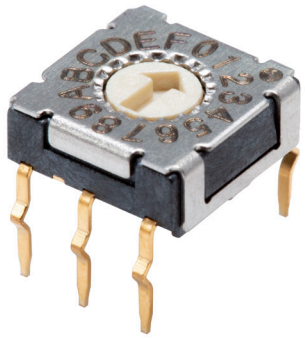
CUI Devices is now Same Sky! Learn More



# SERIES: RDS-7229-CR | DESCRIPTION: ROTARY DIP SWITCH

## FEATURES

- IP67 rated
- 4, 10, & 16 positions
- crimped through hole



## SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| rated voltage | switching<br>non-switching | | | 50<br>50 | Vdc<br>Vdc |
| rated current | switching<br>non-switching | | | 100<br>100 | mA<br>mA |
| withstanding voltage | for 1 minute | | 250 | | Vac |
| contact resistance | | | | 100 | mΩ |
| insulation resistance | at 100 Vdc | 100 | | | MΩ |
| operating torque | | | | 200 | gf*cm |
| actuator travel | continuous rotation | | 360 | | degrees |
| operating temperature | | -40 | | 85 | °C |
| storage temperature | | -40 | | 85 | °C |
| life | at 5 Vdc, 100 mA, 15~20 cycles/minute | | 10,000 | | steps |
| flammability rating | UL94V-0 | | | | |
| RoHS | yes | | | | |
| IP level | IP67 (IEC 60529:2001) | | | | |

## SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| hand soldering | for maximum 3 seconds | | | 350 | °C |
| wave soldering | for maximum 5 seconds | | | 280 | °C |

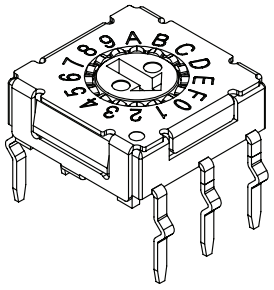
## PART NUMBER KEY

RDS - XXS - 7229 - X - CR

- RDS: Base Number
- XX: No. of Positions:
  - 4 = 4 Positions
  - 10 = 10 Positions
  - 16 = 16 Positions
- X: Actuator Style:
  - A = Flat Arrow
  - C = Flat Cross
  - R = Raised Arrow
  - S = Raised Slotted

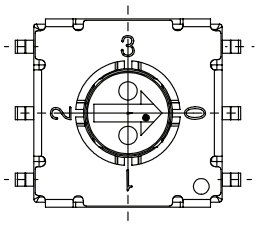
## MECHANICAL DRAWING (FLAT ARROW ACTUATOR)

units: mm
tolerance: ±0.1 mm
unless otherwise noted

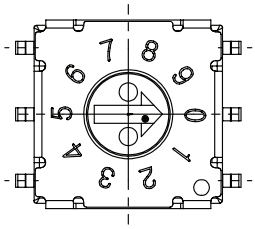


| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|---|
| 1 | actuator | LCP (UL94V-0) | blue (4 position)<br>gray (10 position)<br>ivory (16 position) |
| 2 | housing | LCP (UL94V-0) | dark gray |
| 3 | face plate | stainless steel | |
| 4 | terminals | copper alloy | gold |

