SERIES: RDS2-1012-RA-67 | DESCRIPTION: ROTARY DIP SWITCH

FEATURES

- 4, 8, 10, & 16 positions
- right angle
- 2.54 & 5.08 pitch
- IP67

SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
rated voltage	switching non-switching			42 42	Vdc Vdc
rated current	switching non-switching			150 200	mA 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

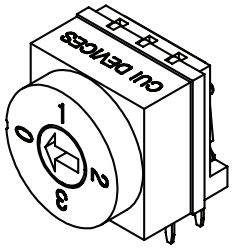
PART NUMBER KEY

RDS2 - XXS - 1012 - RA - XXX - D - 67

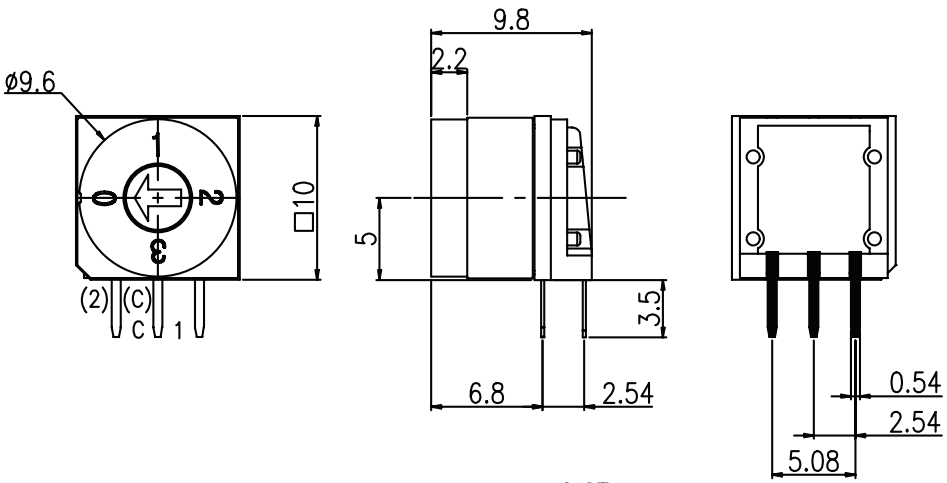
- RDS2: Base Number
- XXS: No. of Positions:
  4 = 4 Positions
  8 = 8 Positions
  10 = 10 Positions
  16 = 16 Positions
- XXX: Pitch:
  254 = 2.54 mm
  508 = 5.08 mm

MECHANICAL DRAWING (4 POSITION, 2.54 MM PITCH)

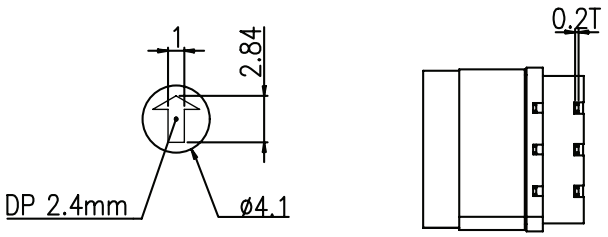
units: mm
tolerance: ±0.3 mm
unless otherwise specified



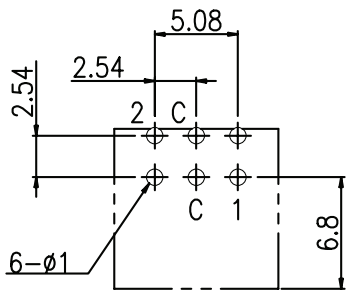
DESCRIPTION	MATERIAL	PLATING/COLOR
actuator	POM (UL94HB)	gray
cover	PA66 (UL94V-0)	light white
base	PA66 (UL94V-0)	black
terminals	phosphorus bronze	Ni/Au



