

ERD7 SERIES

MINIATURE SIZE □7x3 ROTARY SWITCH

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
- I 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	100 mA, 5 VDC
	Min. switching load	10 μ A, 5 VDC
Contact resistance (initial)		200 m Ω Max.
Insulation resistance		100 M Ω Min. at 100 VDC
Dielectric strength		250 VAC rms. for 60 seconds

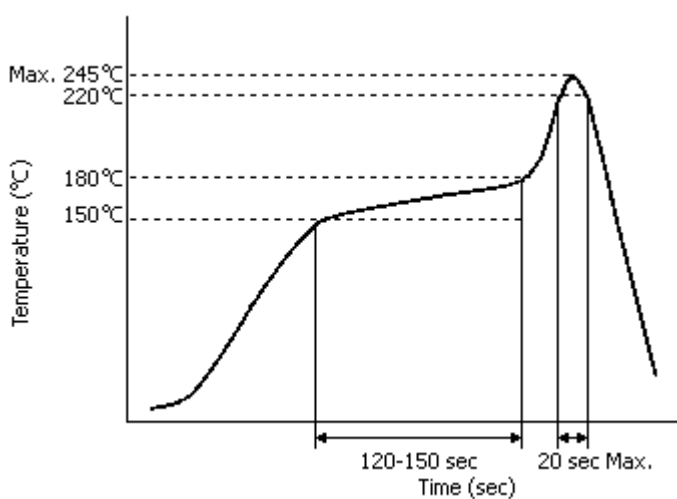
2.MECHANICAL

Temperature rating	operating	-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
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Reflow soldering heat for SMT & THR type (reference only)



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 (7.2×7.2mm²) Rotary DIP Switch

