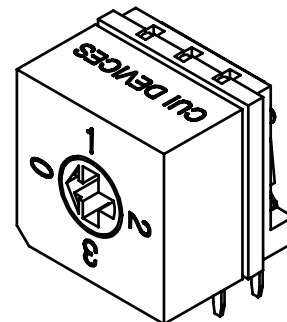


SERIES: RDS6-1011-RA | **DESCRIPTION:** ROTARY DIP SWITCH

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

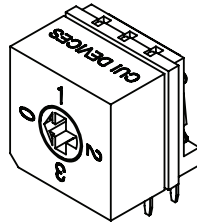
| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds | | | 350 | °C |
| wave soldering | for maximum 5 seconds | | | 260 | °C |

PART NUMBER KEY

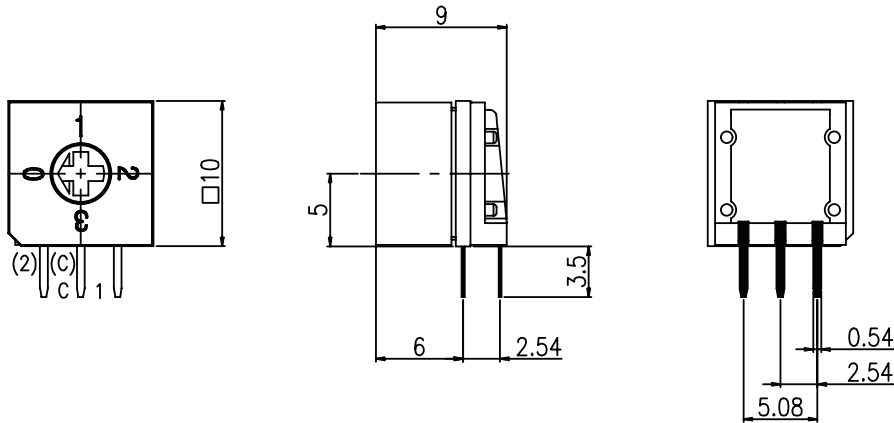
| | | | | | | |
|-------------|---|---------------|--|-------------|--|------------|
| RDS6 | - XXS | - 1011 | - X | - RA | - XXX | - D |
| Base Number | No. of Positions: 4 = 4 Positions 8 = 8 Positions 10 = 10 Positions 16 = 16 Positions | | Actuator Cap: "blank" = Without Cap 1 = Notched Cap 2 = Raised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

MECHANICAL DRAWING (4 POSITION, 2.54 MM PITCH)

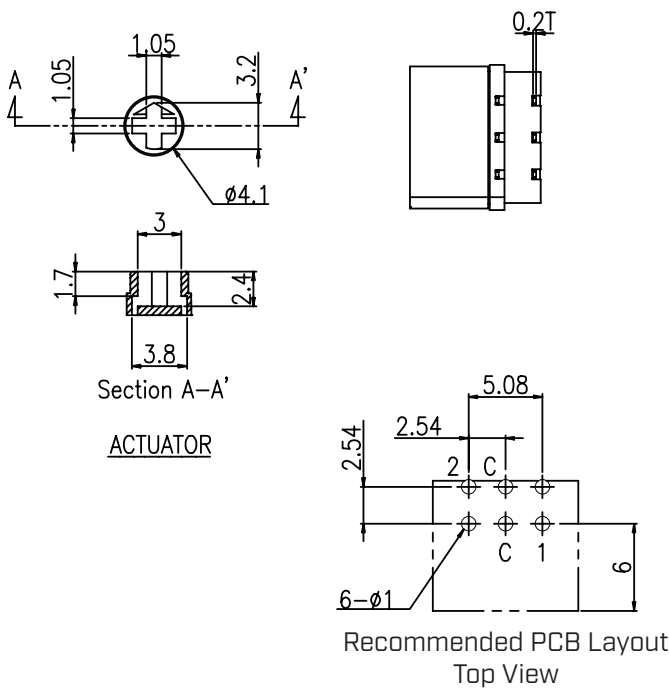
units: mm
 tolerance: ±0.3 mm
 unless otherwise specified



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

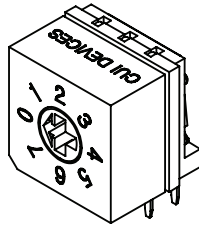


| ON ● | CODE | | | |
|------------|------|---|---|---|
| OFF ○ | | | | |
| TYPE | POS | C | 1 | 2 |
| 4 POSITION | 0 | ● | ○ | ○ |
| | 1 | ● | ● | ○ |
| | 2 | ● | ○ | ● |
| | 3 | ● | ● | ● |

