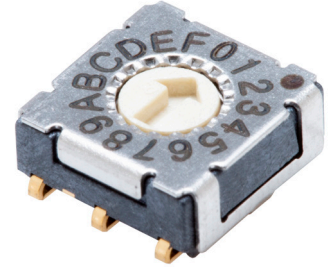


**SERIES:** RDS-7229-JSMT | **DESCRIPTION:** ROTARY DIP SWITCH

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**FEATURES**

- IP67 rated
- 4, 10, & 16 positions
- J hook surface mount

**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)                 |     |        |            |            |

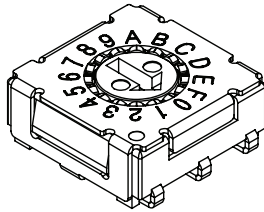
**PART NUMBER KEY**

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|             |                                                                                |               |                                                                                               |               |                                                    |
|-------------|--------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------|---------------|----------------------------------------------------|
| <b>RDS</b>  | <b>- XXS</b>                                                                   | <b>- 7229</b> | <b>- X</b>                                                                                    | <b>- JSMT</b> | <b>- XX</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 |               | Packaging:<br>"blank" = Tube<br>TR = Tape and Reel |

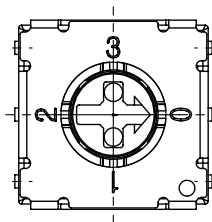
## MECHANICAL DRAWING (FLAT ARROW ACTUATOR)

units: mm  
tolerance:  $\pm 0.1$  mm  
unless otherwise noted

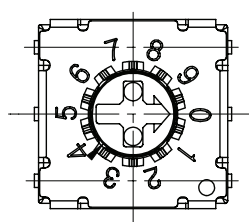


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR                                                  |
|------|-------------|-----------------|----------------------------------------------------------------|
| 1    | actuator    | LCP (UL94V-0)   | blue [4 position]<br>gray [10 position]<br>ivory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

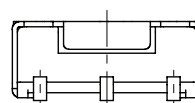
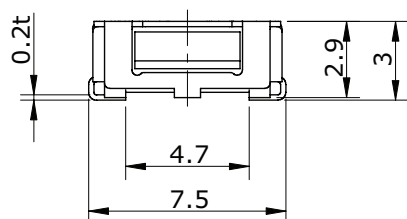
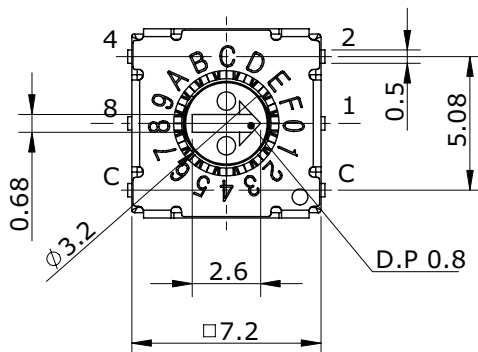
4 POSITION



10 POSITION

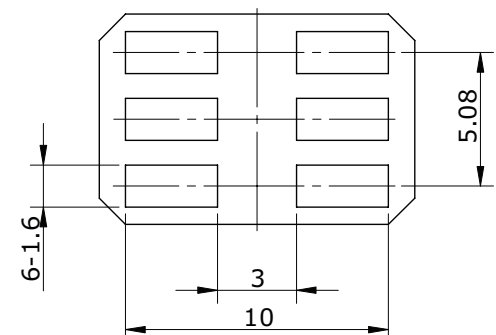


16 POSITION



| 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    | ○ | ○ | ○ | ○ |

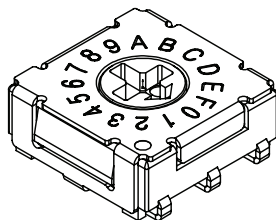
Note: \*Terminals 4 and 8 have no function on 4 position model.



