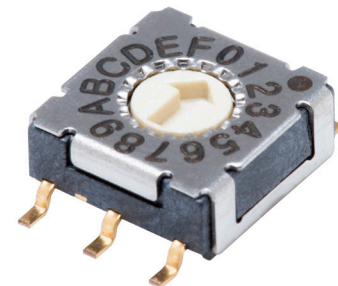


**SERIES:** RDS-7229-SMT | **DESCRIPTION:** ROTARY DIP SWITCH**FEATURES**

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

**SPECIFICATIONS**

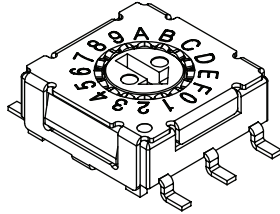
parameter	conditions/description	min	typ	max	units
rated voltage	switching			50	Vdc
	non-switching			50	Vdc
rated current	switching			100	mA
	non-switching			100	mA
withstanding voltage	for 1 minute		250		Vac
contact resistance				100	mΩ
insulation resistance	at 100 Vdc	100			MΩ
operating torque				200	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>- SMT</b>	<b>- XX</b>
Base Number	No. of Positions: 4 = 4 Positions 10 = 10 Positions 16 = 16 Positions		Actuator Style: A = Flat Arrow C = Flat Cross R = Raised Arrow S = Raised Slotted		Packaging: "blank" = Tube TR = Tape and Reel

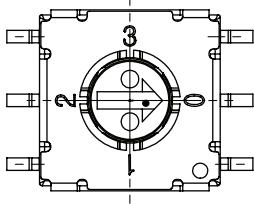
## MECHANICAL DRAWING (FLAT ARROW ACTUATOR)

units: mm  
tolerance: ±0.1 mm  
unless otherwise noted

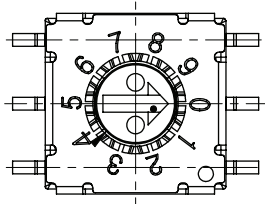


ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	actuator	LCP (UL94V-0)	blue [4 position] gray [10 position] ivory [16 position]
2	housing	LCP (UL94V-0)	dark gray
3	face plate	stainless steel	
4	terminals	copper alloy	gold

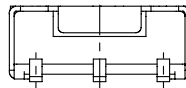
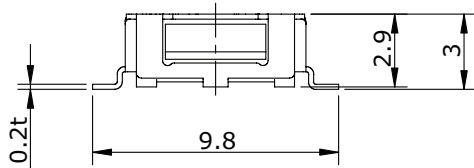
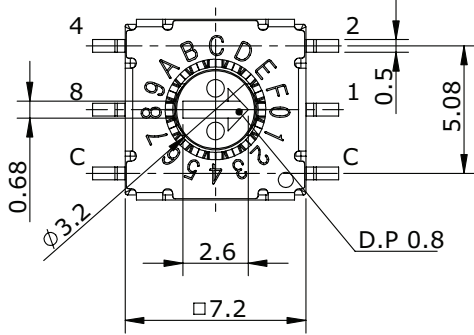
**4 POSITION**



**10 POSITION**

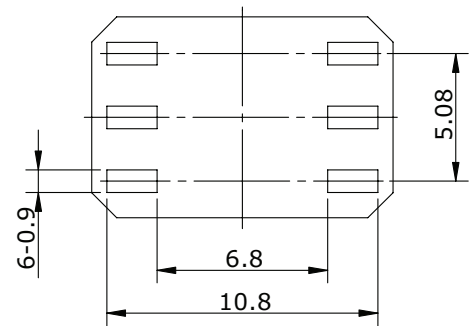


**16 POSITION**



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

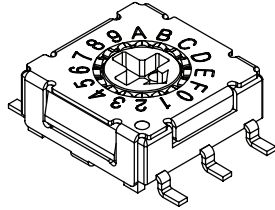
Note: \*Terminals 4 and 8 have no function on 4 position model.



