

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.

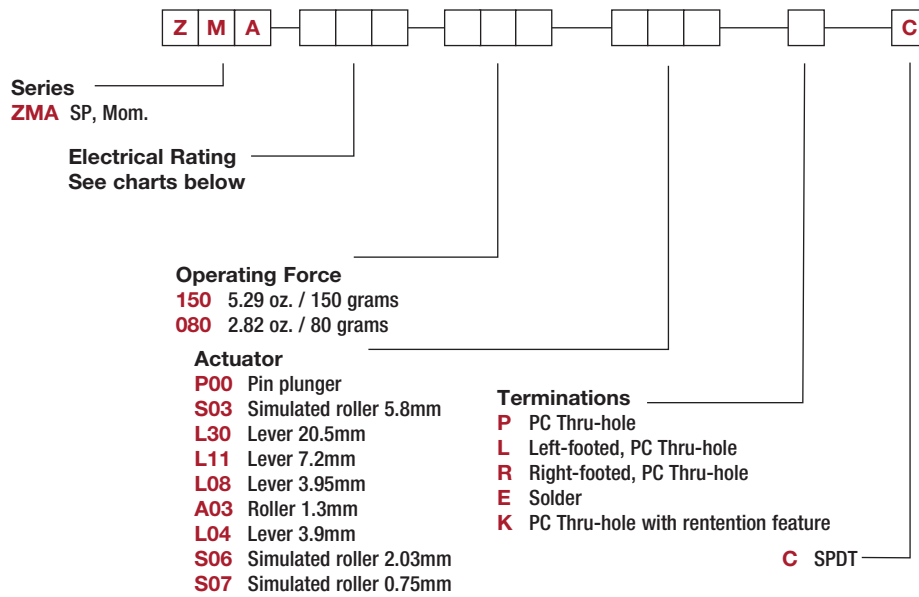
Materials

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.



Detect

Silver Contacts

| Option Code | UL 1054 | UL 61058-1 | ELK4 | ELK15 |
|-------------|-------------------------------|-----------------------------------|---------------|-----------------------------------|
| 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 | ELK4 | ELK15 |
|-------------|-------------------------------|-----------------------------------|---------------|-----------------------------------|
| 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 |

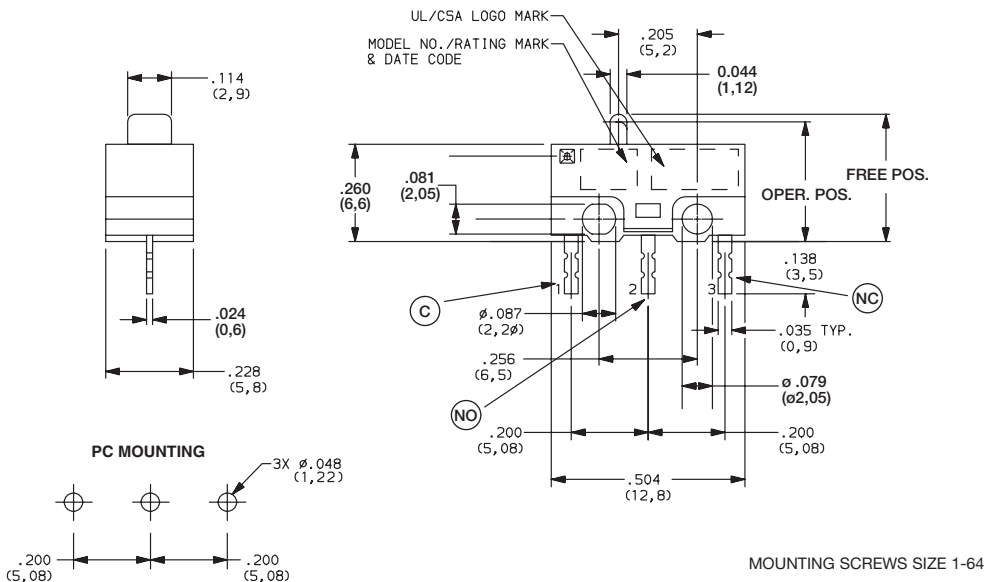


Dimensions are shown: mm
 Specifications and dimensions subject to change

ZMA Series Subminiature Snap-acting Switches

SERIES

ZMA SUBMINIATURE SNAP-ACTING SWITCHES – SP MOMENTARY



ZMA03A150L04PC
SPDT

ELECTRICAL RATING



Silver Contacts

| Option Code | UL c US 1054 | UL c 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 | |
| 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 c US 1054 | UL c US 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 |

