

# ZM 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 compliant / compatible**

## Typical Applications

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

UL61058-1



## Specifications

CONTACT RATING: F7: 3A @ 125 VAC  
M9: 0.2A @ 60 VDC.

ELECTRICAL LIFE: 10,000 Cycles. @ 3A

INSULATION RESISTANCE: 100 M ohm min.

DIELECTRIC STRENGTH: 1000 Vrms.

OPERATING TEMPERATURE: -30°C to 85°C.

OPERATING FORCE: CJ: 150 grams, CH: 90 grams.

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

## Materials

COVER: Nylon 6/6

ACTUATOR BUTTON: Nylon 6/6

CASE: Nylon 6/6

SPRING: SUS

MOVABLE BLADE: BeCu

MOVABLE CONTACT: Silver alloy (M9 option gold plated)

FIXED CONTACTS: Silver alloy (M9 option Au plated)

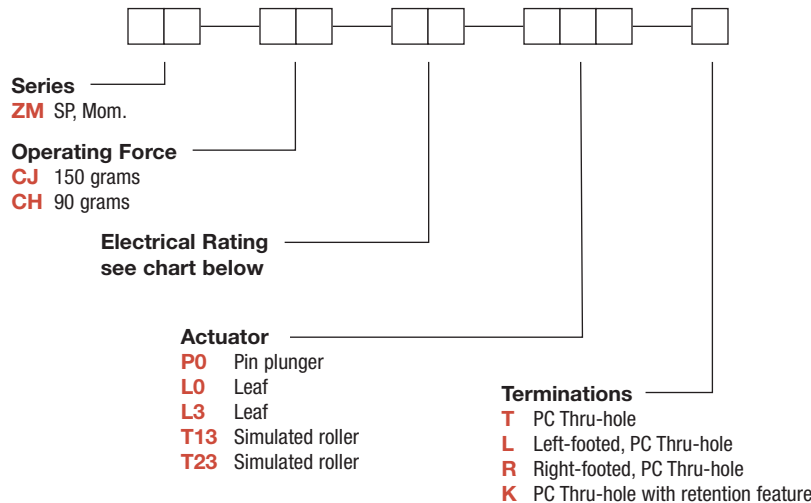
FIXED TERMINALS: Brass - Ag plated.

ACTUATOR (Leaf / Roller options): SUS

**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-34 and J-35. For additional options not shown in catalog, consult Customer Service Center.



| Option Code | UL<br>cUL US 1054                                | UL<br>cUL US 61058-1                             | UL<br>cUL US 61058-1                             |
|-------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| <b>F7</b>   | 3 A 125 V AC                                     | 3 A 125 V AC<br>3 A 30 V DC                      | 3 A 125 V AC                                     |
| <b>M9</b>   | 0.1 A 48 V DC<br>0.2 A 60 V DC<br>0.1 A 125 V AC | 0.1 A 48 V DC<br>0.2 A 60 V DC<br>0.1 A 125 V AC | 0.1 A 48 V DC<br>0.2 A 60 V DC<br>0.1 A 125 V AC |



Third Angle  
Projection

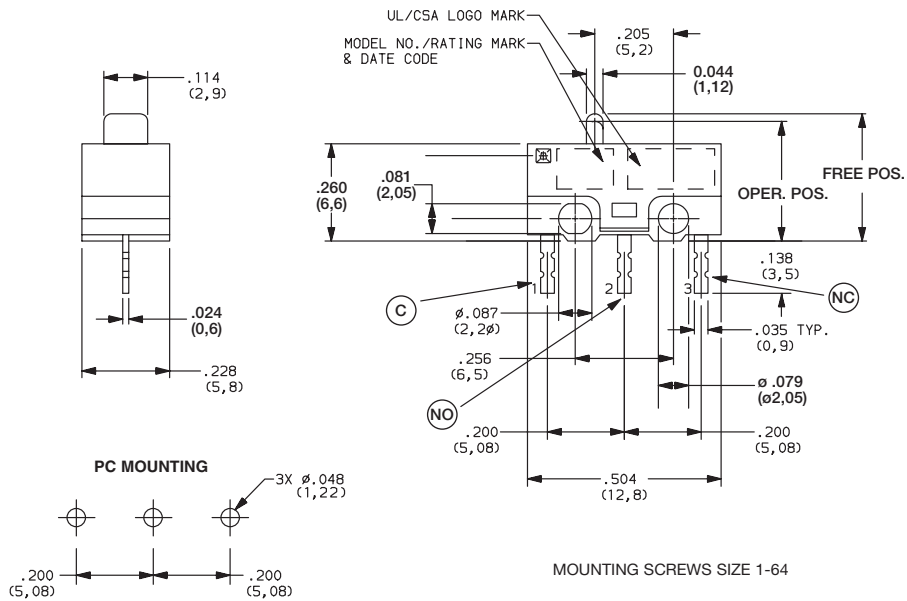
Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

# ZM Series

## Subminiature Snap-acting Switches

SERIES **ZM** ■ ■ ■ ■ ■ ■ ■ ■

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



ZMCJF7L0T  
SPDT

### OPERATING FORCE ■ ■ ■ ■ ■ ■ ■ ■

| OPTION CODE | BASIC SWITCH<br>OPERATING FORCE<br>(OZ./GRAMS) |
|-------------|------------------------------------------------|
| <b>CJ</b>   | 5.29<br>150                                    |
| <b>CH</b>   | 3.15<br>90                                     |

