

**SERIES:** RDS6-1011-RA | **DESCRIPTION:** ROTARY DIP SWITCH**FEATURES**

- 4, 8, 10, & 16 positions
- removable cap options
- 2.54 and 5.08 pitch

**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                                    |     |        |     |         |

**SOLDERABILITY**

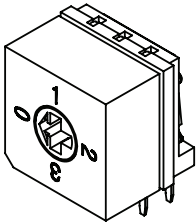
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds  |     |     | 350 | °C    |
| wave soldering | for maximum 5 seconds  |     |     | 260 | °C    |

**PART NUMBER KEY**

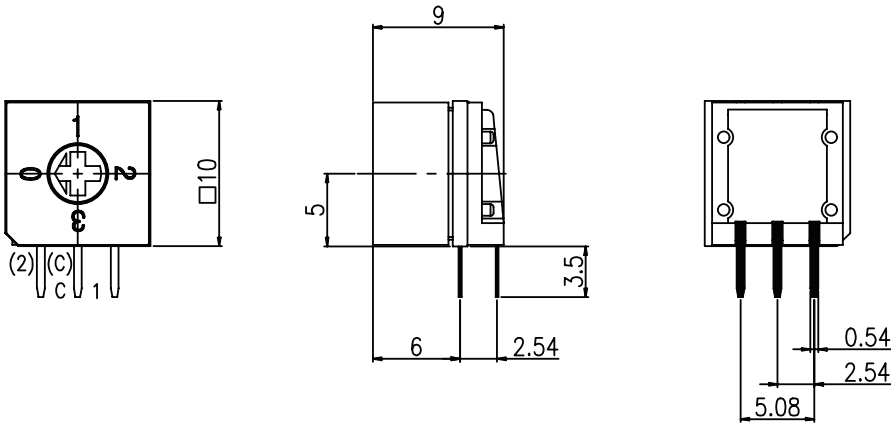
|             |                                                                                                   |               |                                                                                                          |             |                                          |            |
|-------------|---------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------|-------------|------------------------------------------|------------|
| <b>RDS6</b> | <b>- XXS</b>                                                                                      | <b>- 1011</b> | <b>- X</b>                                                                                               | <b>- RA</b> | <b>- XXX</b>                             | <b>- D</b> |
| Base Number | No. of Positions:<br>4 = 4 Positions<br>8 = 8 Positions<br>10 = 10 Positions<br>16 = 16 Positions |               | Actuator Cap:<br>"blank" = Without Cap<br>1 = Notched Cap<br>2 = Raised Slotted Cap<br>3 = Numbered Dial |             | Pitch:<br>254 = 2.54 mm<br>508 = 5.08 mm |            |

MECHANICAL DRAWING (4 POSITION, 2.54 MM PITCH)

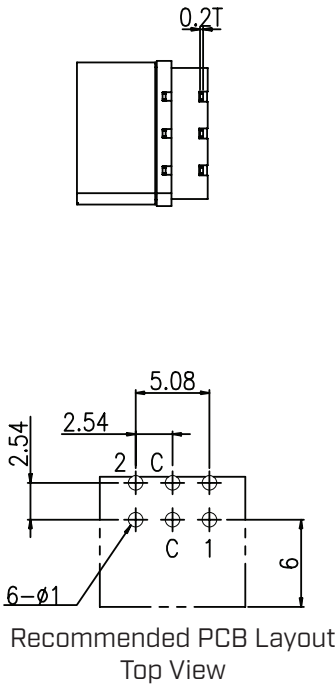
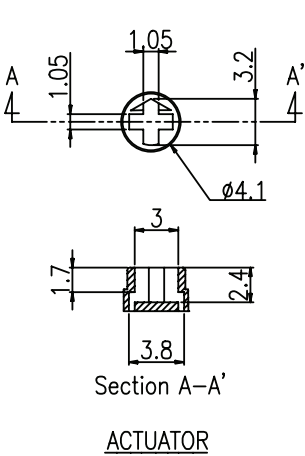
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



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

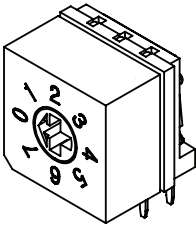


| ON ●       |      |   |   |   |
|------------|------|---|---|---|
| OFF ○      | CODE |   |   |   |
| TYPE       | POS  | C | 1 | 2 |
| 4 POSITION | 0    | ● | ○ | ○ |
|            | 1    | ● | ● | ○ |
|            | 2    | ● | ○ | ● |
|            | 3    | ● | ● | ● |

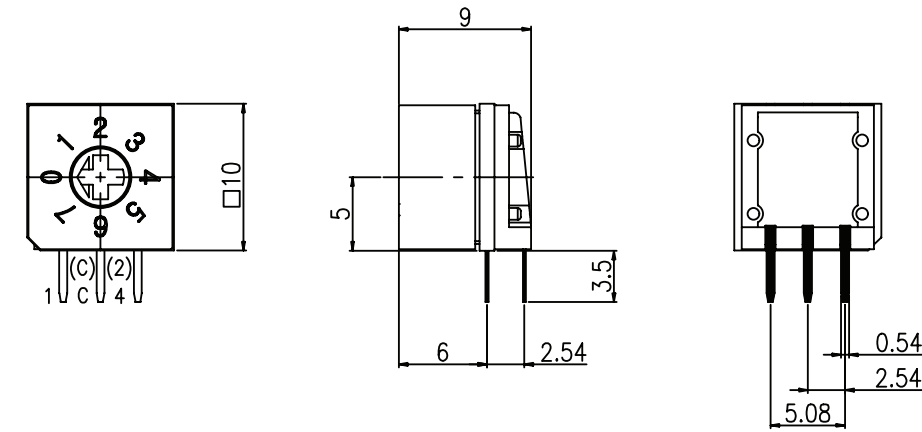


MECHANICAL DRAWING (8 POSITION, 2.54 MM PITCH)