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



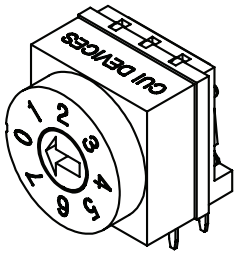
ACTUATOR



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
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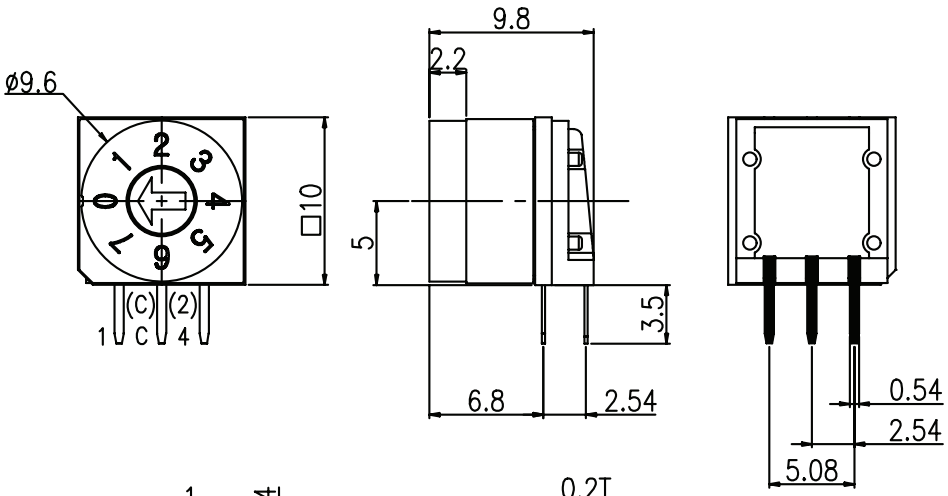
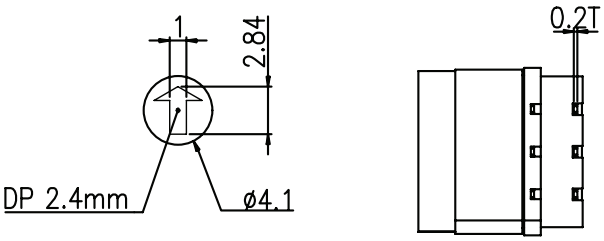
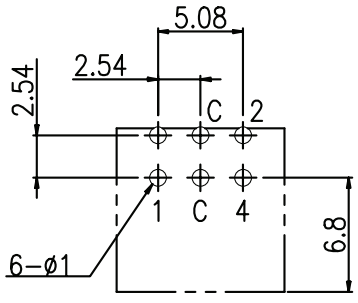
cover	PA66 (UL94V-0)	light white
base	PA66 (UL94V-0)	black
terminals	phosphorus bronze	Ni/Au