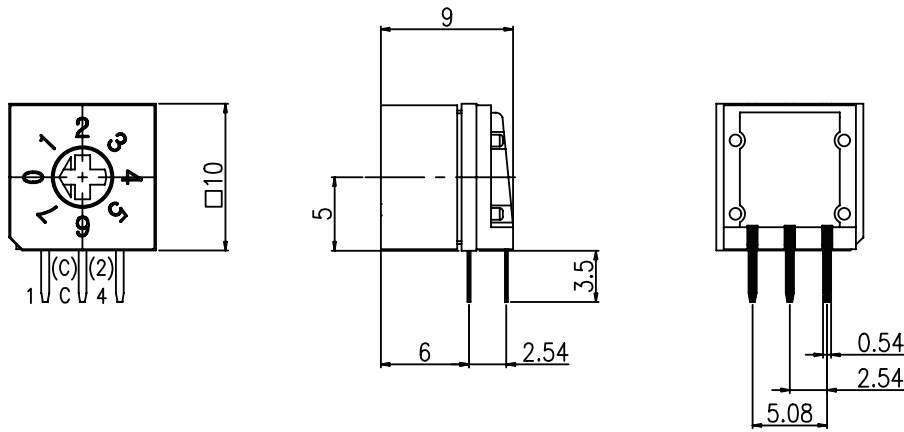


MECHANICAL DRAWING (8 POSITION, 2.54 MM PITCH)

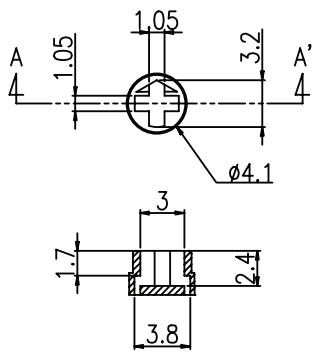
units: mm
 tolerance: ±0.3 mm
 unless otherwise specified



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

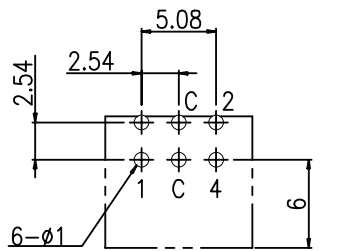


| TYPE | POS | CODE | | | |
|------------|-----|------|---|---|---|
| | | C | 1 | 2 | 4 |
| 8 POSITION | 0 | ● | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ |
| | 2 | ● | ○ | ● | ○ |
| | 3 | ● | ● | ● | ○ |
| | 4 | ● | ○ | ○ | ● |
| | 5 | ● | ● | ○ | ● |
| | 6 | ● | ○ | ● | ● |
| | 7 | ● | ● | ● | ● |



Section A-A'

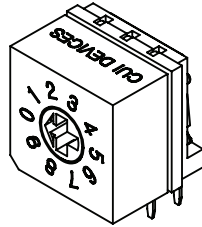
ACTUATOR



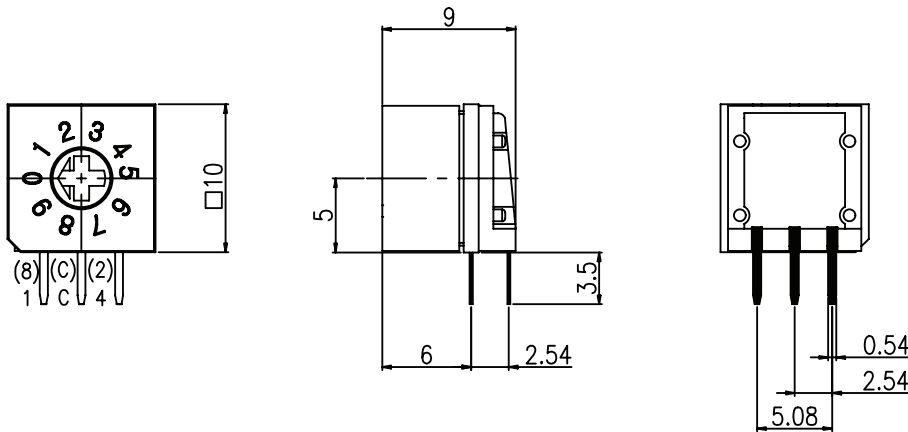
Recommended PCB Layout
 Top View

MECHANICAL DRAWING (10 POSITION, 2.54 MM PITCH)

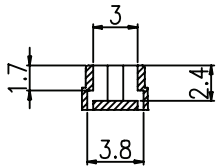
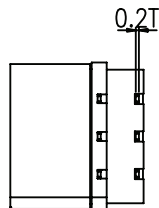
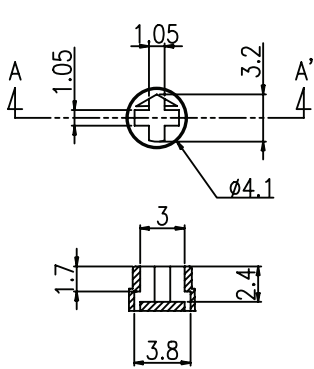
units: mm
 tolerance: ±0.3 mm
 unless otherwise specified



