

# C&K 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**

### Typical Applications

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



Models Available

### Specifications

CONTACT RATING: 3A @ 125 V AC / 0.1A @ 30 V DC.  
ELECTRICAL LIFE: 300,000 cycles @ 0.1A / 10,000 cycles @ 3A.  
INSULATION RESISTANCE: 100 M ohm min.  
DIELECTRIC STRENGTH: 500 Vrms.  
OPERATING TEMPERATURE: -17°F to 185°F (-25°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: PBT  
COVER/ACTUATOR: Nylon 6/6  
MOVABLE CONTACTS: Silver or gold plated.  
STATIONARY CONTACTS: Silver or gold plated.  
TERMINALS: Brass, tin plated.

**NOTE:** For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

**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 F-18 and F-19. For additional options not shown in catalog, consult Customer Service Center.

|                          |                            |          |          |  |  |  |  |  |  |          |
|--------------------------|----------------------------|----------|----------|--|--|--|--|--|--|----------|
|                          | <b>Z</b>                   | <b>M</b> | <b>A</b> |  |  |  |  |  |  | <b>C</b> |
| <b>Series</b>            |                            |          |          |  |  |  |  |  |  |          |
| <b>ZMA</b>               | SP, Mom.                   |          |          |  |  |  |  |  |  |          |
| <b>Electrical Rating</b> |                            |          |          |  |  |  |  |  |  |          |
| <b>00A</b>               | 0.1A 30 V DC               |          |          |  |  |  |  |  |  |          |
| <b>03A*</b>              | 3A 125 V AC                |          |          |  |  |  |  |  |  |          |
| <b>Operating Force</b>   |                            |          |          |  |  |  |  |  |  |          |
| <b>150</b>               | 5.29 oz. / 150 grams       |          |          |  |  |  |  |  |  |          |
| <b>080*</b>              | 2.82 oz. / 80 grams        |          |          |  |  |  |  |  |  |          |
| <b>Actuator</b>          |                            |          |          |  |  |  |  |  |  |          |
| <b>P00</b>               | Pin plunger                |          |          |  |  |  |  |  |  |          |
| <b>L04</b>               | Leaf                       |          |          |  |  |  |  |  |  |          |
| <b>Terminations</b>      |                            |          |          |  |  |  |  |  |  |          |
| <b>P</b>                 | PC Thru-hole               |          |          |  |  |  |  |  |  |          |
| <b>L</b>                 | Left-footed, PC Thru-hole  |          |          |  |  |  |  |  |  |          |
| <b>R</b>                 | Right-footed, PC Thru-hole |          |          |  |  |  |  |  |  |          |
|                          | <b>C</b> SPDT              |          |          |  |  |  |  |  |  |          |

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



F

Detect



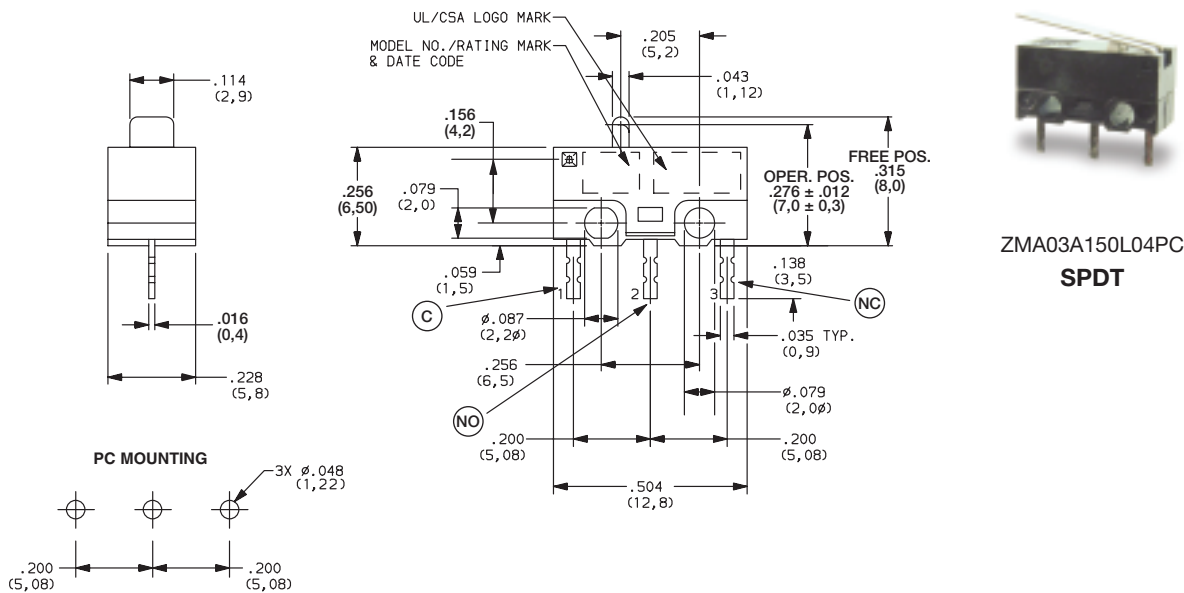
Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