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



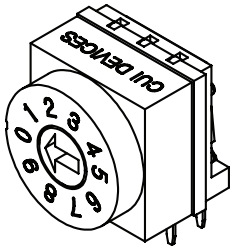
ACTUATOR



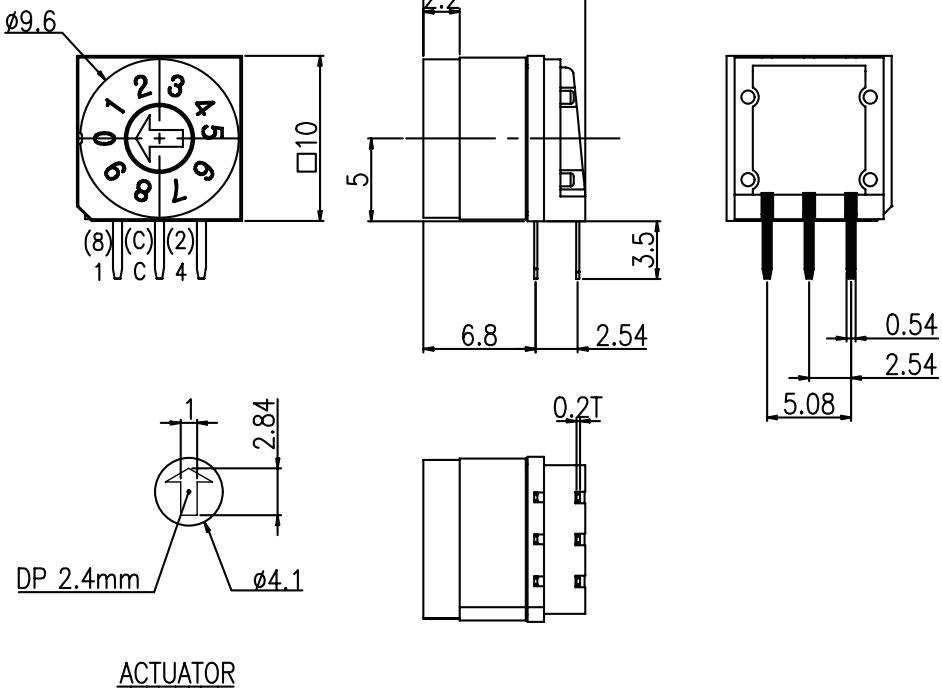
Recommended PCB Layout
Top View

MECHANICAL DRAWING (10 POSITION, 2.54 MM PITCH)

units: mm
tolerance: ±0.3 mm
unless otherwise specified

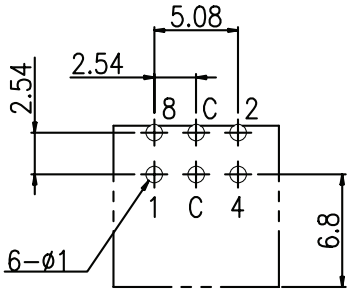


DESCRIPTION	MATERIAL	PLATING/COLOR
actuator	POM (UL94HB)	gray
cover	PA66 (UL94V-0)	light white
base	PA66 (UL94V-0)	black
terminals	phosphorus bronze	Ni/Au



ACTUATOR

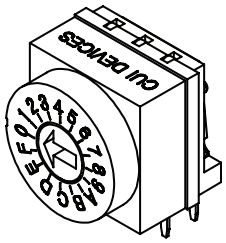
ON ●						
OFF ○		CODE				
TYPE	POS	C	1	2	4	8
10 POSITION	0	●	○	○	○	○
	1	●	●	○	○	○
	2	●	○	●	○	○
	3	●	●	●	○	○
	4	●	○	○	●	○
	5	●	●	○	●	○
	6	●	○	●	●	○
	7	●	●	●	●	○
	8	●	○	○	○	●
	9	●	●	○	○	●



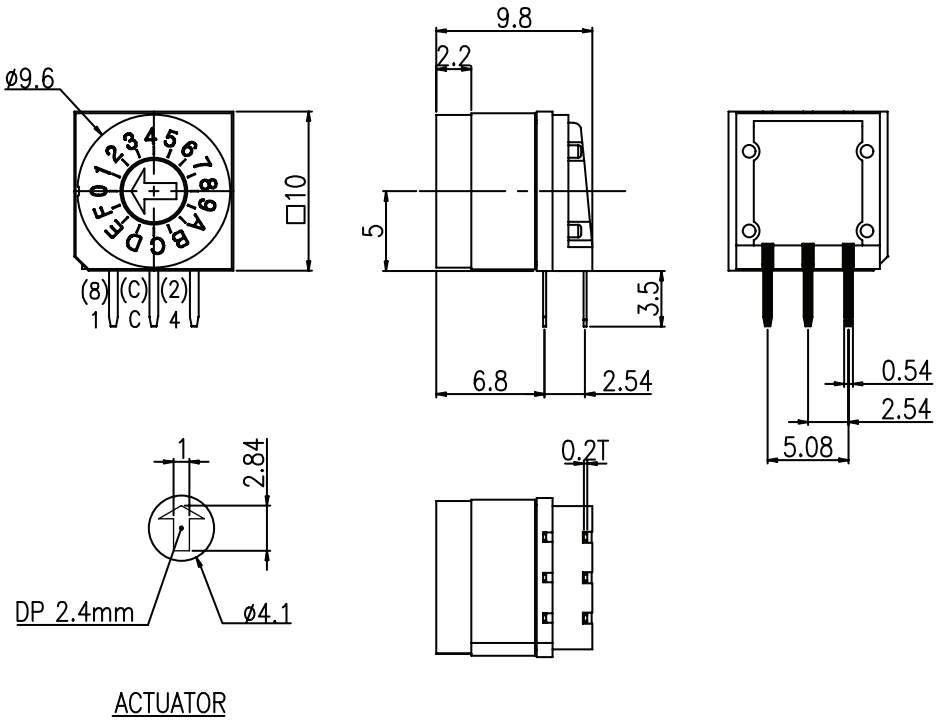
Recommended PCB Layout
Top View

MECHANICAL DRAWING (16 POSITION, 2.54 MM PITCH)

