

## ERD7 SERIES

### MINIATURE SIZE □7x3 ROTARY SWITCH



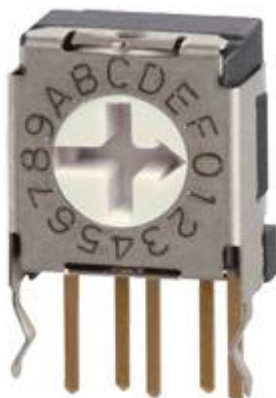
SMT



Through hole reflow (THR)  
Through hole (TH)



Right Angle (RA)



Right Angle (RA)  
Through hole (TH)



Right Angle (RA)  
SMT



J-Hook  
SMT

## ■ FEATURES

- Low profile of 3.0mm
- THR (Through Hole Reflow) version available
- Available with spindle or slotted spindle
- Supply various switch codes, include Gray code, Reel and Complement code
- Gold plated contact area ensures reliable electric continuity for micro current
- Surface mounting type can be supplied in embossed taping for automatic packing
- Pin-out compatible with most of current equivalents
- All plastics are UL 94V-0 grade fire retardant

## ■ APPLICATIONS

- Address switching applications
- Data storage devices
- Computer and peripherals
- Instrumentation



## ■ SPECIFICATIONS

### 1.ELECTRICAL

● Contact rating	Max. switching load	100mA, 5VDC
	Min. switching load	10 $\mu$ A, 5VDC
● Contact resistance (initial)		200m $\Omega$ Max.
● Insulation resistance		100M $\Omega$ Min. at 100VDC
● Dielectric strength		250VAC rms. for 60 seconds

### 2.MECHANICAL and ENVIRONMENTAL

● Temperature rating	operation	-25 $^{\circ}$ C ~+70 $^{\circ}$ C
	storage	-25 $^{\circ}$ C ~+85 $^{\circ}$ C
● Operation force		510gf-cm Max.
● Operation life		10,000 detents Min.
● Vibration		10Hz-50Hz-10Hz for 6Hrs.
● Solderability		After flux 245 $^{\circ}$ C $\pm$ 5 $^{\circ}$ C for 5 $\pm$ 1 seconds
● Resistance to soldering heat	solder bath	260 $\pm$ 5 $^{\circ}$ C for 5 $\pm$ 1 seconds
	solder reflow	Peak temperature 260 $^{\circ}$ C Max.

### 3.SOLDERING PROCESS

● Solder iron	Max. 2 sec/350 $^{\circ}$ C
● Reflow soldering heat for SMT & THR type (reference only)	

## CODE

### Real / Complement Code

PIN NO.	POSITIONS															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●
2	○	○	●	●	○	○	●	●	○	○	●	●	○	○	●	●
4	○	○	○	○	●	●	●	●	○	○	○	○	●	●	●	●
8	○	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●

●.....Real Code

○.....Complement Code

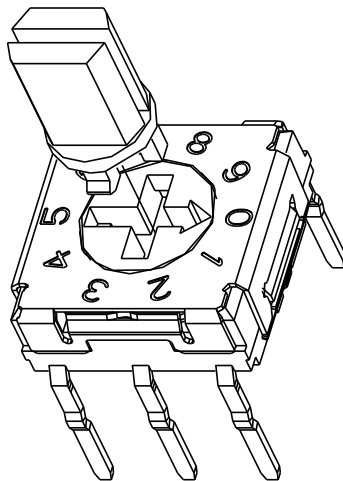
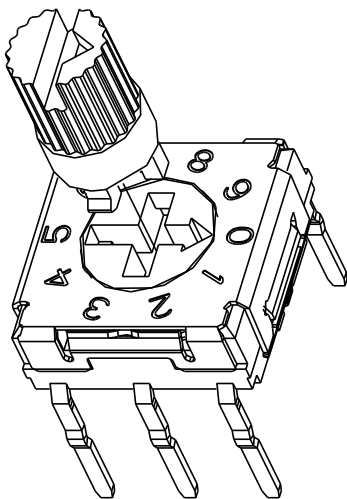
### Gray Code

PIN NO.	POSITIONS															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1		●	●			●	●			●	●			●	●	
2			●	●	●	●					●	●	●	●		
4					●	●	●	●	●	●	●	●				
8									●	●	●	●	●	●	●	●

