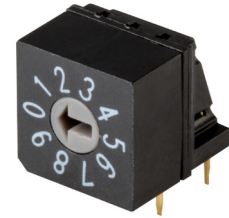




SERIES: RDS5-1011-RA-67 | DESCRIPTION: ROTARY DIP SWITCH

FEATURES

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



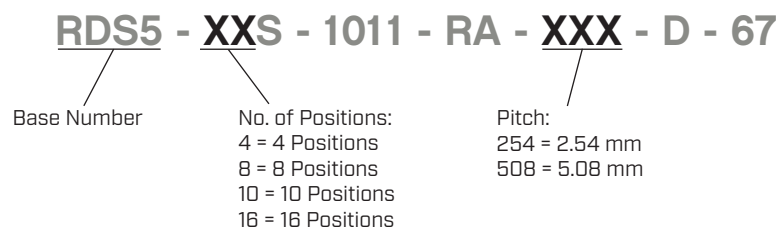
SPECIFICATIONS

| 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 |

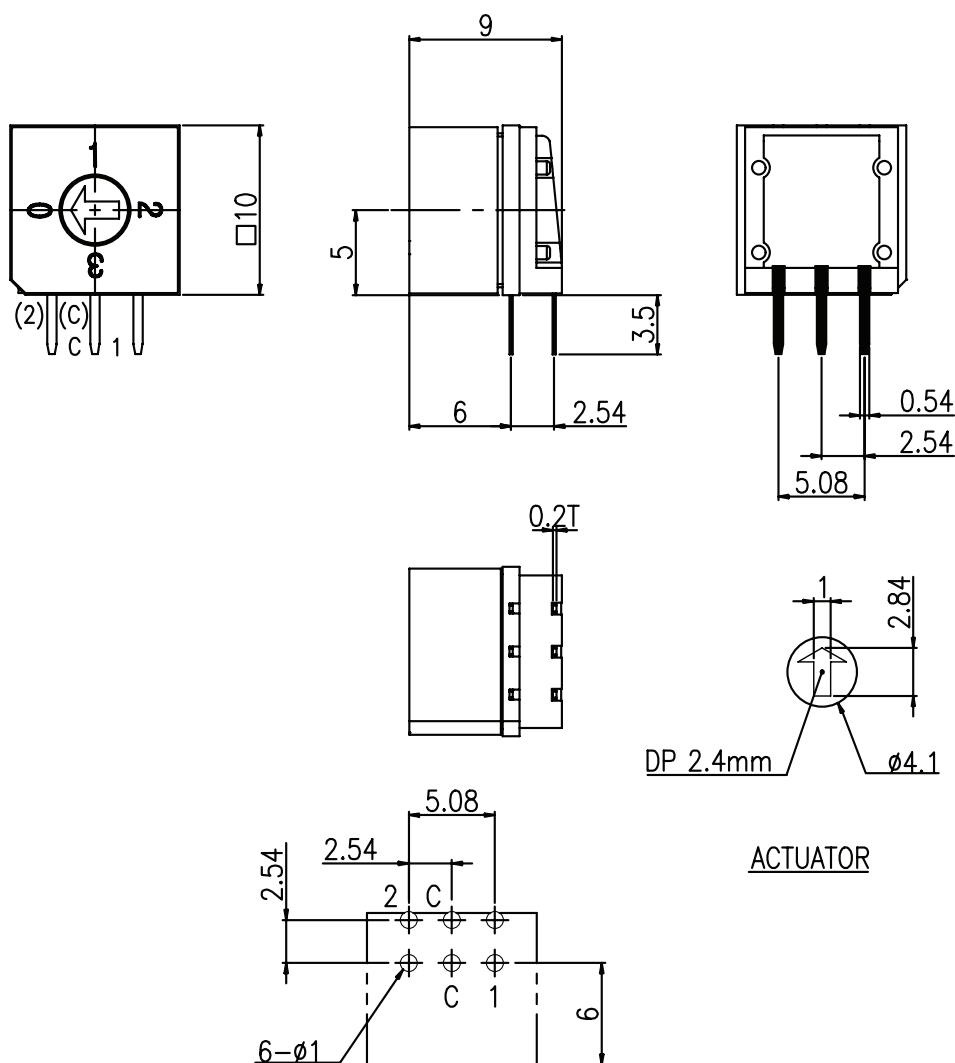
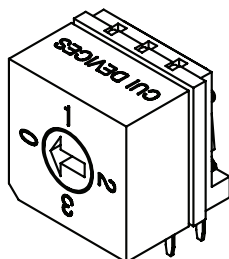
PART NUMBER KEY