units: mm
tolerance: ±0.3 mm
unless otherwise specified

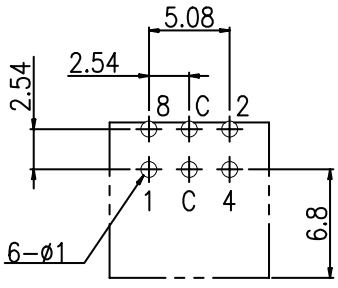


DESCRIPTION	MATERIAL	PLATING/COLOR
actuator	POM (UL94HB)	gray
cover	PA66 (UL94V-0)	light white
base	PA66 (UL94V-0)	black
terminals	phosphorus bronze	Ni/Au



ACTUATOR

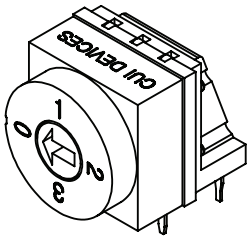
ON ●						
OFF ○		CODE				
TYPE	POS	C	1	2	4	8
16 POSITION	0	●	○	○	○	○
	1	●	●	○	○	○
	2	●	○	●	○	○
	3	●	●	●	○	○
	4	●	○	○	●	○
	5	●	●	○	●	○
	6	●	○	●	●	○
	7	●	●	●	●	○
	8	●	○	○	○	●
	9	●	●	○	○	●
	A	●	○	●	○	●
	B	●	●	●	○	●
	C	●	○	○	●	●
	D	●	●	○	●	●
	E	●	○	●	●	●
	F	●	●	●	●	●



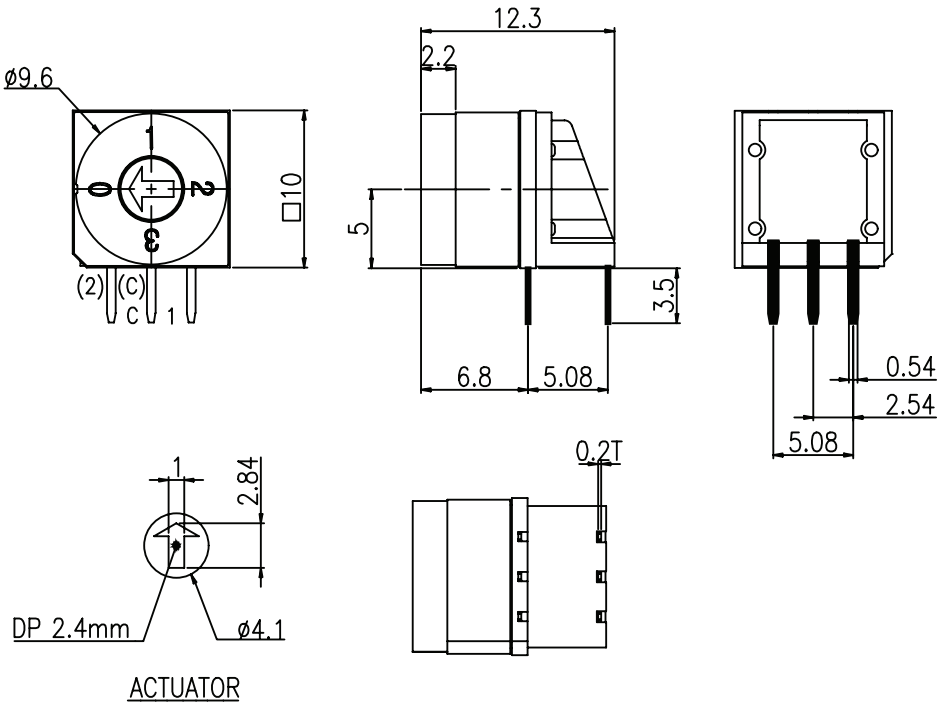
Recommended PCB Layout
Top View

MECHANICAL DRAWING (4 POSITION, 5.08 MM PITCH)