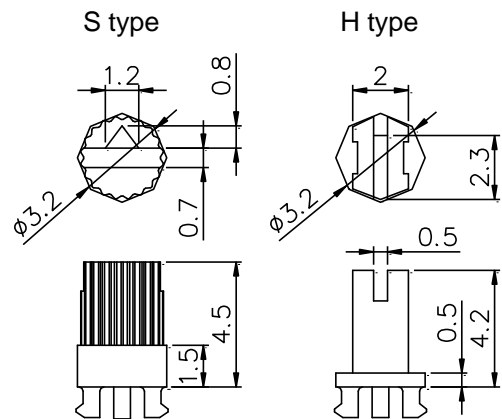
●.....Gray Code

## OPTIONS

- 1.Special marking available
- 2.Shaft available (for cross shaped slot type only)



### ERD7 Shaft

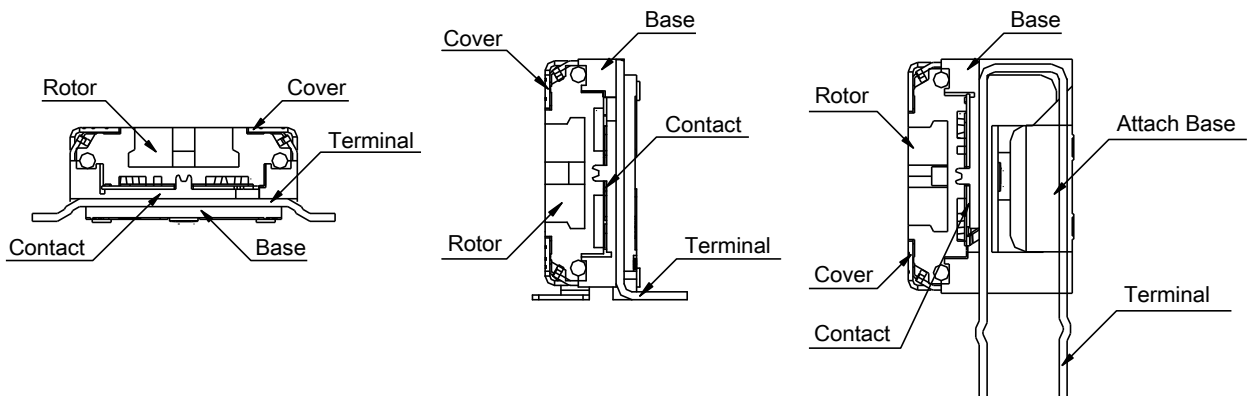


## ■ PART NUMBERING SYSTEM

ERD7 08 A S XX Z

- Z: RoHS Compliant
- Special number:
  - None: Center Common terminal pins location (3:3 pin out)
  - Center Output "8" terminal pin location (3:2, 5:0 pin out)
  - 06: Side Common terminal pins location (3:3 pin out)
  - Center Output "1" terminal pin location (3:2, 5:0 pin out)
- S: Spindle
- H: Slotted spindle
- Setting:
  - S: Standard type with row spacing 7.62mm
  - F: Right Angle type with row spacing 5.08mm
  - R: Right Angle type with row spacing 2.54mm
  - H: Right Angle type with row spacing 1.27mm
  - M: Surface Mounting type
  - D: "M" type in Tape & Reel Package
  - J: Right Angle with Surface Mounting type and side support terminal
  - T: "J" type in Tape & Reel Package
  - L: Right Angle with Surface Mounting type and forward support terminal
  - U: "L" type in Tape & Reel Package
  - C: J-hook with Surface Mounting type
  - E: "C" type in Tape & Reel Package
- Code:
  - R: Real code / Arrow shaped slot type
  - A: Real code / Cross shaped slot type
  - C: Complement code / Arrow shaped slot type
  - B: Complement code / Cross shaped slot type
  - G: Gray code / Cross shaped slot type
- Positions:
  - 08: 8 Positions, 10: 10 Positions, 16: 16 Positions
- Series name: ERD7: Miniature size (7.2x7.2mm<sup>2</sup>) Rotary DIP Switch

