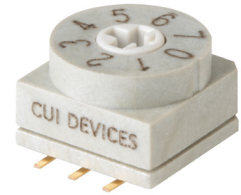


**SERIES:** RDS3-1065-SMT | **DESCRIPTION:** ROTARY DIP SWITCH

**FEATURES**

- 4, 8, 10, & 16 positions
- removable cap options
- surface mount


**SPECIFICATIONS**

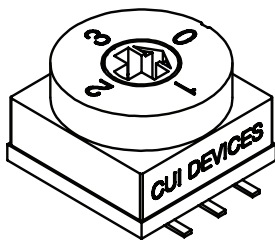
| parameter             | conditions/description                 | min | typ    | max | units   |
|-----------------------|--|-----|--------|-----|---------|
| rated voltage         | switching                              |     |        | 42  | Vdc     |
|                       | non-switching                          |     |        | 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                                    |     |        |     |         |

**PART NUMBER KEY**

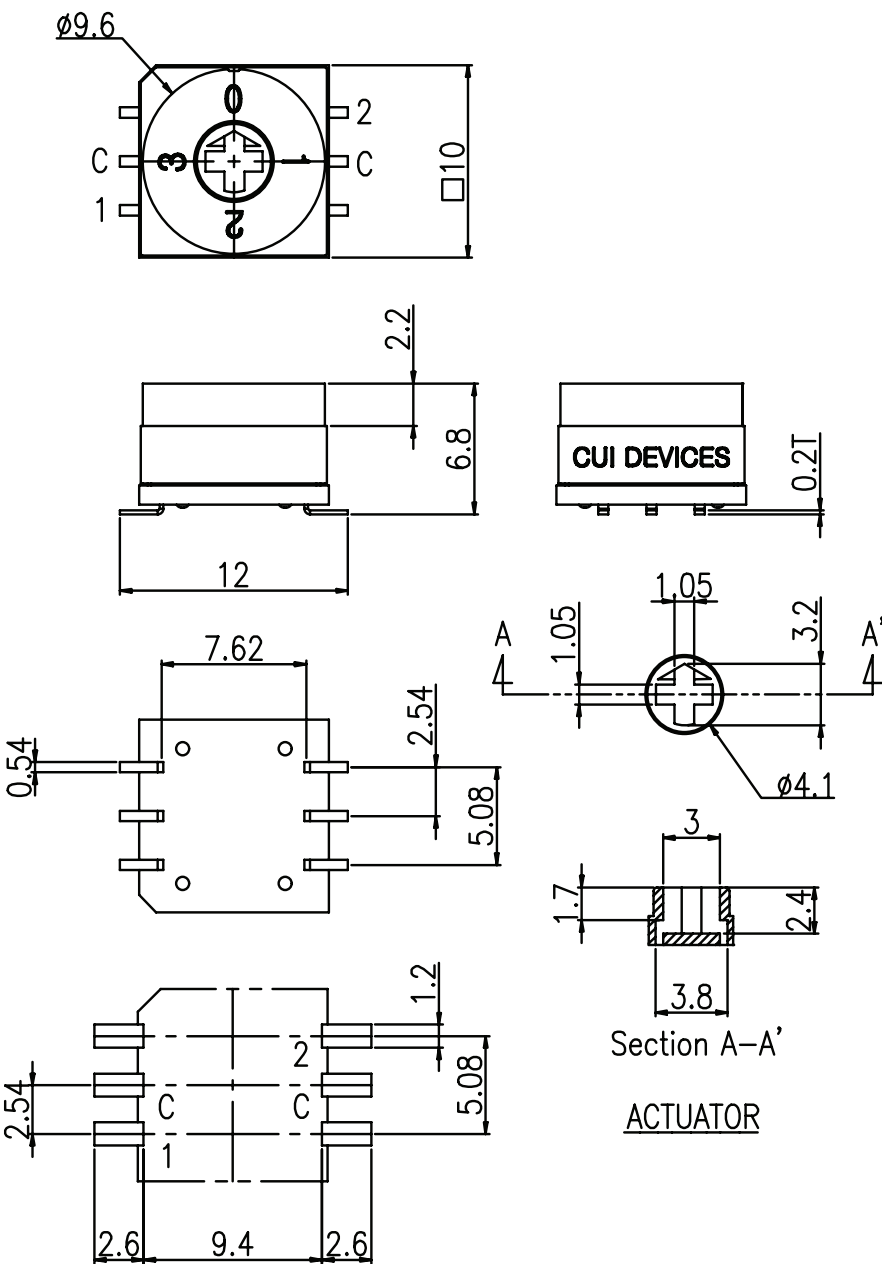
|             |             |   |   |   |             |   |  |   |            |   |           |
|-------------|-------------|---|---|---|-------------|---|--|---|------------|---|-----------|
|             | <b>RDS3</b> | - | <b>XXS</b>  | - | <b>1065</b> | - | <b>X</b>   | - | <b>SMT</b> | - | <b>TR</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 |   |            |   |           |

