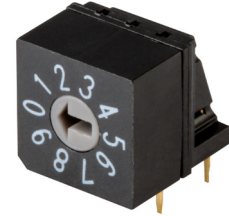


**SERIES:** RDS5-1011-RA-67 | **DESCRIPTION:** ROTARY DIP SWITCH

**FEATURES**

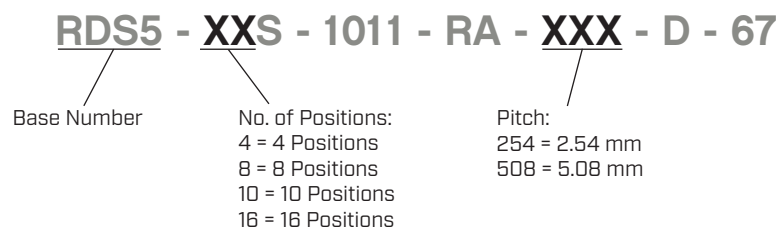
- 4, 8, 10, 16 positions
- right angle
- IP67


**SPECIFICATIONS**

| parameter             | conditions/description                 | min | typ    | max | units   |
|-----------------------|--|-----|--------|-----|---------|
| rated voltage         | switching                              |     |        | 42  | Vdc     |
|                       | non-switching                          |     |        | 42  | Vdc     |
| rated current         | switching                              |     |        | 150 | mA      |
|                       | non-switching                          |     |        | 200 | mA      |
| withstanding voltage  | for 1 minute                           |     | 250    |     | Vac     |
| contact resistance    |  |     |        | 80  | mΩ      |
| insulation resistance | for 1 minute at 250 Vdc                | 100 |        |     | MΩ      |
| operating torque      |  |     |        | 700 | gf*cm   |
| actuator travel       | continuous rotation                    |     | 360    |     | degrees |
| operating temperature |  | -40 |        | 85  | °C      |
| storage temperature   |  | -40 |        | 85  | °C      |
| life                  | at 42 Vdc, 150 mA, 15~20 cycles/minute |     | 10,000 |     | steps   |
| flammability rating   | see material tables                    |     |        |     |         |
| RoHS                  | yes                                    |     |        |     |         |
| IP level              | IP67                                   |     |        |     |         |

**SOLDERABILITY**

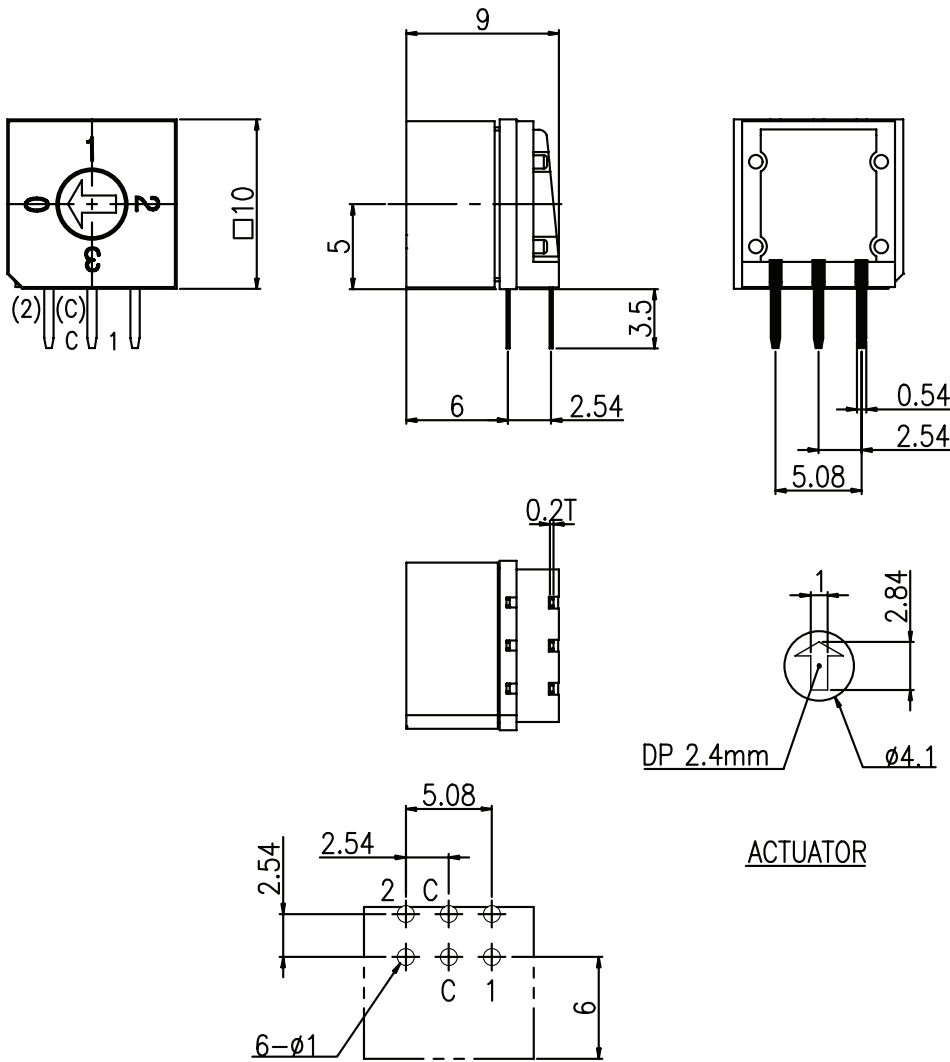
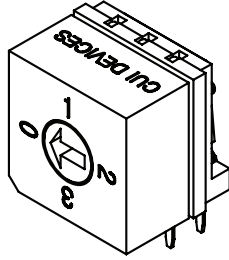
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds  |     |     | 350 | °C    |
| wave soldering | for maximum 5 seconds  |     |     | 260 | °C    |