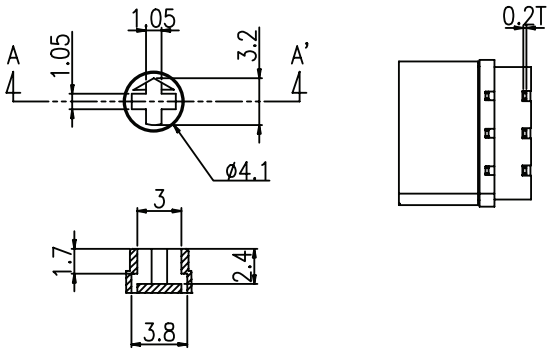
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



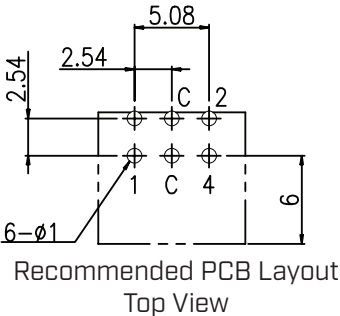
| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM [UL94HB]      | gray          |
| cover       | PA66 [UL94V-0]    | black         |
| base        | PA66 [UL94V-0]    | black         |
| terminals   | phosphorus bronze | Ni/Au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



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

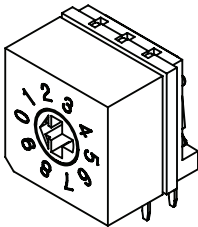


Section A-A'  
ACTUATOR

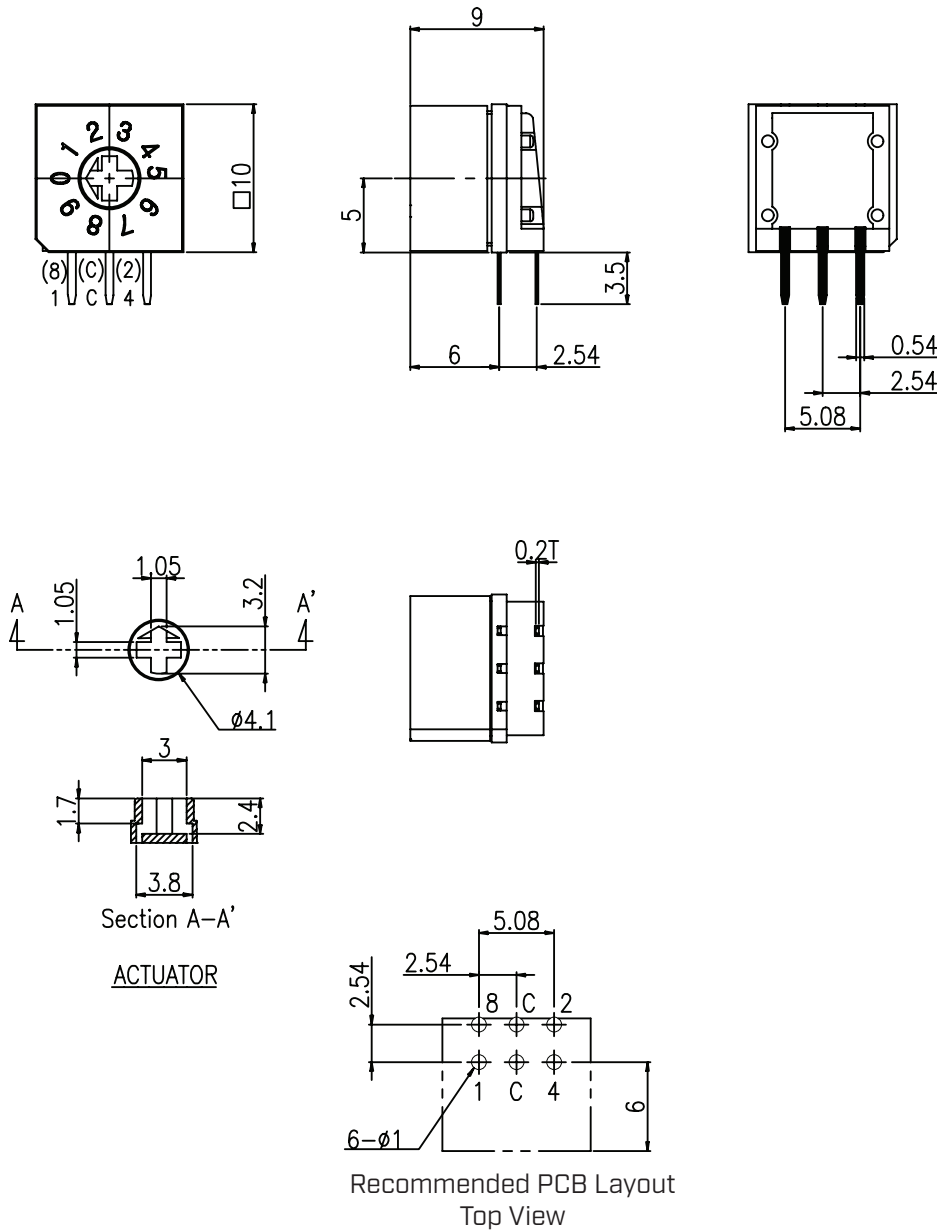


MECHANICAL DRAWING (10 POSITION, 2.54 MM PITCH)