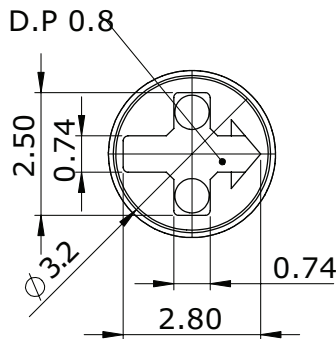
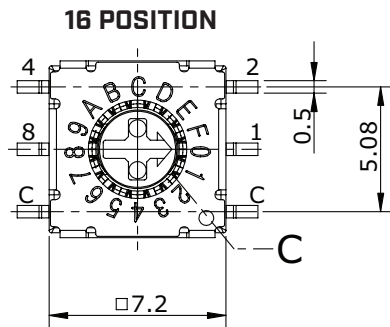
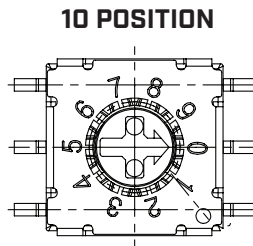
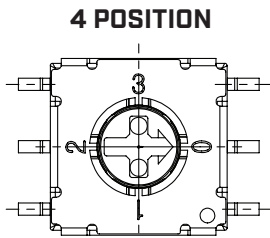
Recommended PCB Layout  
Top View

## MECHANICAL DRAWING (FLAT CROSS ACTUATOR)

units: mm  
 tolerance: ±0.1 mm  
 unless otherwise noted

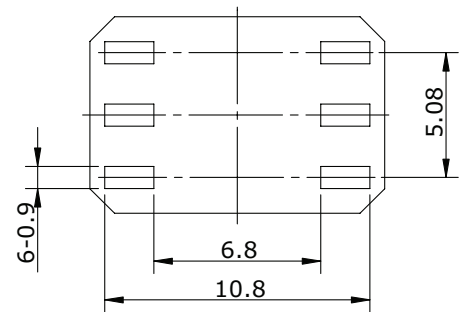
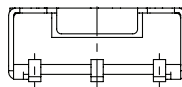
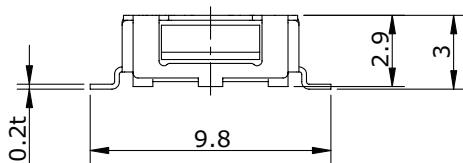


ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	actuator	LCP (UL94V-0)	blue [4 position] gray [10 position] ivory [16 position]
2	housing	LCP (UL94V-0)	dark gray
3	face plate	stainless steel	
4	terminals	copper alloy	gold



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	○	○	○	○	○

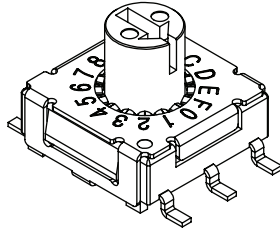
Note: \*Terminals 4 and 8 have no function on 4 position model.



Recommended PCB Layout  
Top View

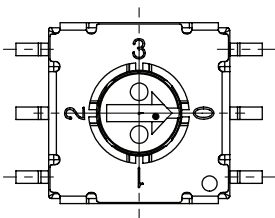
## MECHANICAL DRAWING (RAISED ARROW ACTUATOR)

units: mm  
 tolerance: ±0.1 mm  
 unless otherwise noted

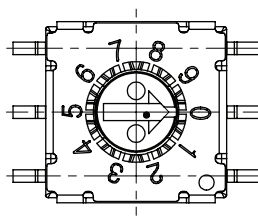


ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	actuator	LCP (UL94V-0)	blue [4 position] gray [10 position] ivory [16 position]
2	housing	LCP (UL94V-0)	dark gray
3	face plate	stainless steel	
4	terminals	copper alloy	gold