**PART NUMBER KEY**


## MECHANICAL DRAWING (4 POSITION, 2.54 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



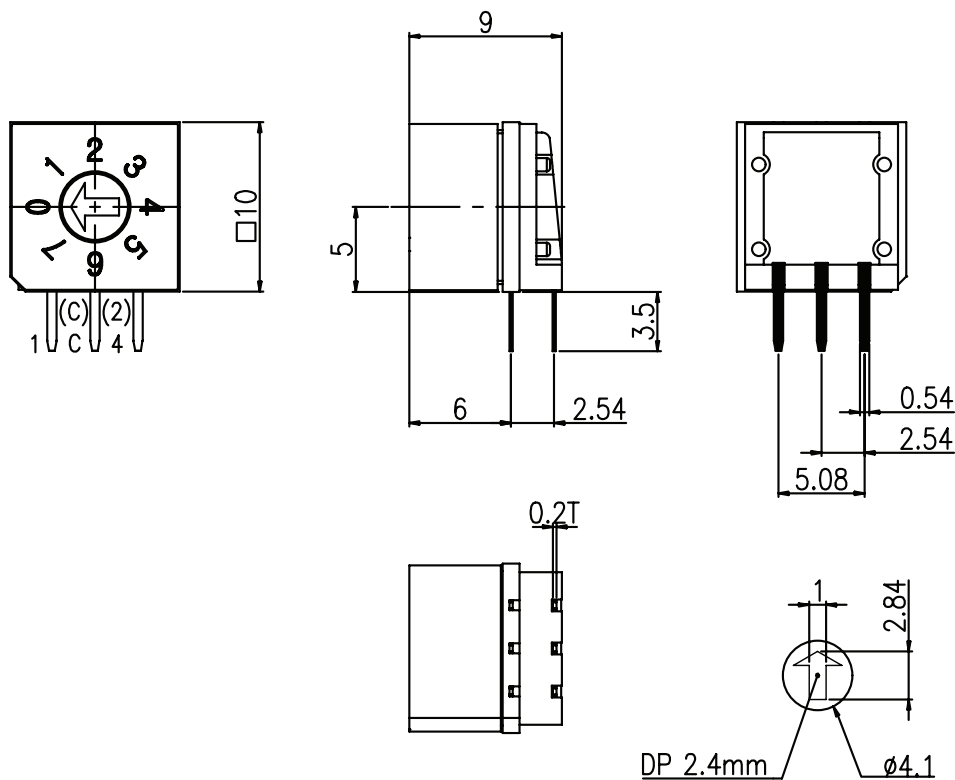
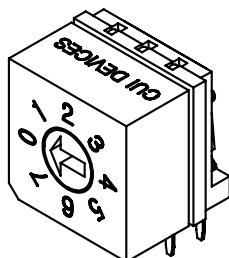
| ON ●       |      |   |   |   |
|------------|------|---|---|---|
| OFF ○      | CODE |   |   |   |
| TYPE       | POS  | C | 1 | 2 |
| 4 POSITION | 0    | ● | ○ | ○ |
|            | 1    | ● | ● | ○ |
|            | 2    | ● | ○ | ● |
|            | 3    | ● | ● | ● |