## ■ CONSTRUCTION

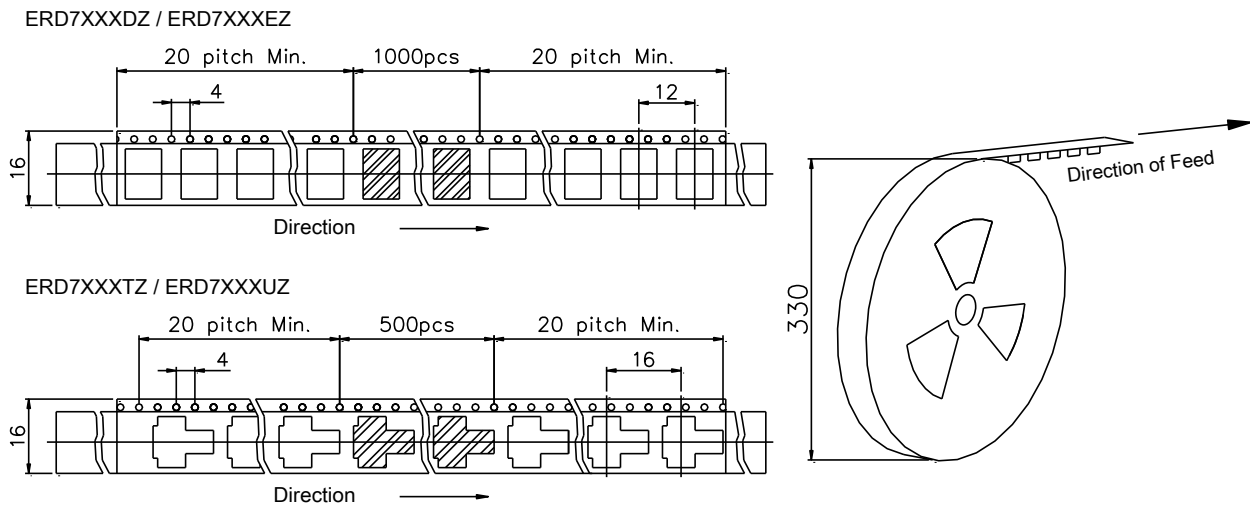




## PACKING

### 1. PACKING METHOD

Type	Package	Number of pcs. Per IC Tube	Number of pcs. Per Reel
Top Adjust Type		70	1000
Side Adjust Type		70	500