CODE

Real / Complement Code

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

●.....Real Code Rotor color: White

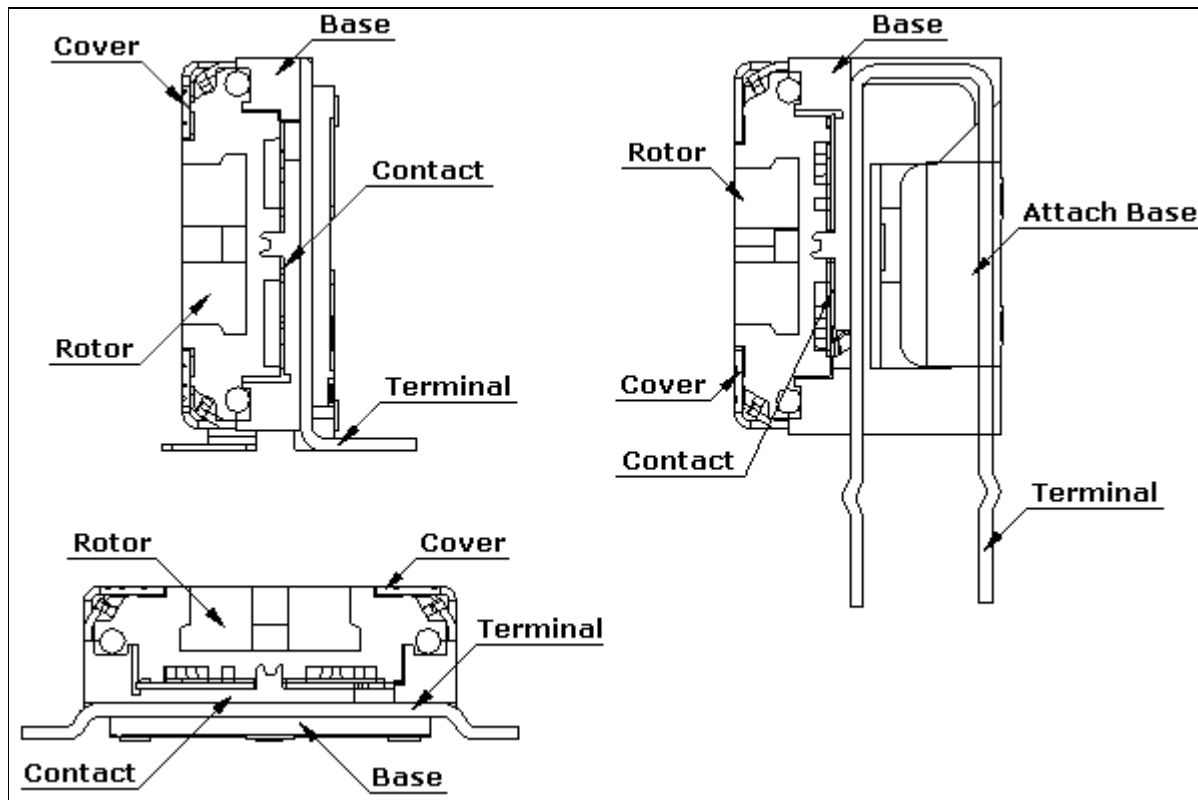
●.....Complement Code Rotor color: Red

Gray Code

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

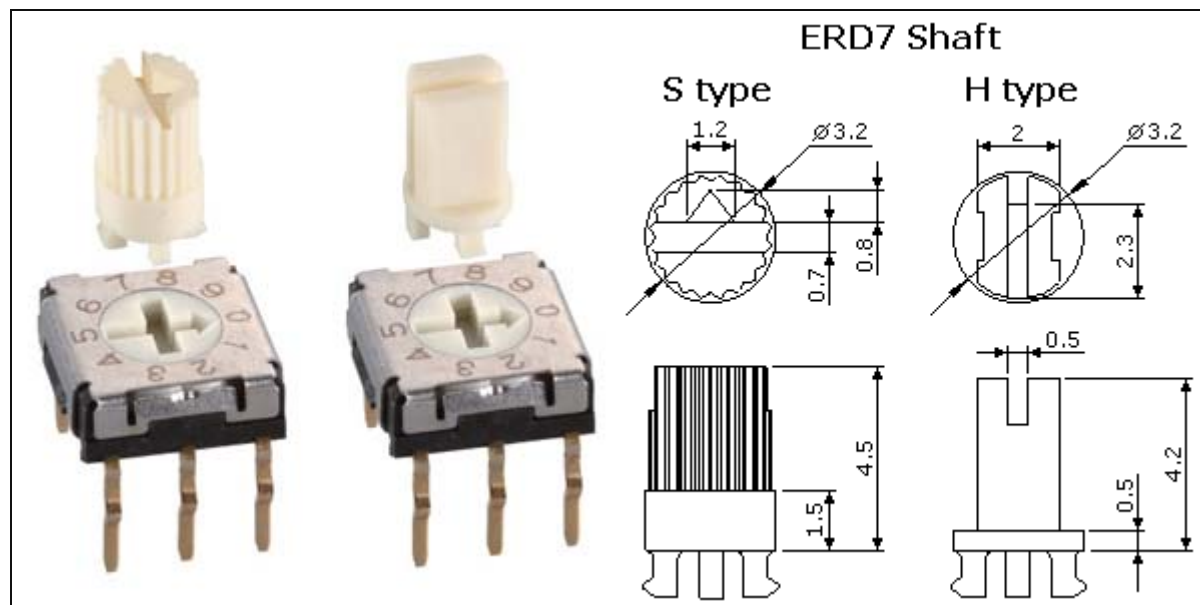
●.....Gray Code Rotor color: Gray

CONSTRUCTION



OPTIONS

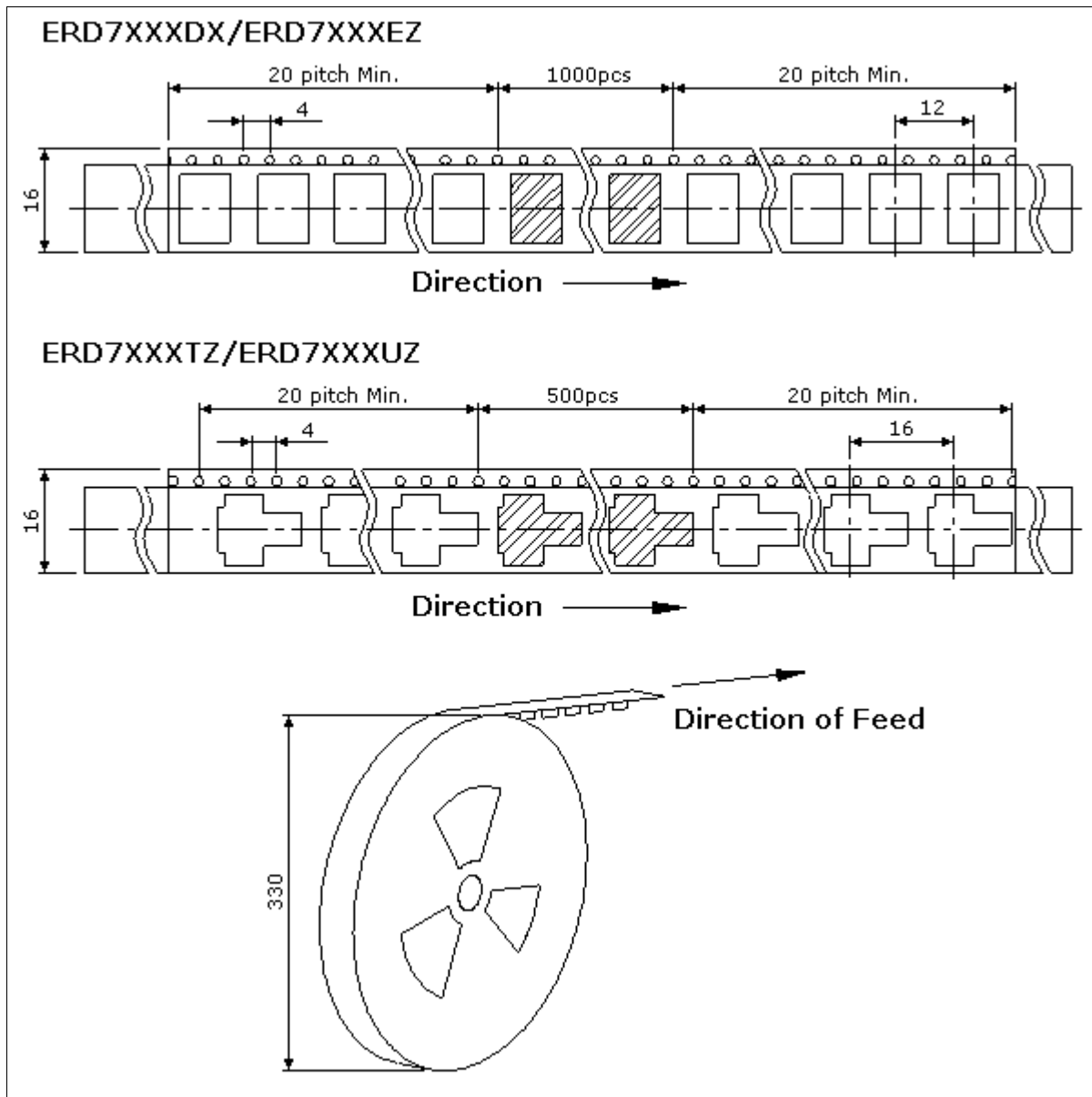
- 1.Special marking available
- 2.Shaft available (for cross shaped slot type only)