Recommended PCB Layout  
 Top View

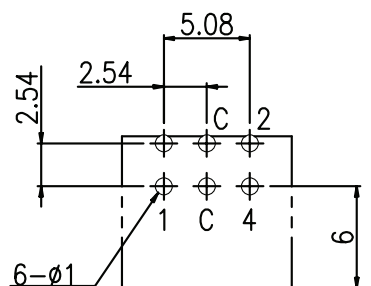
## MECHANICAL DRAWING (8 POSITION, 2.54 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



| TYPE       | POS | CODE |   |   |   |
|------------|-----|------|---|---|---|
|            |     | C    | 1 | 2 | 4 |
| 8 POSITION | 0   | ●    | ○ | ○ | ○ |
|            | 1   | ●    | ● | ○ | ○ |
|            | 2   | ●    | ○ | ● | ○ |
|            | 3   | ●    | ● | ● | ○ |
|            | 4   | ●    | ○ | ○ | ● |
|            | 5   | ●    | ● | ○ | ● |
|            | 6   | ●    | ○ | ● | ● |
|            | 7   | ●    | ● | ● | ● |

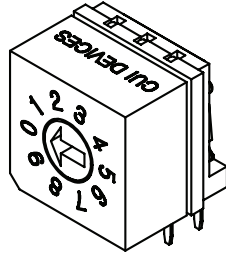


Recommended PCB Layout  
 Top View

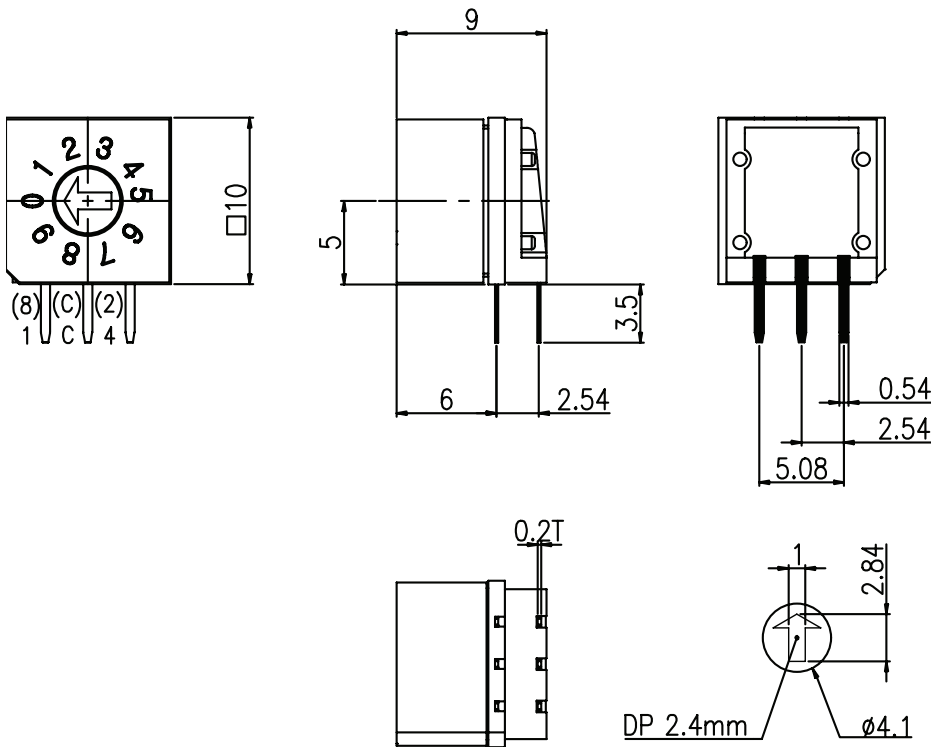
ACTUATOR

## MECHANICAL DRAWING (10 POSITION, 2.54 MM PITCH)

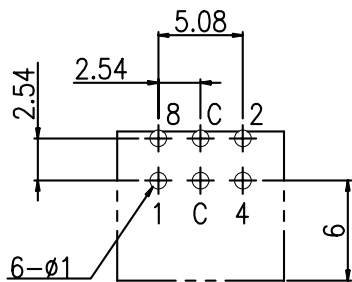
units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified



| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



| TYPE        | POS | CODE |   |   |   |   |
|-------------|-----|------|---|---|---|---|
|             |     | C    | 1 | 2 | 4 | 8 |
| 10 POSITION | 0   | ●    | ○ | ○ | ○ | ○ |
|             | 1   | ●    | ● | ○ | ○ | ○ |
|             | 2   | ●    | ○ | ● | ○ | ○ |
|             | 3   | ●    | ● | ● | ○ | ○ |
|             | 4   | ●    | ○ | ○ | ● | ○ |
|             | 5   | ●    | ● | ○ | ● | ○ |
|             | 6   | ●    | ○ | ● | ● | ○ |
|             | 7   | ●    | ● | ● | ● | ○ |
|             | 8   | ●    | ○ | ○ | ○ | ● |
|             | 9   | ●    | ● | ○ | ○ | ● |