## MECHANICAL DRAWING (POSITION 4)

units: mm  
 tolerance: ±0.1 mm  
 unless otherwise specified



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

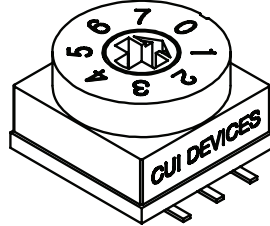


| ON ●       |      |   |   |   |
|------------|------|---|---|---|
| OFF ○      | CODE |   |   |   |
| TYPE       | POS  | C | 1 | 2 |
| 4 POSITION | 0    | ● | ○ | ○ |
|            | 1    | ● | ● | ○ |
|            | 2    | ● | ○ | ● |
|            | 3    | ● | ● | ● |

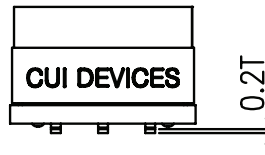
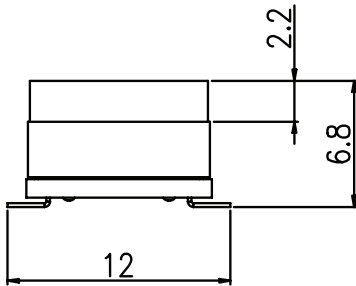
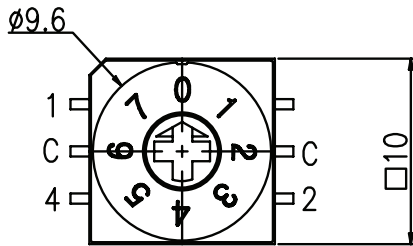
Recommended PCB Layout  
 Top View

## MECHANICAL DRAWING (POSITION 8)

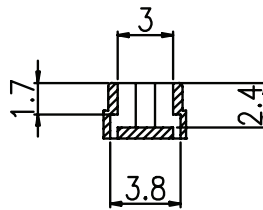
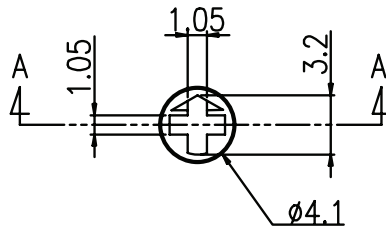
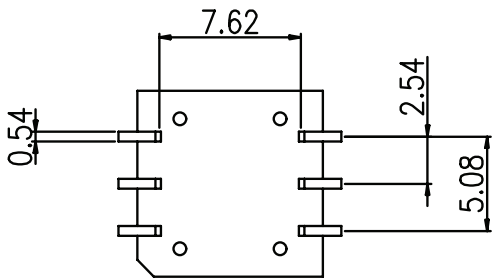
units: mm  
 tolerance: ±0.1 mm  
 unless otherwise specified



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

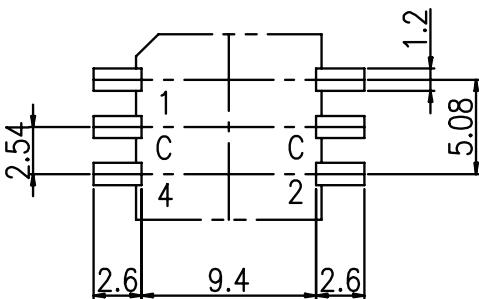


| ON ●       |      |   |   |   |   |
|------------|------|---|---|---|---|
| OFF ○      | CODE |   |   |   |   |
| TYPE       | POS  | C | 1 | 2 | 4 |
| 8 POSITION | 0    | ● | ○ | ○ | ○ |
|            | 1    | ● | ● | ○ | ○ |
|            | 2    | ● | ○ | ● | ○ |
|            | 3    | ● | ● | ● | ○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