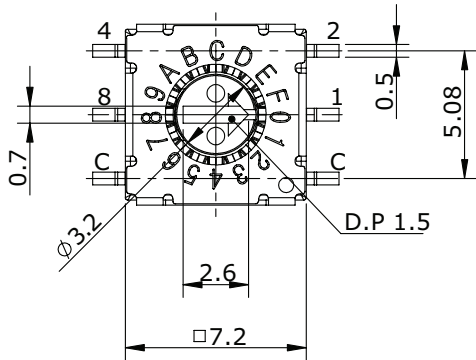
4 POSITION



10 POSITION

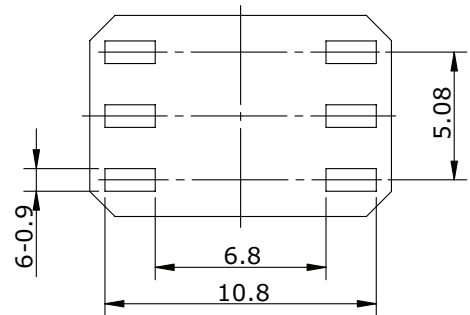
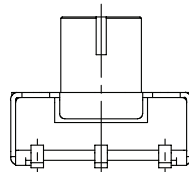
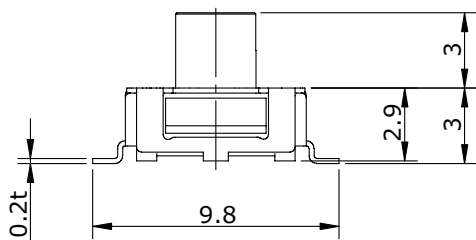


16 POSITION



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	○	○	○	○

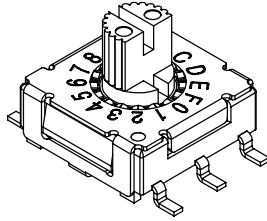
Note: \*Terminals 4 and 8 have no function on 4 position model.



Recommended PCB Layout  
Top View

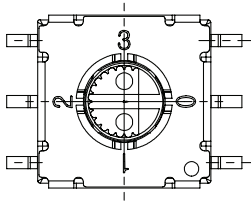
## MECHANICAL DRAWING (RAISED SLOTTED ACTUATOR)

units: mm  
tolerance: ±0.1 mm  
unless otherwise noted

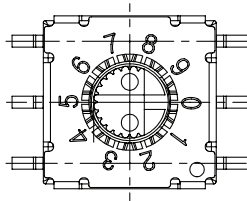


ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	actuator	LCP (UL94V-0)	blue [4 position] gray [10 position] ivory [16 position]
2	housing	LCP (UL94V-0)	dark gray
3	face plate	stainless steel	
4	terminals	copper alloy	gold

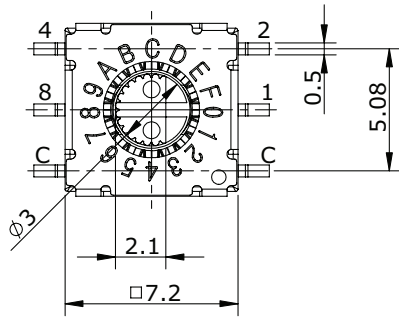
4 POSITION



10 POSITION

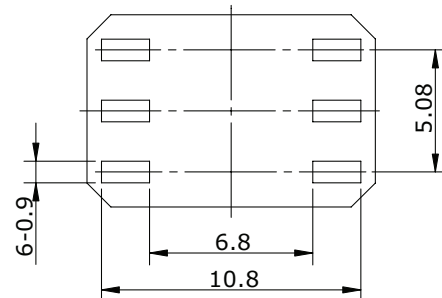
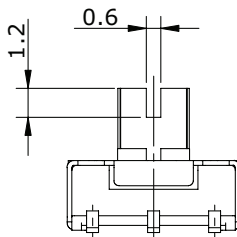
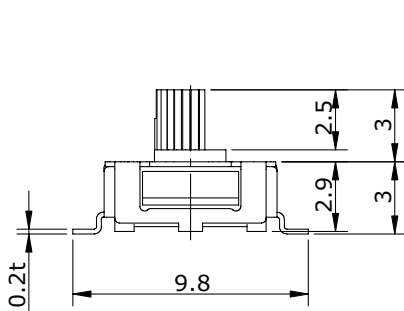


16 POSITION



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	○	○	○	○

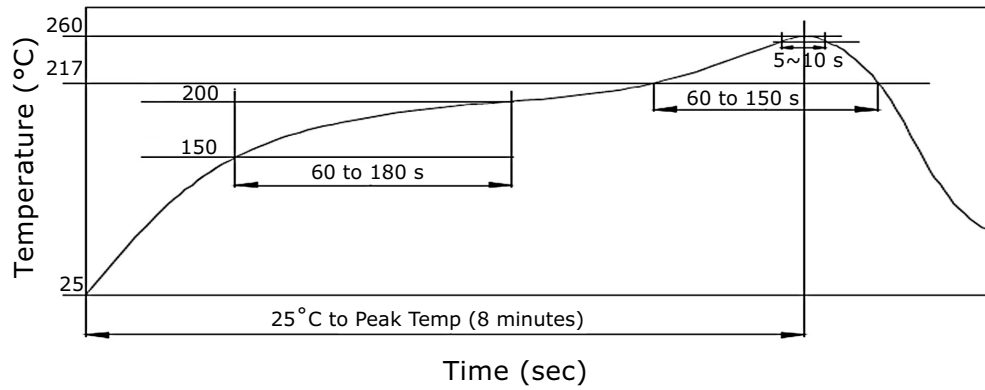
Note: \*Terminals 4 and 8 have no function on 4 position model.