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 |



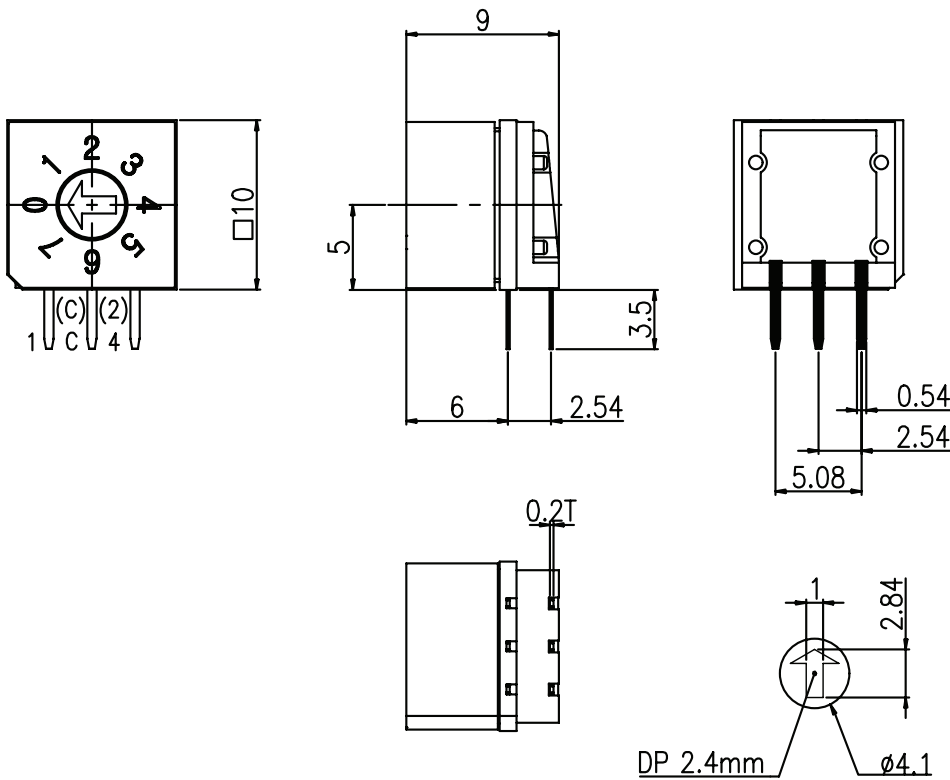
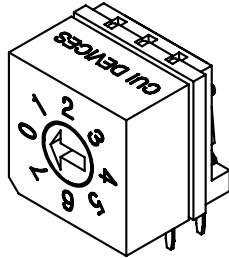
| ON ● | CODE | | | |
|------------|------|---|---|---|
| OFF ○ | | | | |
| TYPE | POS | C | 1 | 2 |
| 4 POSITION | 0 | ● | ○ | ○ |
| | 1 | ● | ● | ○ |
| | 2 | ● | ○ | ● |
| | 3 | ● | ● | ● |

Recommended PCB Layout
 Top View

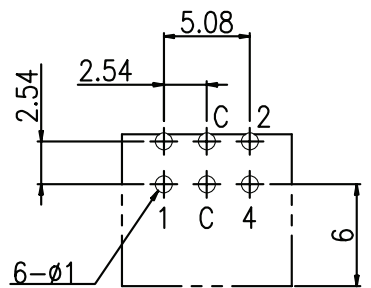
MECHANICAL DRAWING (8 POSITION, 2.54 MM PITCH)