Section A-A'

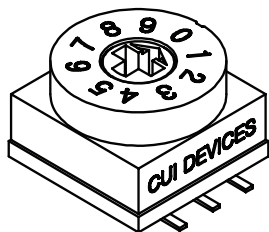
ACTUATOR



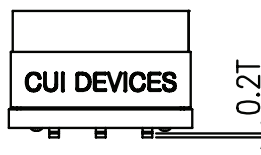
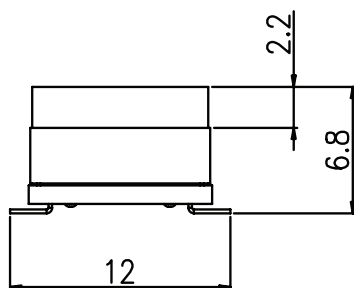
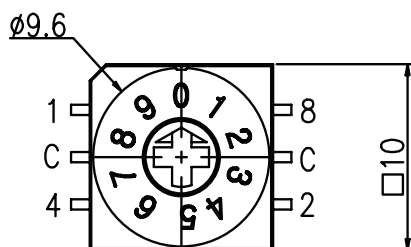
Recommended PCB Layout  
 Top View

## MECHANICAL DRAWING (POSITION 10)

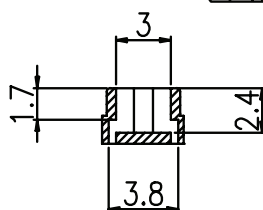
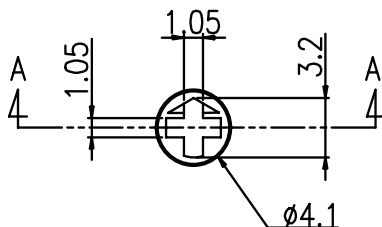
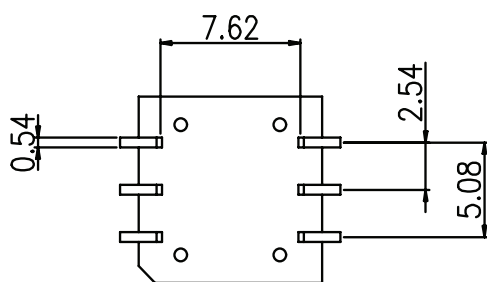
units: mm  
tolerance: ±0.1 mm  
unless otherwise specified



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

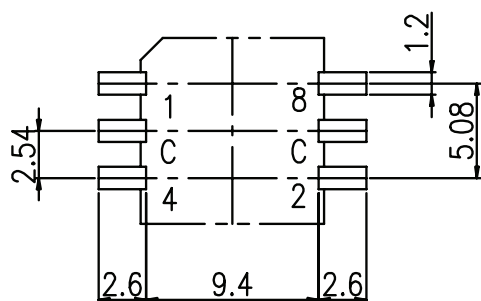


| TYPE        | POS | CODE |   |   |   |   |
|-------------|-----|------|---|---|---|---|
|             |     | C    | 1 | 2 | 4 | 8 |
| 10 POSITION | 0   | ●    | ○ | ○ | ○ | ○ |
|             | 1   | ●    | ● | ○ | ○ | ○ |
|             | 2   | ●    | ○ | ● | ○ | ○ |
|             | 3   | ●    | ●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



Section A-A'

