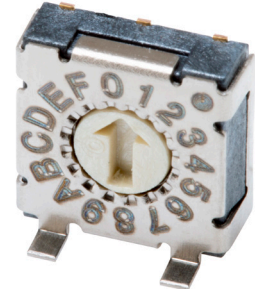


**SERIES:** RDS-7229-ASMT | **DESCRIPTION:** ROTARY DIP SWITCH**FEATURES**

- IP67 rated
- 4, 10, & 16 positions
- angled surface mount

**SPECIFICATIONS**

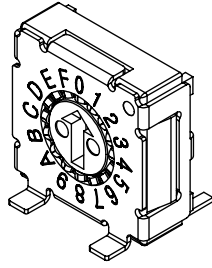
| parameter             | conditions/description                | min | typ    | max | units   |
|-----------------------|---------------------------------------|-----|--------|-----|---------|
| rated voltage         | switching                             |     |        | 50  | Vdc     |
|                       | non-switching                         |     |        | 50  | Vdc     |
| rated current         | switching                             |     |        | 100 | mA      |
|                       | non-switching                         |     |        | 100 | 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)                 |     |        |     |         |

**PART NUMBER KEY**

|             |            |   |  |   |             |   |   |   |             |   |           |
|-------------|------------|---|--|---|-------------|---|---|---|-------------|---|-----------|
|             | <b>RDS</b> | - | <b>XXS</b>   | - | <b>7229</b> | - | <b>X</b>  | - | <b>ASMT</b> | - | <b>TR</b> |
| Base Number |            |   | No. of Positions:<br>4 = 4 Positions<br>10 = 10 Positions<br>16 = 16 Positions |   |             |   | Actuator Style:<br>A = Flat Arrow<br>C = Flat Cross<br>R = Raised Arrow<br>S = Raised Slotted |   |             |   |           |

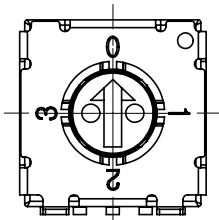
## MECHANICAL DRAWING (FLAT ARROW ACTUATOR)

units: mm  
tolerance: ±0.1 mm  
unless otherwise noted

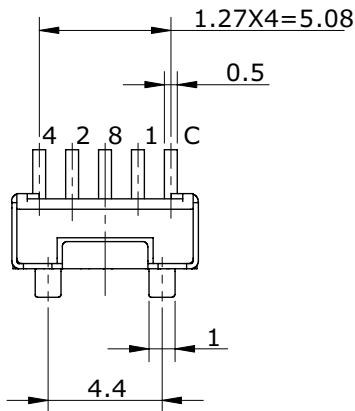
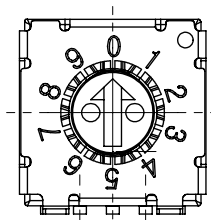


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR  |
|------|-------------|-----------------|--|
| 1    | actuator    | LCP (UL94V-0)   | blue [4 position]<br>gray [10 position]<br>ivory [16 position] |
| 2    | housing     | LCP (UL94V-0)   | dark gray  |
| 3    | face plate  | stainless steel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

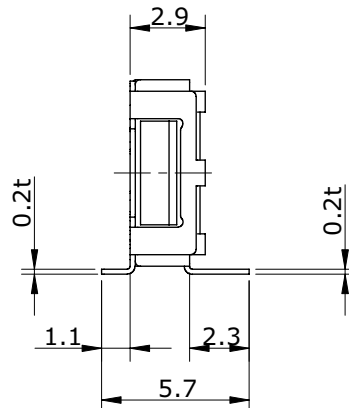
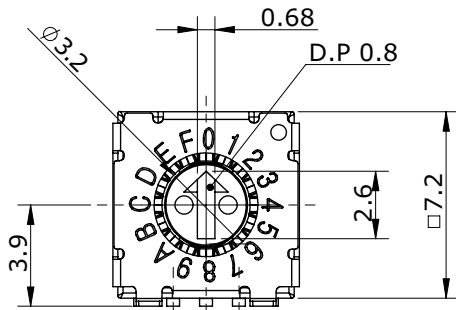
4 POSITION



10 POSITION

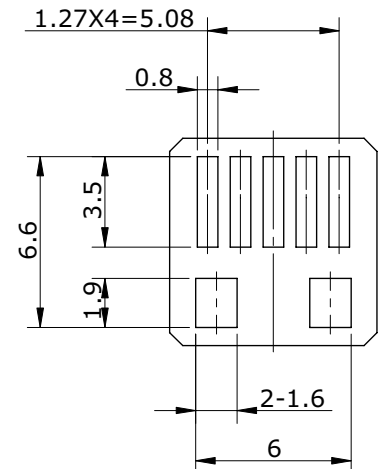


16 POSITION



| 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   | ○    | ○ | ○ | ○ |

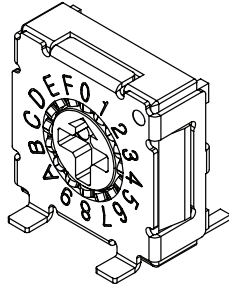
Note: \*Terminals 4 and 8 have no function on 4 position model.