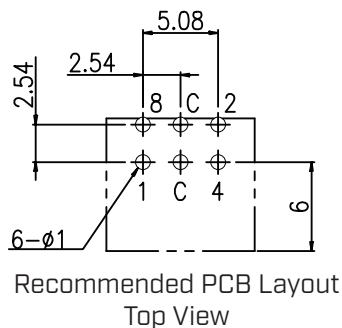
| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator | POM (UL94HB) | gray |
| cover | PA66 (UL94V-0) | black |
| base | PA66 (UL94V-0) | black |
| terminals | phosphorus bronze | Ni/Au |



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



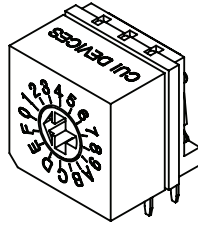
Section A-A'
 ACTUATOR



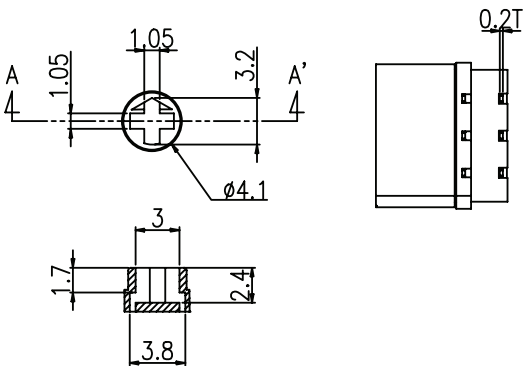
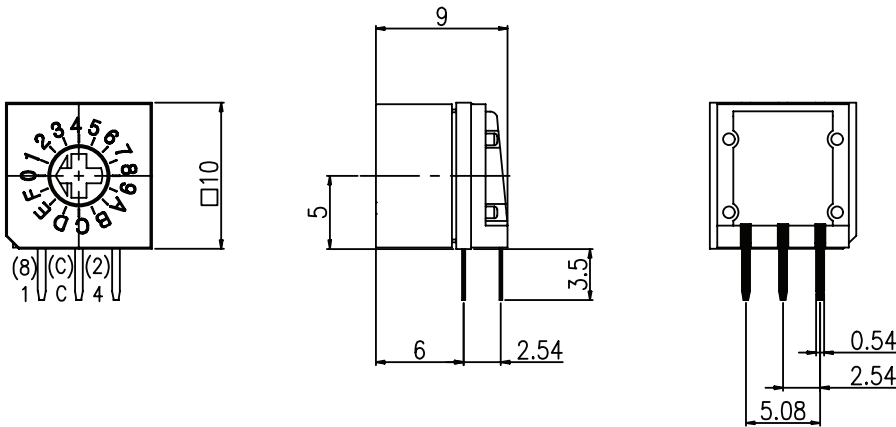
Recommended PCB Layout
 Top View

MECHANICAL DRAWING (16 POSITION, 2.54 MM PITCH)

units: mm
 tolerance: ±0.3 mm
 unless otherwise specified

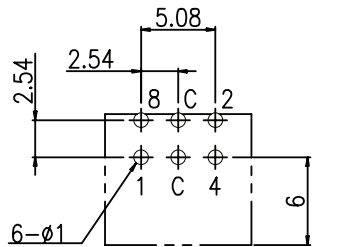


| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator | POM (UL94HB) | gray |
| cover | PA66 (UL94V-0) | black |
| base | PA66 (UL94V-0) | black |
| terminals | phosphorus bronze | Ni/Au |



Section A-A'

ACTUATOR

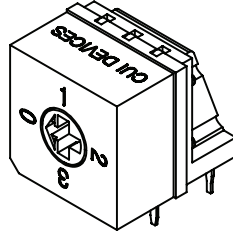


Recommended PCB Layout
 Top View

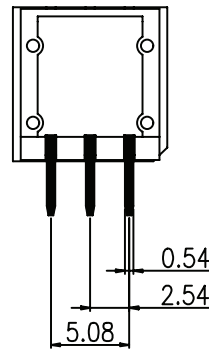
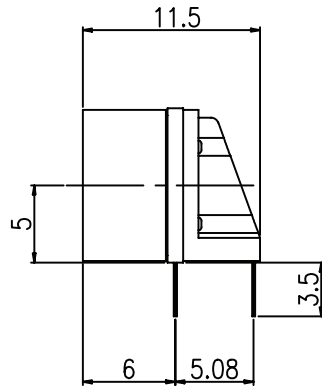
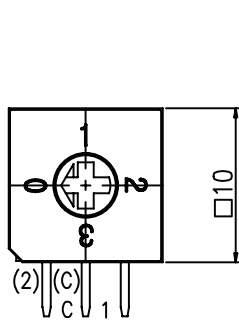
| TYPE | CODE | | | | | |
|-------------|------|---|---|---|---|---|
| | POS | C | 1 | 2 | 4 | 8 |
| | ON ● | | | | | |
| OFF ○ | | | | | | |
| 16 POSITION | 0 | ● | ○ | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ | ○ |
| | 2 | ● | ○ | ● | ○ | ○ |
| | 3 | ● | ● | ● | ○ | ○ |
| | 4 | ● | ○ | ○ | ● | ○ |
| | 5 |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