units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



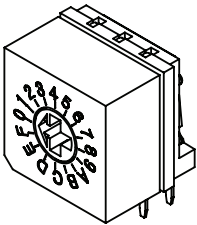
| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM [UL94HB]      | gray          |
| cover       | PA66 [UL94V-0]    | black         |
| base        | PA66 [UL94V-0]    | black         |
| terminals   | phosphorus bronze | Ni/Au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



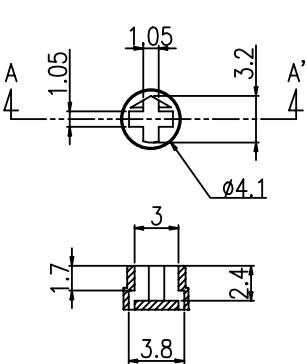
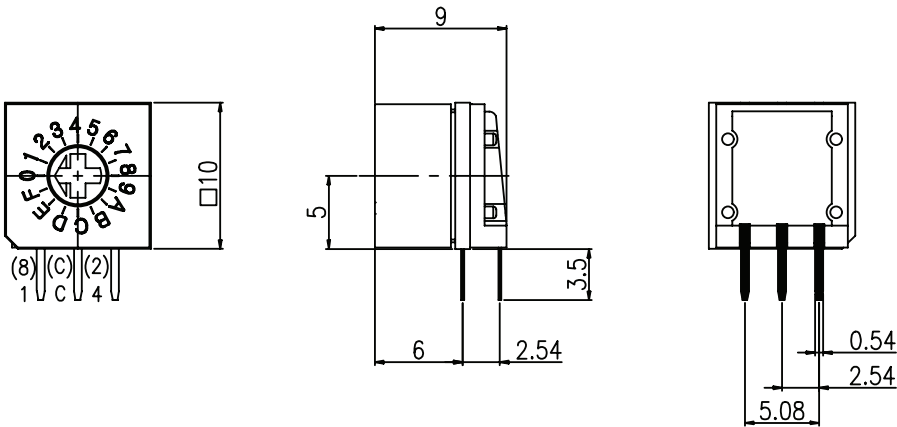
| ON ●        |      |   |   |   |   |   |
|-------------|------|---|---|---|---|---|
| OFF ○       | CODE |   |   |   |   |   |
| TYPE        | POS  | C | 1 | 2 | 4 | 8 |
| 10 POSITION | 0    | ● | ○ | ○ | ○ | ○ |
|             | 1    | ● | ● | ○ | ○ | ○ |
|             | 2    | ● | ○ | ● | ○ | ○ |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

MECHANICAL DRAWING (16 POSITION, 2.54 MM PITCH)

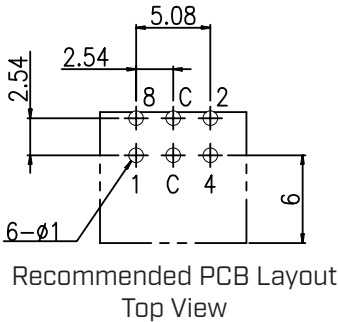
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



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



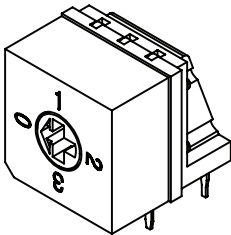
Section A-A'  
ACTUATOR



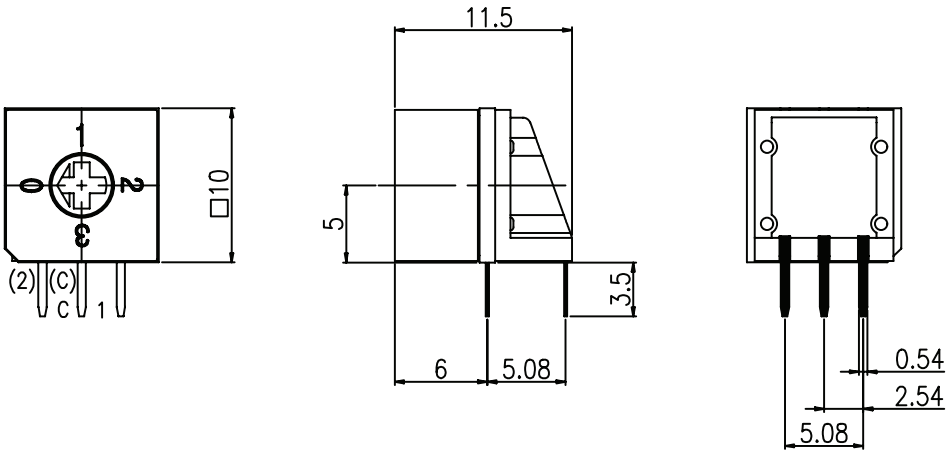
| ON ●        |      |   |   |   |   |   |
|-------------|------|---|---|---|---|---|
| OFF ○       | CODE |   |   |   |   |   |
| TYPE        | POS  | C | 1 | 2 | 4 | 8 |
| 16 POSITION | 0    | ● | ○ | ○ | ○ | ○ |
|             | 1    | ● | ● | ○ | ○ | ○ |
|             | 2    | ● | ○ | ● | ○ | ○ |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

