

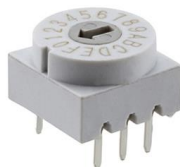
## ERD9 SERIES

### 10x10 SIZE SEALED CONSTRUCTION ROTARY TYPE

#### PIN OUT (3:3)



**ERD 9XXXM**  
(SMT Type)



**ERD 9XXXS**  
(Through Hole Type)



**ERD AXXXX**  
(Shaft Type)



**ERD 9XXXXF/R**  
(Right Angle Type)

## ■ FEATURES

- Molded-in terminals and fully sealed construction.
- All plastics UL 94V-0 grade fire retardant.
- Reliable contact and long-term stability.
- Binary decimal (10 positions) and hexadecimal (16 positions), real and complementary codes available.
- Pin-out is compatible with most of current equivalents.
- Gold plated contact to ensure low contact resistance.
- RoHS Compliant

## ■ APPLICATIONS

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

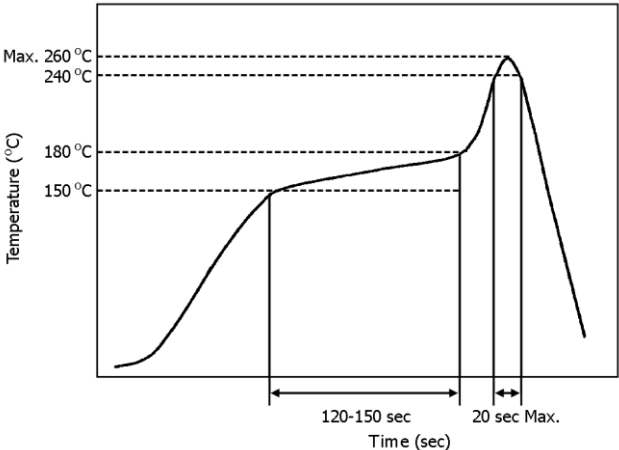
## ■ SPECIFICATIONS

### 1.ELECTRICAL

● Contact rating	switching	150mA, 42VDC
	non-switching	200mA
● Contact resistance (initial)		80mΩ Max.
● Insulation resistance		100MΩ Min.
● Dielectric strength		250VAC Min. for 60 seconds

### 2.MECHANICAL AND ENVIRONMENTAL

● Temperature rating	operating	-40°C to +85°C
	storage	-40°C to +85°C
● Operation force		500 gf-cm Max.

● Mechanical life	10,000 steps
● Vibration	10Hz-55Hz-10Hz for 6 Hrs.
● Solderability (for through hole type)	After flux $230\pm 5^{\circ}\text{C}$ for $5\pm 0.5$ seconds, 95% coverage
● Resistance to soldering heat (for through hole type)	$260\pm 5^{\circ}\text{C}$ for $5\pm 1$ seconds
● Reflow soldering heat for SMT type (reference only)	$240^{\circ}\text{C}$ for 20 seconds or less, peak temperature $260^{\circ}\text{C}$ or less 

## ■ PART NUMBERING SYSTEM

ERD   9   16   R   S   04   Z

Z: RoHS Compliant  
 Special number:  
 None: Standard type  
 04: Straight Pin (Terminals)  
 Setting:  
 S: Standard type (Top Adjust type)  
 R: Right Angle type with row spacing 2.54 mm  
 F: Right Angle type with row spacing 5.08 mm  
 M: Surface mounting type with Top Tape Sealed  
 D: Surface mounting type with Top Tape Sealed in Tape & Reel Package  
 Code:  
 R: Real  
 C: Complement  
 A: Real / Cross shaped slot type  
 B: Complement / Cross shaped slot type  
 Number of positions: 10, 16  
 Rotor:  
 9: Flat type (pin out 3 :3)  
 A: Shaft type (pin out 3:3)  
 Series name: ERD (Rotary Type Sealed Construction)

## 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

Rotor color:

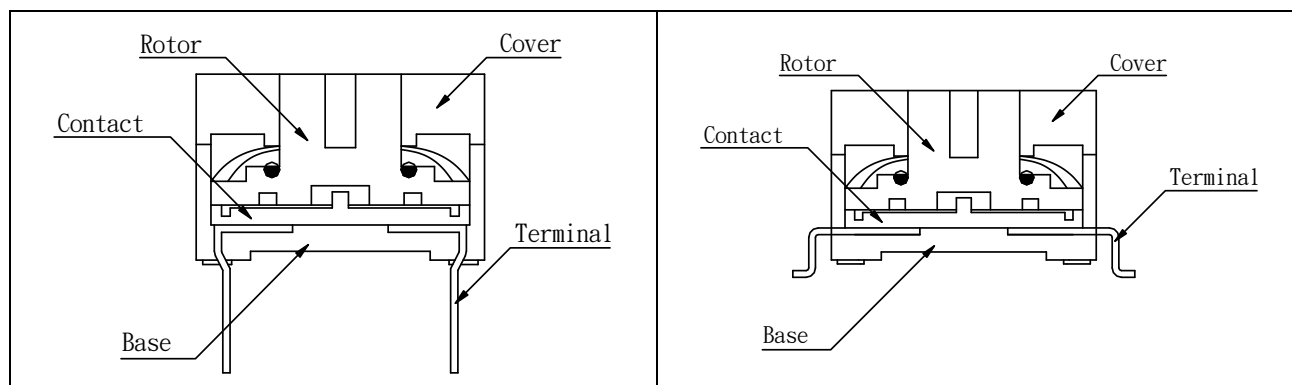
Gray (3:3)

○... Complement Code

Rotor color:

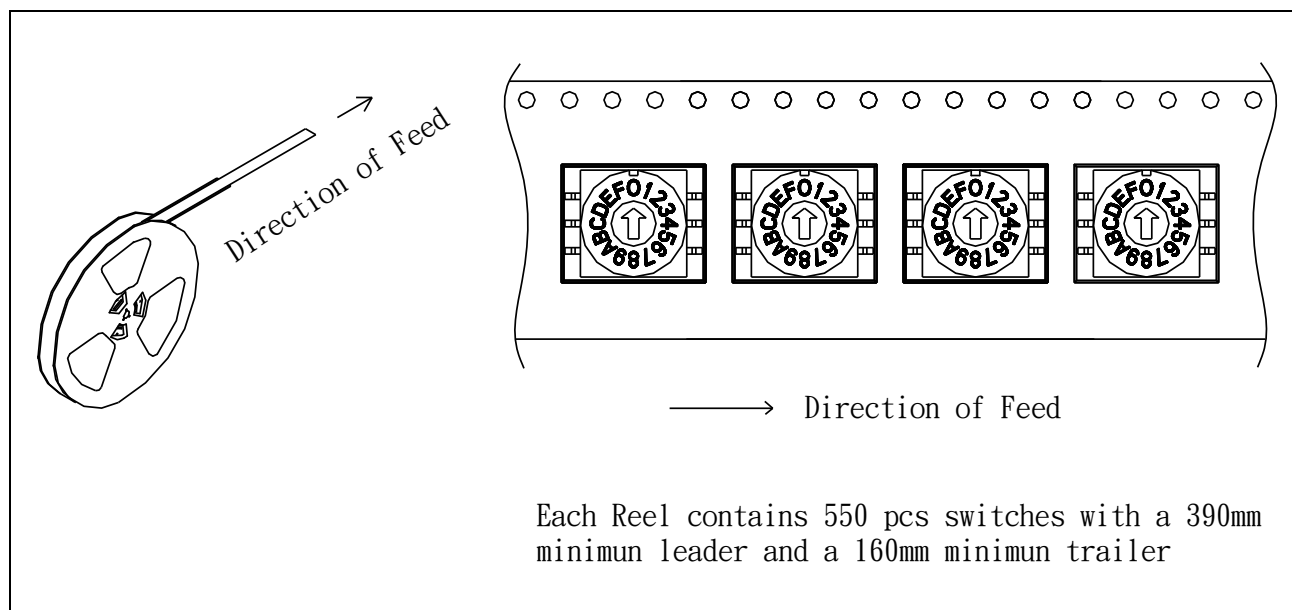
White (3:3)

