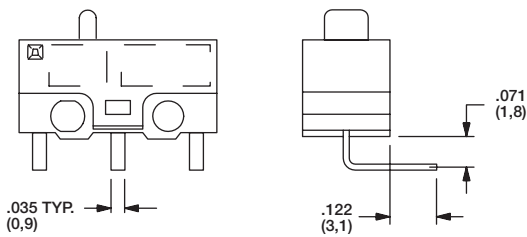
### P PC THRU-HOLE



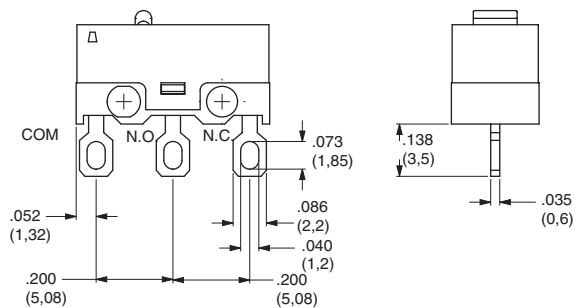
### L LEFT FOOTED, PC THRU-HOLE



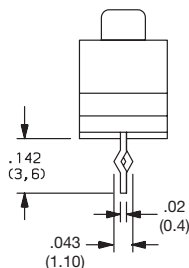
### R RIGHT FOOTED, PC THRU-HOLE



### E SOLDER



### K PC THRU-HOLE WITH RETENTION FEATURE



Third Angle  
Projection

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



Snap-acting