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
				3:2	RIGHT ANGLE	ERD7XXXHZ
				5:0	RIGHT ANGLE WITH SMT	ERD7XXXJZ ERD7XXXLZ
					RIGHT ANGLE WITH SMT IN T&R	ERD7XXXTZ ERD7XXXUZ

DIMENSIONS AND CIRCUITRY

SMT

Through hole reflow (THR)
Through hole (TH)

Right Angle (RA)



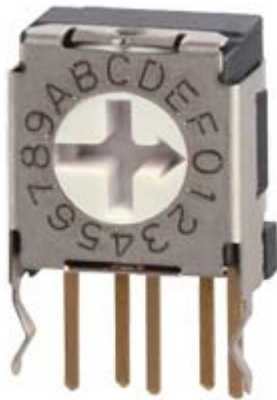
Right Angle (RA)
Through hole (TH)



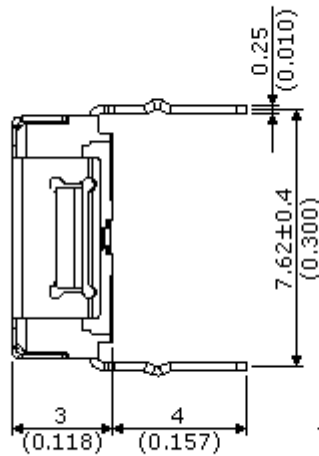
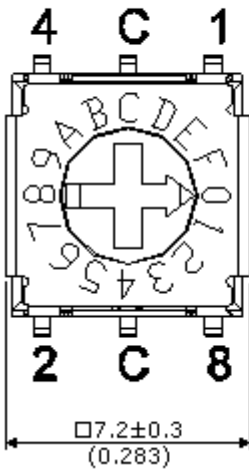
Right Angle (RA)
SMT