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 | ● | ● | ● | ● |

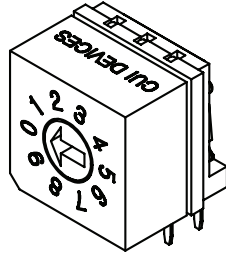


Recommended PCB Layout
 Top View

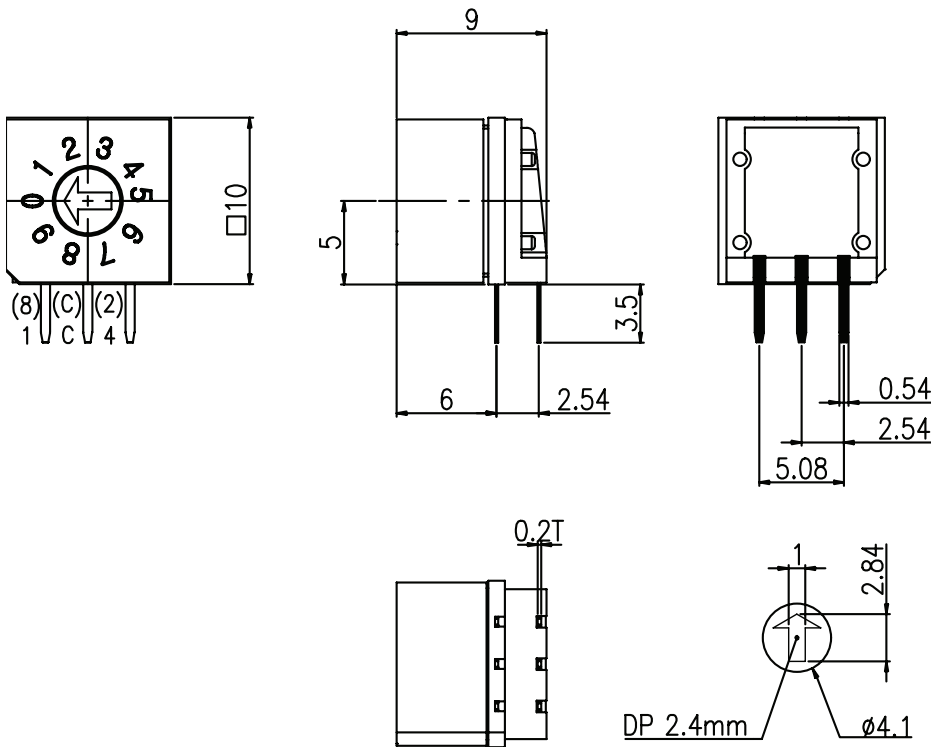
ACTUATOR

MECHANICAL DRAWING (10 POSITION, 2.54 MM PITCH)

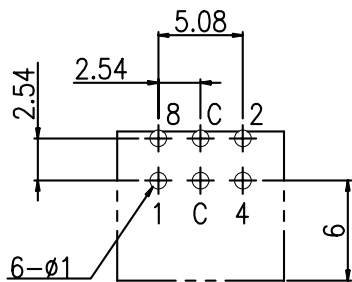
units: mm
 tolerance: ±0.3 mm
 unless otherwise specified



| 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 | ● | ● | ○ | ○ | ● |



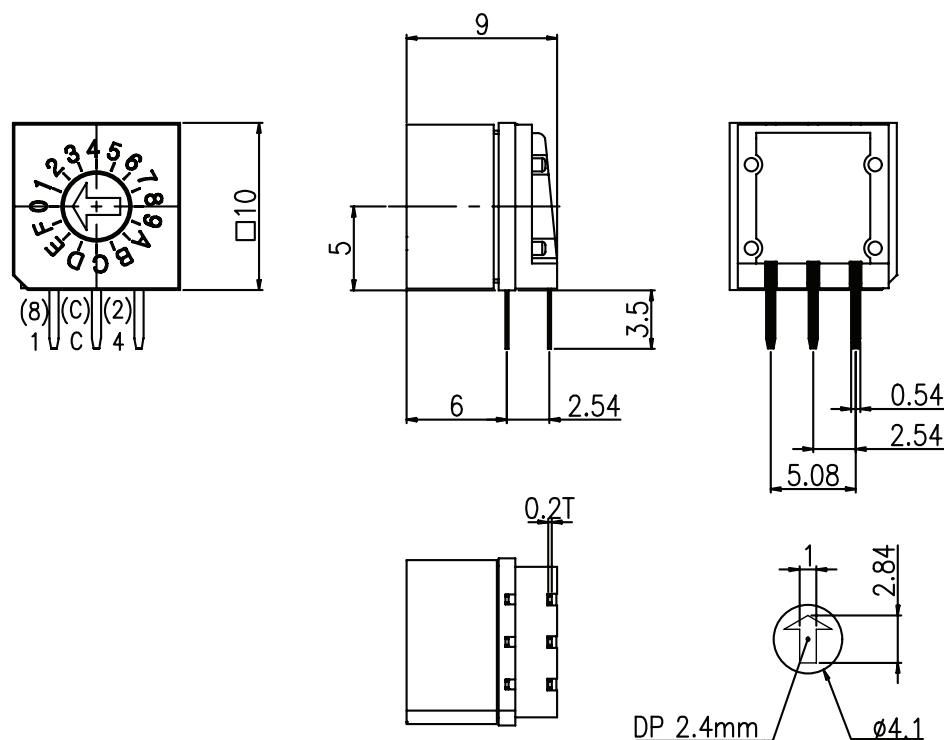
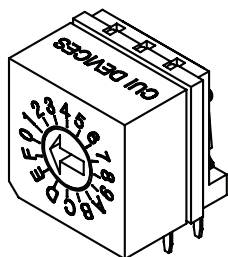
Recommended PCB Layout
 Top View