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

All models US 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

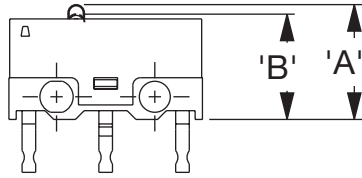


Detect

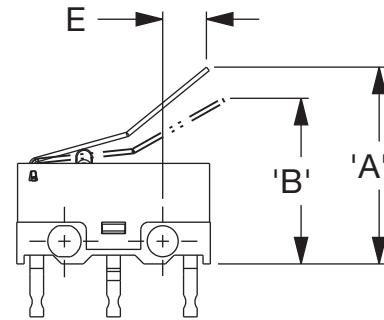
ZMA Series Subminiature Snap-acting Switches

ACTUATOR

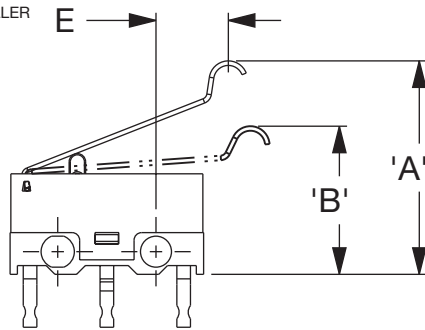
P00 PIN PLUNGER



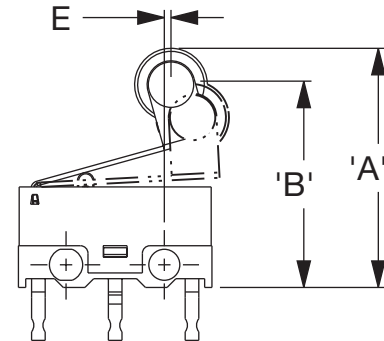
L08 LEVER
3.95MM



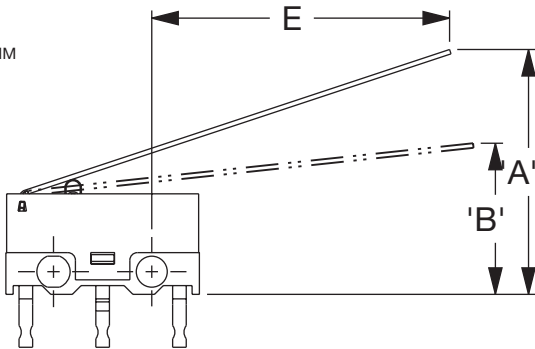
S03 SIMULATED ROLLER
5.8MM



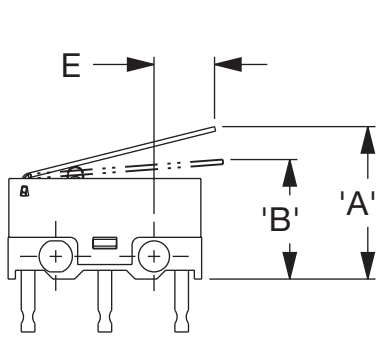
A03 ROLLER
1.3MM



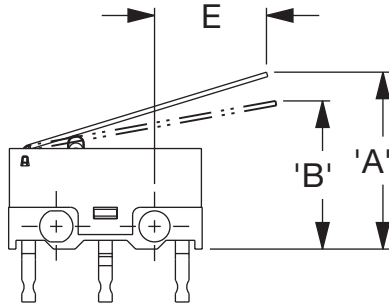
L30 LEVER
20.5MM



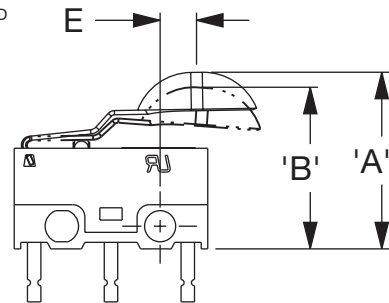
L04 LEVER
3.49MM



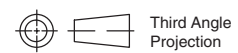
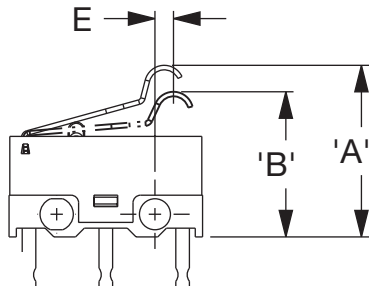
L11 LEVER
7.2MM



S06 SIMULATED ROLLER
2.03MM



S07 SIMULATED ROLLER
0.75MM



Third Angle
Projection

Dimensions are shown: mm

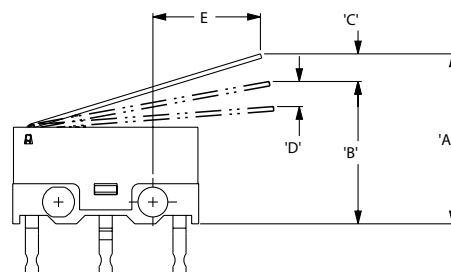
Specifications and dimensions subject to change