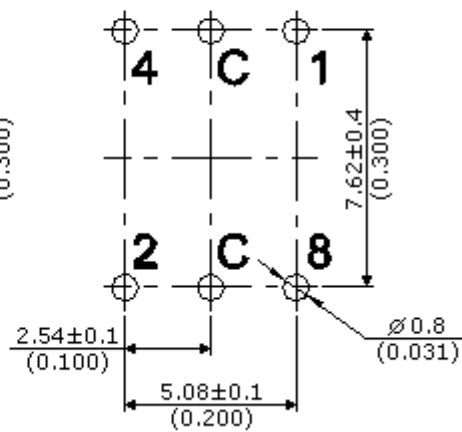
J-Hook
SMT



DIMENSIONS UNIT:mm(inch)
ERD7XXXSZ SERIES

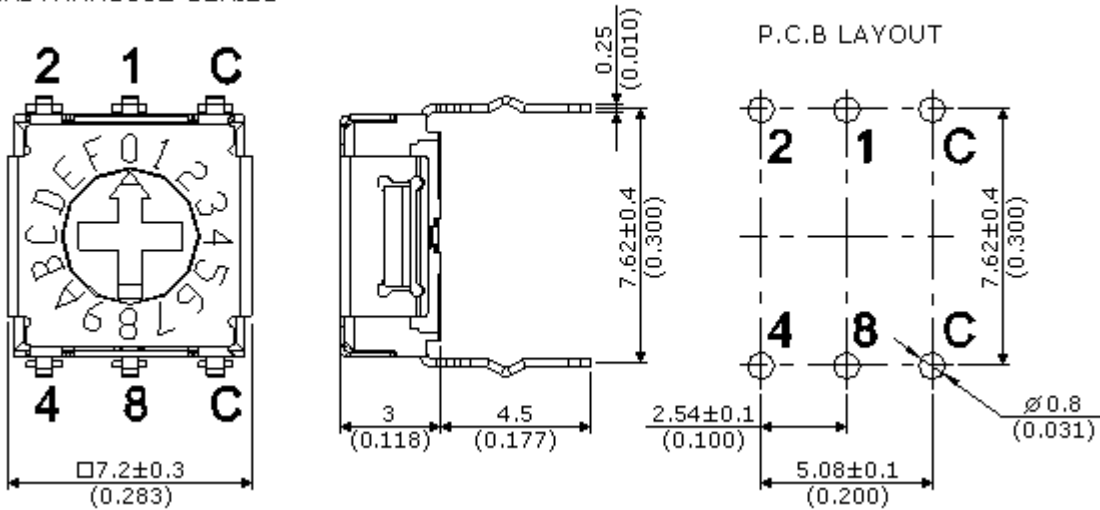


P.C.B LAYOUT



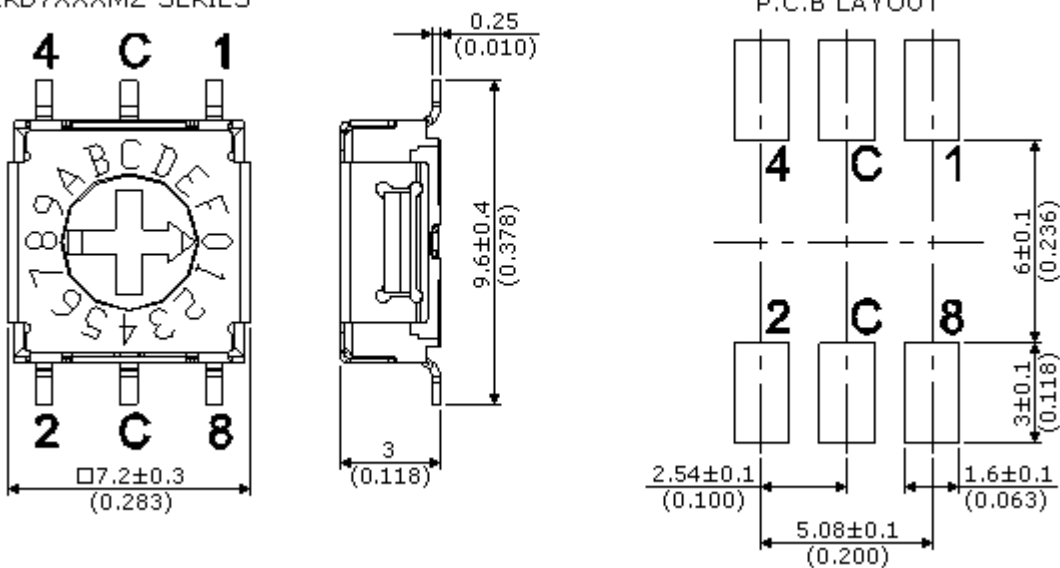
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ERD7XXXS06Z SERIES