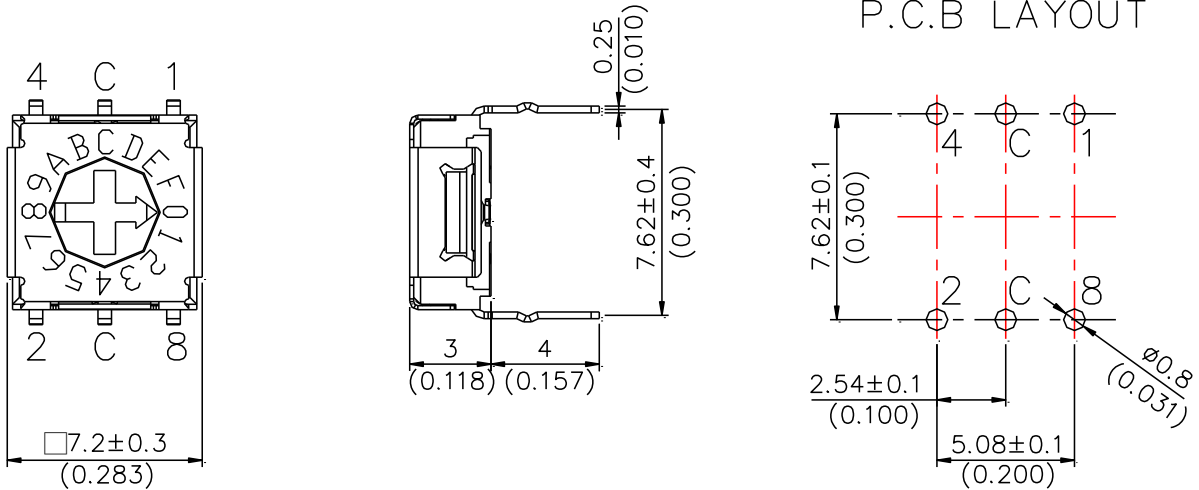


## QUICK SELECTION GUIDE

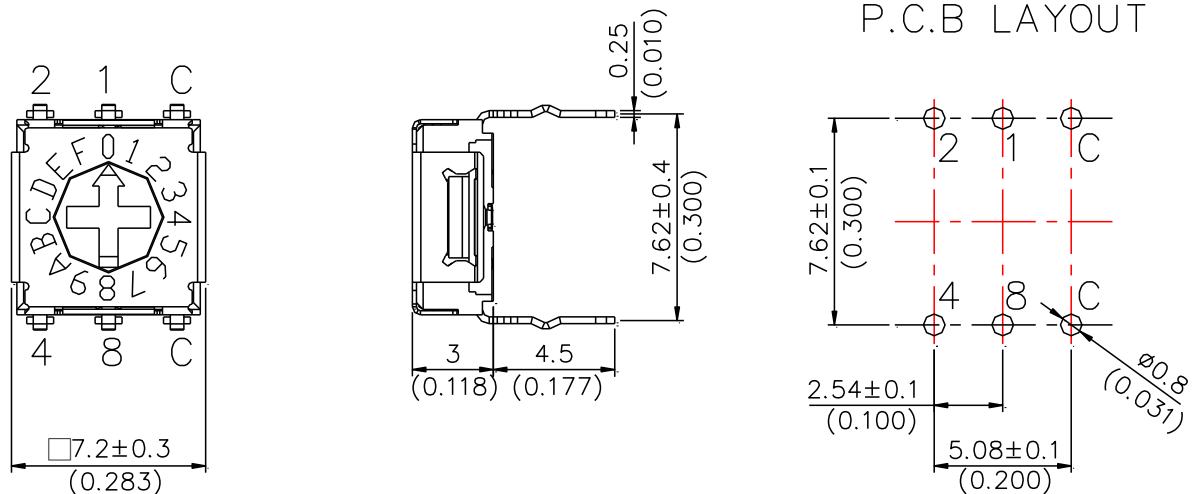
SIZE	POSITIONS	CODE	SETTING POSITION	PIN OUT	SHAPE OF TERMINAL	PART NUMBER
7x7	8,10,16	REAL COMPLEMENT GRAY	TOP SETTING	3:3	STANDARD	ERD7XXXSZ
					SMT	ERD7XXXMZ
					SMT IN T&R	ERD7XXXDZ
					J-HOOK WITH SMT	ERD7XXXCZ
					J-HOOK WITH SMT IN T&R	ERD7XXXEZ
			SIDE SETTING	3:3	RIGHT ANGLE	ERD7XXXRZ ERD7XXXFZ
					RIGHT ANGLE	ERD7XXXHZ
				5:0	RIGHT ANGLE WITH SMT	ERD7XXXJZ ERD7XXXLZ
					RIGHT ANGLE WITH SMT IN T&R	ERD7XXXTZ ERD7XXXUZ