### ELECTRICAL RATING ■ ■ ■ ■ ■ ■ ■ ■

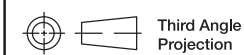
| OPTION CODE | RoHS COMPLIANT* | RoHS COMPATIBLE* | CONTACT MATERIAL             |                    | ELECTRICAL RATING |
|-------------|-----------------|------------------|------------------------------|--------------------|-------------------|
|             |                 |                  | MOVABLE CONTACT              | STATIONARY CONTACT |                   |
| <b>F7</b>   | Yes             | Yes              | Silver alloy                 |                    | see chart         |
| <b>M9</b>   | Yes             | Yes              | Gold plating or silver alloy |                    | see chart         |

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

All models **c** **UL** **US** with all options.

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

| Option Code | <b>c</b> <b>UL</b> <b>US</b> 1054                | <b>c</b> <b>UL</b> <b>US</b> 61058-1             |  |
|-------------|--------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>F7</b>   | 3 A 125 V AC                                     | 3 A 125 V AC<br>3 A 30 V DC                      | 3 A 125 V AC                                                                          |
| <b>M9</b>   | 0.1 A 48 V DC<br>0.2 A 60 V DC<br>0.1 A 125 V AC | 0.1 A 48 V DC<br>0.2 A 60 V DC<br>0.1 A 125 V AC | 0.1 A 48 V DC<br>0.2 A 60 V DC<br>0.1 A 125 V AC                                      |



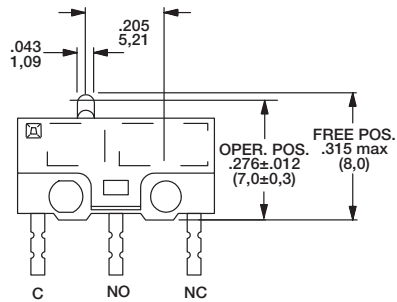
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[www.ck-components.com](http://www.ck-components.com)

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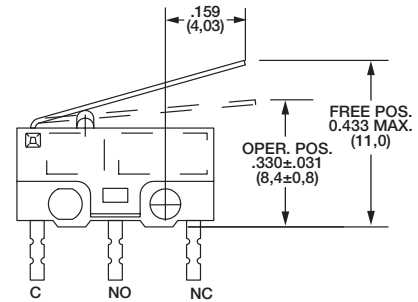
## ACTUATOR

**P0** PIN PLUNGER



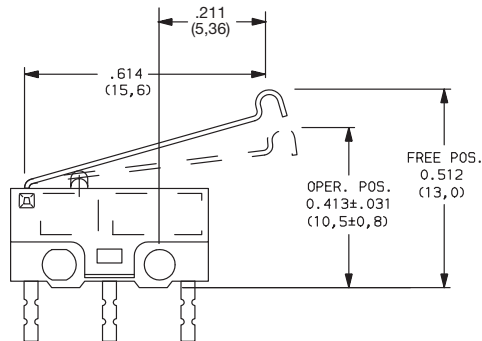
**L0** LEAF, 50 GRAMS (CJ ONLY)

**L3** LEAF, 30 GRAMS (CH ONLY)



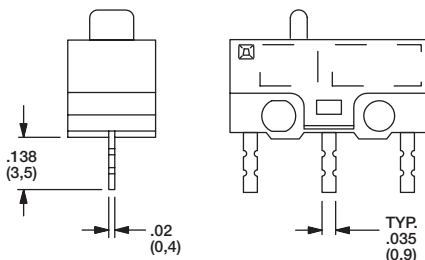
**T13** SIMULATED ROLLER, 40 GRAMS (CJ ONLY)

**T23** SIMULATED ROLLER, 25 GRAMS (CH ONLY)

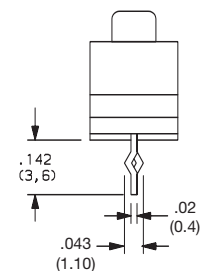


## TERMINATIONS

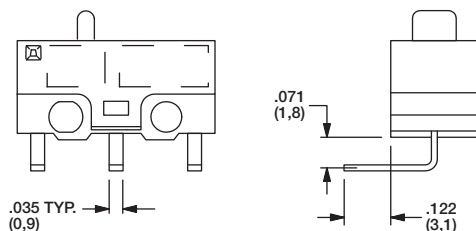
**T** (STD.) PC THRU-HOLE



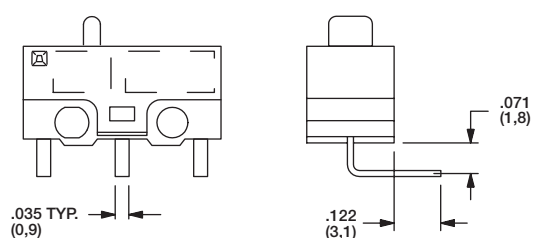
**K** PC THRU-HOLE WITH RETENTION FEATURE



**L** LEFT FOOTED, PC THRU-HOLE



**R** RIGHT FOOTED, PC THRU-HOLE



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# Mouser Electronics

Authorized Distributor

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

## C&K Switches:

[ZMCJF7T13K](#) [ZMCHF7P0K](#) [ZMCJM9T13K](#) [ZMCJM9P0R](#) [ZMCHF7T23K](#)