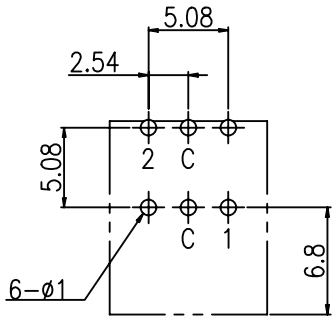
units: mm
tolerance: ±0.3 mm
unless otherwise specified



DESCRIPTION	MATERIAL	PLATING/COLOR
actuator	POM (UL94HB)	gray
cover	PA66 (UL94V-0)	light white
base	PA66 (UL94V-0)	black
terminals	phosphorus bronze	Ni/Au



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



Recommended PCB Layout
Top View

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
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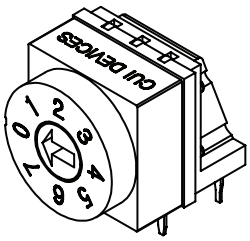
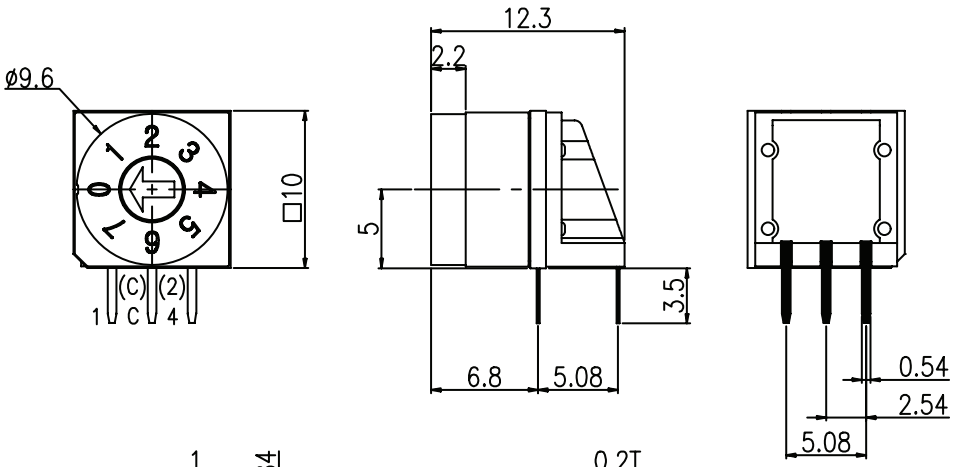
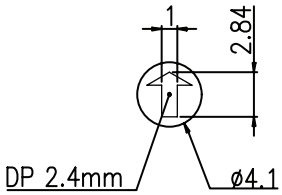
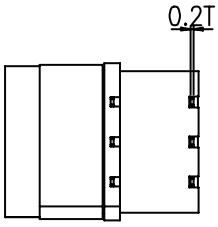
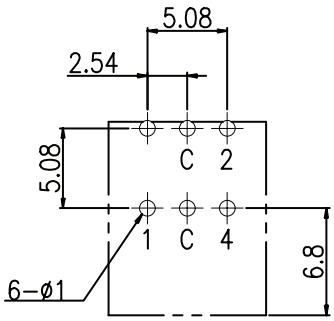






ACTUATOR



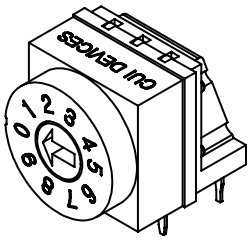


Recommended PCB Layout
Top View

ON ●					
OFF ○		CODE			
TYPE	POS	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