MECHANICAL DRAWING (4 POSITION, 5.08 MM PITCH)

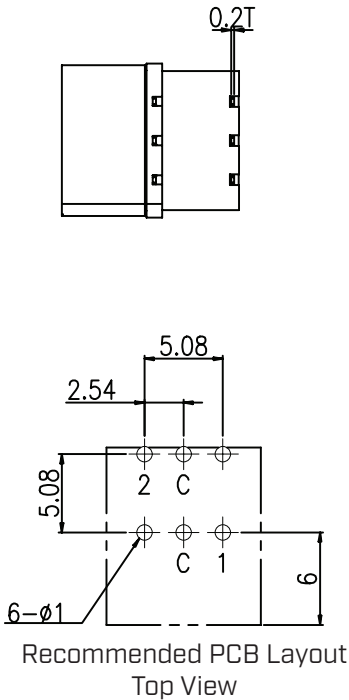
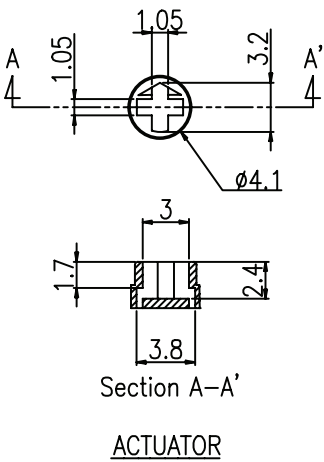
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



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

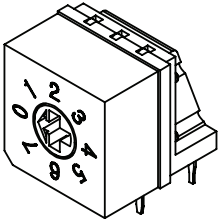


| ON ●       |      |   |   |   |
|------------|------|---|---|---|
| OFF ○      | CODE |   |   |   |
| TYPE       | POS  | C | 1 | 2 |
| 4 POSITION | 0    | ● | ○ | ○ |
|            | 1    | ● | ● | ○ |
|            | 2    | ● | ○ | ● |
|            | 3    | ● | ● | ● |

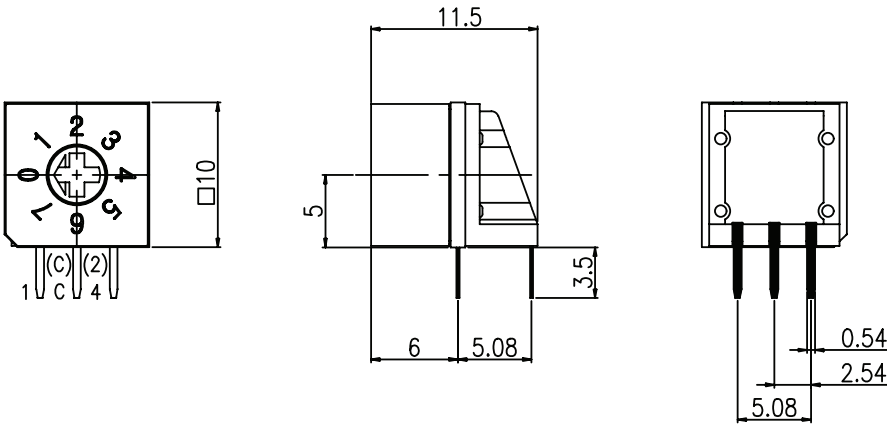


MECHANICAL DRAWING (8 POSITION, 5.08 MM PITCH)

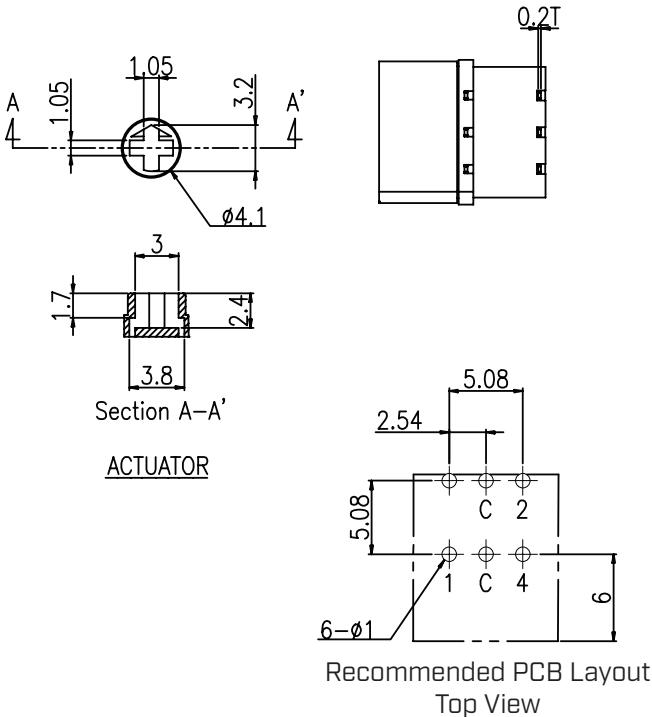
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