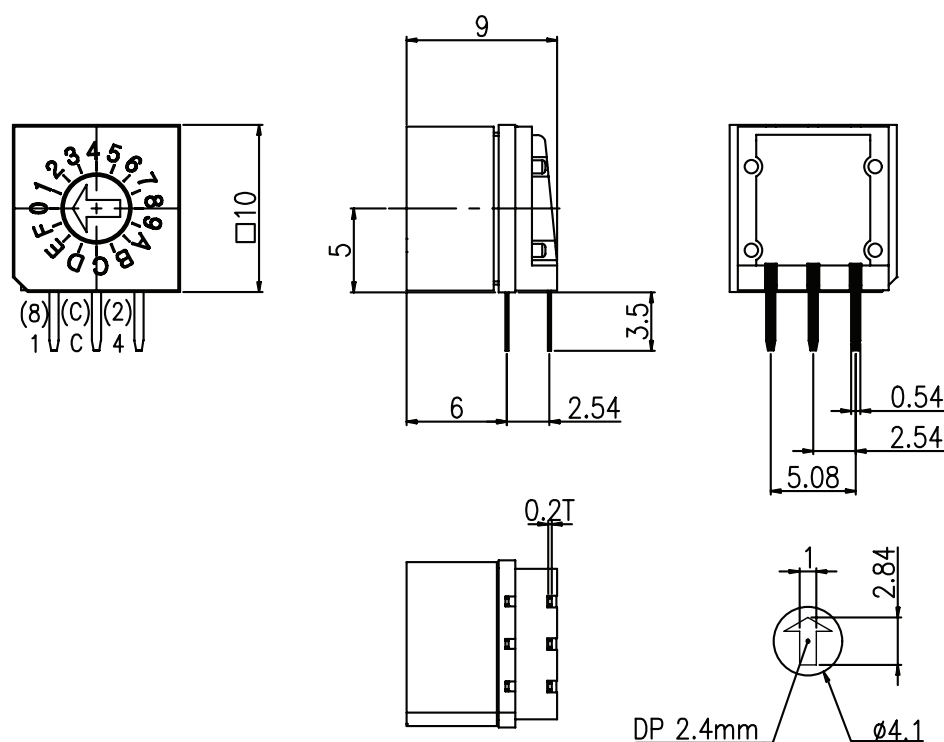
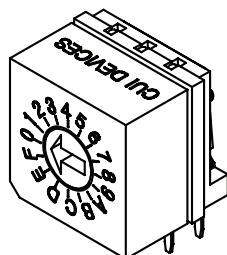
Recommended PCB Layout  
 Top View

### ACTUATOR

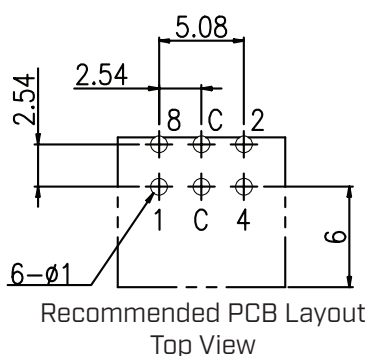
## MECHANICAL DRAWING (16 POSITION, 2.54 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



| TYPE        | POS | CODE |   |   |   |   |
|-------------|-----|------|---|---|---|---|
|             |     | C    | 1 | 2 | 4 | 8 |
| 16 POSITION | 0   | ●    | ○ | ○ | ○ | ○ |
|             | 1   | ●    | ● | ○ | ○ | ○ |
|             | 2   | ●    | ○ | ● | ○ | ○ |
|             | 3   | ●    | ● | ● | ○ | ○ |
|             | 4   | ●    | ○ | ○ | ● | ○ |
|             | 5   | ●    | ● | ○ | ● | ○ |
|             | 6   | ●    | ○ | ● | ● | ○ |
|             | 7   | ●    | ● | ● | ● | ○ |
|             | 8   | ●    | ○ | ○ | ○ | ● |
|             | 9   | ●    | ● | ○ | ○ | ● |
|             | A   | ●    | ○ | ● | ○ | ● |
|             | B   | ●    | ● | ● | ○ | ● |
|             | C   | ●    | ○ | ○ | ● | ● |
|             | D   | ●    | ● | ○ | ● | ● |
|             | E   | ●    | ○ | ● | ● | ● |
|             | F   | ●    | ● | ● | ● | ● |