## DIMENSIONS AND CIRCUITRY

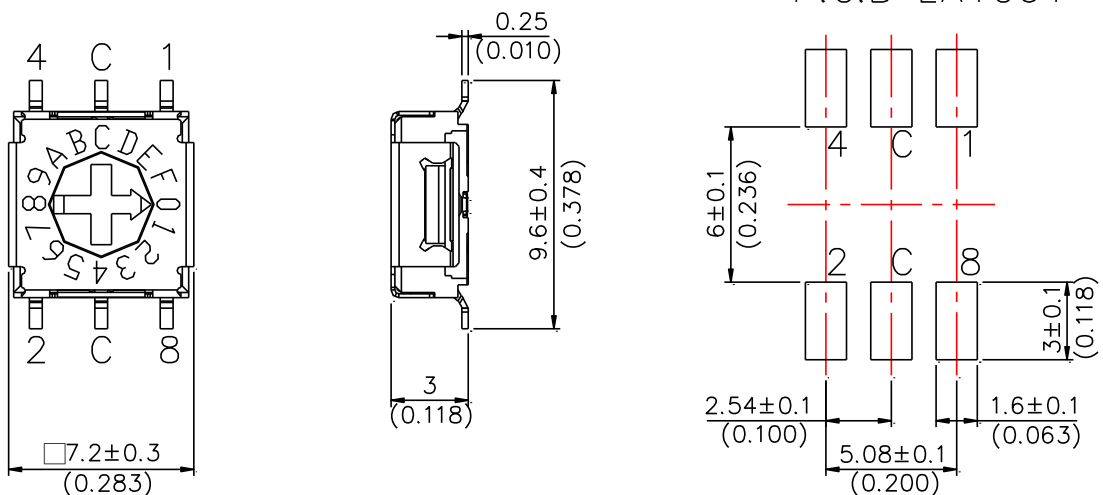
### ERD7XXXSZ SERIES



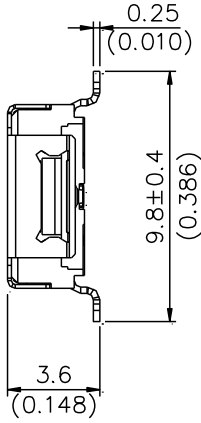
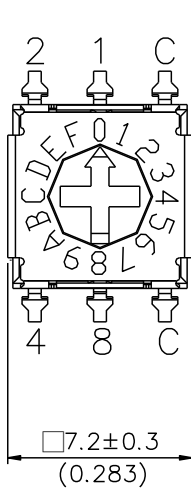
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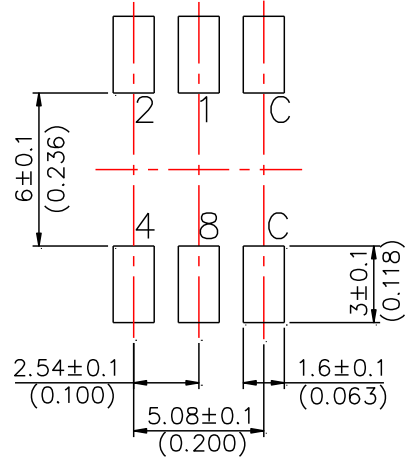
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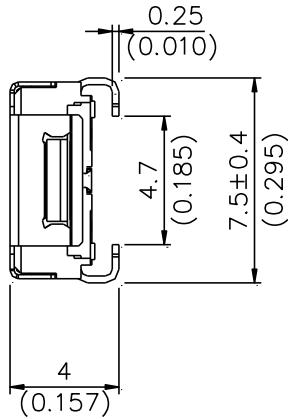
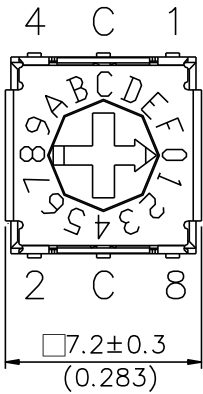
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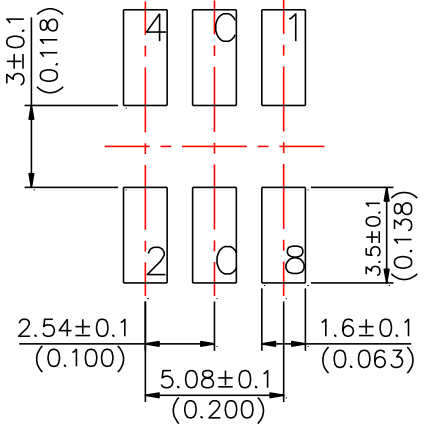
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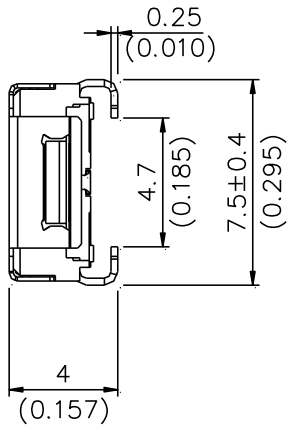
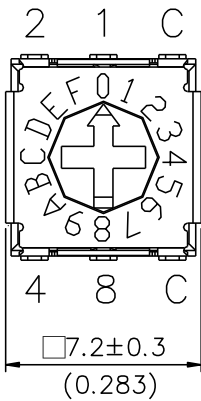
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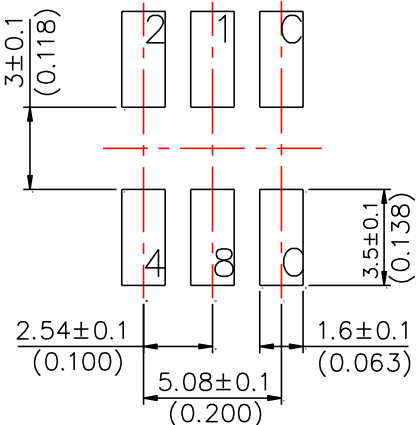
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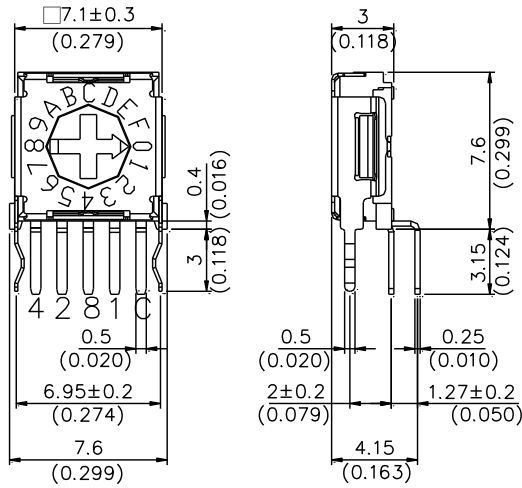


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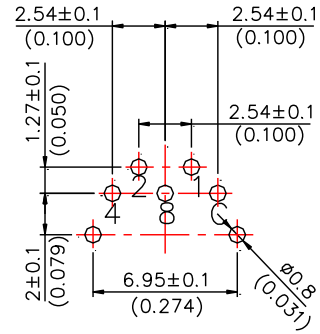