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

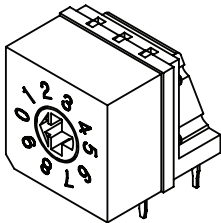


| ON ●       |      |   |   |   |   |
|------------|------|---|---|---|---|
| OFF ○      | CODE |   |   |   |   |
| TYPE       | POS  | C | 1 | 2 | 4 |
| 8 POSITION | 0    | ● | ○ | ○ | ○ |
|            | 1    | ● | ● | ○ | ○ |
|            | 2    | ● | ○ | ● | ○ |
|            | 3    | ● | ● | ● | ○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

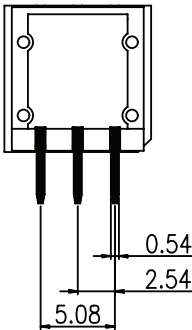
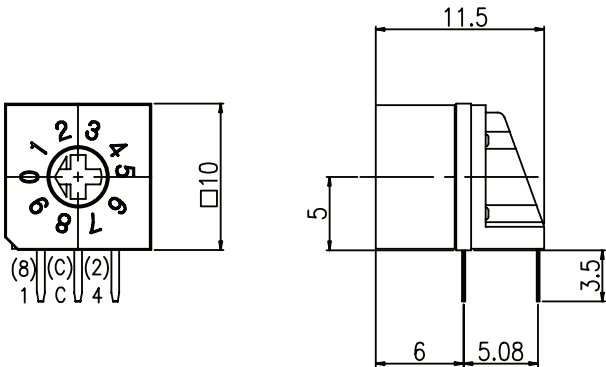


MECHANICAL DRAWING (10 POSITION, 5.08 MM PITCH)

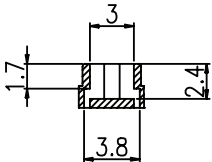
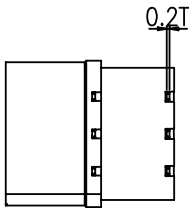
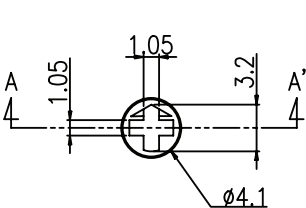
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



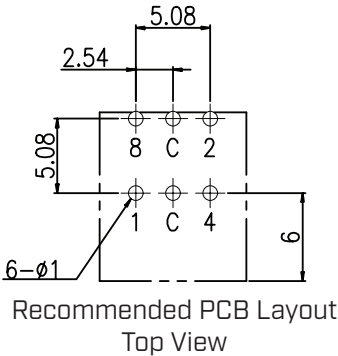
| DESCRIPTION | MATERIAL          | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator    | POM [UL94HB]      | gray          |
| cover       | PA66 [UL94V-0]    | black         |
| base        | PA66 [UL94V-0]    | black         |
| terminals   | phosphorus bronze | Ni/Au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



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

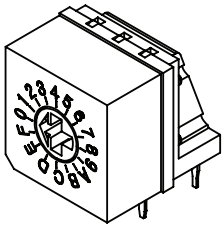


Section A-A'  
ACTUATOR

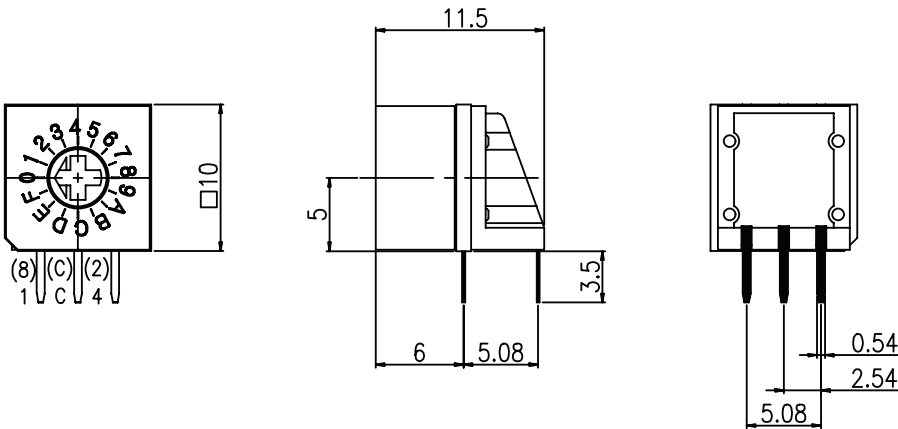


MECHANICAL DRAWING (16 POSITION, 5.08 MM PITCH)

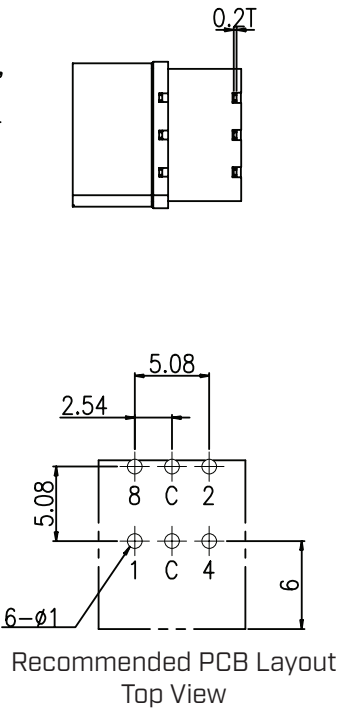
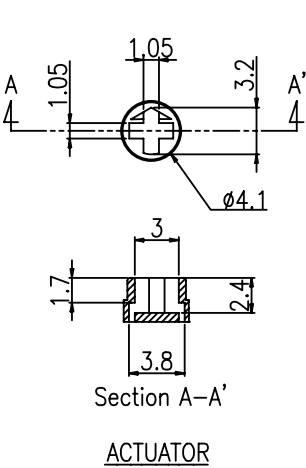
units: mm  
tolerance: ±0.3 mm  
unless otherwise specified