ACTUATOR

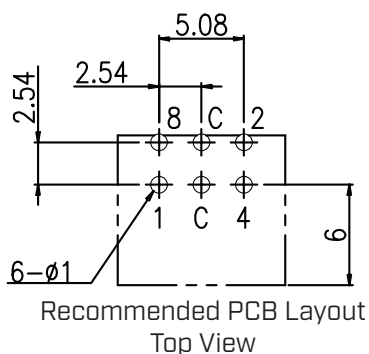
MECHANICAL DRAWING (16 POSITION, 2.54 MM PITCH)

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 | ● | ● | ● | ● | ● |

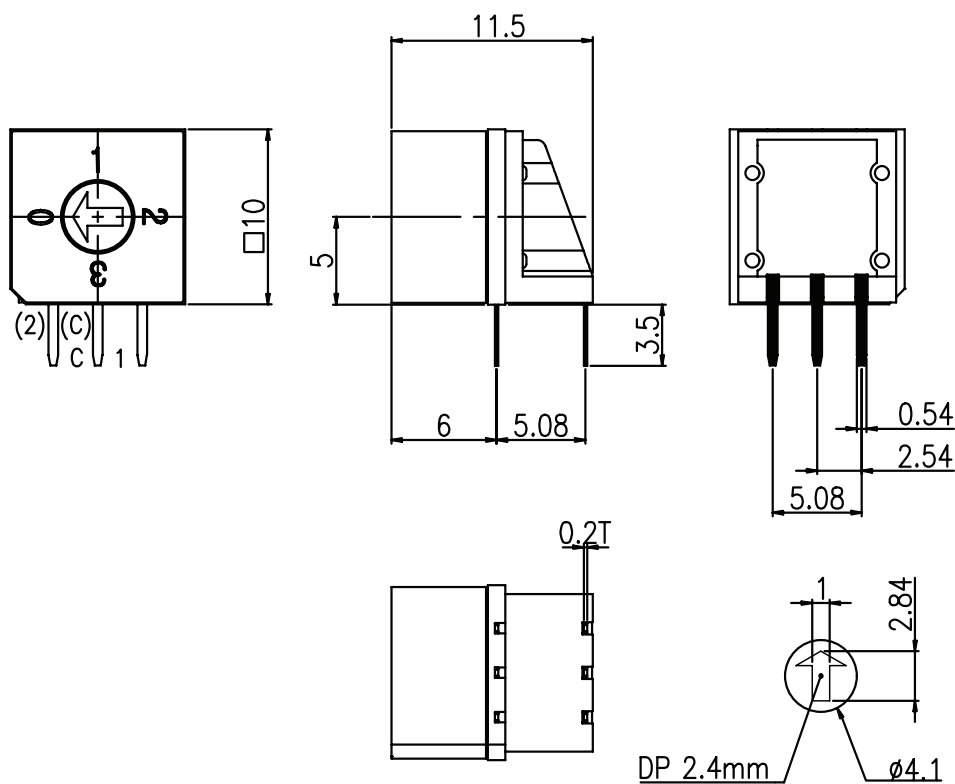
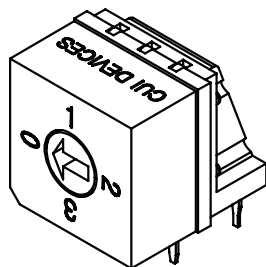


