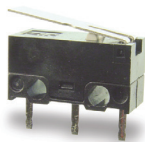


ZMA Series

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.

* 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. For additional options not shown in catalog, consult Customer Service Center.

Z	M	A							C
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 20.55mm L11 Lever 7.75mm L21 Lever 4.55mm L08 Lever 4.3mm A03 Roller 0.9mm L04 Lever 3.6mm S06 Simulated roller 2.1mm S07 Simulated roller 1mm						
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						
			C SPDT						

* Dim. E

See chart on following pages for detailed information

Silver Contacts

Option Code	UL 1054	UL 61058-1	EKL4	EKL15
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	EKL4	EKL15
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



SERIES

Technical drawing of the PC mounting section of the relay, showing side and top views with dimensions and labels.

Labels:

- UL/CSA LOGO MARK
- MODEL NO./RATING MARK & DATE CODE
- PC MOUNTING
- 3X $\phi .048$ (1,22)
- FREE POS.
- OPER. POS.
- (C)
- (NO)
- (NC)

Dimensions (inches / millimeters):

- .114 (2,9)
- .260 (6,6)
- .081 (2,05)
- .205 (5,2)
- .004 (1,12)
- .024 (0,6)
- .228 (5,8)
- $\phi .087$ (2,2 ϕ)
- .256 (6,5)
- .138 (3,5)
- .035 TYP. (0,9)
- $\phi .079$ (ϕ 2,05)
- .200 (5,08)
- .504 (12,8)
- .200 (5,08)
- .200 (5,08)



ZMA03A150L04PC
SPDT

ELECTRICAL RATING

Option Code	UL cUL _{us} 1054	UL cUL _{us} 61058-1			Option Code	UL cUL _{us} 1054	UL cUL _{us} 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		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	
03A	3 A 125 V AC	3 A 125 V AC 3 A 24 V DC	3A 125 V AC		G03	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	G01		1 A 24 V DC 1 A 125 / 250 V AC		1 A 24 V DC 1 A 125 / 250 V AC

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

OPERATING FORCE

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



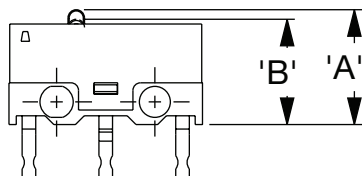
Third Angle Projection

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

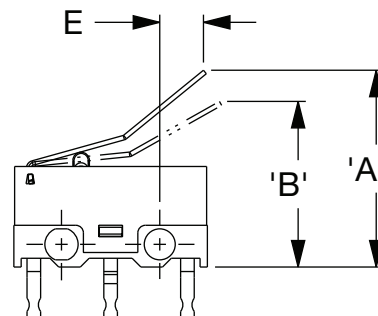
ZMA Series Mini Size Snap-acting Switches