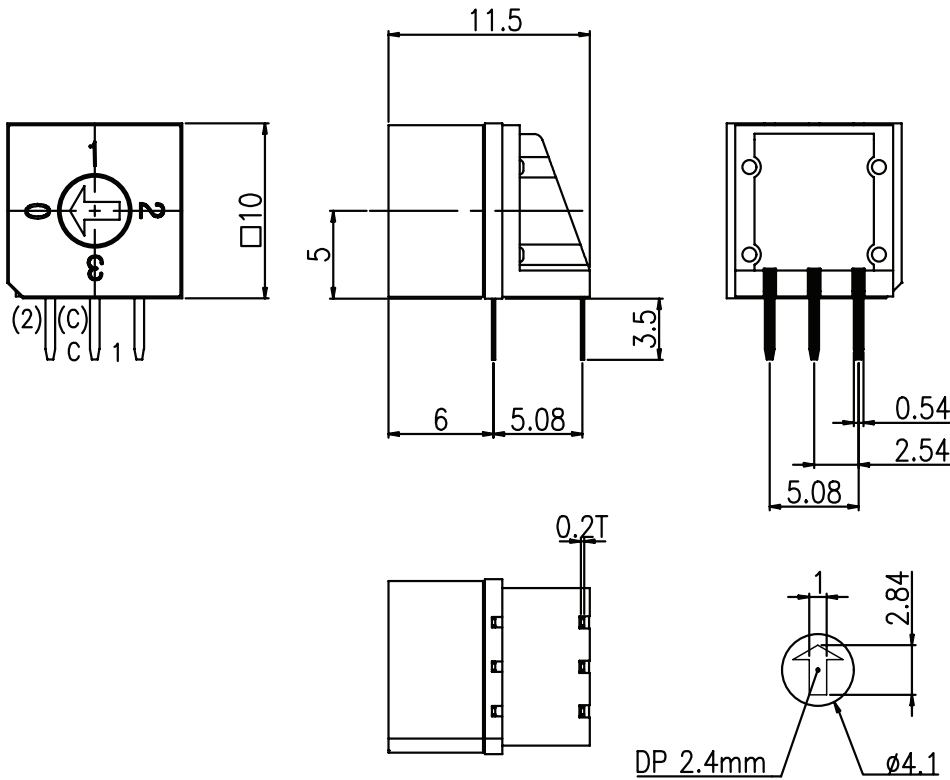
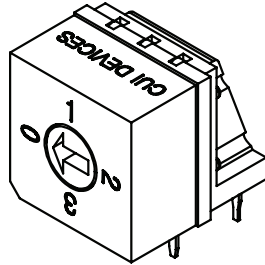


ACTUATOR

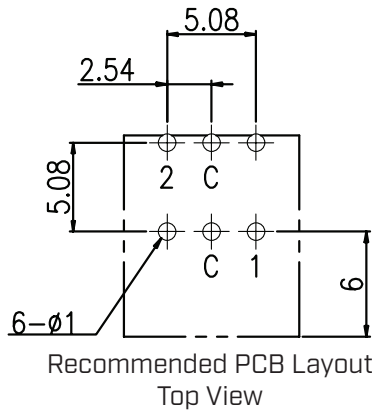
## MECHANICAL DRAWING (4 POSITION, 5.08 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



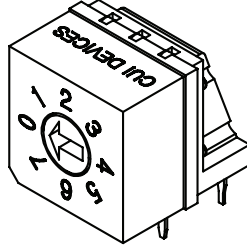
| TYPE       | POS | CODE |   |   |
|------------|-----|------|---|---|
|            |     | C    | 1 | 2 |
| 4 POSITION | 0   | ●    | ○ | ○ |
|            | 1   | ●    | ● | ○ |
|            | 2   | ●    | ○ | ● |
|            | 3   | ●    | ● | ● |