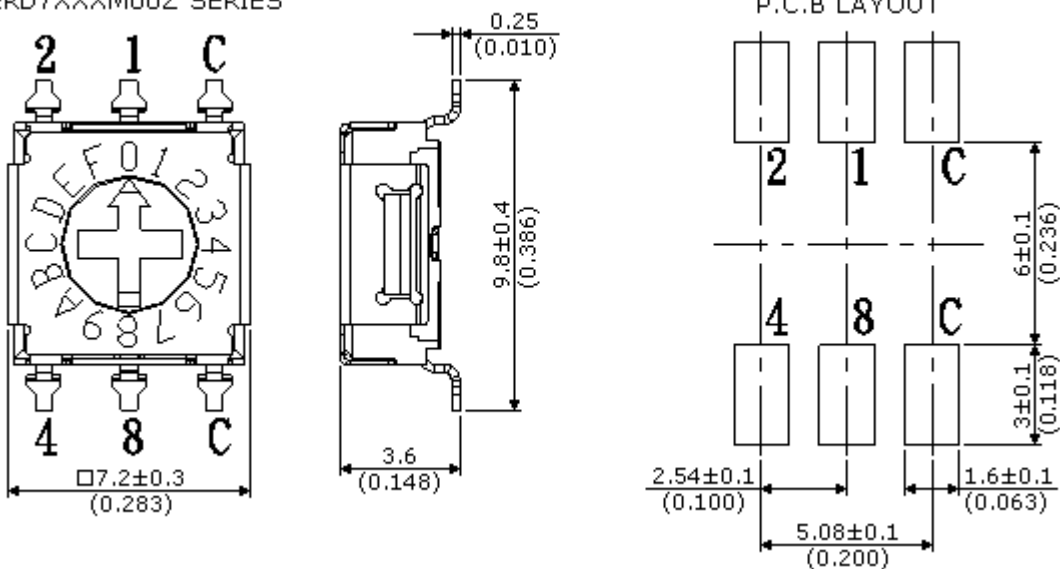
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ERD7XXXMZ SERIES



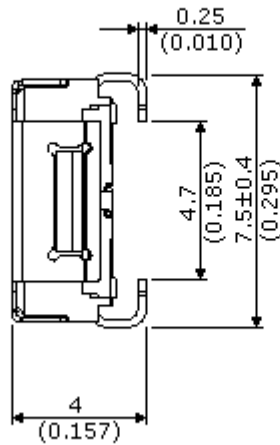
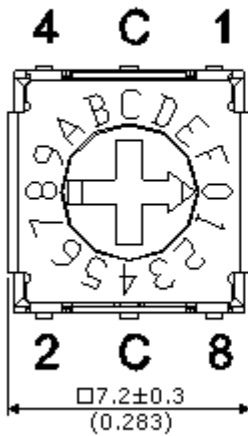
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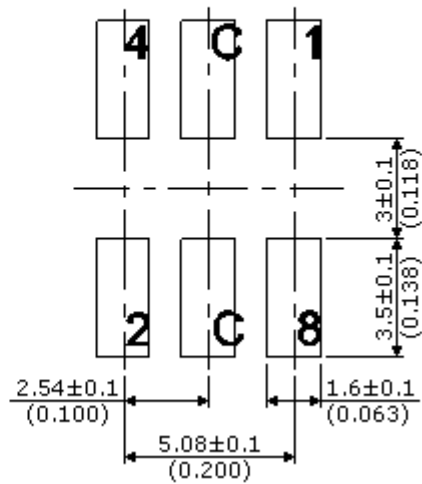


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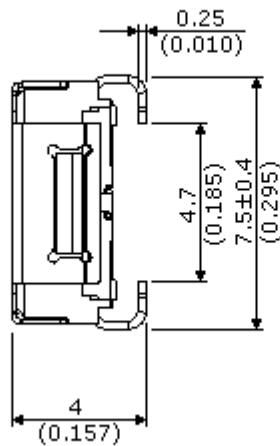
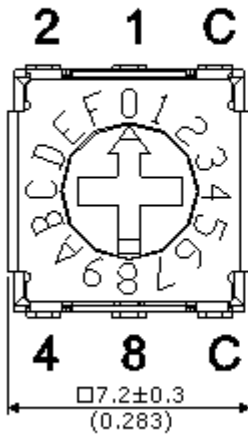


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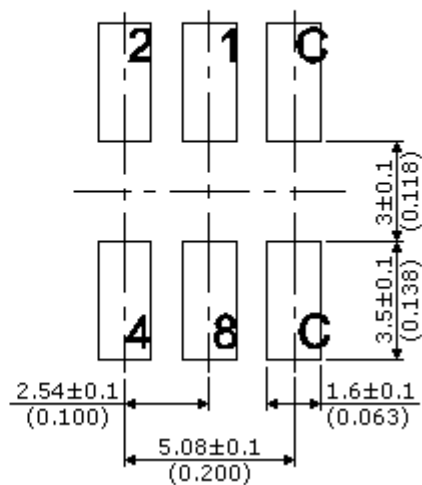