ACTUATOR

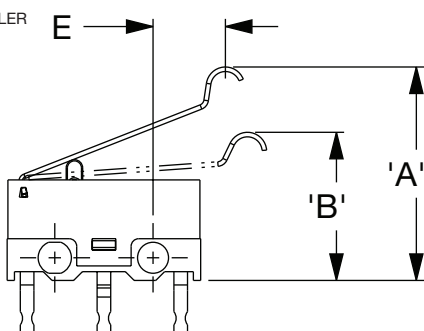
P00 PIN PLUNGER



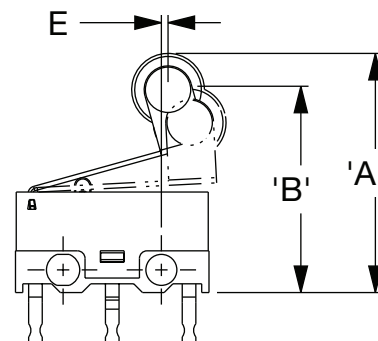
L08 LEVER
4.3MM



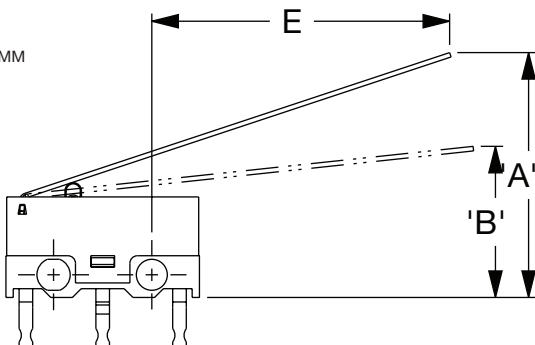
S03 SIMULATED ROLLER
5.8MM



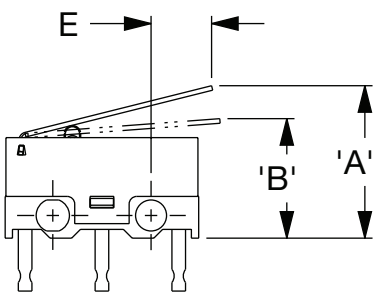
A03 ROLLER
0.9MM



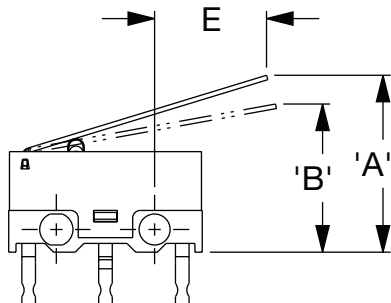
L30 LEVER
20.55MM



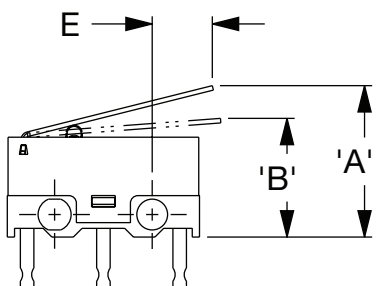
L04 LEVER
3.6MM



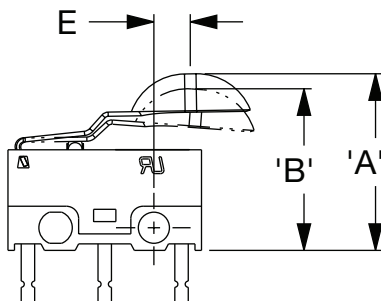
L11 LEVER
7.75MM



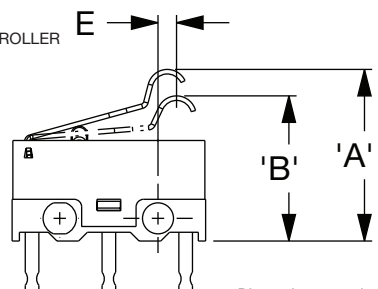
L21 LEVER
4.55MM



S06 SIMULATED ROLLER
2.1MM



S07 SIMULATED ROLLER
1MM



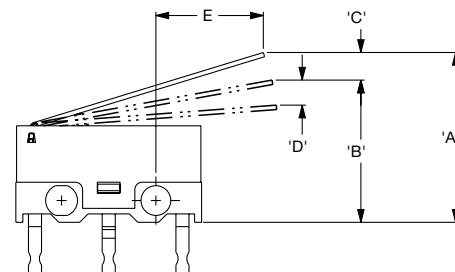
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

ZMA Series

Mini Size Snap-acting Switches

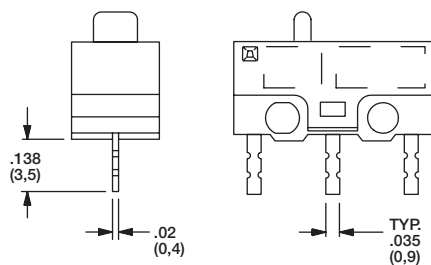
SWITCH CHARACTERISTICS

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 ± 0.3	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

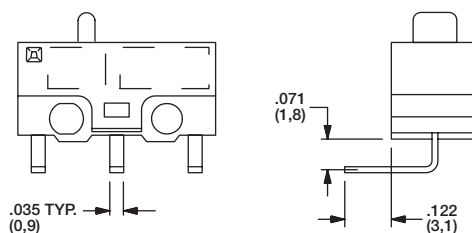


TERMINATIONS

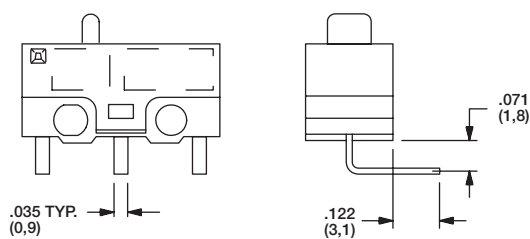
P PC THRU-HOLE



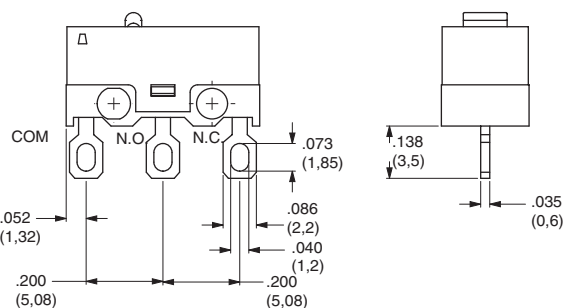
L LEFT FOOTED, PC THRU-HOLE



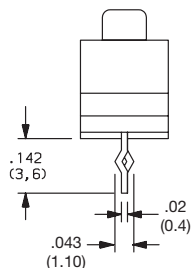
R RIGHT FOOTED, PC THRU-HOLE



E SOLDER



K PC THRU-HOLE WITH RETENTION FEATURE



Third Angle Projection

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

Mouser Electronics

Authorized Distributor

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

C&K Switches:

[ZMA00A080P00PC1](#) [ZMA00A150A03LC](#) [ZMA00A150L21LC](#) [ZMA00A150S03LC](#) [ZMA01A080P00RC](#)
[ZMA03A150L21PC](#) [ZMA03A150S07LC](#) [ZMAG00080L04PC](#) [ZMAG00080L11EC](#) [ZMAG00150L08RC](#)
[ZMAG03150S07RC](#) [ZMA00A080L21LC](#) [ZMA00A150L21KC](#) [ZMAG00080P00RC](#) [ZMA00A080L21EC](#)
[ZMAG00150L04RC](#)