ACTUATOR

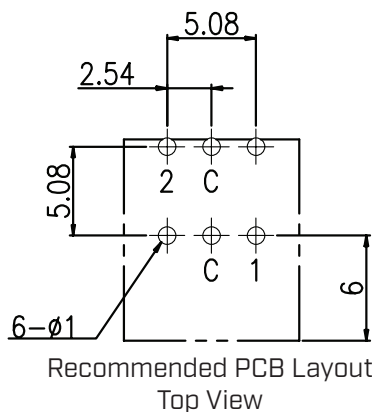
MECHANICAL DRAWING (4 POSITION, 5.08 MM PITCH)

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 |



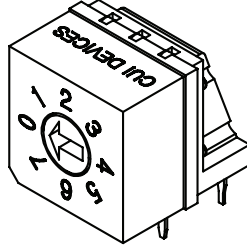
| TYPE | POS | CODE | | |
|------------|-----|------|---|---|
| | | C | 1 | 2 |
| 4 POSITION | 0 | ● | ○ | ○ |
| | 1 | ● | ● | ○ |
| | 2 | ● | ○ | ● |
| | 3 | ● | ● | ● |



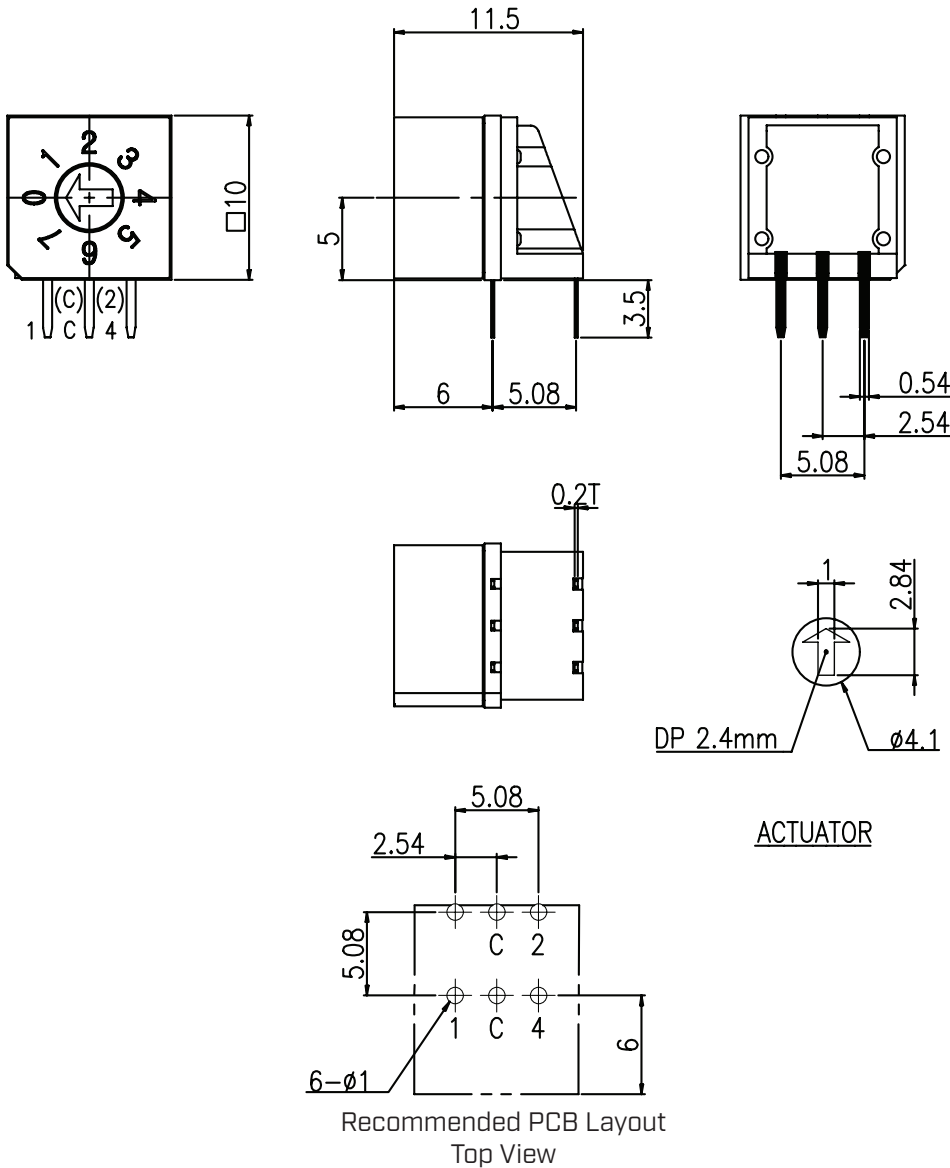
ACTUATOR

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 |

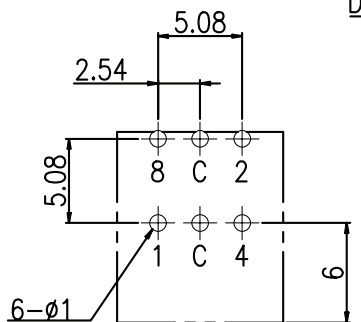
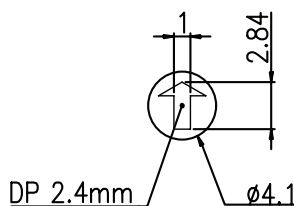
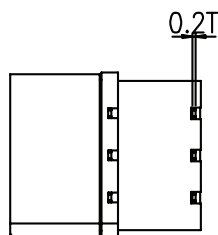
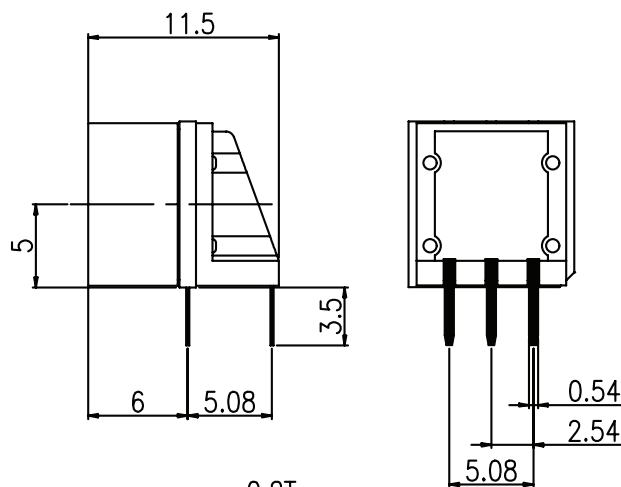
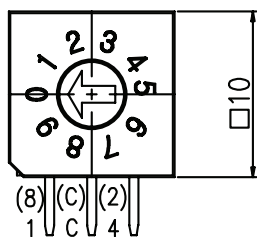