Recommended PCB Layout  
Top View

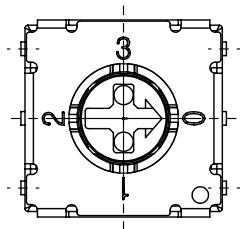
## MECHANICAL DRAWING (FLAT CROSS ACTUATOR)

units: mm  
tolerance:  $\pm 0.1$  mm  
unless otherwise noted

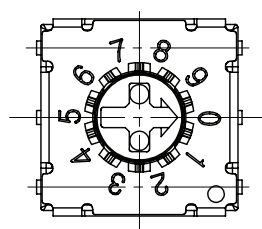


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR                                                  |
|------|-------------|-----------------|----------------------------------------------------------------|
| 1    | actuator    | LCP (UL94V-0)   | blue [4 position]<br>gray [10 position]<br>ivory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

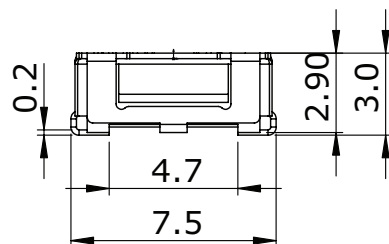
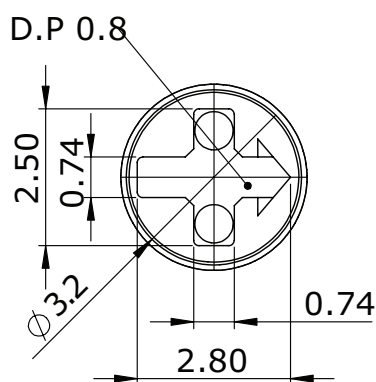
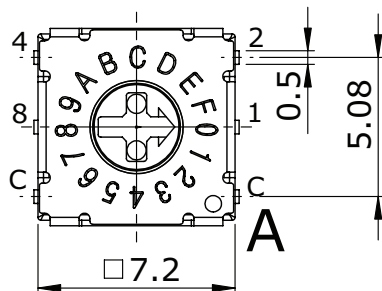
4 POSITION



10 POSITION

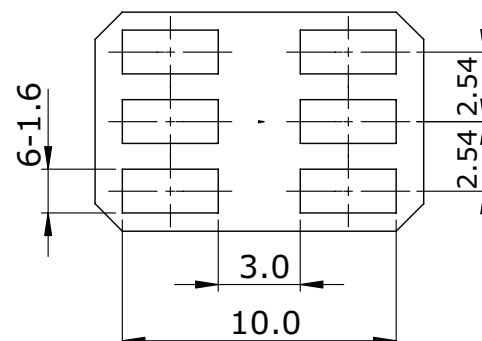


16 POSITION



| 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    | ○ | ○ | ○ | ○ |

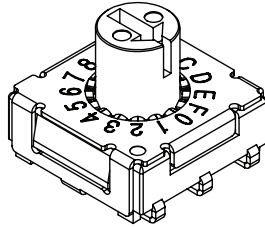
Note: \*Terminals 4 and 8 have no function on 4 position model.



Recommended PCB Layout  
Top View

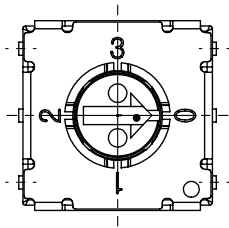
## MECHANICAL DRAWING (RAISED ARROW ACTUATOR)

units: mm  
tolerance:  $\pm 0.1$  mm  
unless otherwise noted

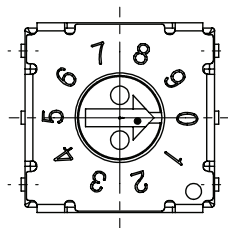


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR                                                  |
|------|-------------|-----------------|----------------------------------------------------------------|
| 1    | actuator    | LCP [UL94V-0]   | blue [4 position]<br>gray [10 position]<br>ivory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