Detect 

ZMA Series Subminiature Snap-acting Switches

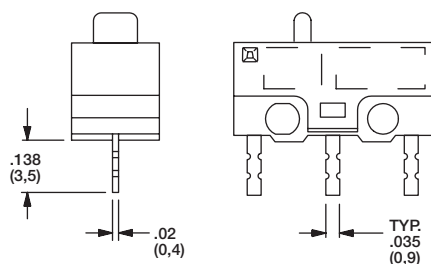
SWITCH CHARACTERISTICS

| 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 ±0.3 | 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 |

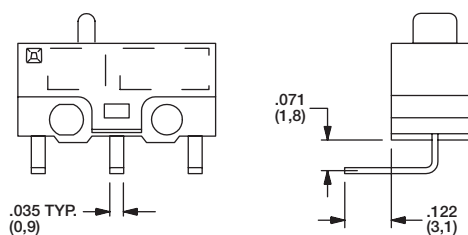


TERMINATIONS

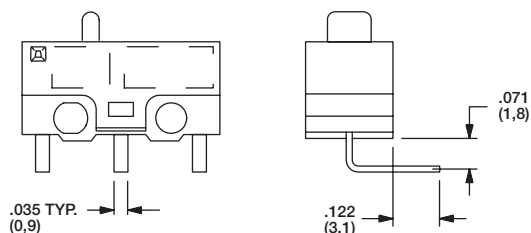
P PC THRU-HOLE



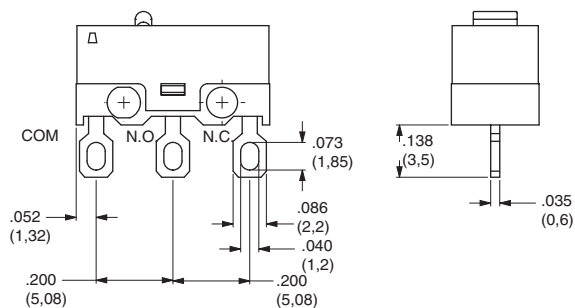
L LEFT FOOTED, PC THRU-HOLE



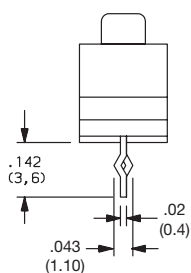
R RIGHT FOOTED, PC THRU-HOLE



E SOLDER



K PC THRU-HOLE WITH RETENTION FEATURE



Detect

Mouser Electronics

Authorized Distributor

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

C&K Switches:

[ZMA00A080L04PC](#) [ZMA00A080L04RC](#) [ZMA00A080P00PC](#) [ZMA00A080P00RC](#) [ZMA00A080S06PC](#)
[ZMA00A150L04PC](#) [ZMA00A150P00LC](#) [ZMA00A150P00PC](#) [ZMA00A150P00RC](#) [ZMA00A150S06LC](#)
[ZMA00A150S06PC](#) [ZMA03A150L04PC](#) [ZMA03A150P00LC](#) [ZMA03A150P00PC](#) [ZMA03A150P00RC](#)
[ZMA03A150S06PC](#) [ZMA00A150L04RC](#) [ZMA00A150S06RC](#) [ZMA00A080L04LC](#) [ZMA03A150L04RC](#)
[ZMA00A150L04LC](#) [ZMA03A150L04LC](#) [ZMA03A150L11PC](#) [ZMA00A080L04EC](#) [ZMA03A150L11LC](#)
[ZMA03A150S06LC](#) [ZMA00A150L08EC](#) [ZMA00A080L11RC](#) [ZMA00A080S06EC](#) [ZMA03A150L04EC](#)
[ZMA03A080L04LC](#) [ZMA00A150S07RC](#) [ZMA03A080P00LC](#) [ZMA03A150L11EC](#) [ZMA03A150P00KC](#)
[ZMA03A080L04EC](#) [ZMA00A150S03PC](#) [ZMA03A150L30PC](#) [ZMA03A080L11PC](#) [ZMA00A080L30PC](#)
[ZMA00A080A03RC](#) [ZMA00A150L04EC](#) [ZMA03A150L11RC](#) [ZMA01A080P00PC](#) [ZMA00A150S07PC](#)
[ZMA00A080S03PC](#) [ZMA01A150P00PC](#) [ZMA00A080S07PC](#) [ZMA00A080L08PC](#) [ZMA00A150L11RC](#)
[ZMA00A150A03PC](#) [ZMA00A150S03EC](#) [ZMA03A080S07LC](#) [ZMA00A150L11EC](#)