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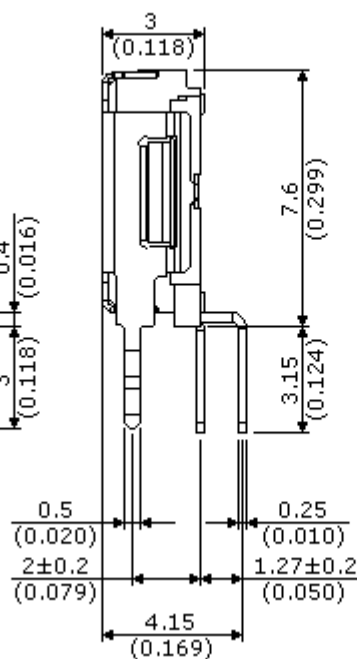
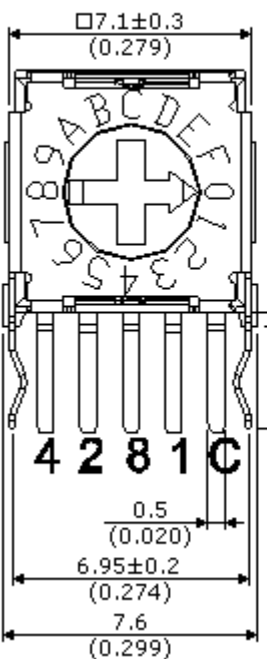


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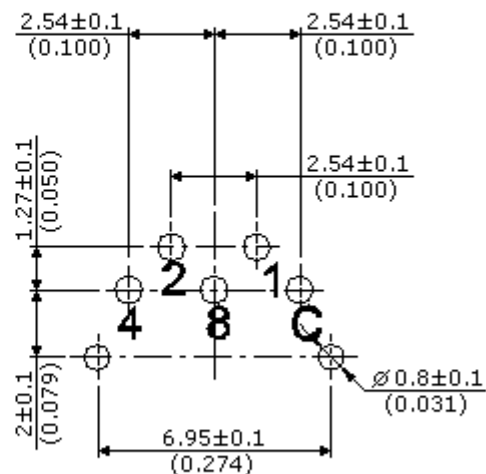


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ERD7XXXHZ SERIES

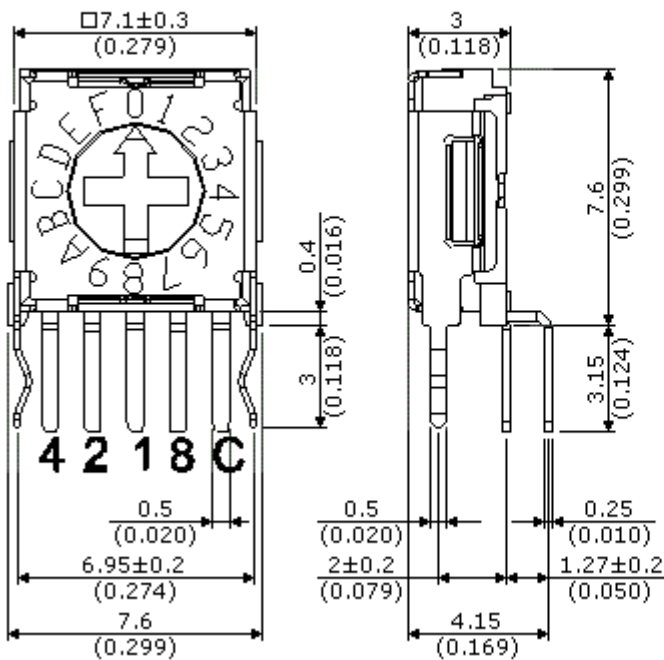


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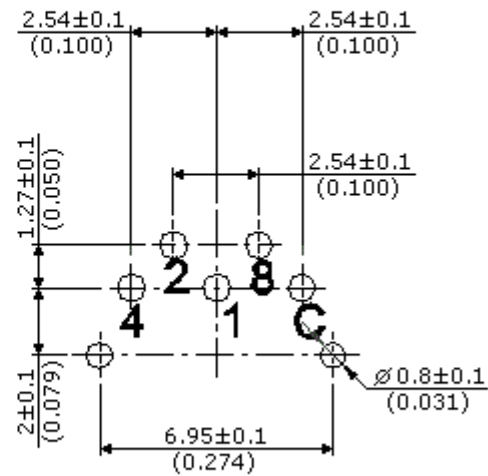


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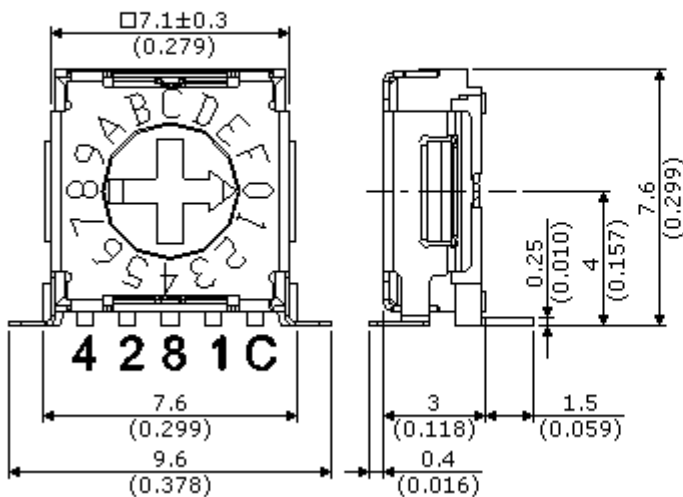