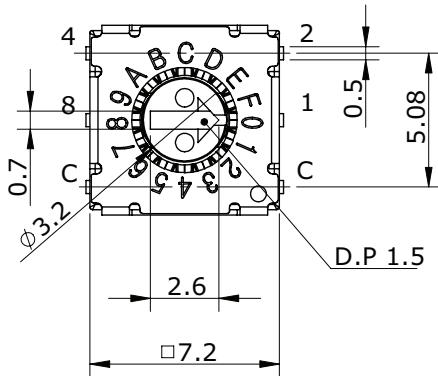
#### 4 POSITION



## 10 POSITION

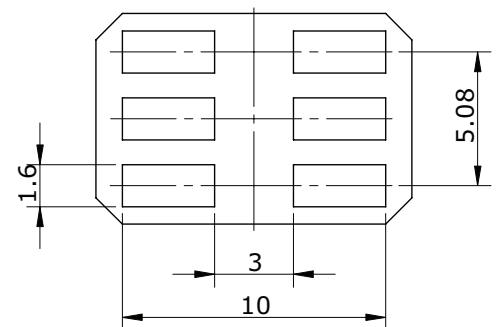
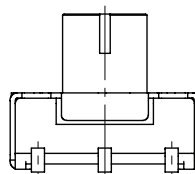
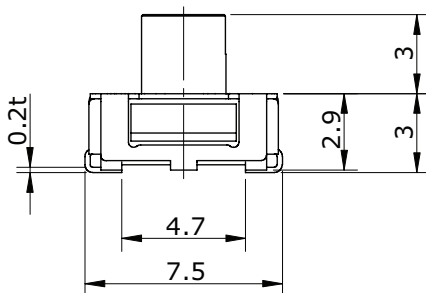


## 16 POSITION



| 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   | ○    | ○ | ○ | ○ |

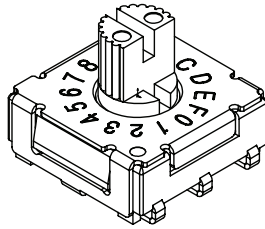
Note: \*Terminals 4 and 8 have no function on 4 position model.



### Recommended PCB Layout Top View

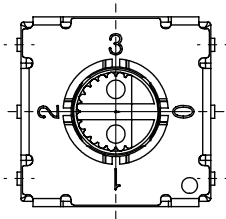
## MECHANICAL DRAWING (RAISED SLOTTED ACTUATOR)

units: mm  
tolerance:  $\pm 0.1$  mm  
unless otherwise noted

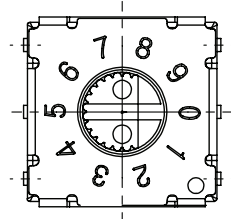


| ITEM | DESCRIPTION | MATERIAL        | PLATING/COLOR                                                  |
|------|-------------|-----------------|----------------------------------------------------------------|
| 1    | actuator    | LCP (UL94V-0)   | blue [4 position]<br>gray [10 position]<br>ivory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

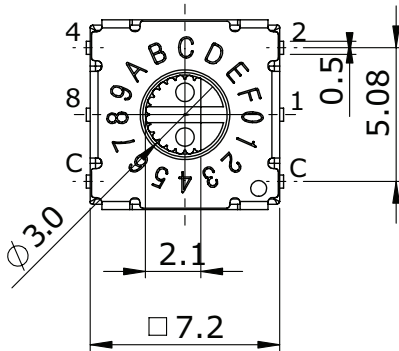
4 POSITION



10 POSITION

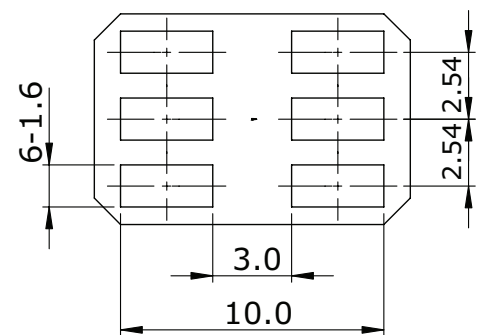
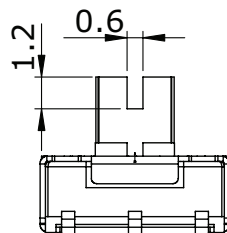
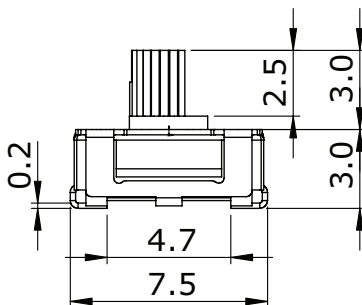