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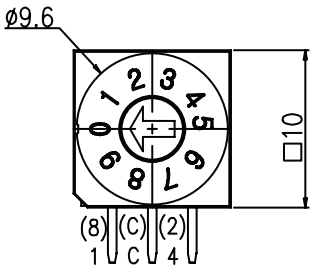
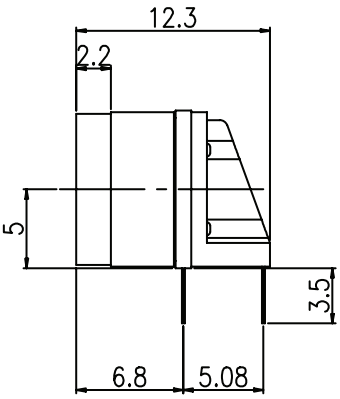
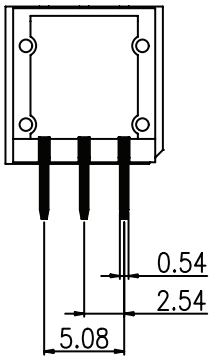
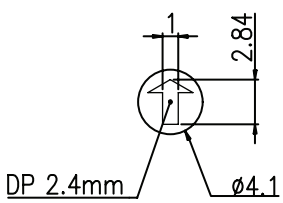
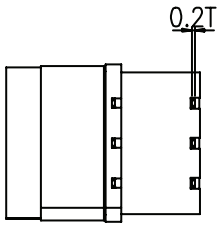




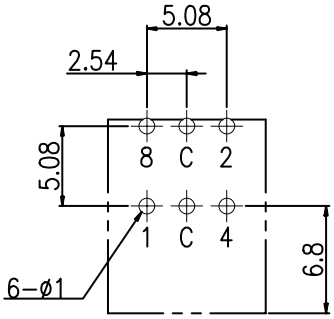


ON ●						
OFF ○		CODE				
TYPE	POS	C	1	2	4	8
10 POSITION	0	●	○	○	○	○
	1	●	●	○	○	○
	2	●	○	●	○	○
	3	●	●	●	○	○
	4	●	○	○	●	○
	5	●	●	○	●	○
	6	●	○	●	●	○
	7	●	●	●	●	○
	8	●	○	○	○	●
	9	●	●	○	○	●





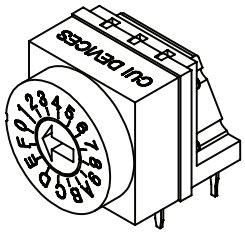
ACTUATOR



Recommended PCB Layout
Top View

MECHANICAL DRAWING (16 POSITION, 5.08 MM PITCH)

units: mm
tolerance: ±0.3 mm
unless otherwise specified



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base	PA66 (UL94V-0)	black
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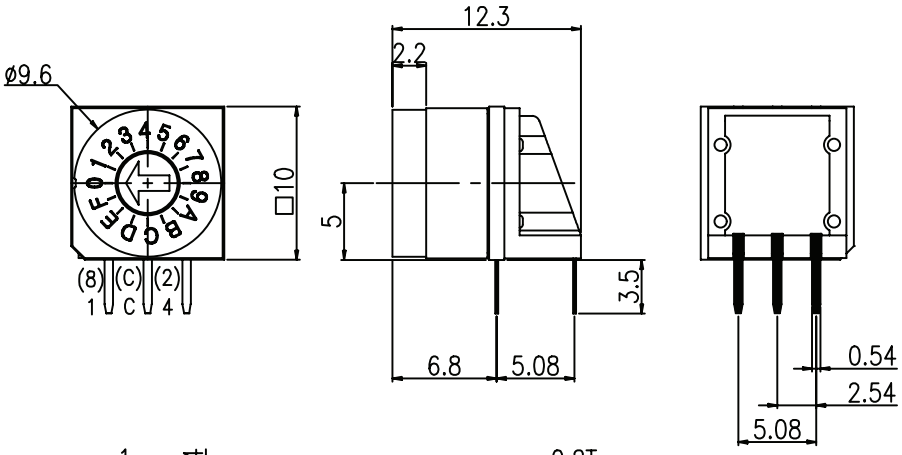
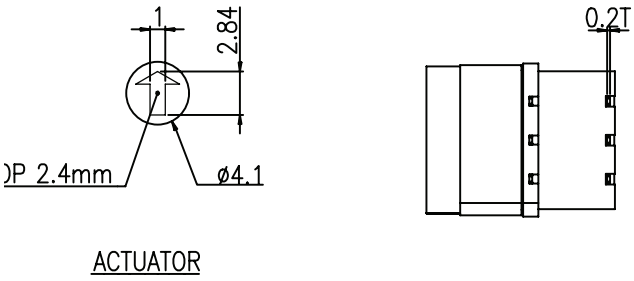
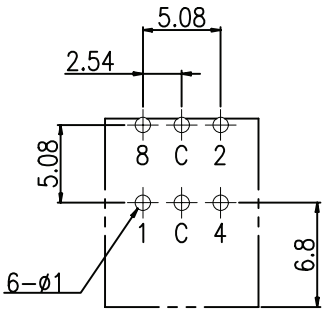