**4 POSITION**



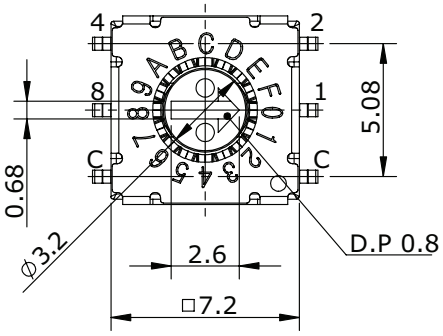
**10 POSITION**

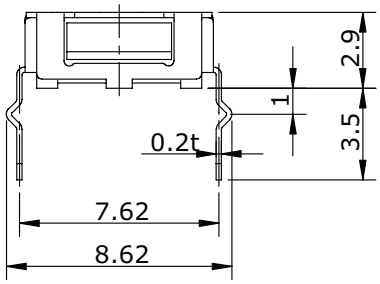


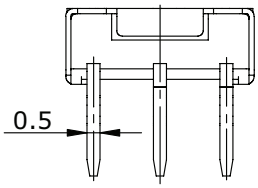
| ON ○ | | | | | |
|---|---|---|---|---|---|
| OFF ● | | | CODE | | |
| TYPE | | POS | 1 | 2 | 4 | 8 |
| 4 STEP* | | 0 | ● | ● | ● | ● |
| | | 1 | ○ | ● | ● | ● |
| | | 2 | ● | ○ | ● | ● |
| | | 3 | ○ | ○ | ● | ● |
| 10 STEP | | 4 | ● | ● | ○ | ● |
| | | 5 | ○ | ● | ○ | ● |
| | | 6 | ● | ○ | ○ | ● |
| | | 7 | ○ | ○ | ○ | ● |
| | | 8 | ● | ● | ● | ○ |
| | | 9 | ○ | ● | ● | ○ |
| 16 STEP | | A | ● | ○ | ● | ○ |
| | | B | ○ | ○ | ● | ○ |
| | | C | ● | ● | ○ | ○ |
| | | D | ○ | ● | ○ | ○ |
| | | E | ● | ○ | ○ | ○ |
| | | F | ○ | ○ | ○ | ○ |

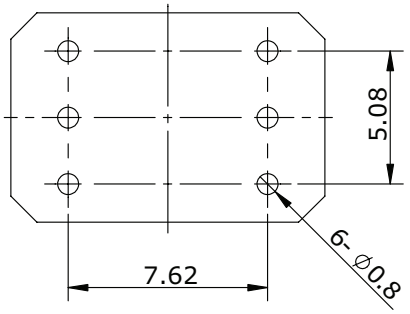
Note: *Terminals 4 and 8 have no function on 4 position model.

**16 POSITION**



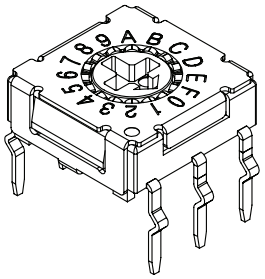




Recommended PCB Layout
Top View

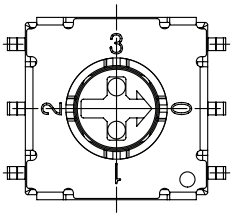
## MECHANICAL DRAWING (FLAT CROSS ACTUATOR)

units: mm
tolerance: ±0.1 mm
unless otherwise noted

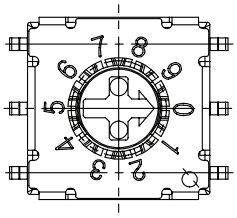


| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|---|
| 1 | actuator | LCP (UL94V-0) | blue (4 position)<br>gray (10 position)<br>ivory (16 position) |
| 2 | housing | LCP (UL94V-0) | dark gray |
| 3 | face plate | stainless steel | |
| 4 | terminals | copper alloy | gold |