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



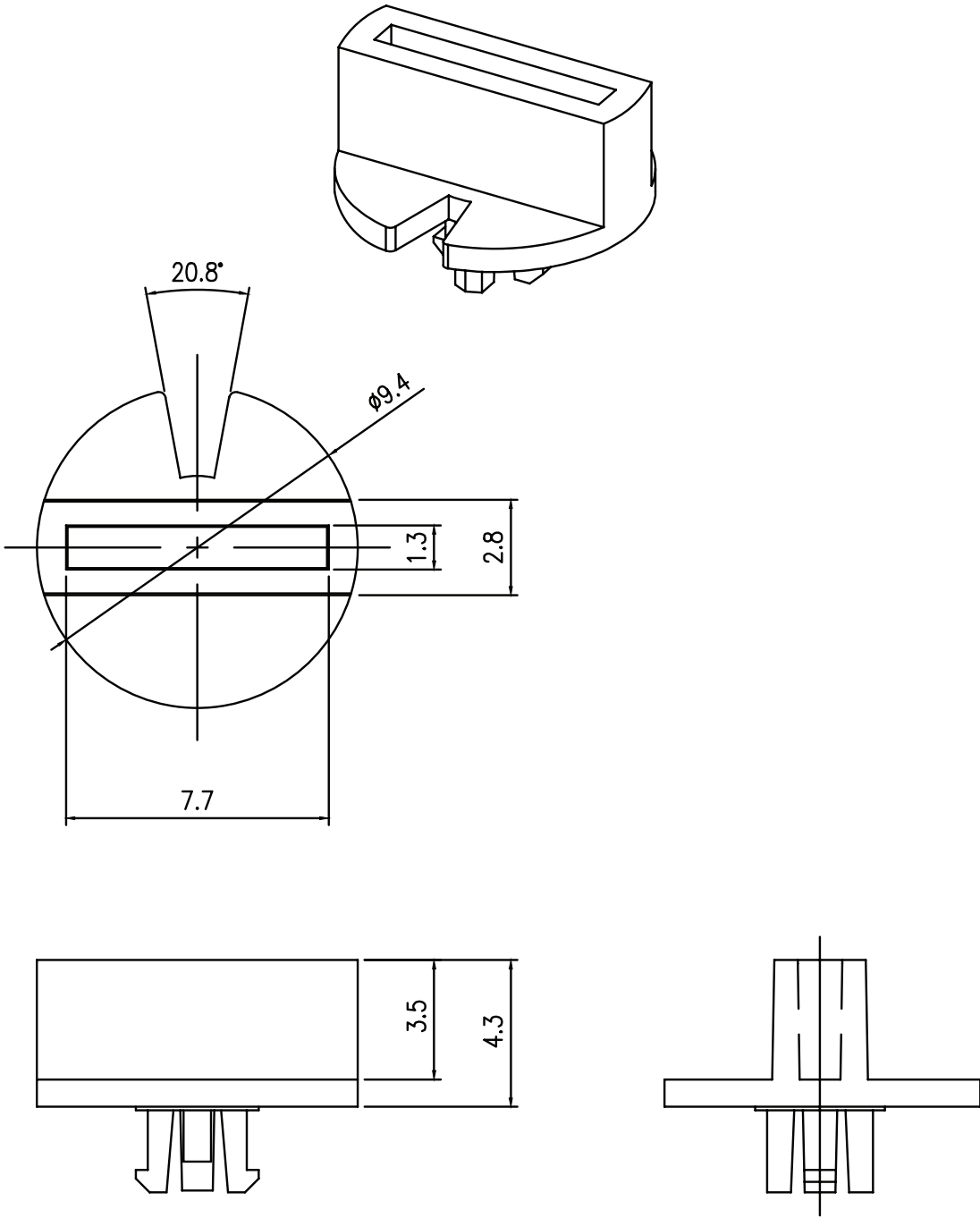
| ON ●        |      |   |   |   |   |   |
|-------------|------|---|---|---|---|---|
| OFF ○       | CODE |   |   |   |   |   |
| TYPE        | POS  | C | 1 | 2 | 4 | 8 |
| 16 POSITION | 0    | ● | ○ | ○ | ○ | ○ |
|             | 1    | ● | ● | ○ | ○ | ○ |
|             | 2    | ● | ○ | ● | ○ | ○ |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



MECHANICAL DRAWING (NOTCHED CAP)