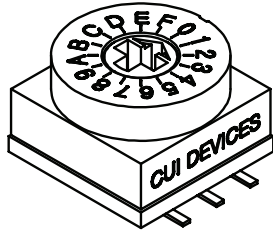
ACTUATOR



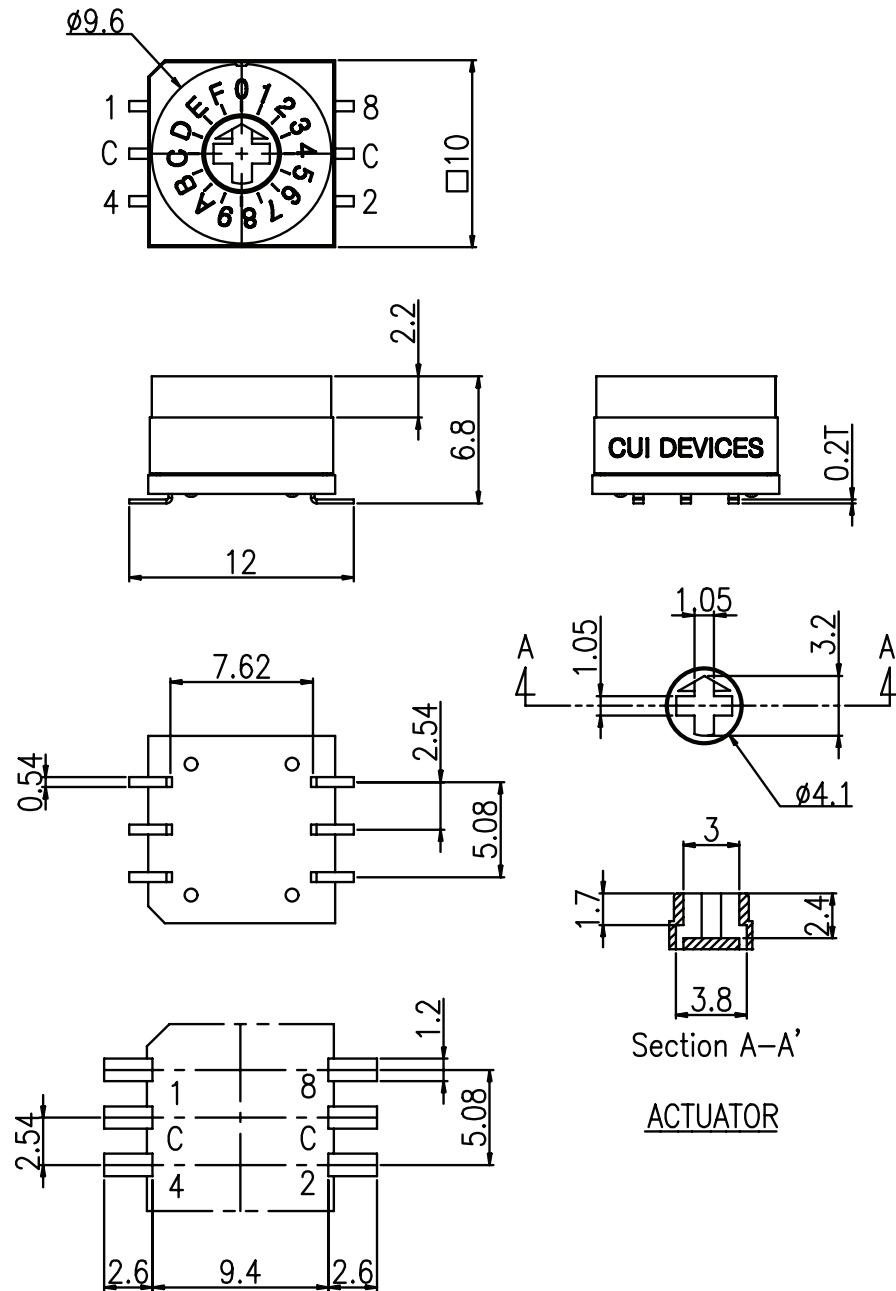
Recommended PCB Layout  
Top View

## MECHANICAL DRAWING (POSITION 16)

units: mm  
 tolerance: ±0.1 mm  
 unless otherwise specified



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



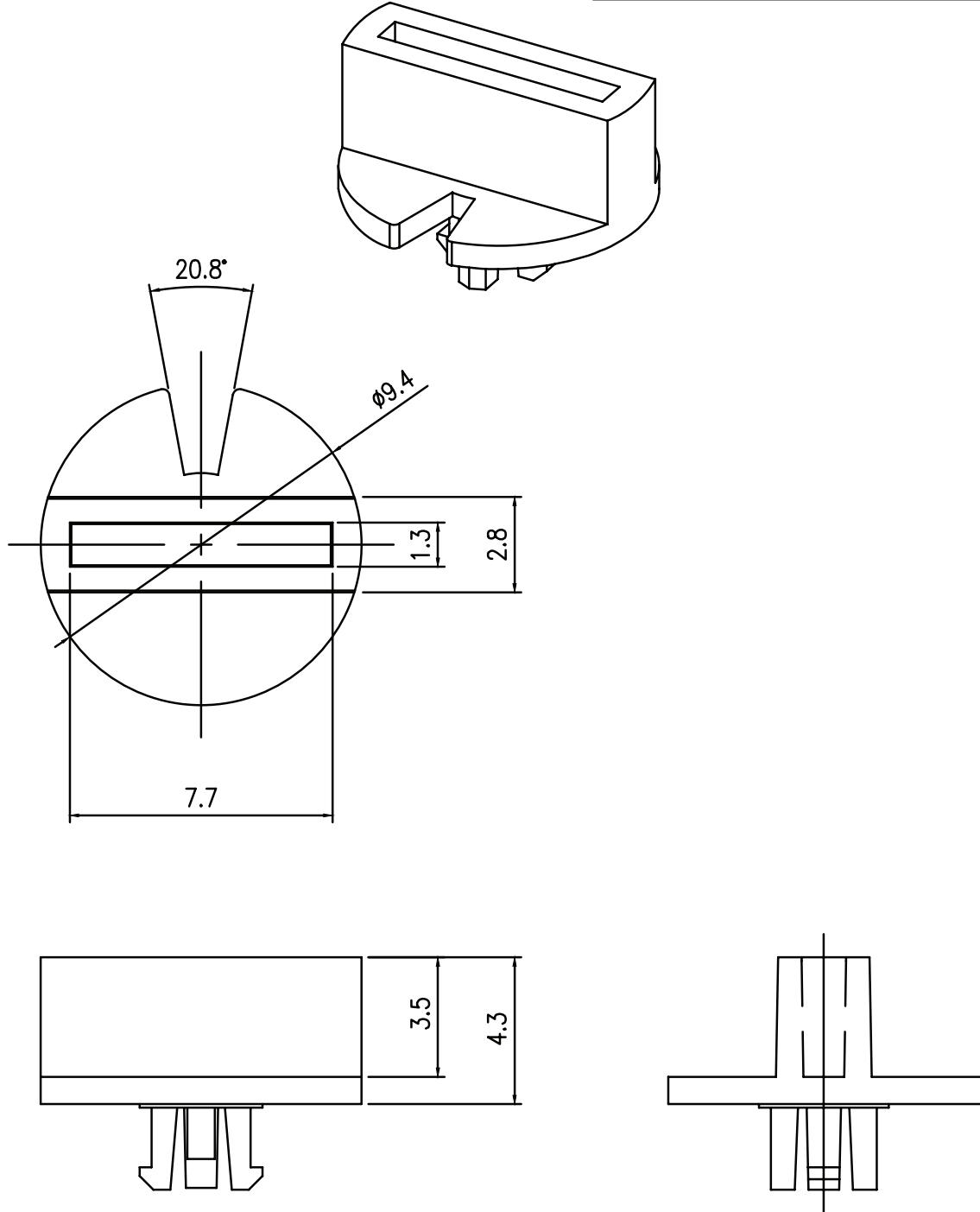
| TYPE        | POS | CODE |   |   |   |   |
|-------------|-----|------|---|---|---|---|
|             |     | C    | 1 | 2 | 4 | 8 |
| 16 POSITION | 0   | ●    | ○ | ○ | ○ | ○ |
|             | 1   | ●    | ● | ○ | ○ | ○ |
|             | 2   | ●    | ○ | ● | ○ | ○ |
|             | 3   | ●    | ●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