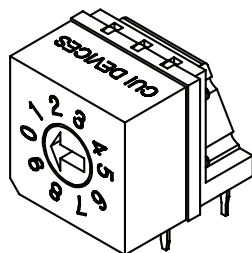


| TYPE | POS | CODE | | | |
|------------|-----|------|---|---|---|
| | | C | 1 | 2 | 4 |
| 8 POSITION | 0 | ● | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ |
| | 2 | ● | ○ | ● | ○ |
| | 3 | ● | ● | ● | ○ |
| | 4 | ● | ○ | ○ | ● |
| | 5 | ● | ● | ○ | ● |
| | 6 | ● | ○ | ● | ● |
| | 7 | ● | ● | ● | ● |

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 |



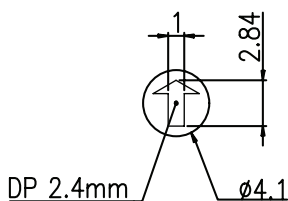
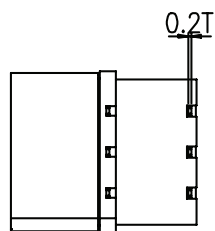
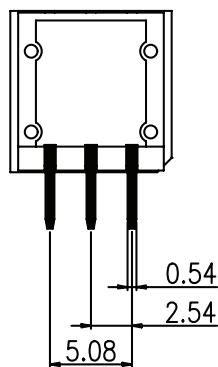
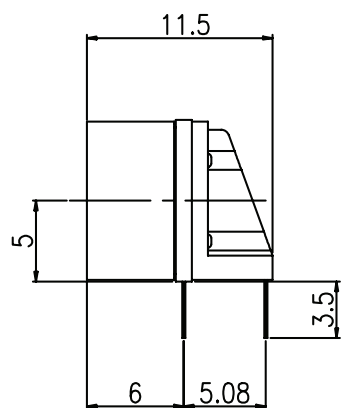
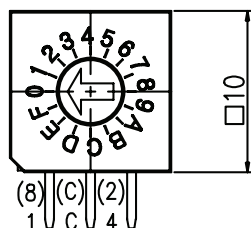
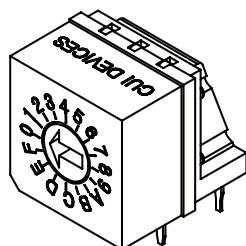
Recommended PCB Layout
 Top View