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



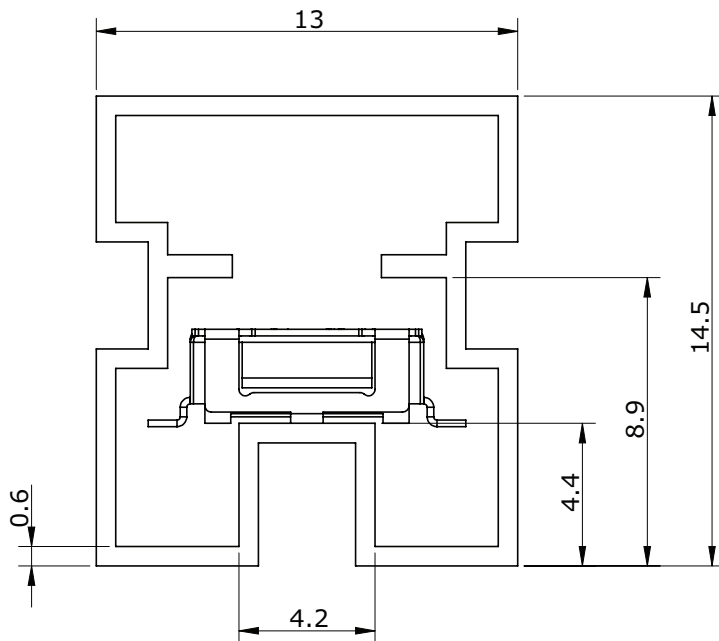
## PACKAGING (TUBE)