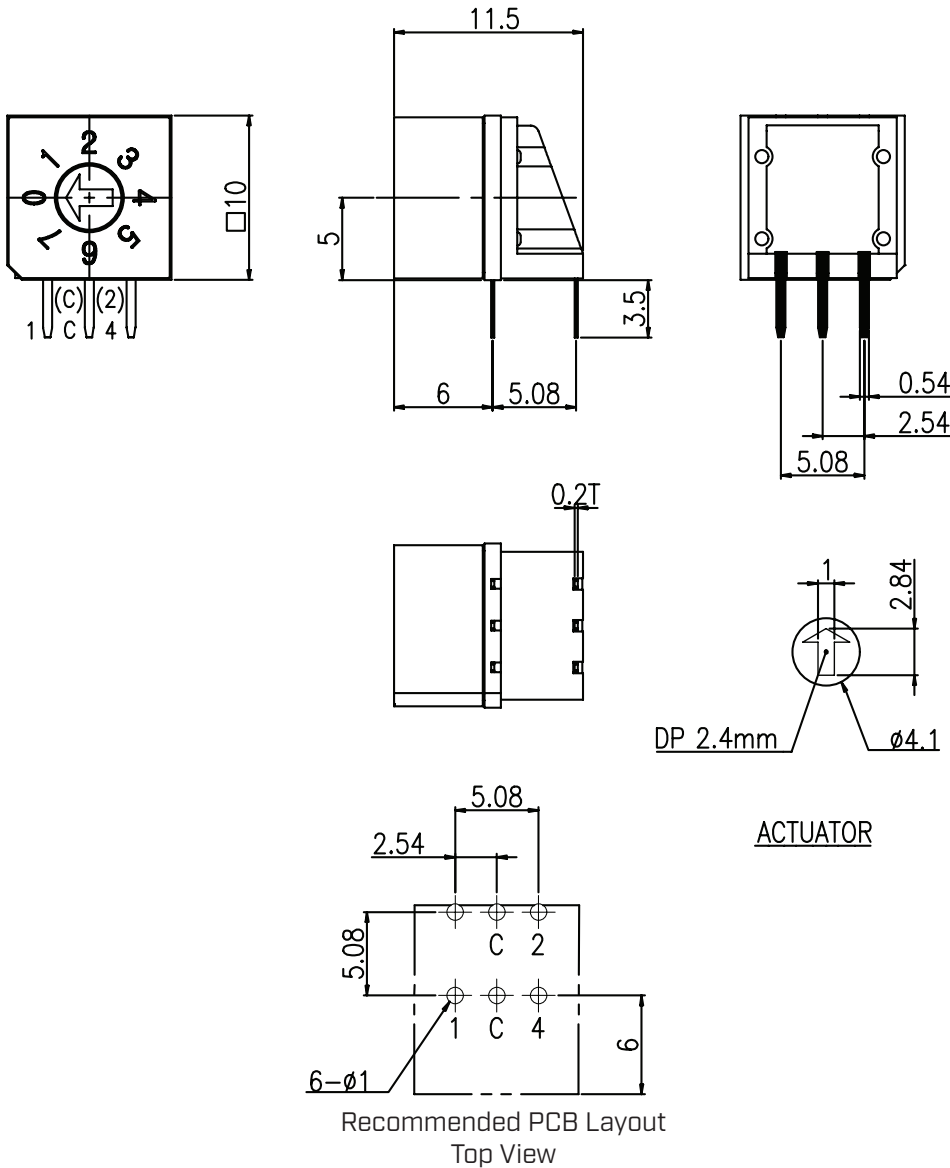
ACTUATOR

## MECHANICAL DRAWING (8 POSITION, 5.08 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified



| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |

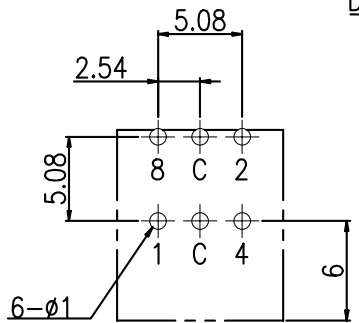
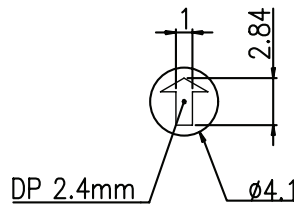
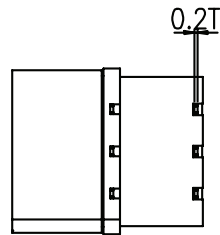
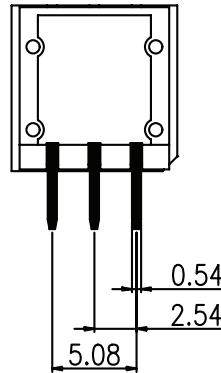
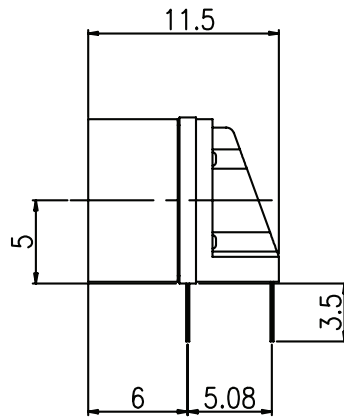
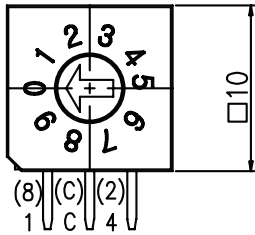
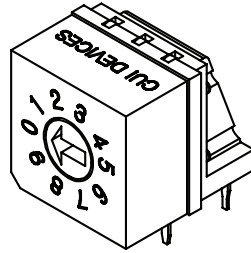