Recommended PCB Layout  
Top View

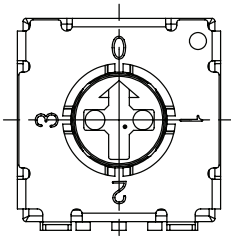
## MECHANICAL DRAWING (FLAT CROSS ACTUATOR)

units: mm  
tolerance: ±0.1 mm  
unless otherwise noted

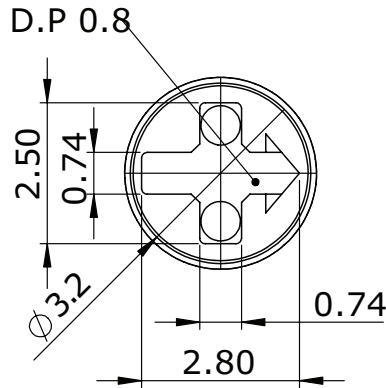
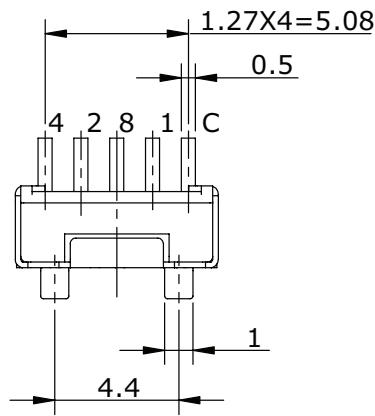
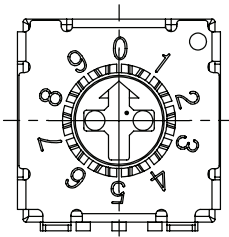


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR  |
|------|-------------|-----------------|--|
| 1    | actuator    | LCP (UL94V-0)   | blue [4 position]<br>gray [10 position]<br>ivory [16 position] |
| 2    | housing     | LCP (UL94V-0)   | dark gray  |
| 3    | face plate  | stainless steel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

4 POSITION



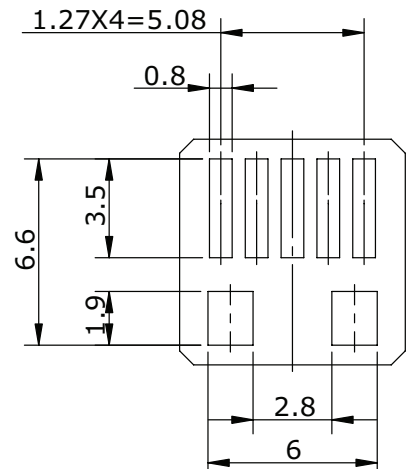
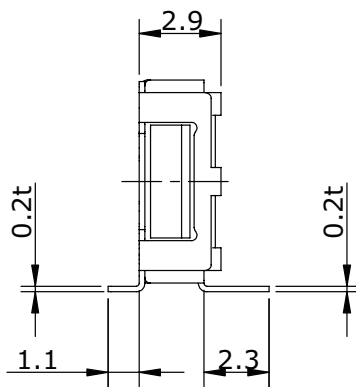
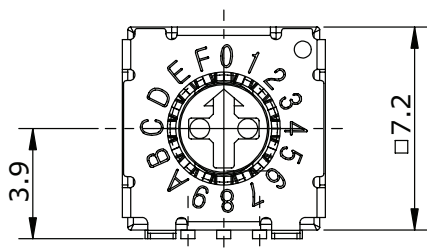
10 POSITION



| ON ○    |   | CODE |   |   |   |   |
|---------|---|------|---|---|---|---|
| OFF ●   |   | POS  | 1 | 2 | 4 | 8 |
| TYPE    |   |      |   |   |   |   |
| 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.