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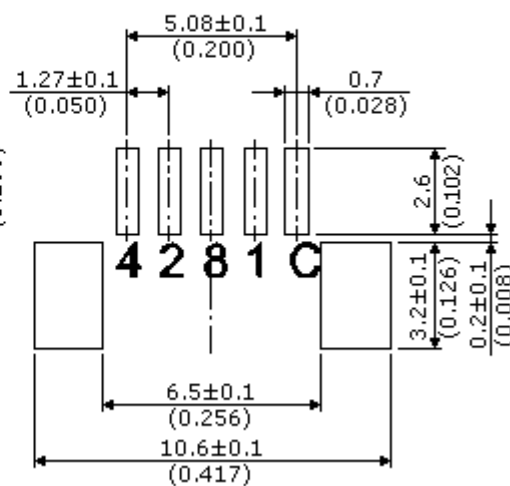


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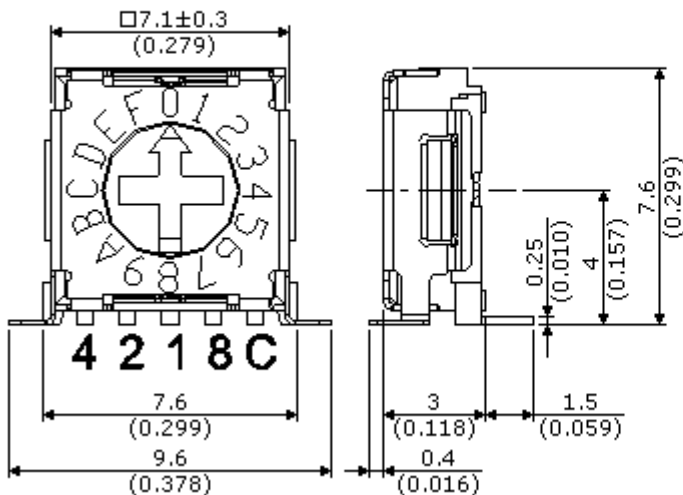


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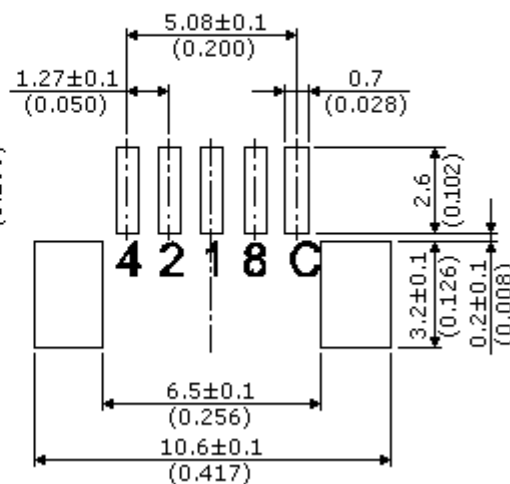


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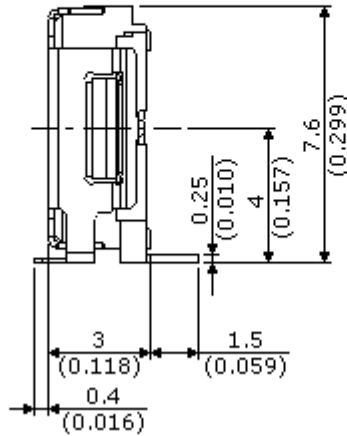
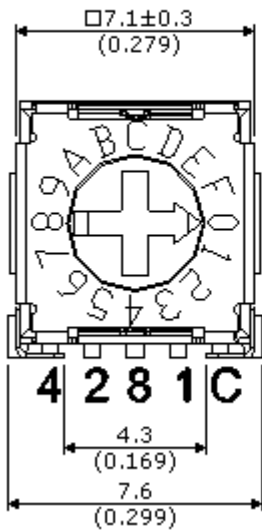