## CONSTRUCTION



## PACKING

### 1. Tape & Reel Packaging (Per EIA STANDARD)



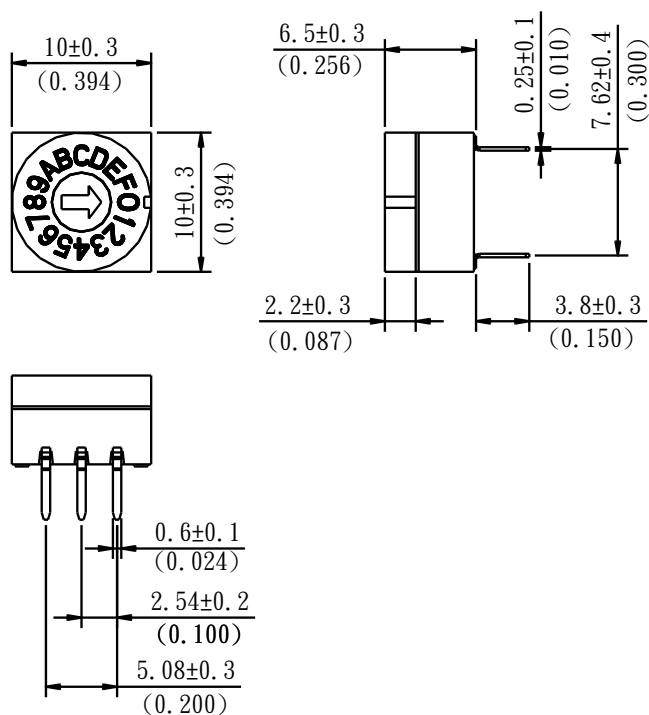


## ■ INTRODUCTION to ECE ROTARY DIP SWITCH

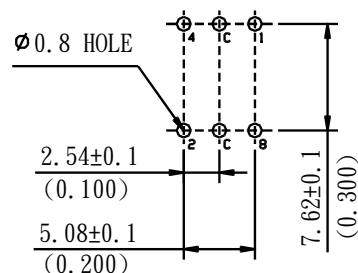
SIZE	POSITIONS	CODE	PIN OUT	ROTOR	TYPE	PART NUMBER
10x10	10,16	REAL, COMPLEMENT	3:3	FLAT, SHAFT	STANDARD	ERD9xxxS, ERDAxxxS
					RIGHT ANGLE	ERD9xxxR/F, ERDAxxxR/F
				FLAT	SMT	ERD9xxxM, ERDAxxxM
					SMT IN T&R	ERD9xxxD

## ■ DIMENSIONS AND CIRCUITRY UNIT:mm(inch) PIN OUT 3:3

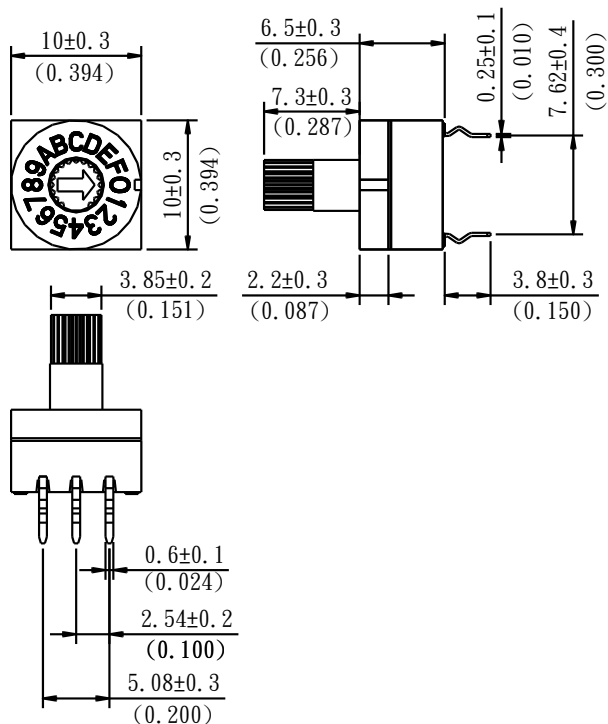
ERD9XXXS04Z Flat Type



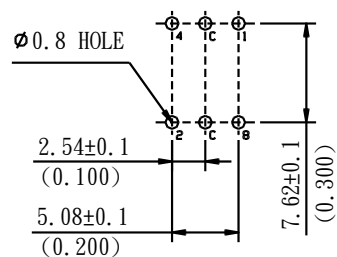
P. C. B. LAYOUT (TOP VIEW)