units: mm  
tolerance: ±0.1 mm  
unless otherwise specified

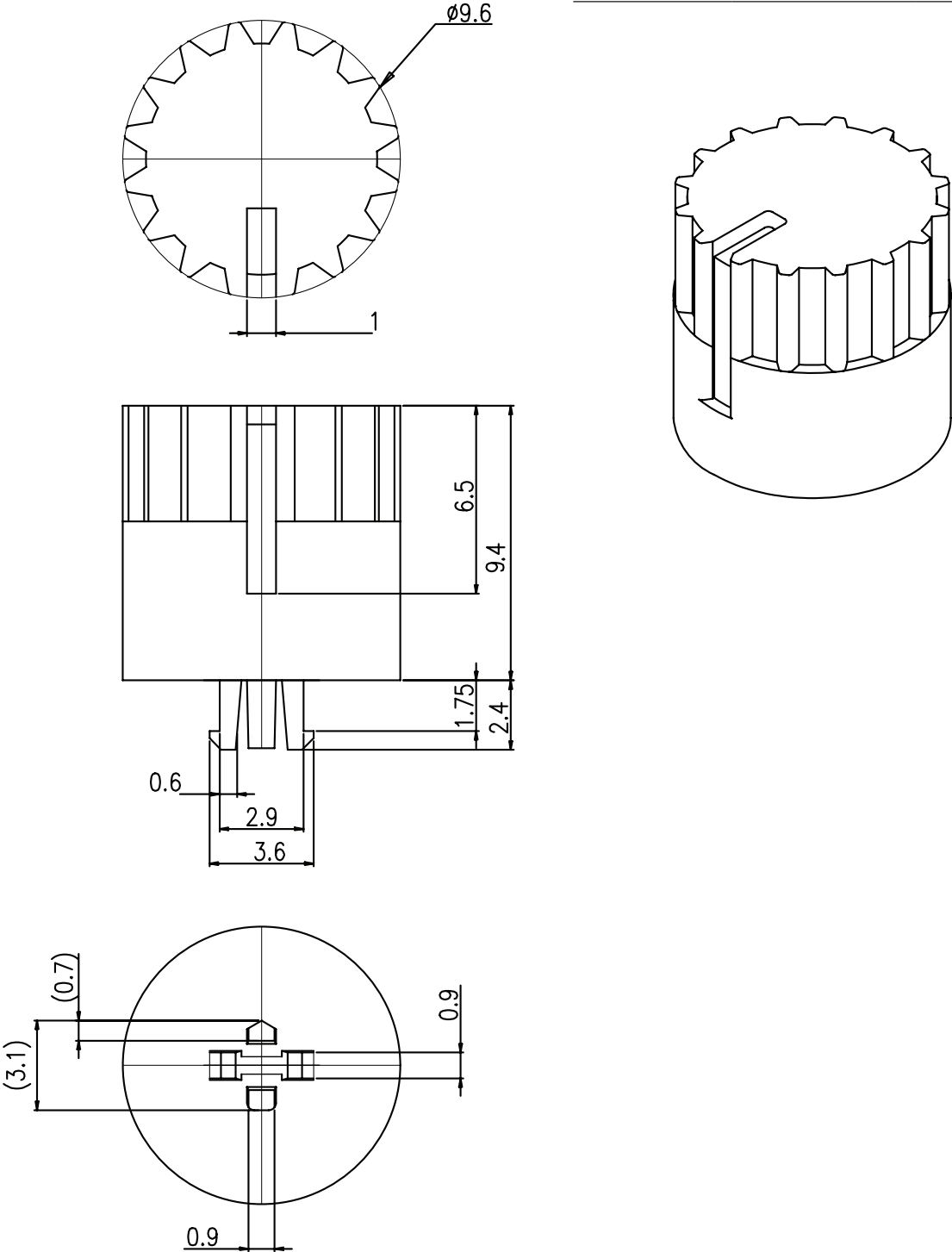
| DESCRIPTION | MATERIAL       | PLATING/COLOR |
|-------------|----------------|---------------|
| housing     | PA66 (UL94V-0) | gray          |



MECHANICAL DRAWING (RAISED SLOTTED CAP)