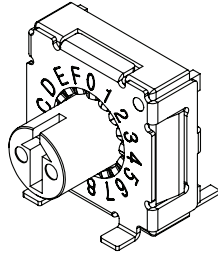
16 POSITION



Recommended PCB Layout  
Top View

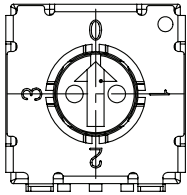
## MECHANICAL DRAWING (RAISED ARROW ACTUATOR)

units: mm  
tolerance: ±0.1 mm  
unless otherwise noted

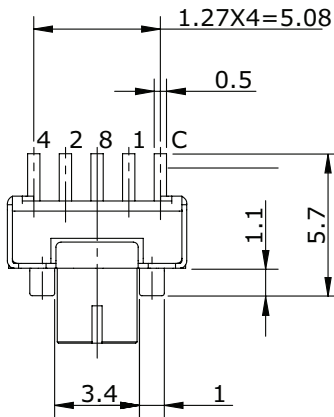
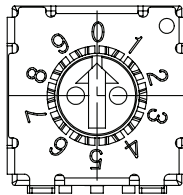


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR  |
|------|-------------|-----------------|--|
| 1    | actuator    | LCP (UL94V-0)   | blue [4 position]<br>gray [10 position]<br>ivory [16 position] |
| 2    | housing     | LCP (UL94V-0)   | dark gray  |
| 3    | face plate  | stainless steel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

**4 POSITION**



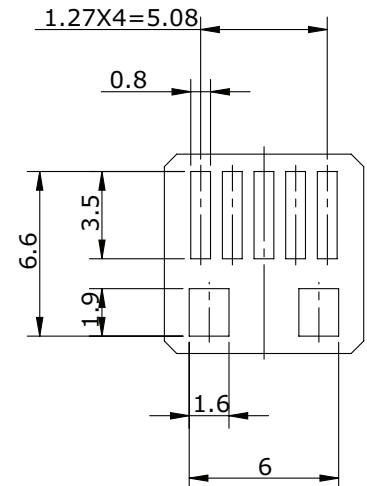
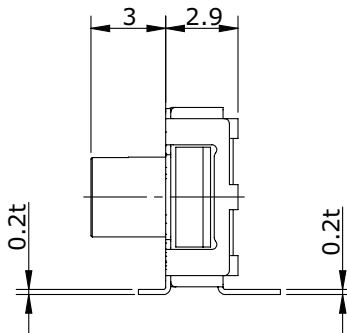
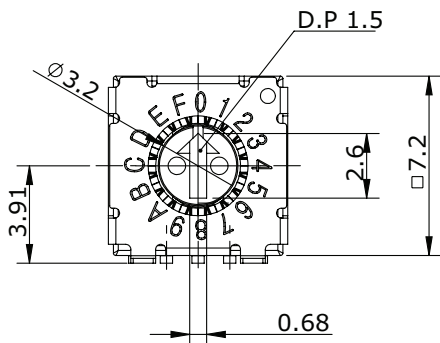
**10 POSITION**



| 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.

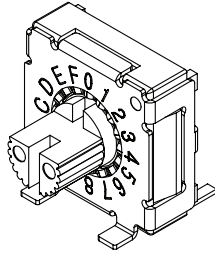
**16 POSITION**



Recommended PCB Layout  
Top View

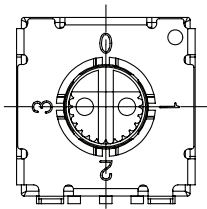
## MECHANICAL DRAWING (RAISED SLOTTED ACTUATOR)

units: mm  
tolerance: ±0.1 mm  
unless otherwise noted

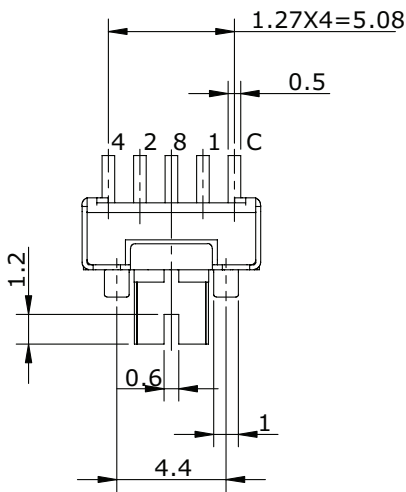
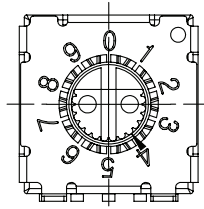