16 POSITION



| 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   | ○    | ○ | ○ | ○ |

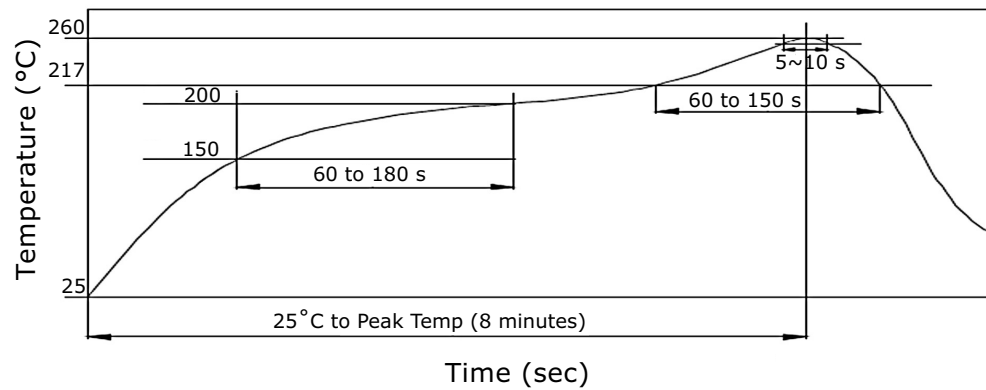
Note: \*Terminals 4 and 8 have no function on 4 position model.



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    |



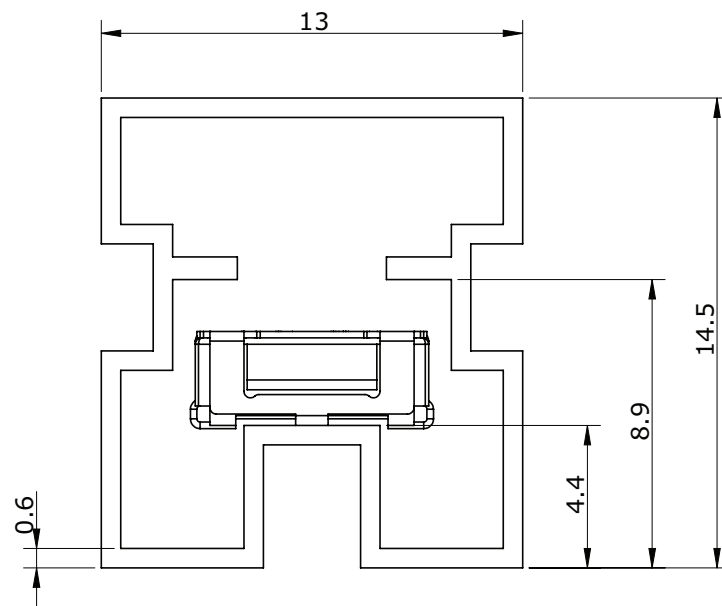
## PACKAGING (TUBE)