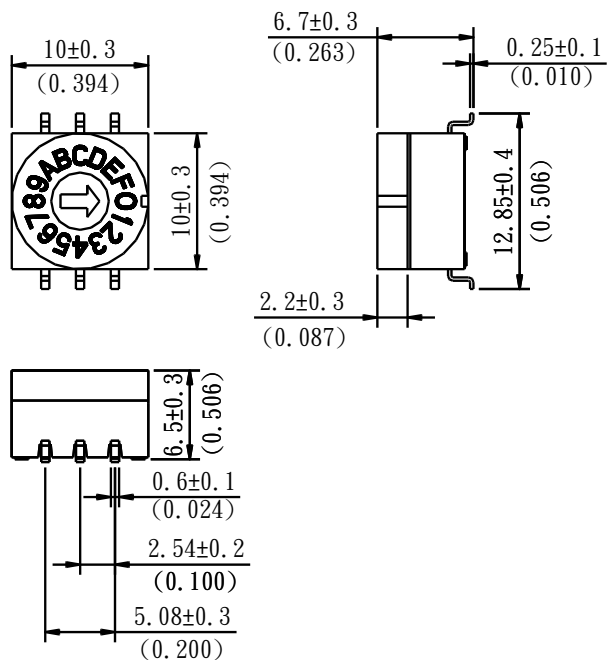
ERDAXXXSZ Shaft Type



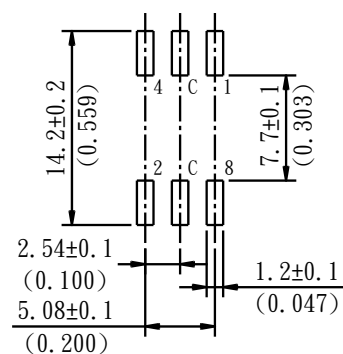
P. C. B. LAYOUT (TOP VIEW)



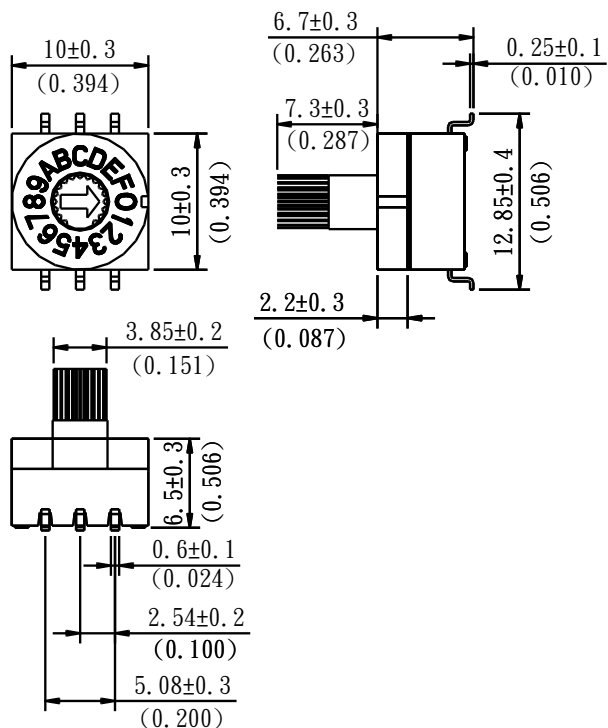
## ERD9XXXMZ Flat Type



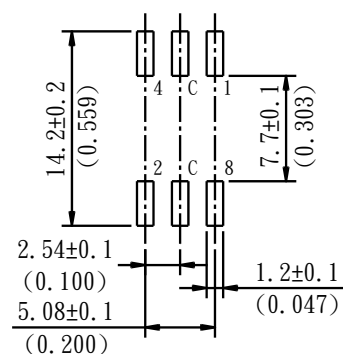
## P. C. B. LAYOUT (TOP VIEW)