**4 POSITION**



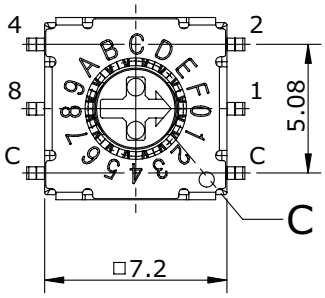
**10 POSITION**

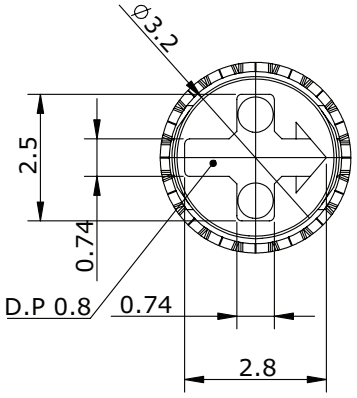


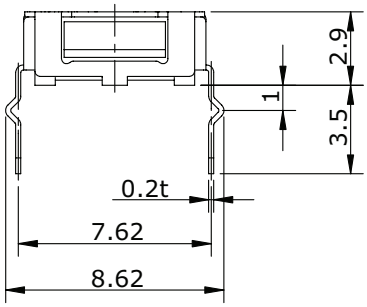
| ON ○ | | | | | |
|---|---|---|---|---|---|
| OFF ● | | | CODE | | |
| TYPE | | POS | 1 | 2 | 4 | 8 |
| 4 STEP* | | 0 | ● | ● | ● | ● |
| | | 1 | ○ | ● | ● | ● |
| | | 2 | ● | ○ | ● | ● |
| | | 3 | ○ | ○ | ● | ● |
| 10 STEP | | 4 | ● | ● | ○ | ● |
| | | 5 | ○ | ● | ○ | ● |
| | | 6 | ● | ○ | ○ | ● |
| | | 7 | ○ | ○ | ○ | ● |
| | | 8 | ● | ● | ● | ○ |
| | | 9 | ○ | ● | ● | ○ |
| 16 STEP | | A | ● | ○ | ● | ○ |
| | | B | ○ | ○ | ● | ○ |
| | | C | ● | ● | ○ | ○ |
| | | D | ○ | ● | ○ | ○ |
| | | E | ● | ○ | ○ | ○ |
| | | F | ○ | ○ | ○ | ○ |

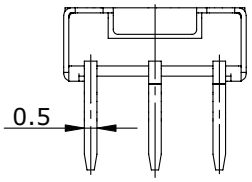
Note: *Terminals 4 and 8 have no function on 4 position model.

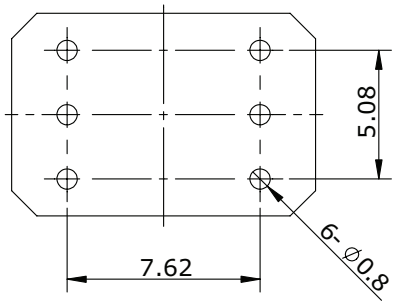
**16 POSITION**



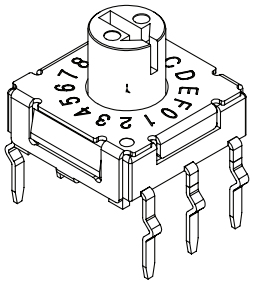




Recommended PCB Layout
Top View

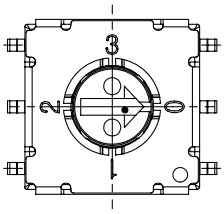
## MECHANICAL DRAWING (RAISED ARROW ACTUATOR)

units: mm
tolerance: ±0.1 mm
unless otherwise noted

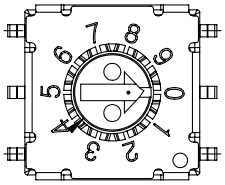


| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|---|
| 1 | actuator | LCP (UL94V-0) | blue (4 position)<br>gray (10 position)<br>ivory (16 position) |
| 2 | housing | LCP (UL94V-0) | dark gray |
| 3 | face plate | stainless steel | |
| 4 | terminals | copper alloy | gold |