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR  |
|------|-------------|-----------------|--|
| 1    | actuator    | LCP (UL94V-0)   | blue (4 position)<br>gray (10 position)<br>ivory (16 position) |
| 2    | housing     | LCP (UL94V-0)   | dark gray  |
| 3    | face plate  | stainless steel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

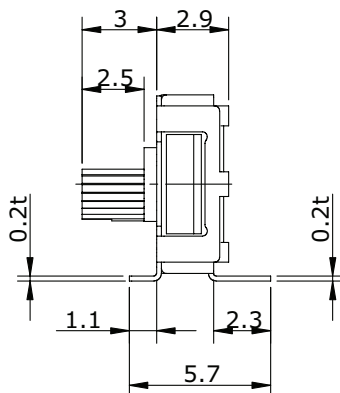
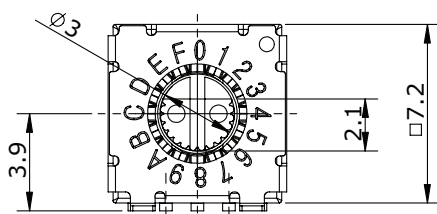
**4 POSITION**



**10 POSITION**

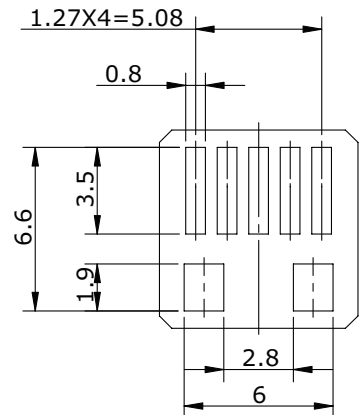


**16 POSITION**



| 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   | ○    | ○ | ○ | ○ |

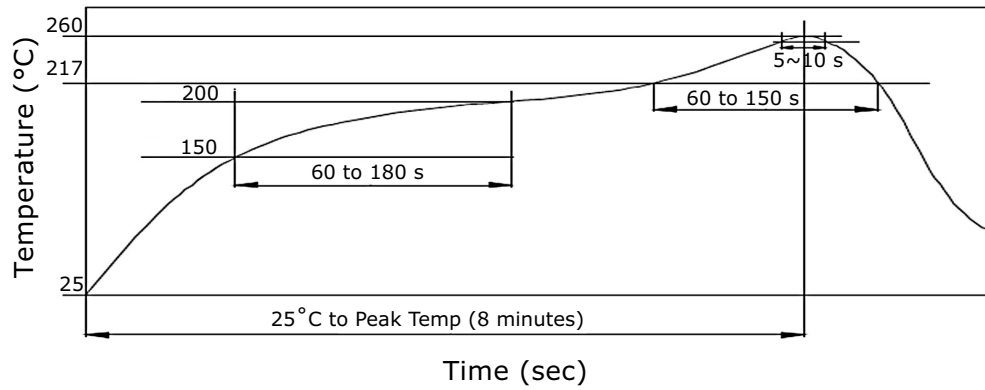
Note: \*Terminals 4 and 8 have no function on 4 position model.