MECHANICAL DRAWING (4 POSITION, 5.08 MM PITCH)

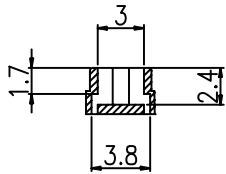
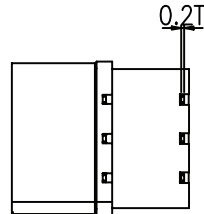
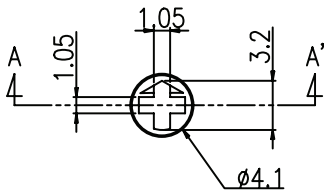
units: mm
tolerance: ±0.3 mm
unless otherwise specified



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

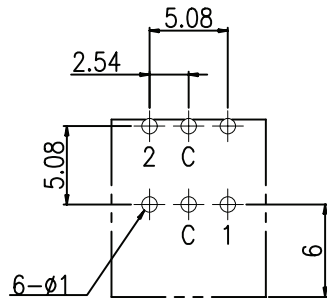


| ON ● | CODE | | | |
|------------|------|---|---|---|
| OFF ○ | | | | |
| TYPE | POS | C | 1 | 2 |
| 4 POSITION | 0 | ● | ○ | ○ |
| | 1 | ● | ● | ○ |
| | 2 | ● | ○ | ● |
| | 3 | ● | ● | ● |



Section A-A'

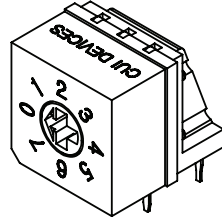
ACTUATOR



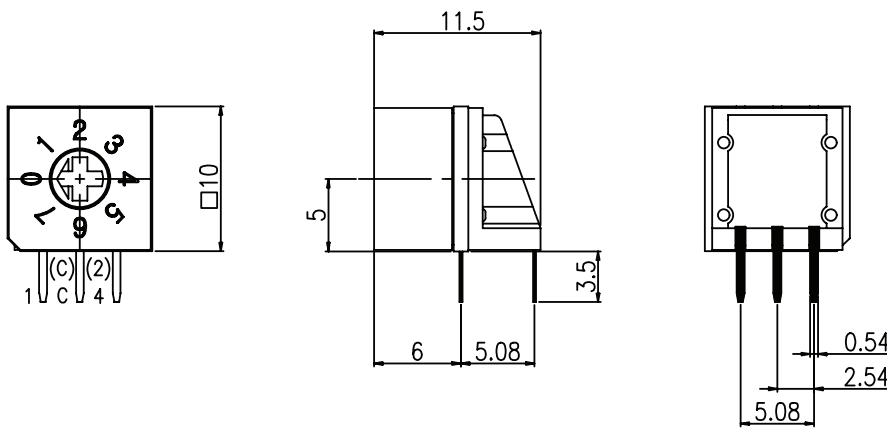
Recommended PCB Layout
Top View

MECHANICAL DRAWING (8 POSITION, 5.08 MM PITCH)

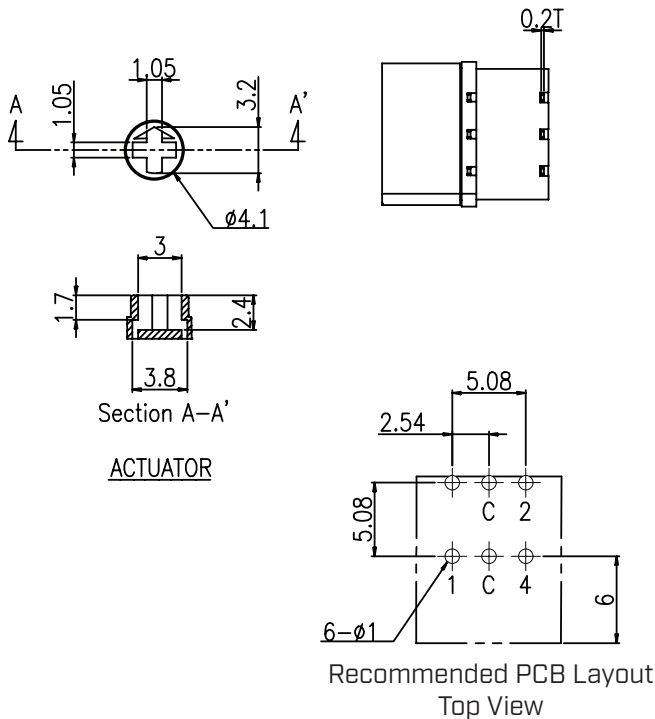
units: mm
 tolerance: ±0.3 mm
 unless otherwise specified