Recommended PCB Layout  
 Top View

## MECHANICAL DRAWING (NOTCHED CAP)

units: mm  
 tolerance: ±0.3 mm  
 unless otherwise specified

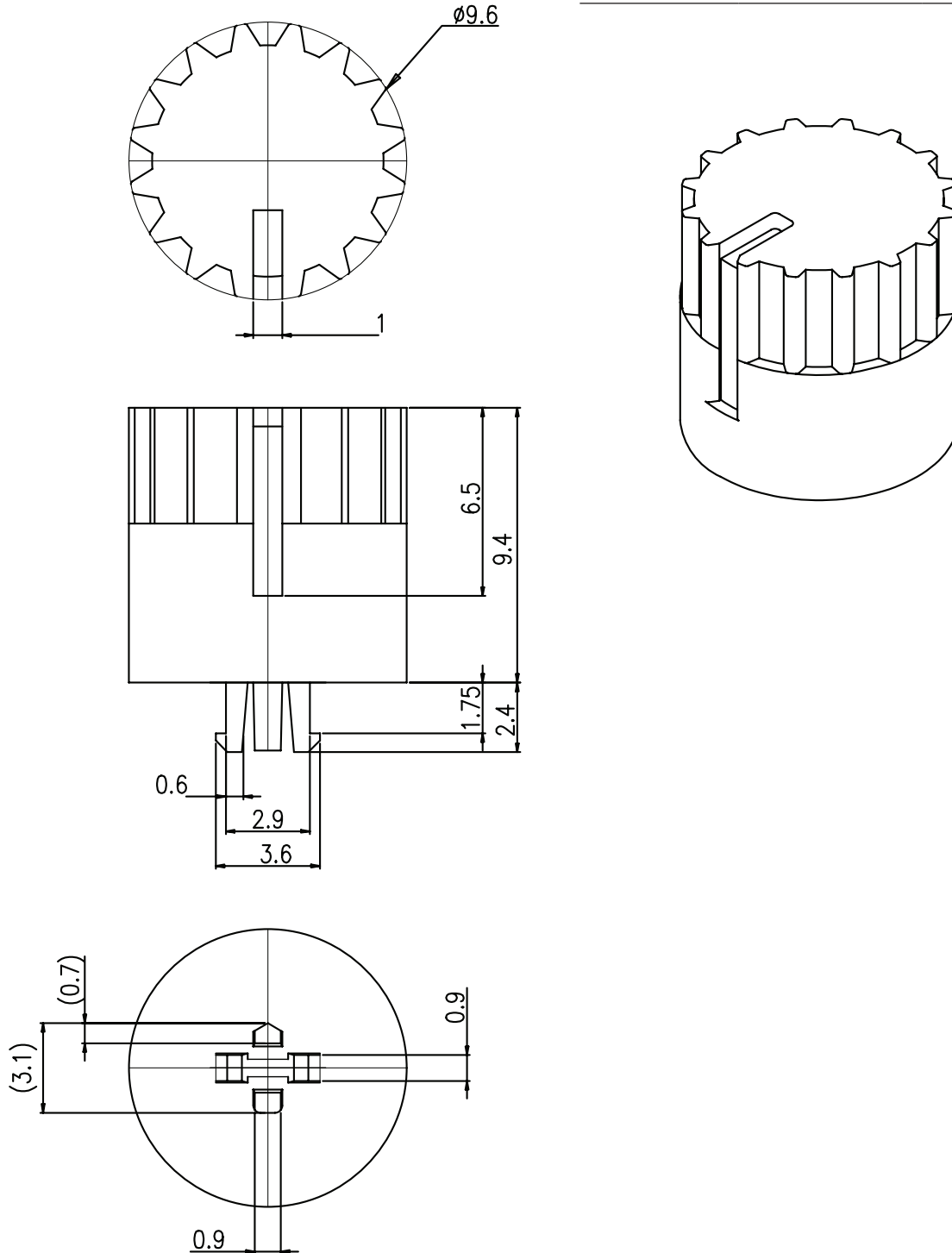
| DESCRIPTION | MATERIAL       | PLATING/COLOR |
|-------------|----------------|---------------|
| housing     | PA66 (UL94V-0) | black         |



## MECHANICAL DRAWING (RAISED SLOTTED CAP)

units: mm  
 tolerance:  $\pm 0.3$  mm  
 unless otherwise specified

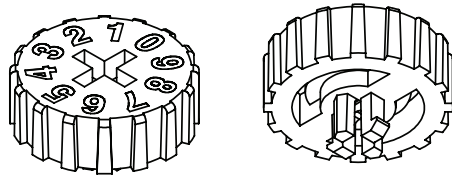
| DESCRIPTION | MATERIAL       | PLATING/COLOR |
|-------------|----------------|---------------|
| housing     | PA66 (UL94V-0) | black         |