| ON ●       |      |   |   |   |   |
|------------|------|---|---|---|---|
| OFF ○      | CODE |   |   |   |   |
| TYPE       | POS  | C | 1 | 2 | 4 |
| 8 POSITION | 0    | ● | ○ | ○ | ○ |
|            | 1    | ● | ● | ○ | ○ |
|            | 2    | ● | ○ | ● | ○ |
|            | 3    | ● | ● | ● | ○ |
|            | 4    | ● | ○ | ○ | ● |
|            | 5    | ● | ● | ○ | ● |
|            | 6    | ● | ○ | ● | ● |
|            | 7    | ● | ● | ● | ● |

## MECHANICAL DRAWING (10 POSITION, 5.08 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



Recommended PCB Layout  
 Top View

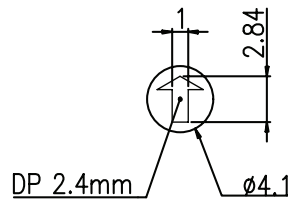
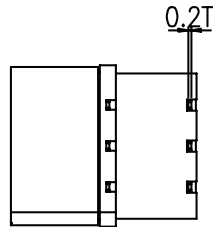
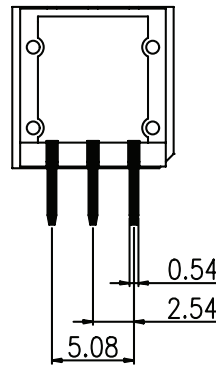
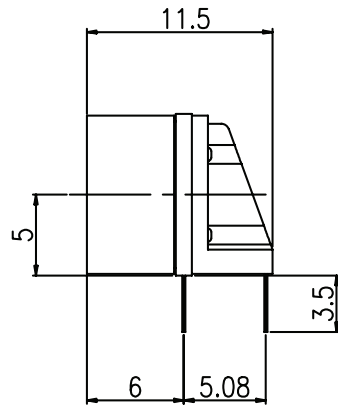
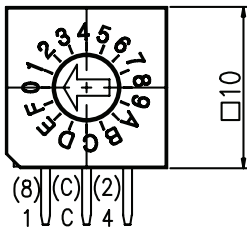
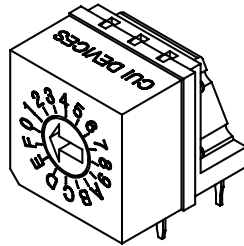
| TYPE        | POS | CODE |   |   |   |   |
|-------------|-----|------|---|---|---|---|
|             |     | C    | 1 | 2 | 4 | 8 |
| 10 POSITION | 0   | ●    | ○ | ○ | ○ | ○ |
|             | 1   | ●    | ● | ○ | ○ | ○ |
|             | 2   | ●    | ○ | ● | ○ | ○ |
|             | 3   | ●    | ● | ● | ○ | ○ |
|             | 4   | ●    | ○ | ○ | ● | ○ |
|             | 5   | ●    | ● | ○ | ● | ○ |
|             | 6   | ●    | ○ | ● | ● | ○ |
|             | 7   | ●    | ● | ● | ● | ○ |
|             | 8   | ●    | ○ | ○ | ○ | ● |
|             | 9   | ●    | ● | ○ | ○ | ● |