ACTUATOR

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



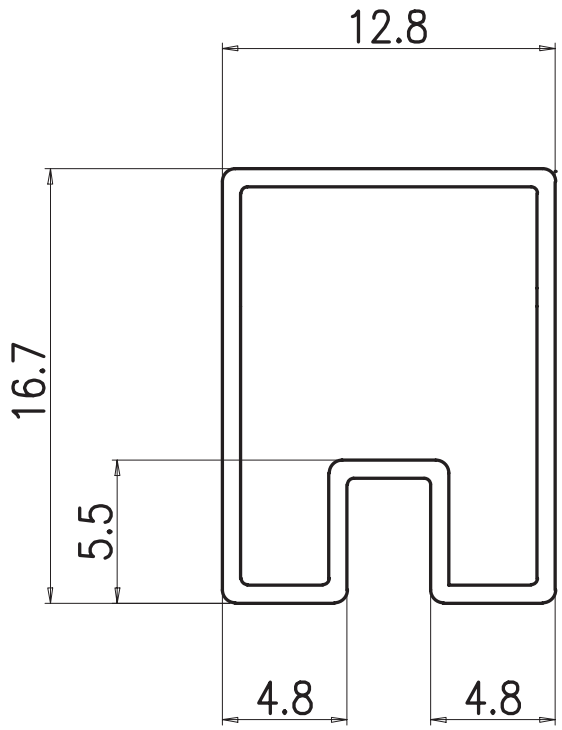
Recommended PCB Layout
Top View

PACKAGING

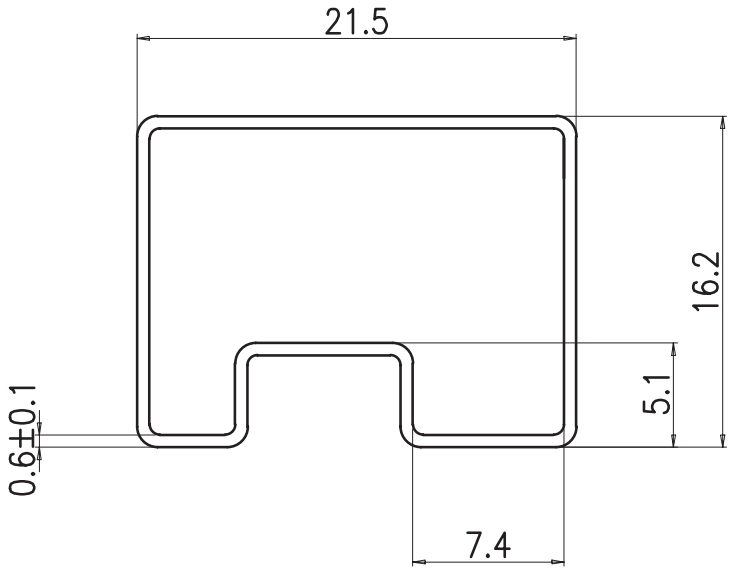
units: mm

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.

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CUI Devices:

RDS2-10S-1012-RA-254-D-67 RDS2-10S-1012-RA-508-D-67 RDS2-16S-1012-RA-254-D-67 RDS2-16S-1012-RA-508-D-67 RDS2-4S-1012-RA-254-D-67 RDS2-4S-1012-RA-508-D-67 RDS2-8S-1012-RA-254-D-67 RDS2-8S-1012-RA-508-D-67