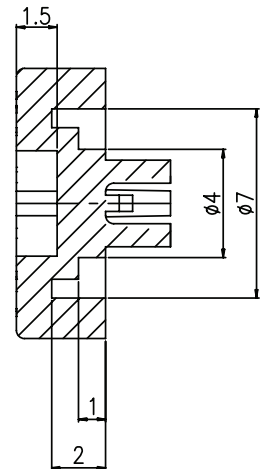
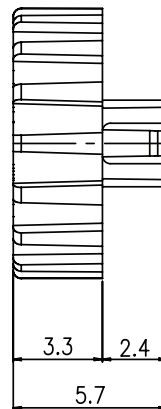
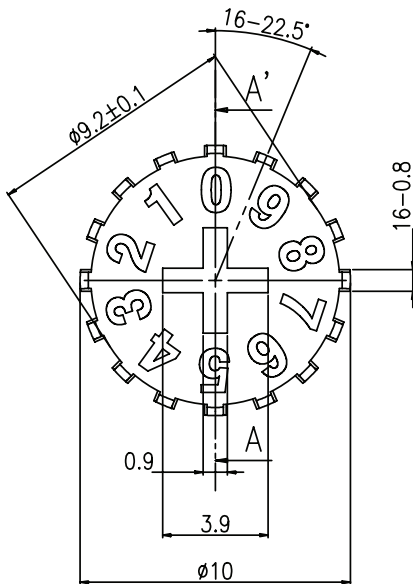
## MECHANICAL DRAWING (NUMBERED DIAL)

units: mm  
 tolerance:  $\pm 0.3$  mm  
 unless otherwise specified

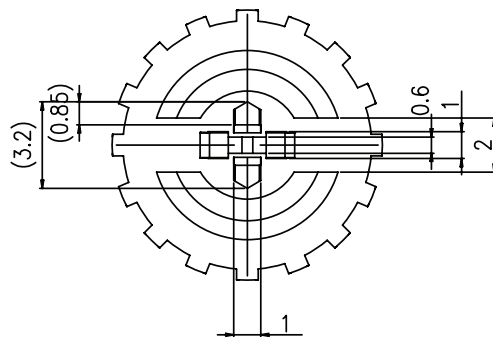
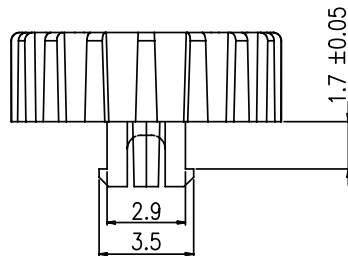
| DESCRIPTION | MATERIAL       | PLATING/COLOR |
|-------------|----------------|---------------|
| housing     | PA66 (UL94V-0) | black         |



| Position | Direction |
|----------|-----------|
| 04       |           |
| 08       |           |
| 10       |           |
| 16       |           |



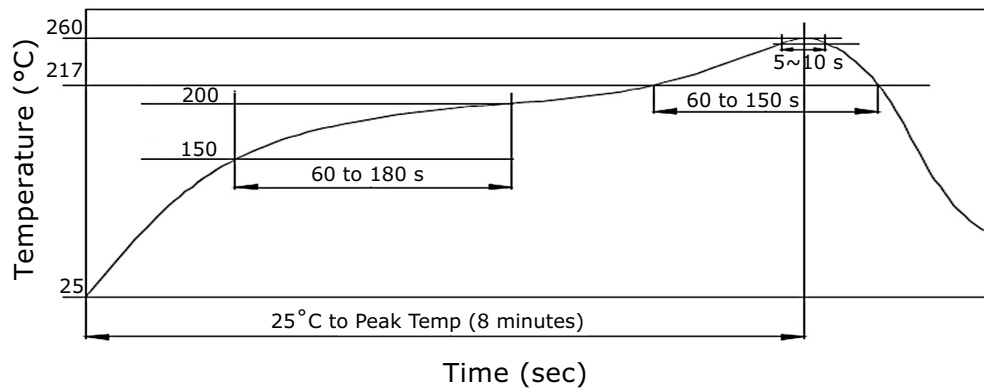
SECTION A-A'