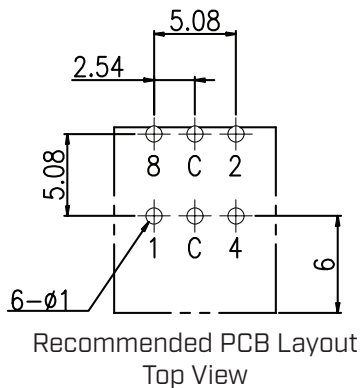
## MECHANICAL DRAWING (16 POSITION, 5.08 MM PITCH)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM (UL94HB)      | gray          |
| cover       | PA66 (UL94V-0)    | black         |
| base        | PA66 (UL94V-0)    | black         |
| terminals   | phosphorus bronze | Ni/Au         |



| TYPE        | POS | CODE |   |   |   |   |
|-------------|-----|------|---|---|---|---|
|             |     | C    | 1 | 2 | 4 | 8 |
| 16 POSITION | 0   | ●    | ○ | ○ | ○ | ○ |
|             | 1   | ●    | ● | ○ | ○ | ○ |
|             | 2   | ●    | ○ | ● | ○ | ○ |
|             | 3   | ●    | ● | ● | ○ | ○ |
|             | 4   | ●    | ○ | ○ | ● | ○ |
|             | 5   | ●    | ● | ○ | ● | ○ |
|             | 6   | ●    | ○ | ● | ● | ○ |
|             | 7   | ●    | ● | ● | ● | ○ |
|             | 8   | ●    | ○ | ○ | ○ | ● |
|             | 9   | ●    | ● | ○ | ○ | ● |
|             | A   | ●    | ○ | ● | ○ | ● |
|             | B   | ●    | ● | ● | ○ | ● |
|             | C   | ●    | ○ | ○ | ● | ● |
|             | D   | ●    | ● | ○ | ● | ● |
|             | E   | ●    | ○ | ● | ● | ● |
|             | F   | ●    | ● | ● | ● | ● |



ACTUATOR

## PACKAGING

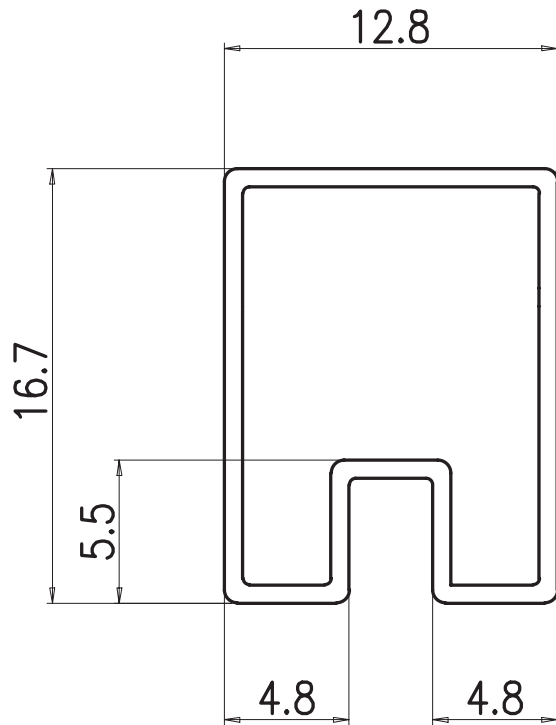
units: mm

Tube Size [2.54 mm pitch]: 16.7 x 12.8 x 540 mm

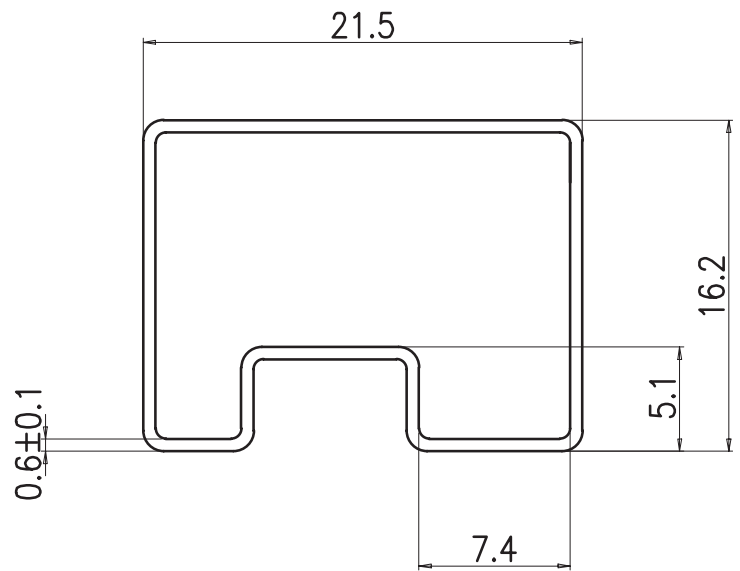
Tube Size [5.08 mm pitch]: 16.2 x 21.5 x 540 mm

Tube QTY: 50 pcs per tube

### 2.54 MM PITCH MODELS



### 5.08 MM PITCH MODELS



## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 05/31/2023 |

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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