units: mm  
tolerance: ±0.3 mm  
unless otherwise specified

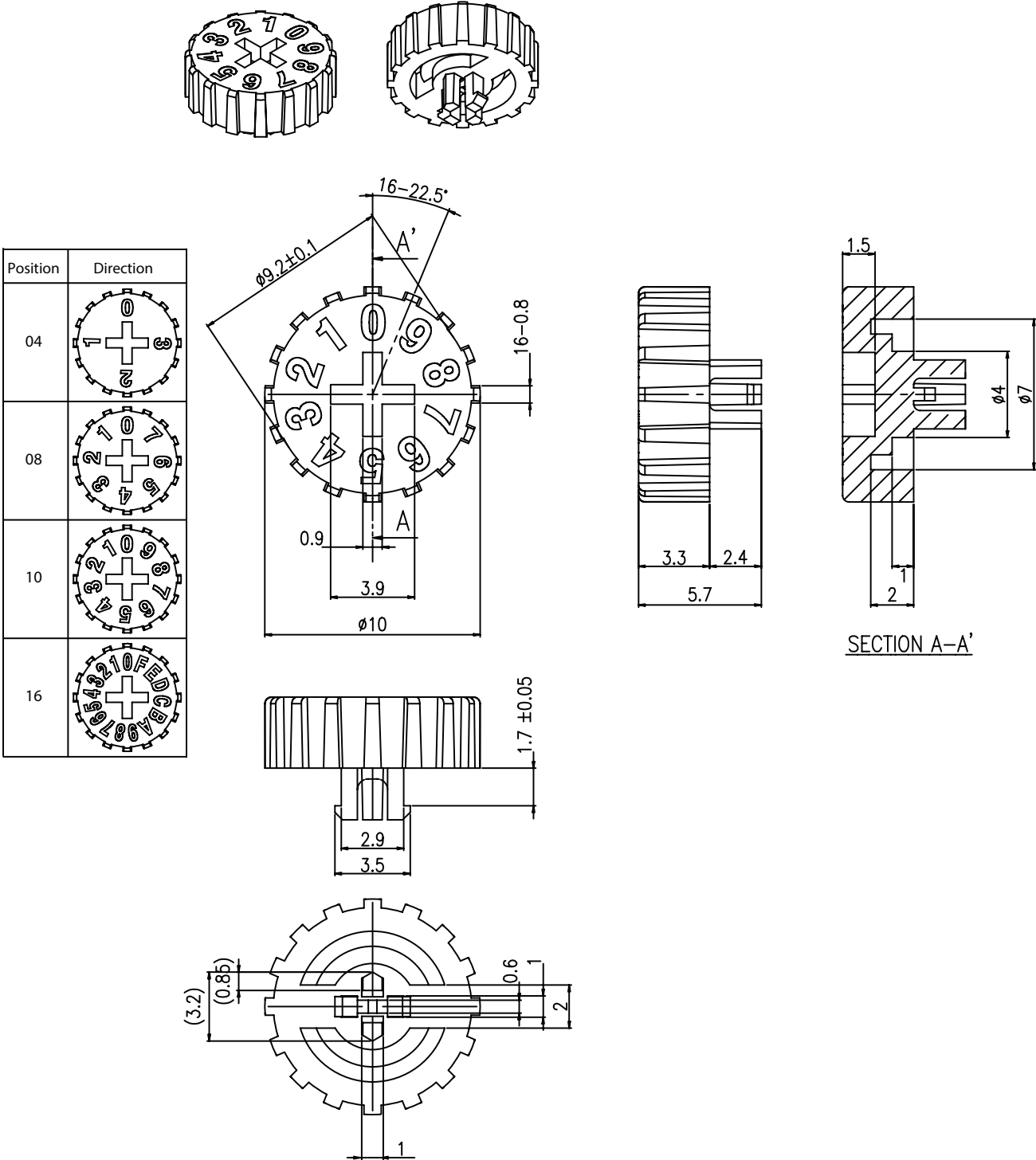
| DESCRIPTION | MATERIAL       | PLATING/COLOR |
|-------------|----------------|---------------|
| housing     | PA66 (UL94V-0) | black         |



MECHANICAL DRAWING (NUMBERED DIAL)

units: mm  
tolerance: ±0.3 mm  
unless otherwise specified

| DESCRIPTION | MATERIAL       | PLATING/COLOR          |
|-------------|----------------|------------------------|
| housing     | PA66 (UL94V-0) | red with white letters |



## PACKAGING

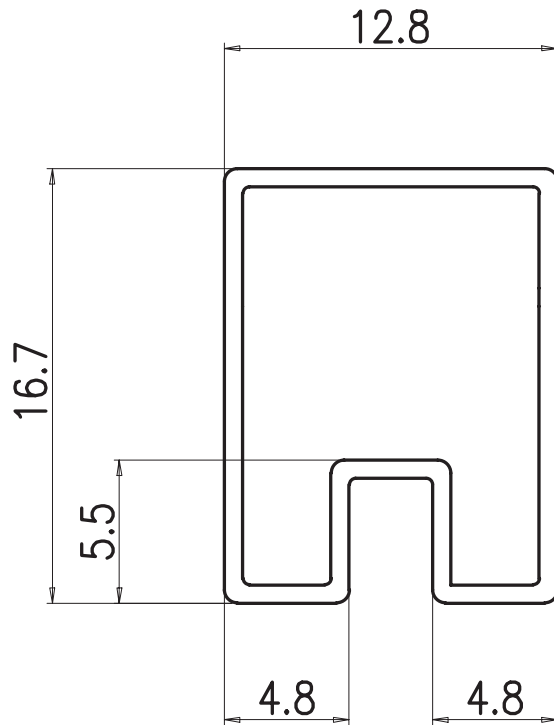
units: mm

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

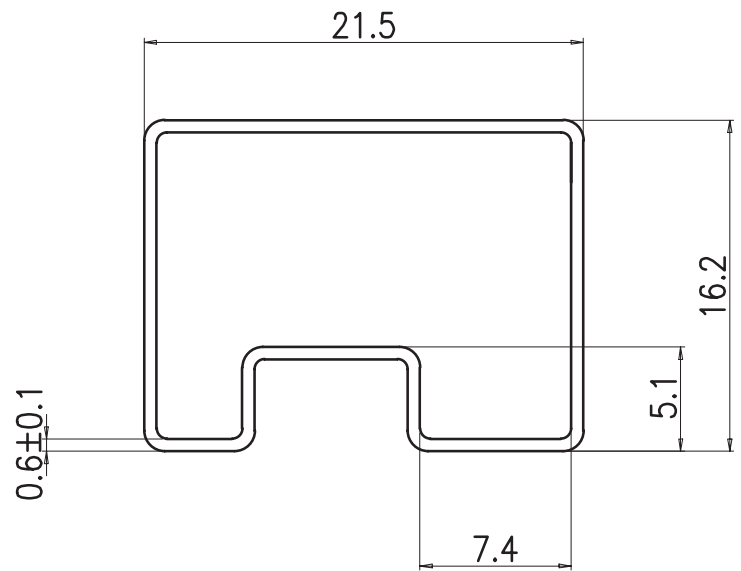
Tube Size [5.08 mm pitch]: 16.2 x 21.5 x 540 mm

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 |
| 1.01 | CUI Devices rebranded to Same Sky | 09/12/2024 |

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



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

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