units: mm

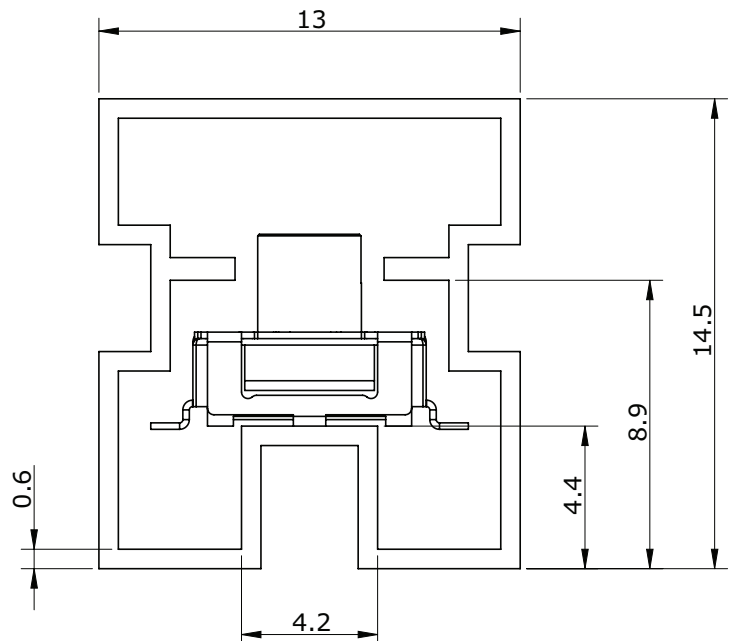
Tube Size: 14.5 x 13.0 x 545 mm

Tube QTY: 70 pcs

### FLAT ACTUATOR MODELS



### RAISED ACTUATOR MODELS



## PACKAGING (TAPE & REEL)

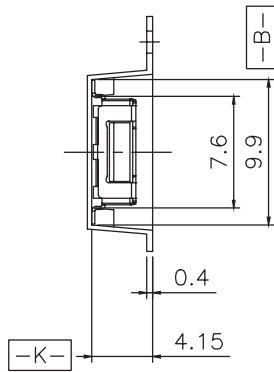
units: mm

Reel Size:  $\varnothing$ 330 mm

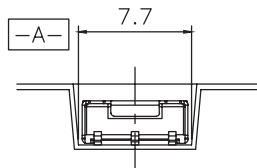
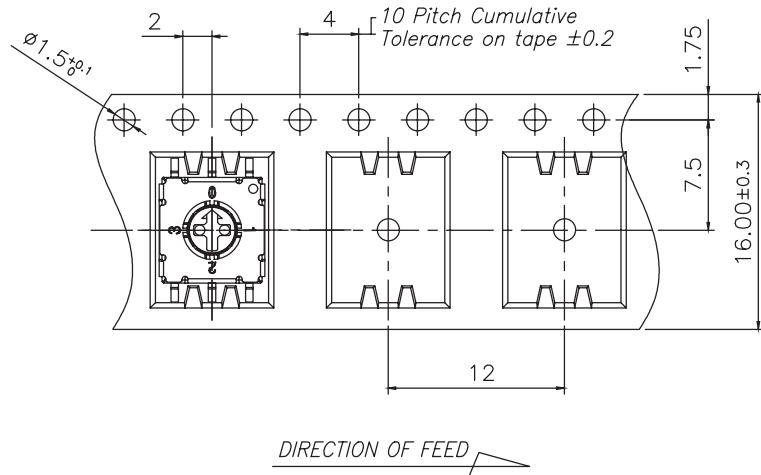
QTY:

Flat actuator models: 1,300 pcs/reel

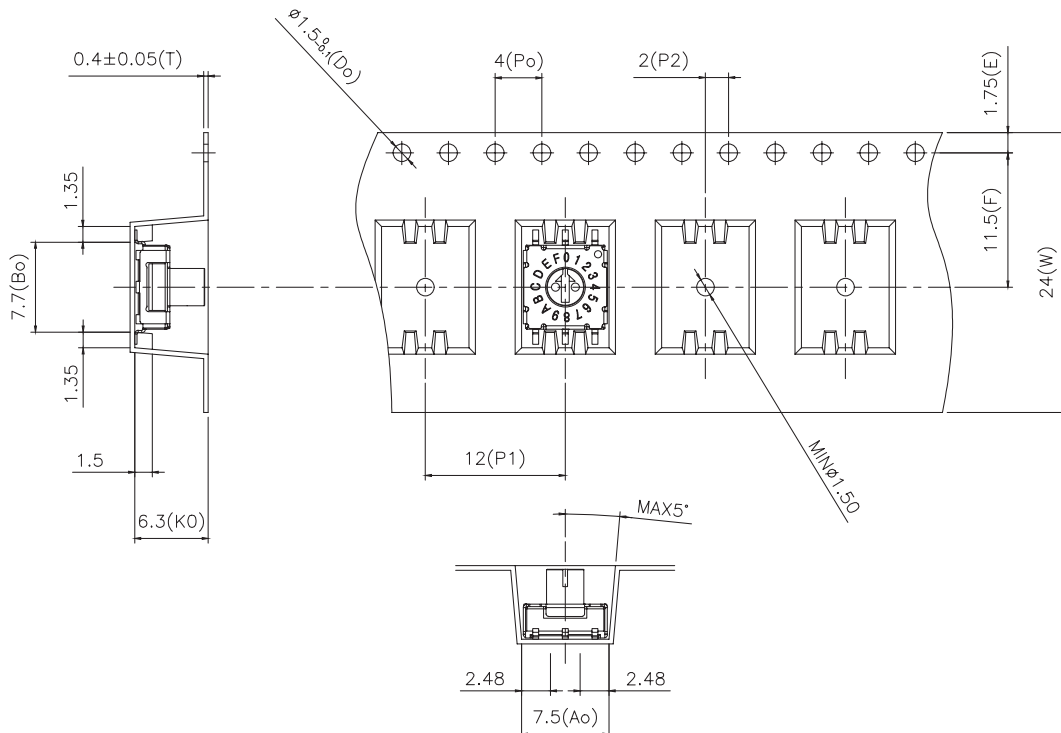
Raised actuator models: 800 pcs/reel



### 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.



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](http://cuidevices.com)