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

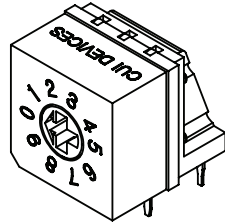


| TYPE | POS | CODE | | | |
|------------|-----|------|---|---|---|
| | | C | 1 | 2 | 4 |
| 8 POSITION | 0 | ● | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ |
| | 2 | ● | ○ | ● | ○ |
| | 3 | ● | ● | ● | ○ |
| | 4 | ● | ○ | ○ | ● |
| | 5 | ● | ● | ○ | ● |
| | 6 | ● | ○ | ● | ● |
| | 7 | ● | ● | ● | ● |

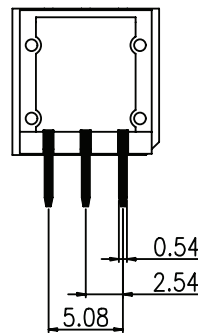
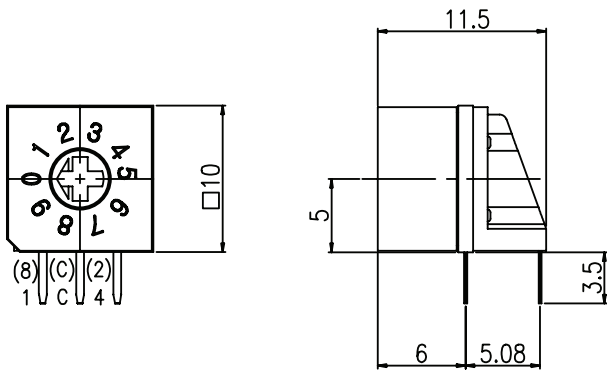


MECHANICAL DRAWING (10 POSITION, 5.08 MM PITCH)

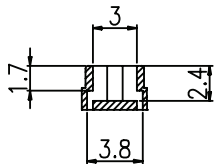
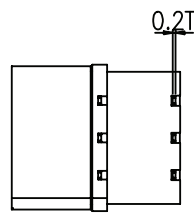
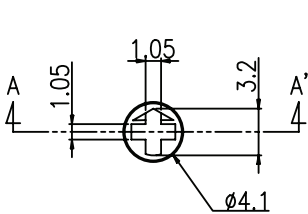
units: mm
tolerance: ±0.3 mm
unless otherwise specified



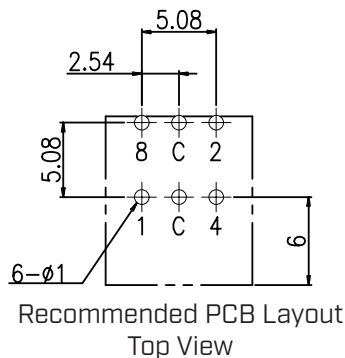
| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|-------------------|---------------|
| actuator | POM (UL94HB) | gray |
| cover | PA66 (UL94V-0) | black |
| base | PA66 (UL94V-0) | black |
| terminals | phosphorus bronze | Ni/Au |



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

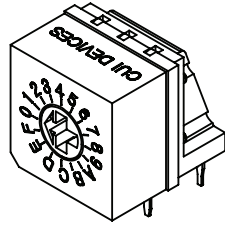


Section A-A'
ACTUATOR

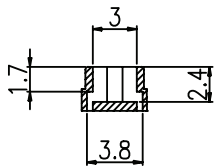
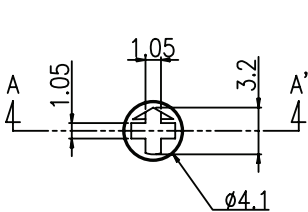
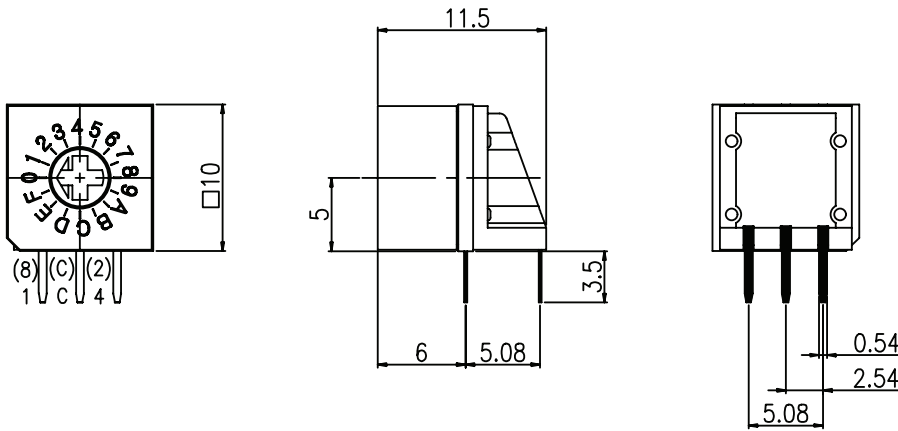


MECHANICAL DRAWING (16 POSITION, 5.08 MM PITCH)