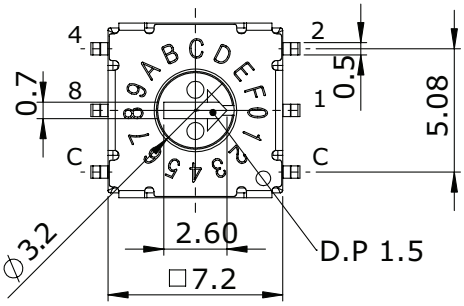
**4 POSITION**



**10 POSITION**

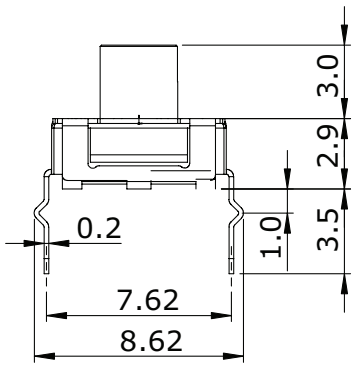


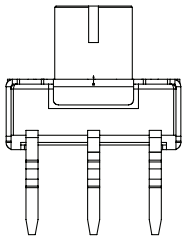
**16 POSITION**

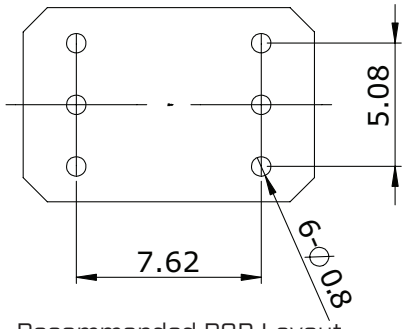



| ON ○ | | | | | |
|---|---|---|---|---|---|
| OFF ● | | | CODE | | |
| TYPE | POS | 1 | 2 | 4 | 8 |
| 4 STEP* | 0 | ● | ● | ● | ● |
| | 1 | ○ | ● | ● | ● |
| | 2 | ● | ○ | ● | ● |
| | 3 | ○ | ○ | ● | ● |
| 10 STEP | 4 | ● | ● | ○ | ● |
| | 5 | ○ | ● | ○ | ● |
| | 6 | ● | ○ | ○ | ● |
| | 7 | ○ | ○ | ○ | ● |
| | 8 | ● | ● | ● | ○ |
| | 9 | ○ | ● | ● | ○ |
| 16 STEP | A | ● | ○ | ● | ○ |
| | B | ○ | ○ | ● | ○ |
| | C | ● | ● | ○ | ○ |
| | D | ○ | ● | ○ | ○ |
| | E | ● | ○ | ○ | ○ |
| | F | ○ | ○ | ○ | ○ |

Note: *Terminals 4 and 8 have no function on 4 position model.



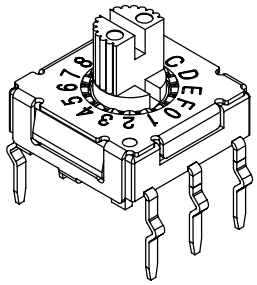






Recommended PCB Layout
Top View

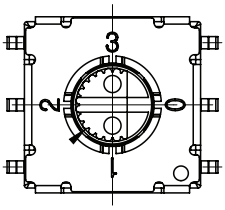
## MECHANICAL DRAWING (RAISED SLOTTED ACTUATOR)

units: mm
tolerance: ±0.1 mm
unless otherwise noted

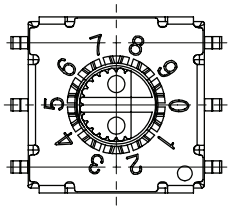


| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|---|
| 1 | actuator | LCP (UL94V-0) | blue (4 position)<br>gray (10 position)<br>ivory (16 position) |
| 2 | housing | LCP (UL94V-0) | dark gray |
| 3 | face plate | stainless steel | |
| 4 | terminals | copper alloy | gold |