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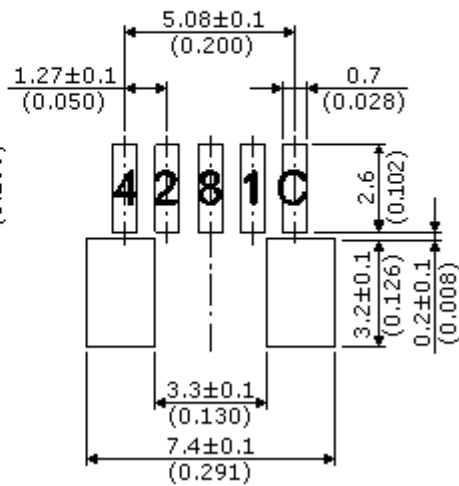


DIMENSIONS UNIT:mm(inch)

ERD7XXXLZ SERIES

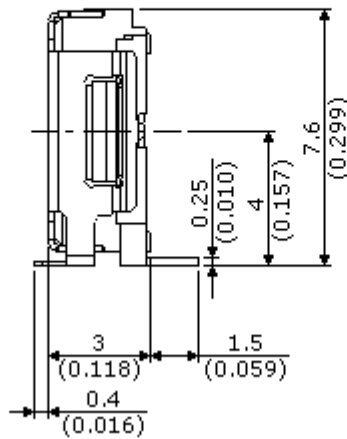
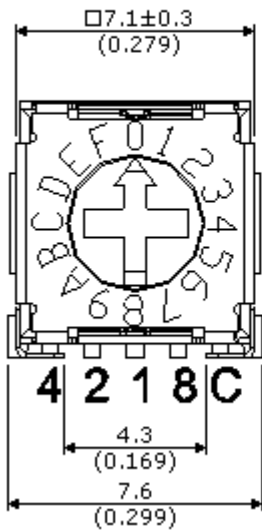


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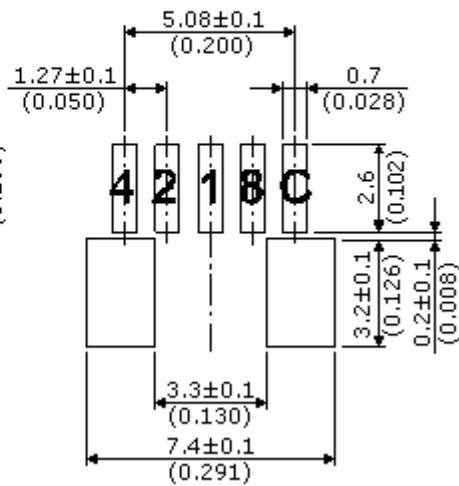


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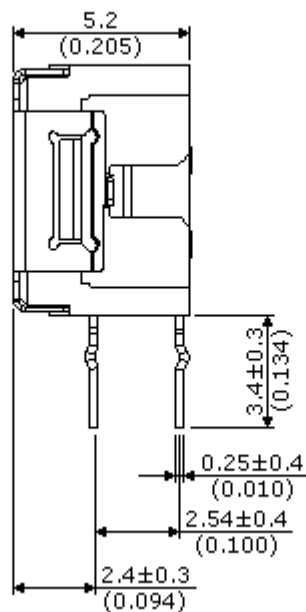
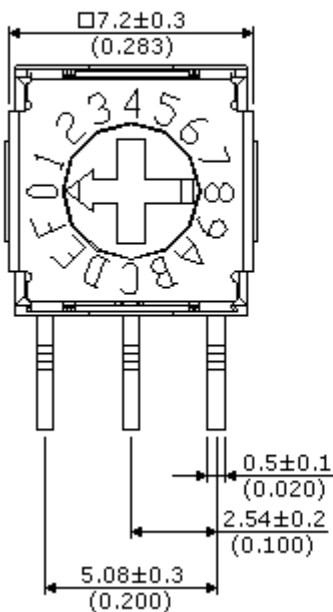


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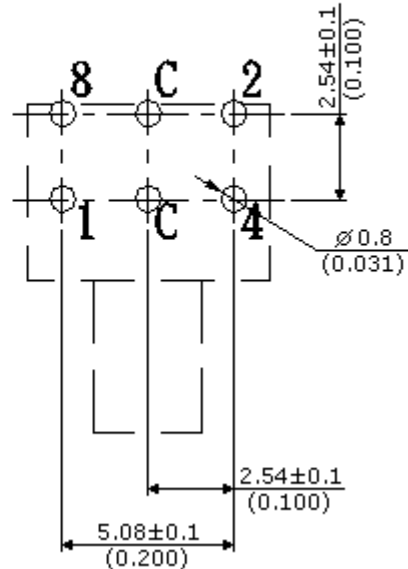


DIMENSIONS UNIT:mm(inch)

ERD7XXXRZ SERIES



P.C.B LAYOUT



DIMENSIONS UNIT:mm(inch)

ERD7XXXFZ SERIES