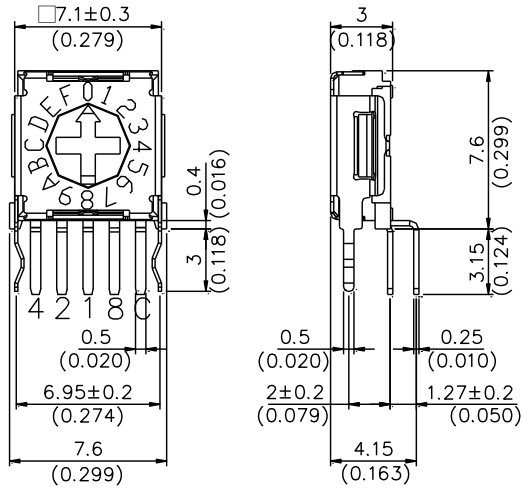
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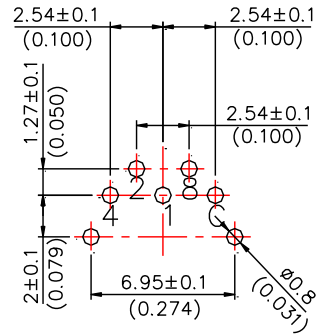
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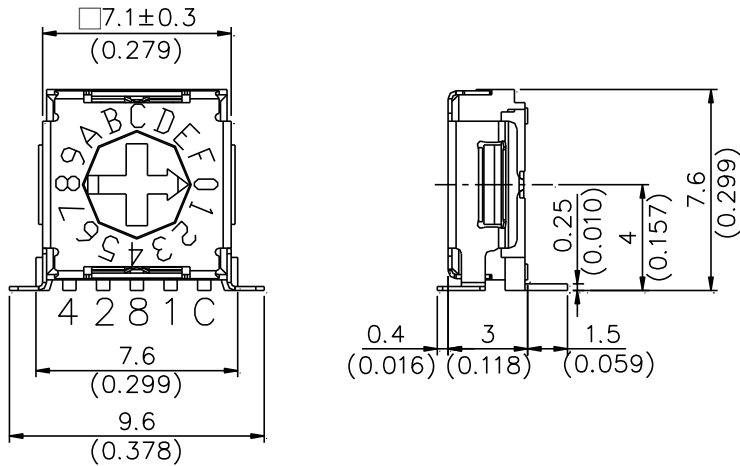
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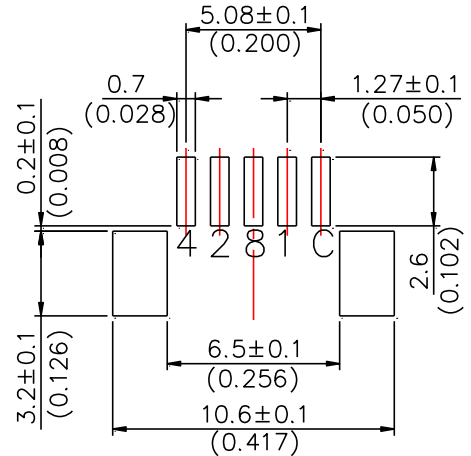
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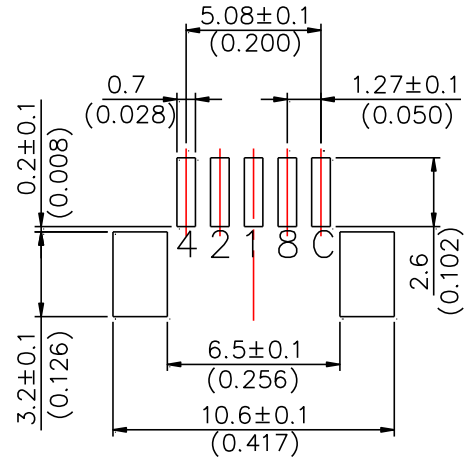
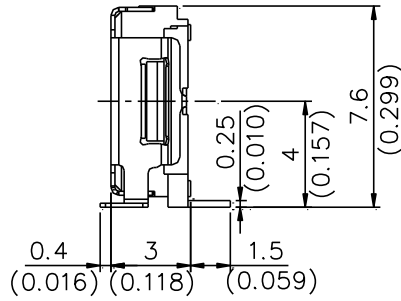
