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***

UL61058-1

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.

* 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: 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.

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-33 through J-35. For additional options not shown in catalog, consult Customer Service Center.

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Series
ZMA SP, Mom.

Electrical Rating
See charts below

Operating Force
150 5.29 oz. / 150 grams
080 2.82 oz. / 80 grams

Actuator
P00 Pin plunger
S03 Simulated roller 5.8mm
L30 Lever 20.5mm
L11 Lever 7.2mm
L08 Lever 3.95mm
A03 Roller 1.3mm
L04 Lever 3.9mm
S06 Simulated roller 2.03mm
S07 Simulated roller 0.75mm

Terminations
P PC Thru-hole
L Left-footed, PC Thru-hole
R Right-footed, PC Thru-hole
E Solder
K PC Thru-hole with rentention feature

C SPDT

E Detect

Silver Contacts

Option Code	UL 1054	UL 61058-1		
00A	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	
03A	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
01A		1 A 24 V DC 1 A 125 / 250 V AC		1 A 24 V DC 1 A 125 / 250 V AC

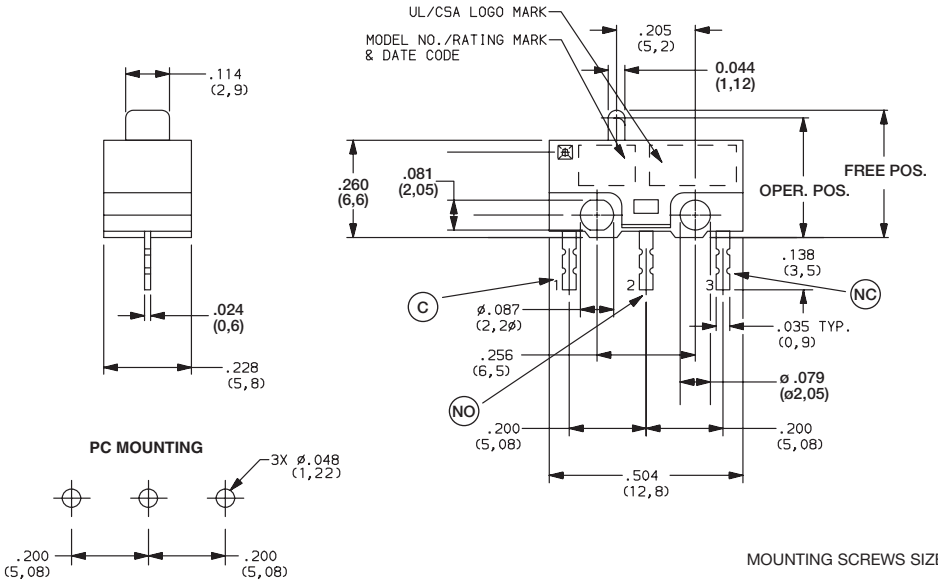
Gold Plated Contacts

Option Code	UL 1054	UL 61058-1		
G00	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	
G03	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
G01		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: mm
Specifications and dimensions subject to change

SERIES

ZMA SUBMINIATURE SNAP-ACTING SWITCHES – SP MOMENTARY



MOUNTING SCREWS SIZE 1-64



ZMA03A150L04PC
SPDT

ELECTRICAL RATING

Silver Contacts

Option Code	UL 1054	UL 61058-1	14	15
00A	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	
03A	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
01A		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	14	15
G00	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	
G03	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC	
G01		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 cULus with all options.

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

OPERATING FORCE

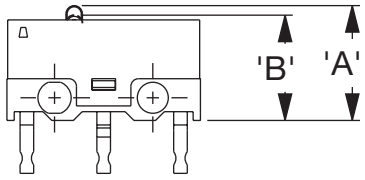
OPTION CODE	BASIC SWITCH OPERATING FORCE (OZ./GRAMS)
150	5.29 150
080	2.82 80

Third Angle Projection

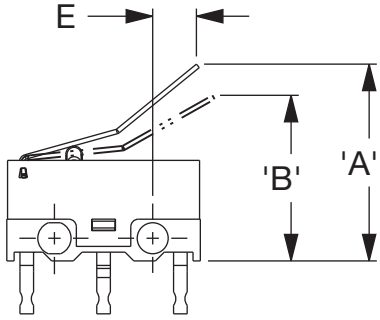
Dimensions are shown: mm
Specifications and dimensions subject to change