Recommended PCB Layout  
Top View

## SOLDERABILITY

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

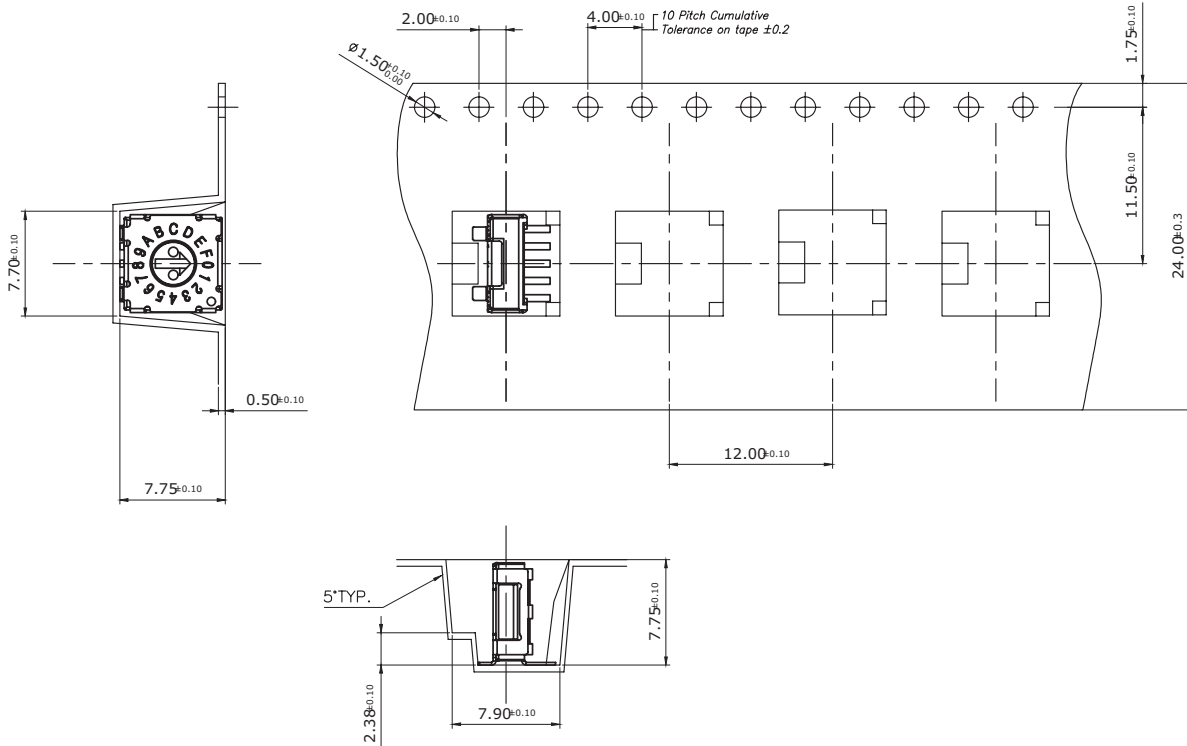


## PACKAGING

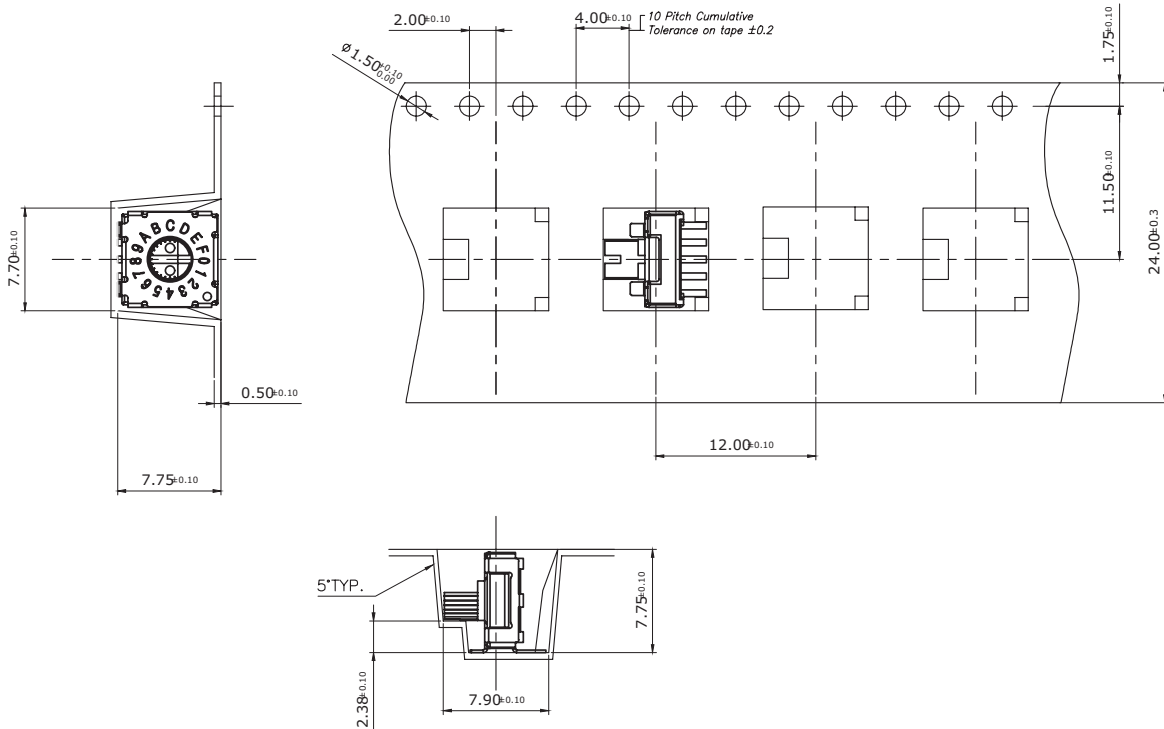
units: mm

Reel Size:  $\varnothing$ 330 mm  
QTY: 580 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 |

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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[cuidevices.com](http://cuidevices.com)