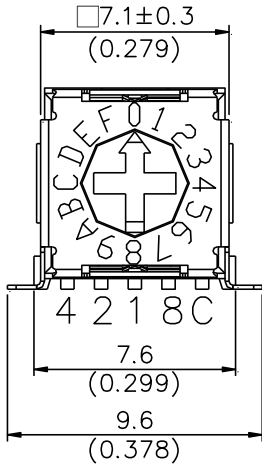
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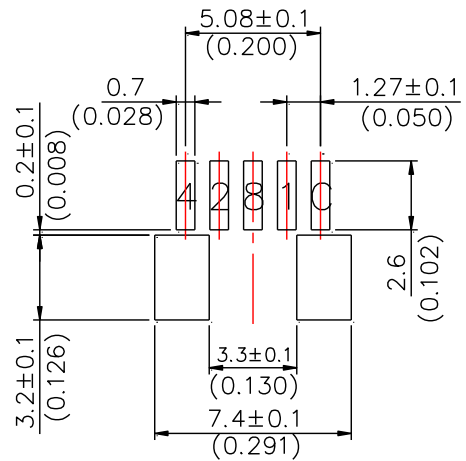
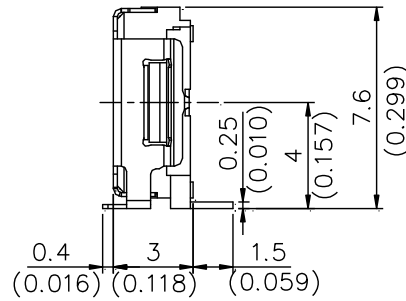
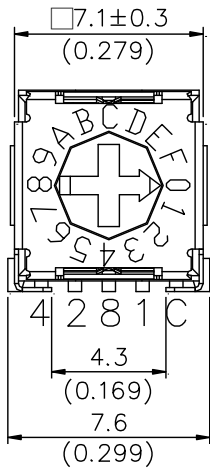
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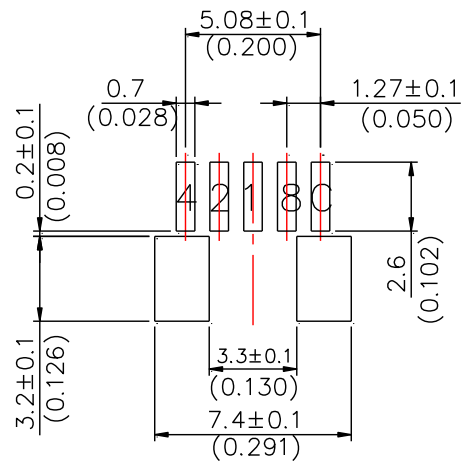
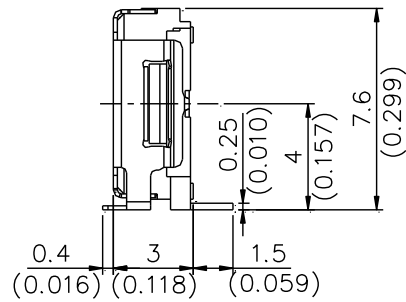
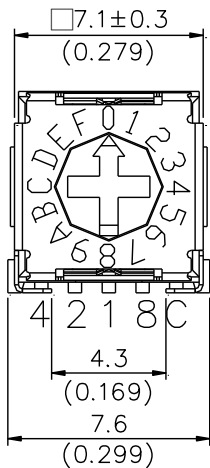
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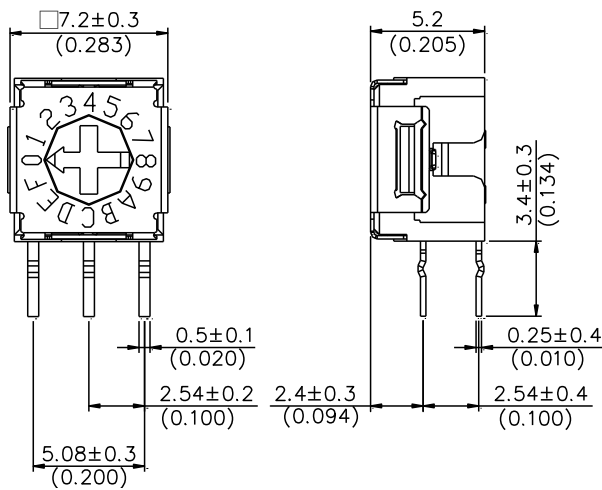