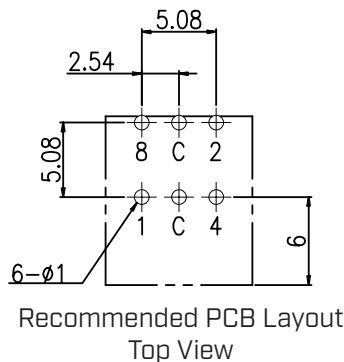
units: mm
 tolerance: ±0.3 mm
 unless otherwise specified



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



Section A-A'
 ACTUATOR

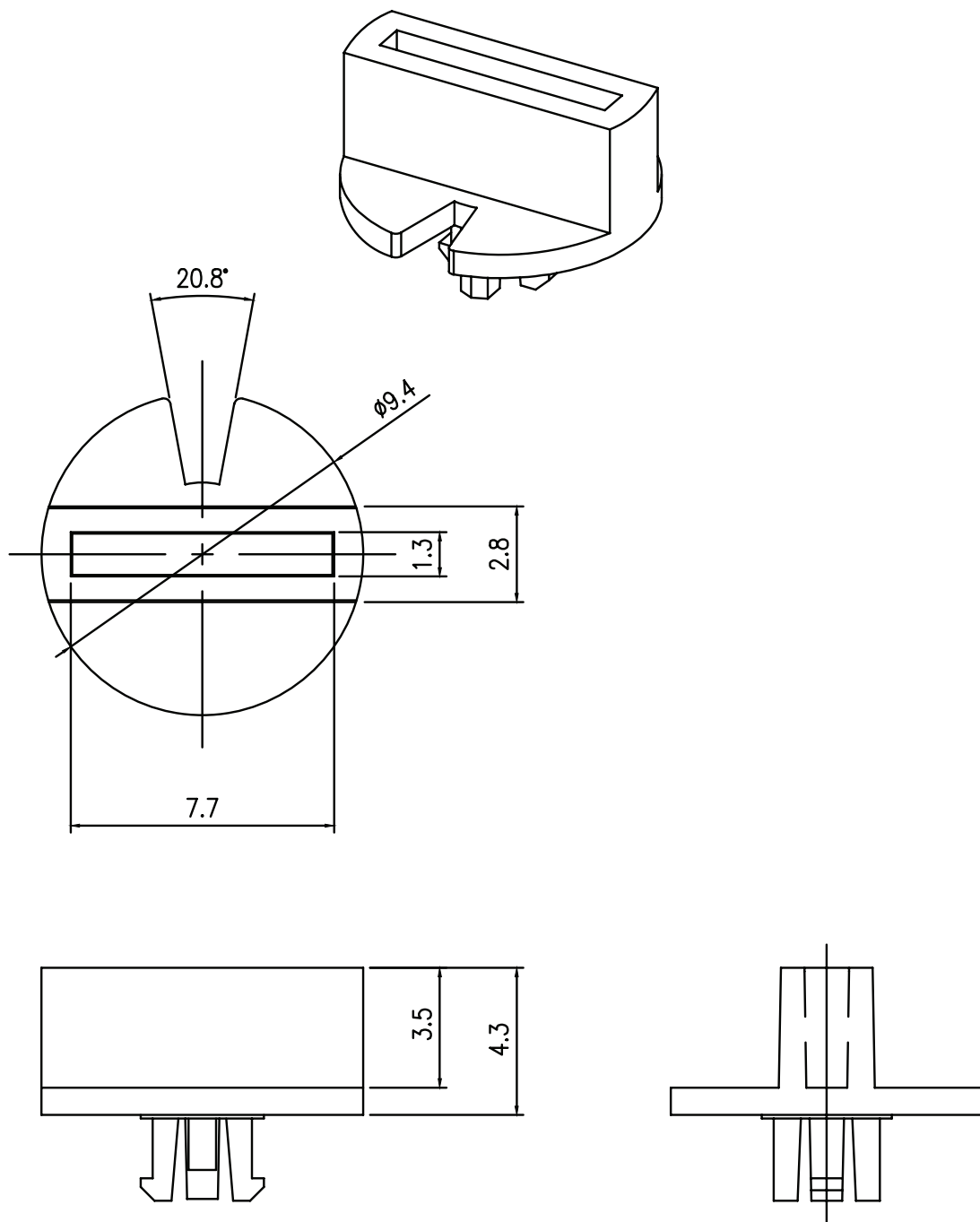


| ON ● | | | | | | |
|-------------|------|---|---|---|---|---|
| OFF ○ | CODE | | | | | |
| TYPE | POS | C | 1 | 2 | 4 | 8 |
| 16 POSITION | 0 | ● | ○ | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ | ○ |
| | 2 | ● | ○ | ● | ○ | ○ |
| | 3 | ● | ● | ● | ○ | ○ |
| | 4 | ● | ○ | ○ | ● | ○ |
| | 5 | ● | ● | ○ | ● |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