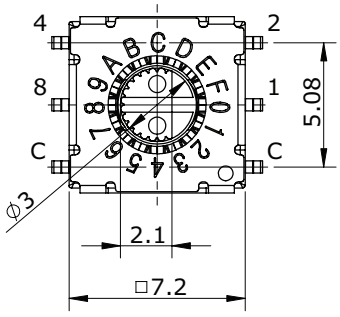
**4 POSITION**



**10 POSITION**

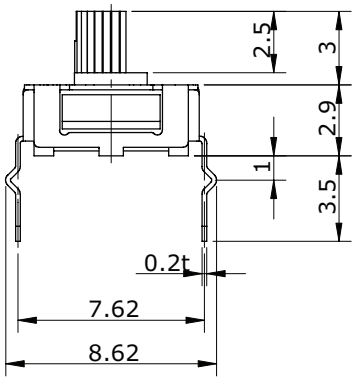


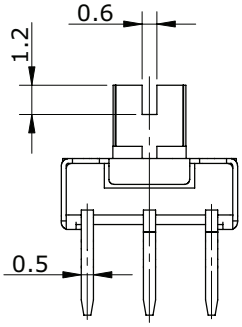
**16 POSITION**

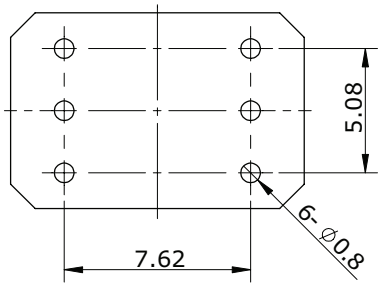



| ON ○ | | | | | |
|---|---|---|---|---|---|
| OFF ● | | | CODE | | |
| TYPE | POS | 1 | 2 | 4 | 8 |
| 4 STEP* | 0 | ● | ● | ● | ● |
| | 1 | ○ | ● | ● | ● |
| | 2 | ● | ○ | ● | ● |
| | 3 | ○ | ○ | ● | ● |
| 10 STEP | 4 | ● | ● | ○ | ● |
| | 5 | ○ | ● | ○ | ● |
| | 6 | ● | ○ | ○ | ● |
| | 7 | ○ | ○ | ○ | ● |
| | 8 | ● | ● | ● | ○ |
| | 9 | ○ | ● | ● | ○ |
| 16 STEP | A | ● | ○ | ● | ○ |
| | B | ○ | ○ | ● | ○ |
| | C | ● | ● | ○ | ○ |
| | D | ○ | ● | ○ | ○ |
| | E | ● | ○ | ○ | ○ |
| | F | ○ | ○ | ○ | ○ |

Note: *Terminals 4 and 8 have no function on 4 position model.



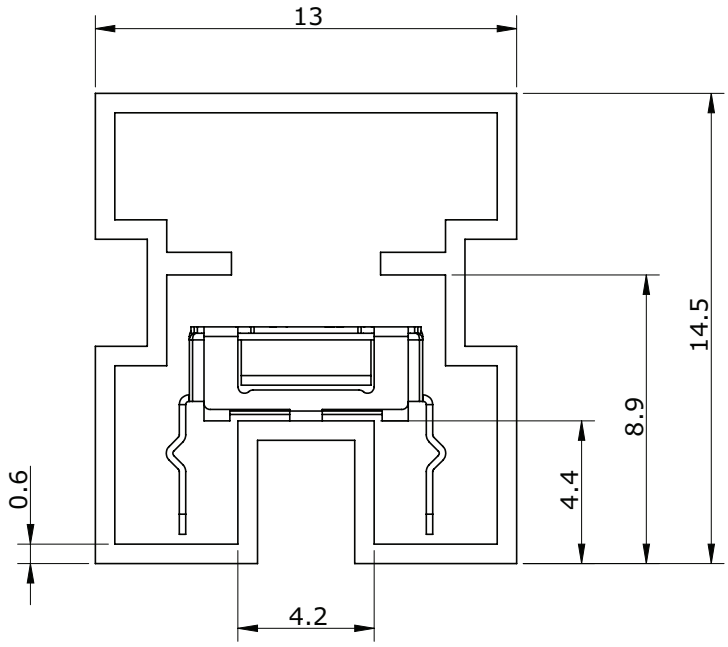

Recommended PCB Layout
Top View

## PACKAGING

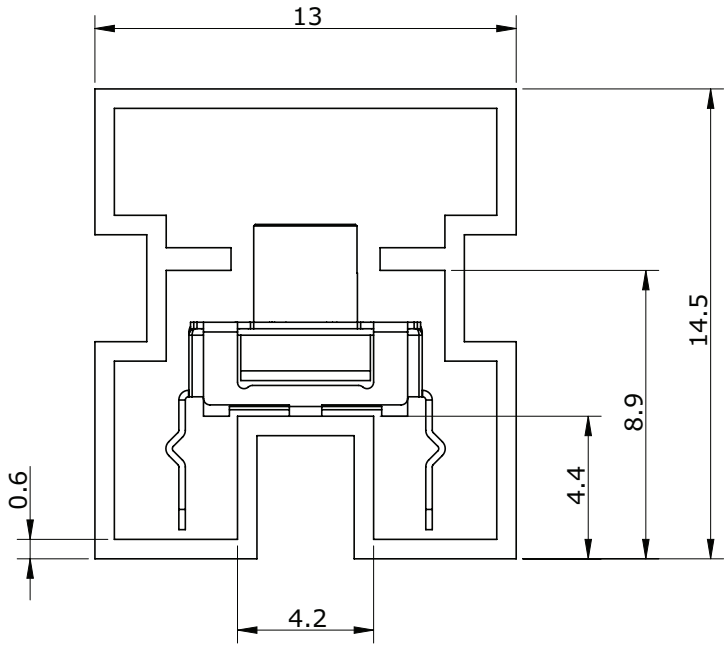
units: mm

Tube Size: 14.5 x 13.0 x 545 mm
Tube QTY: 70 pcs

**FLAT ACTUATOR MODELS**




**RAISED ACTUATOR MODELS**



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 12/11/2020 |
| 1.01 | logo, datasheet style update | 08/05/2022 |
| 1.02 | 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.

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

Same Sky 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.