ACTUATOR

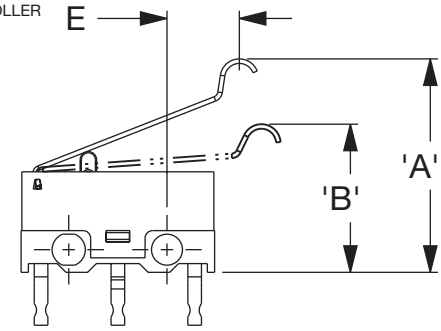
P00 PIN PLUNGER



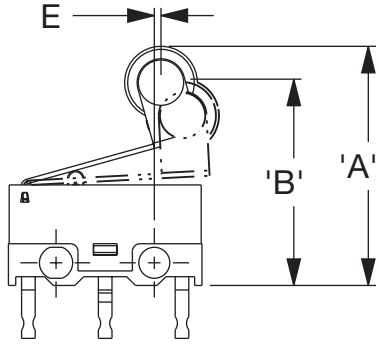
L08 LEVER
3.95MM



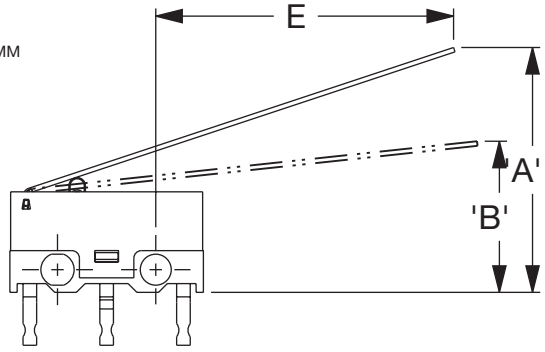
S03 SIMULATED ROLLER
5.8MM



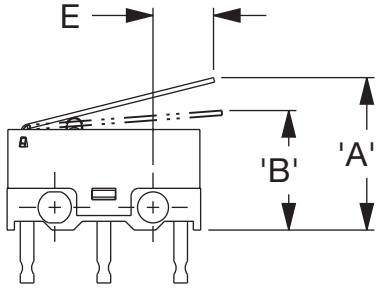
A03 ROLLER
1.3MM



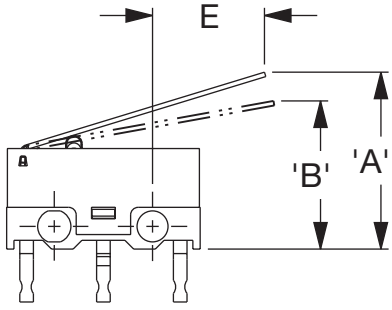
L30 LEVER
20.5MM



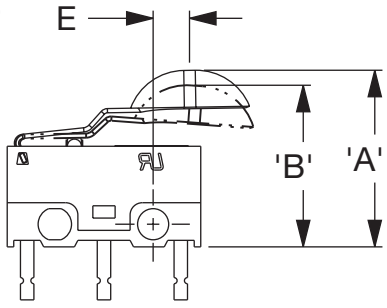
L04 LEVER
3.49MM



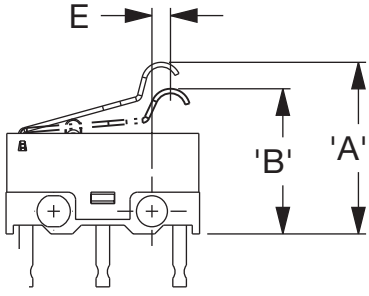
L11 LEVER
7.2MM



S06 SIMULATED
ROLLER
2.03MM



S07 SIMULATED ROLLER
0.75MM

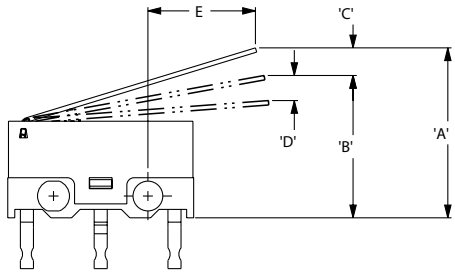


Third Angle Projection

Dimensions are shown: mm
Specifications and dimensions subject to change

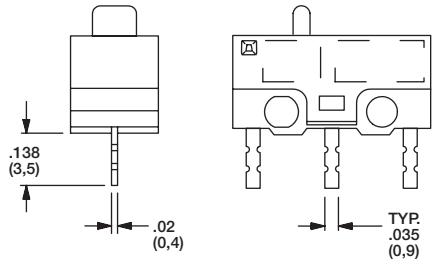
SWITCH CHARACTERISTICS

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	5.41
L30 (80gf)	13	21	2	3	16.8	9.5 ±1.9	6.9	0.55	20.15
L30 (150 gf)	13	21	2	3	16.8	9.75 ±1.9	6.9	0.55	20.15
L11	25	39	4	6	11.7	8.68 ±1	4.4	0.6	7.33
L08	27	48	3	8	13.5	10.75 ±0.8	3.5	0.3	3.82
A03	34	65	6	10	16.55	13.65 ±1	3.9	0.5	0.56
L04	30	50	5	8	10.1	7.9 ±0.8	3.0	0.5	3.49
S06	33	49	5	11	12.43	10.7 ±0.8	1.43	1.25	1.97
S07	40	65	2	5	13.0	9.7 ± 1	4.3	0.5	0.49

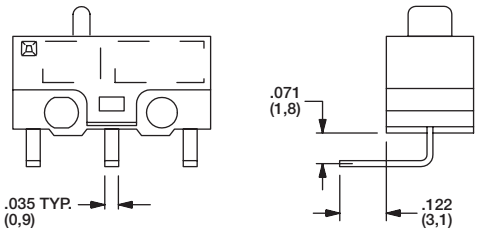


TERMINATIONS

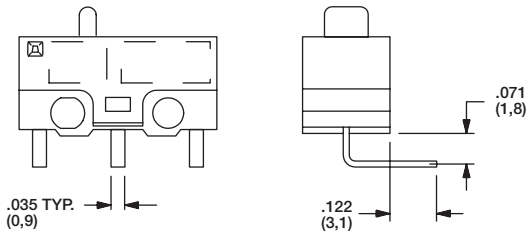
P PC THRU-HOLE



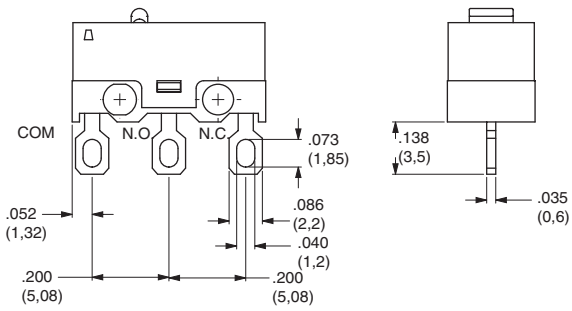
L LEFT FOOTED, PC THRU-HOLE



R RIGHT FOOTED, PC THRU-HOLE



E SOLDER



K PC THRU-HOLE WITH RETENTION FEATURE