## SOLDERABILITY

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

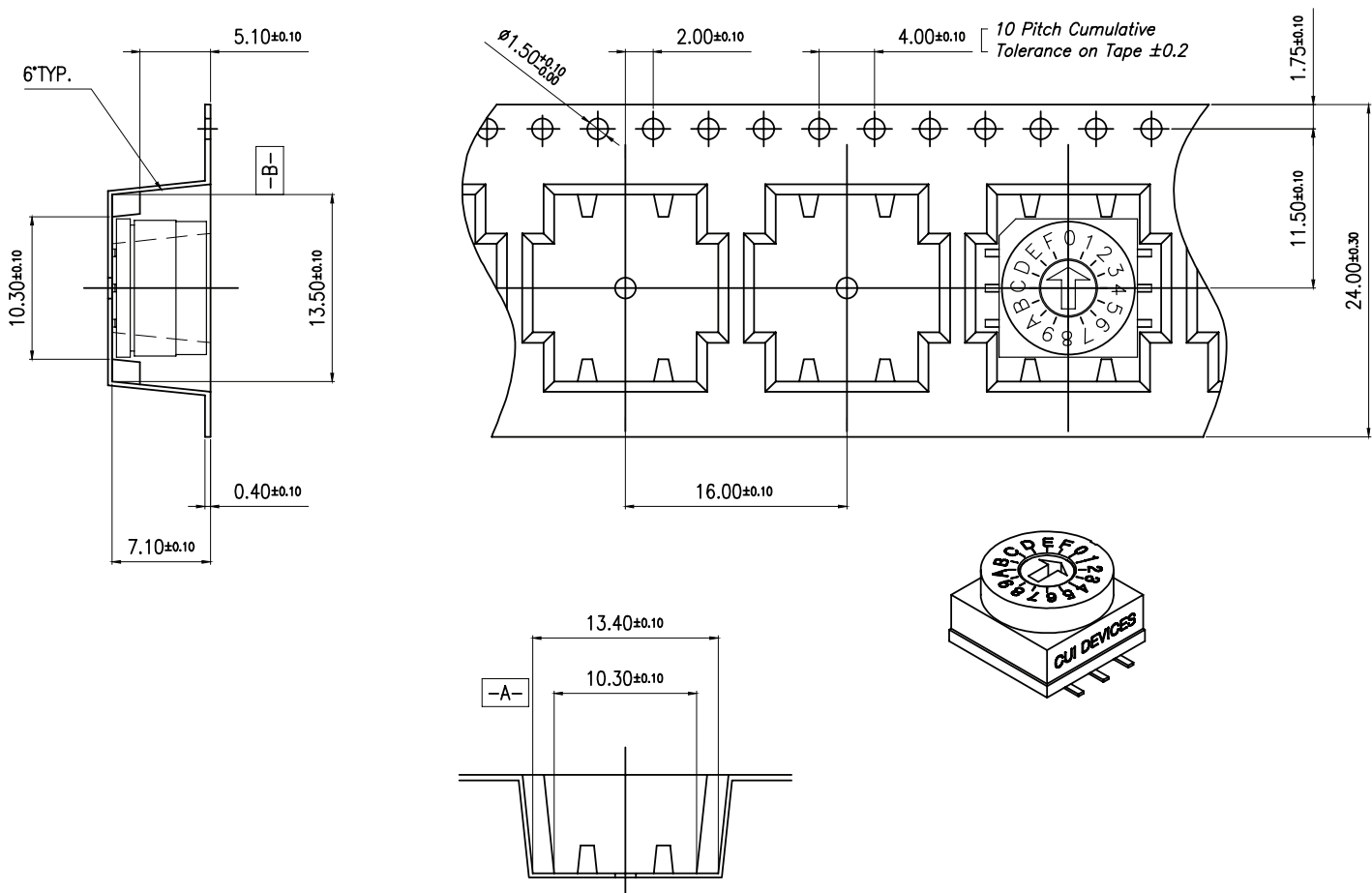


## PACKAGING

units: mm

Reel Size: Ø330 mm

Reel QTY: 600 pcs per reel



## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 05/30/2023 |

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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