# C&K ZMA Series

## Subminiature Snap-acting Switches

SERIES **ZMA**

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



ELECTRICAL RATING

| OPTION CODE | CONTACT MATERIAL      |                       | ELECTRICAL RATING |
|-------------|-----------------------|-----------------------|-------------------|
|             | MOVABLE CONTACT       | STATIONARY CONTACT    |                   |
| <b>00A</b>  | GOLD OVER FINE SILVER | GOLD OVER FINE SILVER | 0.1 AMP @ 30 V DC |
| <b>03A*</b> | FINE SILVER           | FINE SILVER           | 3 AMPS @ 125 V AC |

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<br>OPERATING FORCE<br>(OZ./GRAMS) |
|-------------|------------------------------------------------|
| <b>150</b>  | 5.29<br>150                                    |
| <b>080*</b> | 2.82<br>80                                     |

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



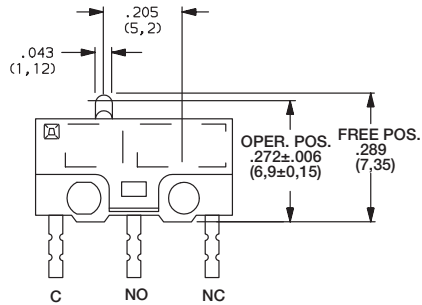
Dimensions are shown: Inch (mm)  
 Specifications and dimensions subject to change

# C&K ZMA Series Subminiature Snap-acting Switches

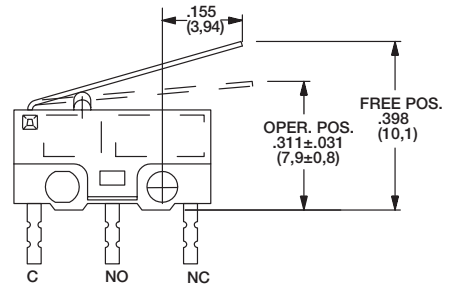
## ACTUATOR



### P00 PIN PLUNGER



### L04 LEAF



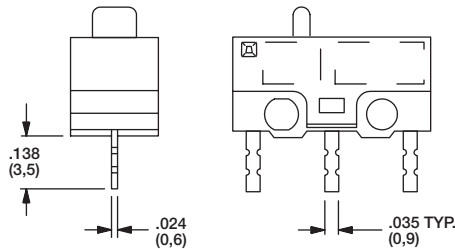
## SWITCH CHARACTERISTICS

|             | Maximum Operate Force (oz. / grams) |             | Minimum Release Force (oz./grams) |            | Free Position Max | Maximum Pre-travel | Operate Position                 | Maximum Differential | Minimum Overtravel |
|-------------|-------------------------------------|-------------|-----------------------------------|------------|-------------------|--------------------|----------------------------------|----------------------|--------------------|
| Option Code | 080                                 | 150         | 080                               | 150        | All               | All                | All                              | All                  | All                |
| P00         | 2.82<br>80                          | 5.29<br>150 | 0.35<br>10                        | 0.71<br>20 | 0.289<br>(7,35)   | 0.024<br>(0,62)    | 0.272 +/- 0.012<br>(6,9 +/- 0,3) | 0.005<br>(0,12)      | 0.008<br>(0,2)     |
| L04         | 1.06<br>30                          | 1.76<br>50  | 0.18<br>5                         | 0.28<br>8  | 0.398<br>(10,1)   | 0.031<br>(3,0)     | 0.311 +/- 0.031<br>(7,9 +/- 0,8) | 0.031<br>(0,8)       | 0.024<br>(0,6)     |

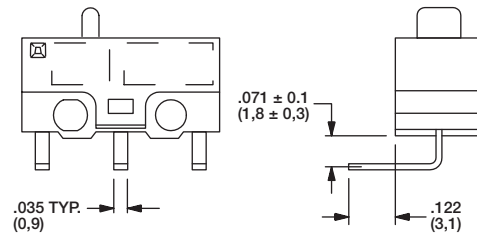
## TERMINATIONS



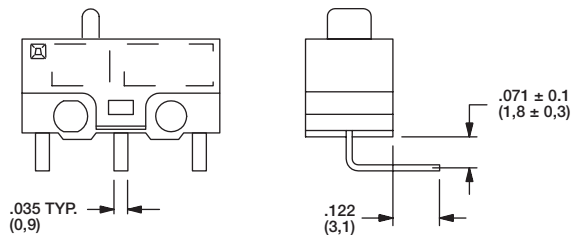
### P PC THRU-HOLE



### L LEFT FOOTED, PC THRU-HOLE

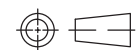


### R RIGHT FOOTED, PC THRU-HOLE



F

Detect



Third Angle  
Projection

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