MECHANICAL DRAWING (NOTCHED CAP)

units: mm
 tolerance: ±0.1 mm
 unless otherwise specified

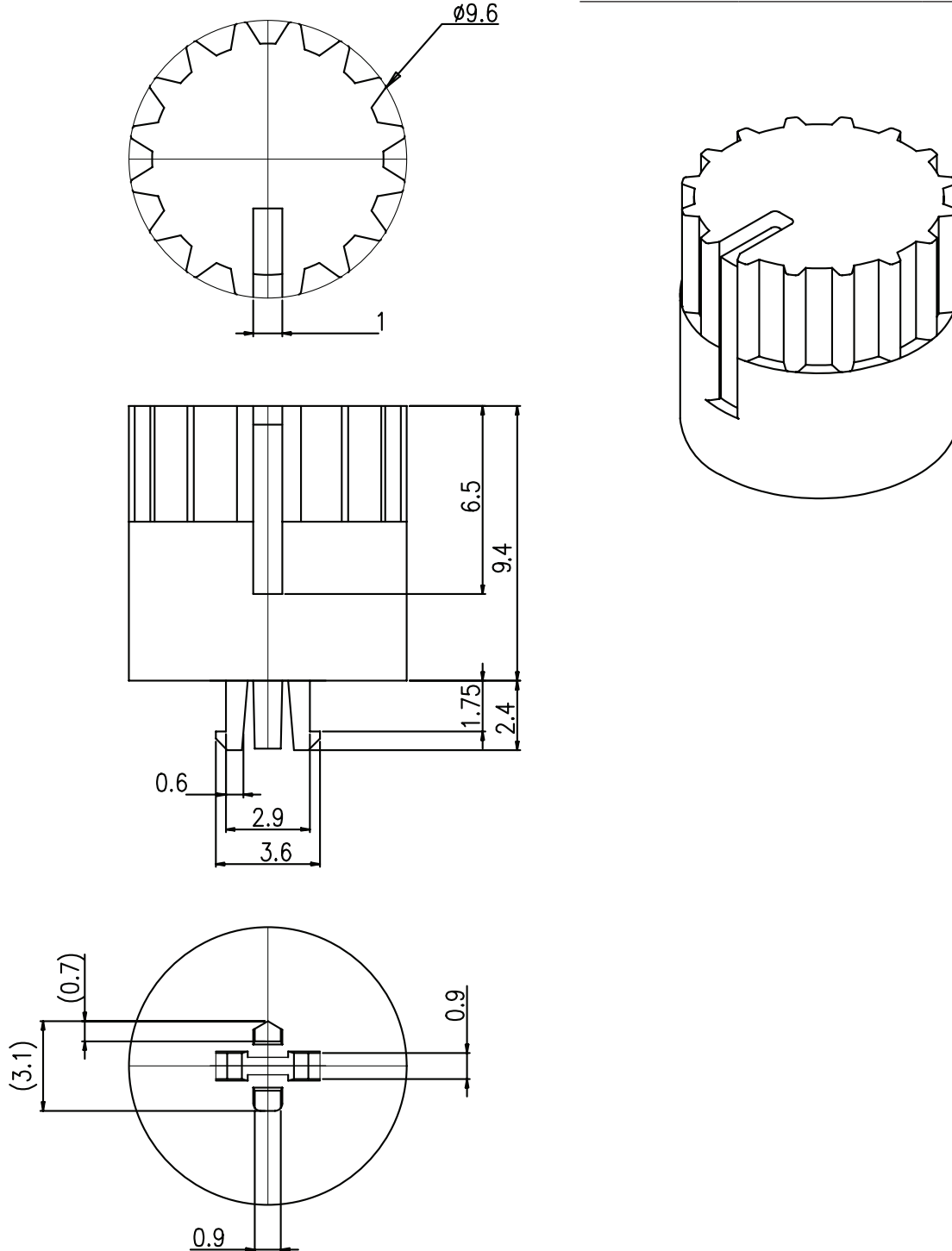
| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|----------------|---------------|
| housing | PA66 (UL94V-0) | gray |



MECHANICAL DRAWING (RAISED SLOTTED CAP)

units: mm
 tolerance: ± 0.3 mm
 unless otherwise specified

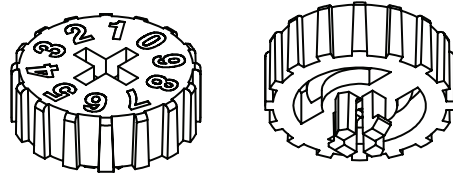
| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|----------------|---------------|
| housing | PA66 (UL94V-0) | black |