units: mm

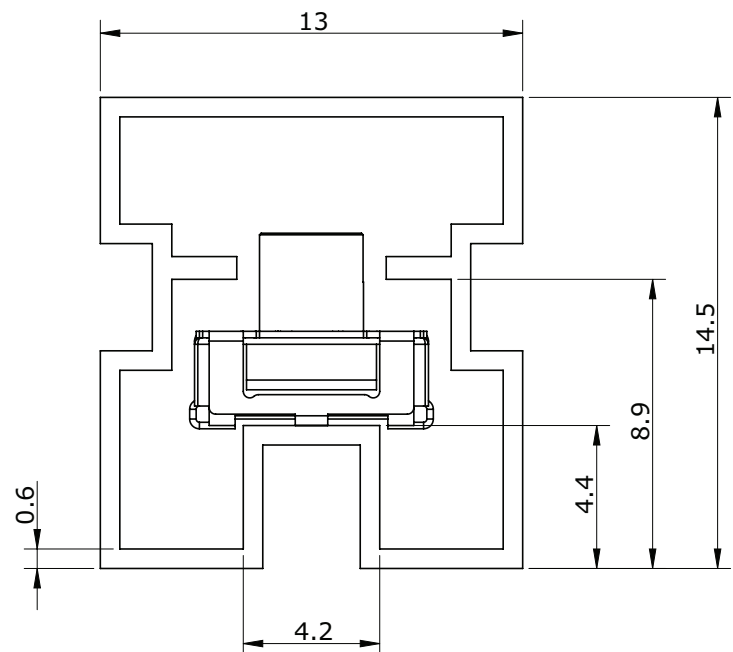
Tube Size: 14.5 x 13.0 x 545 mm

Tube QTY: 70 pcs

### FLAT ACTUATOR MODELS



### RAISED ACTUATOR MODELS



## PACKAGING (TAPE & REEL)

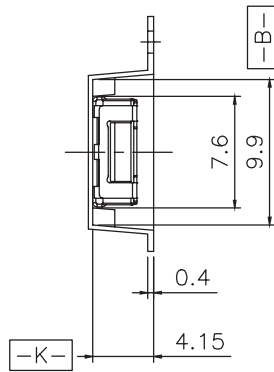
units: mm

Reel Size: Ø330 mm

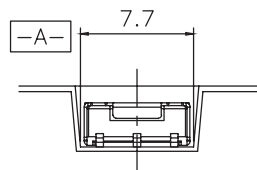
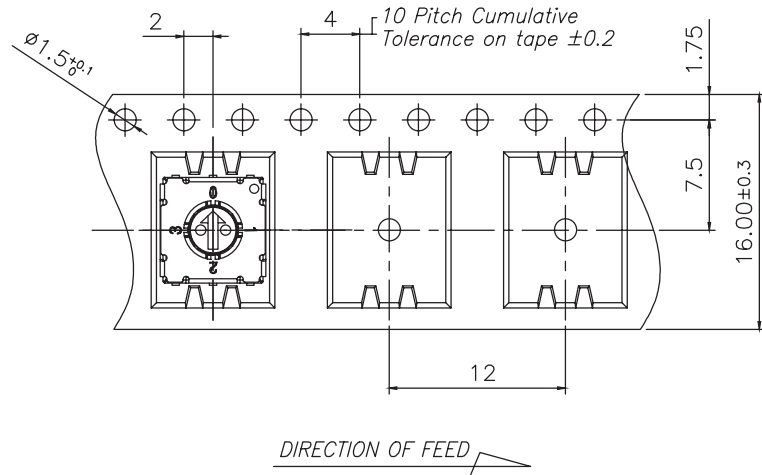
QTY:

Flat actuator models: 1,300 pcs/reel

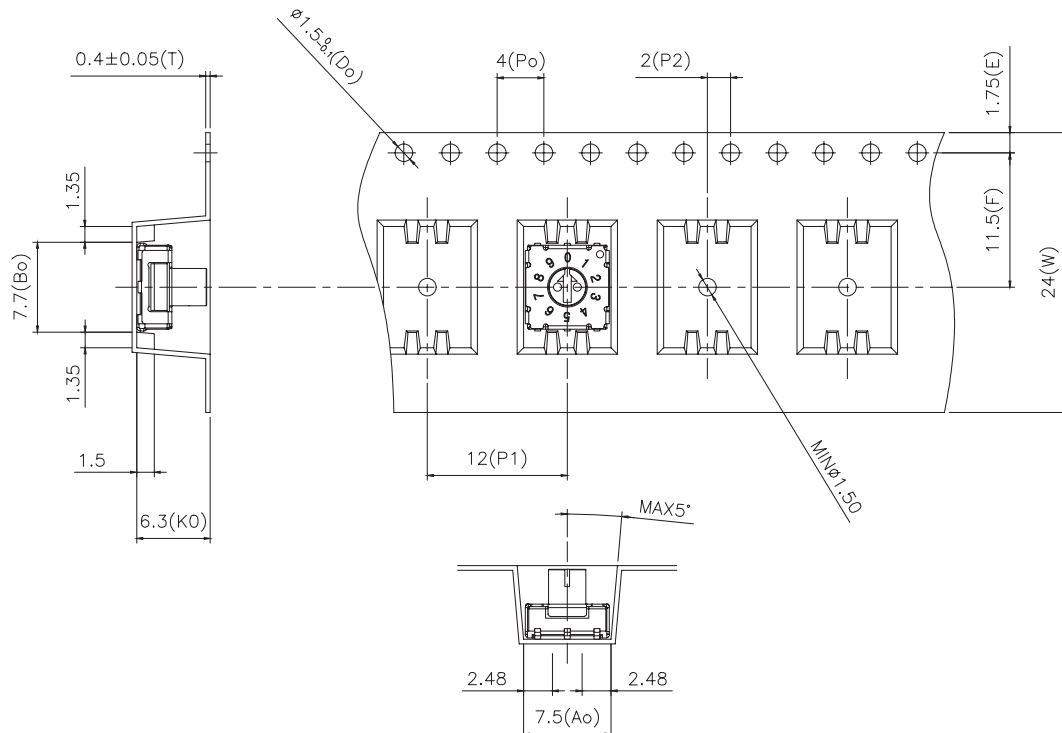
Raised actuator models: 800 pcs/reel



### 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.



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