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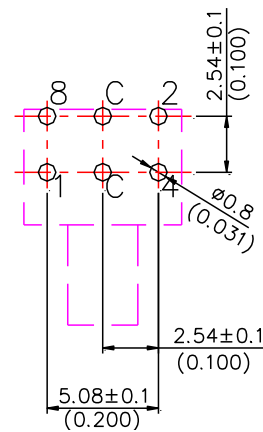
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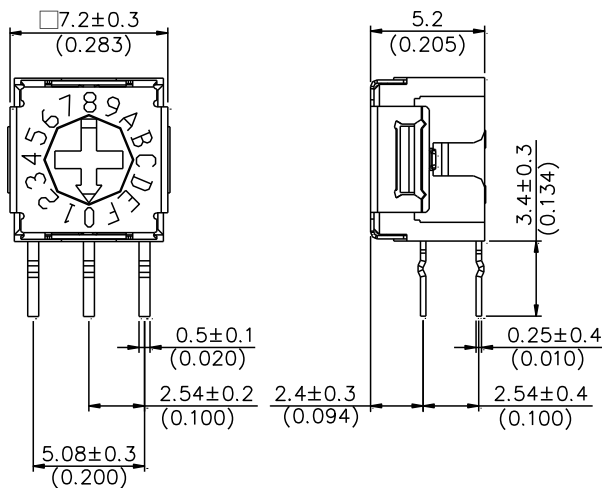
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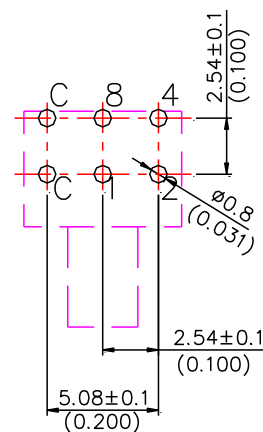
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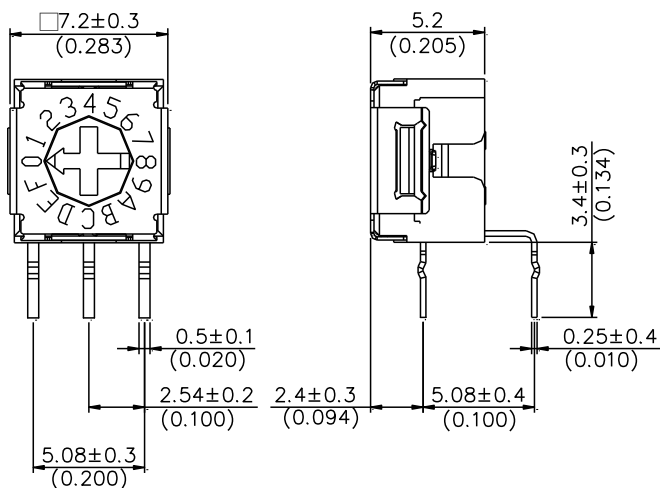
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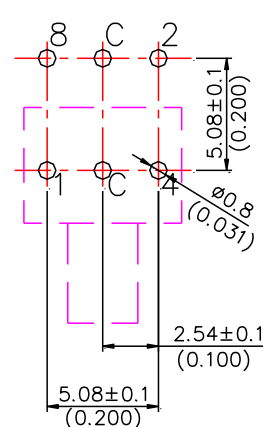
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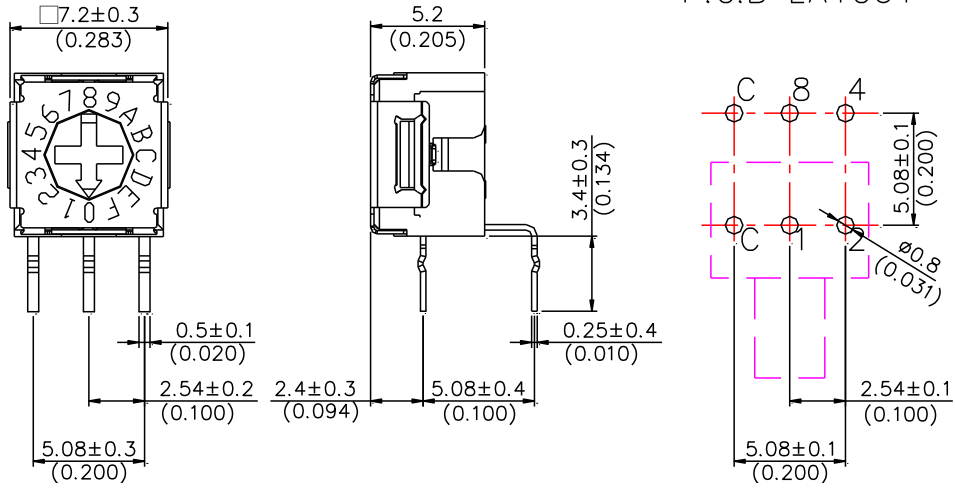


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