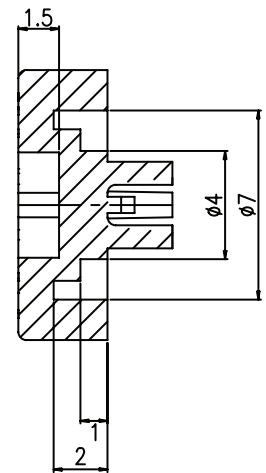
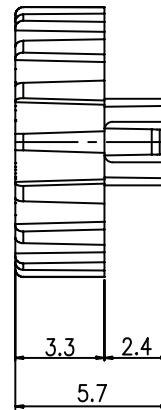
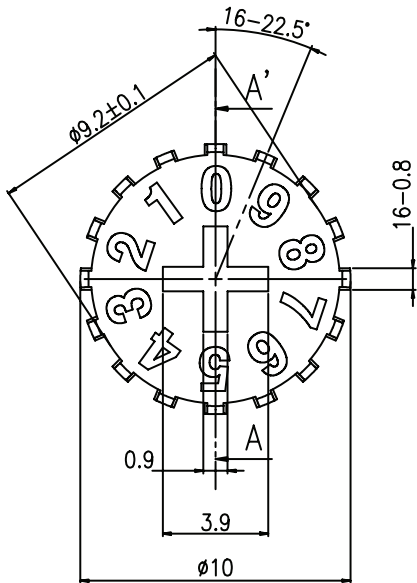
MECHANICAL DRAWING (NUMBERED DIAL)

units: mm
 tolerance: ± 0.3 mm
 unless otherwise specified

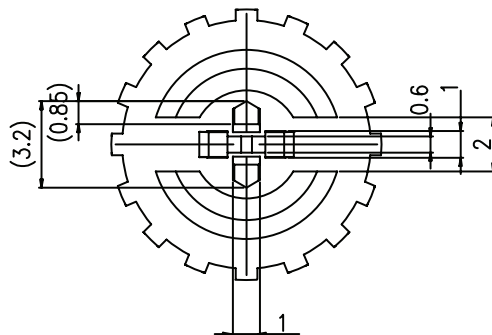
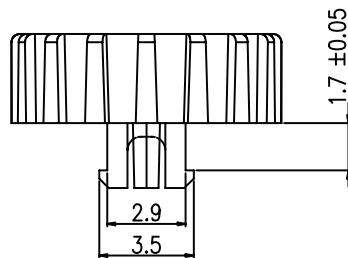
| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|----------------|------------------------|
| housing | PA66 (UL94V-0) | red with white letters |



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



SECTION A-A'



PACKAGING

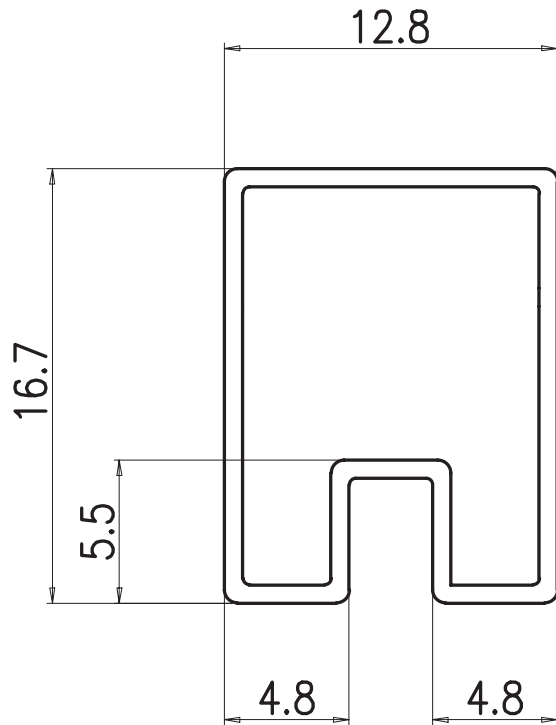
units: mm

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

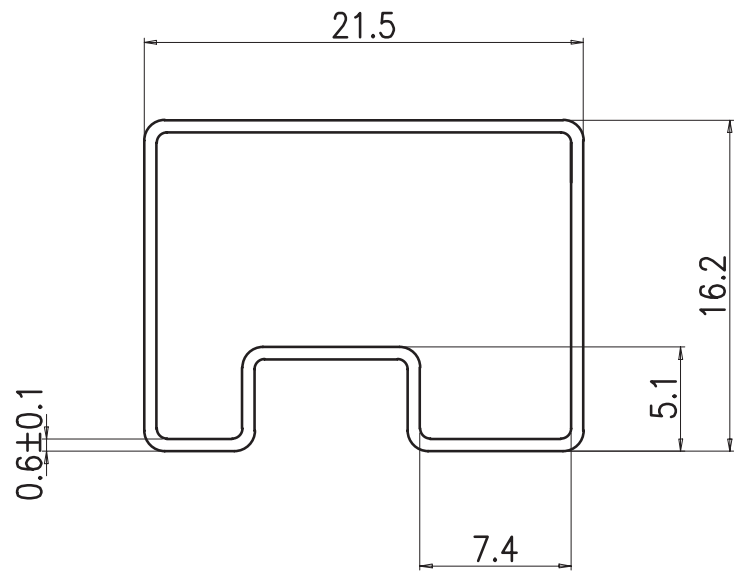
Tube Size [5.08 mm pitch]: 16.2 x 21.5 x 540 mm

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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