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

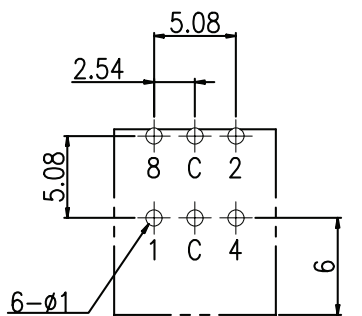
MECHANICAL DRAWING (16 POSITION, 5.08 MM PITCH)

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 | ● | ● | ● | ● | ● |



Recommended PCB Layout
 Top View

ACTUATOR

PACKAGING

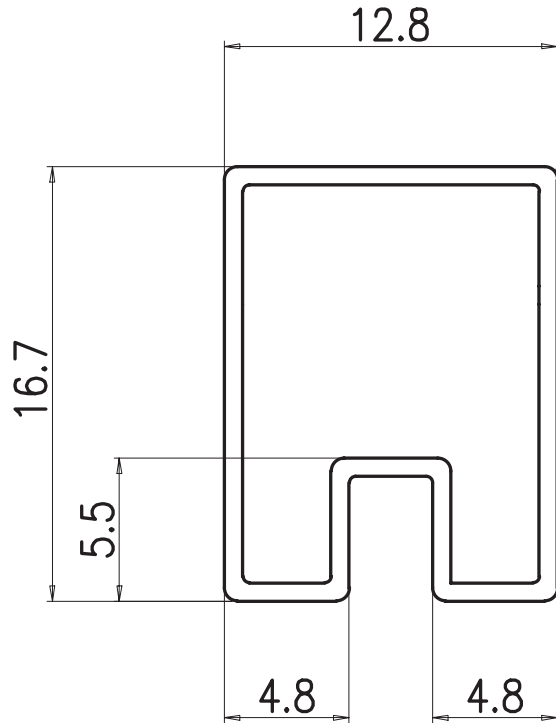
units: mm

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

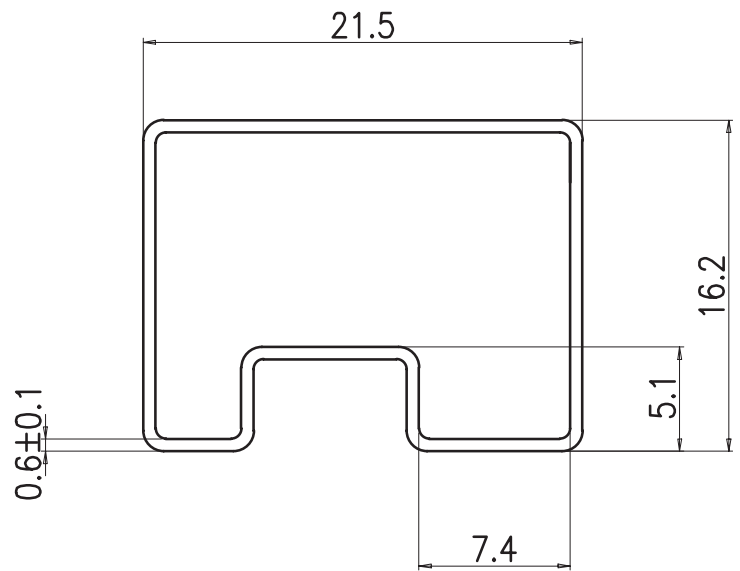
Tube Size [5.08 mm pitch]: 16.2 x 21.5 x 540 mm

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.

CUI Devices reserves the right to make changes to the product at any time without notice. Information provided by CUI Devices is believed to be accurate and reliable. However, no responsibility is assumed by CUI Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI Devices products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

cuidevices.com