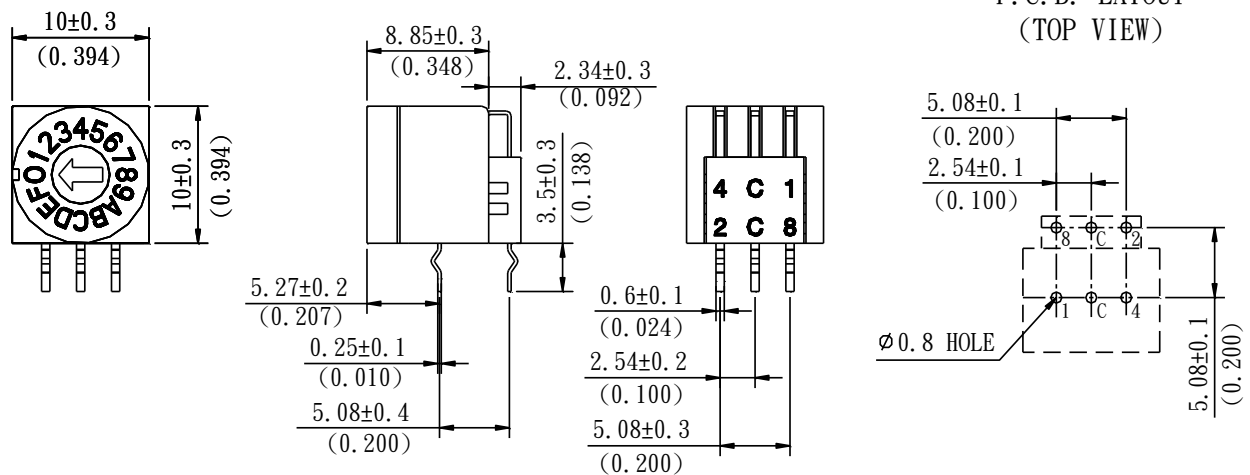
## ERDAXXXMZ Shaft Type



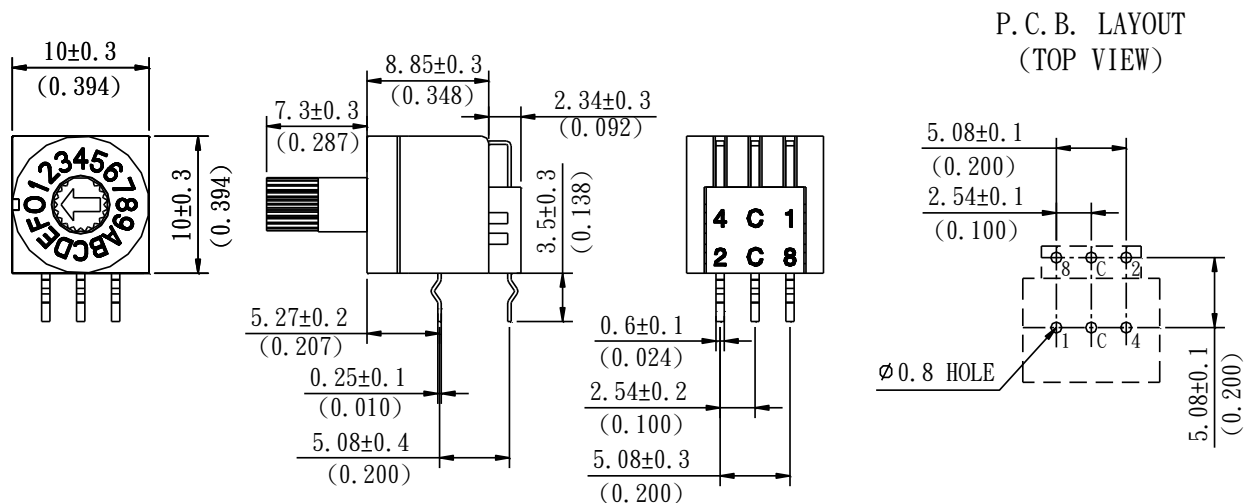
## P. C. B. LAYOUT (TOP VIEW)



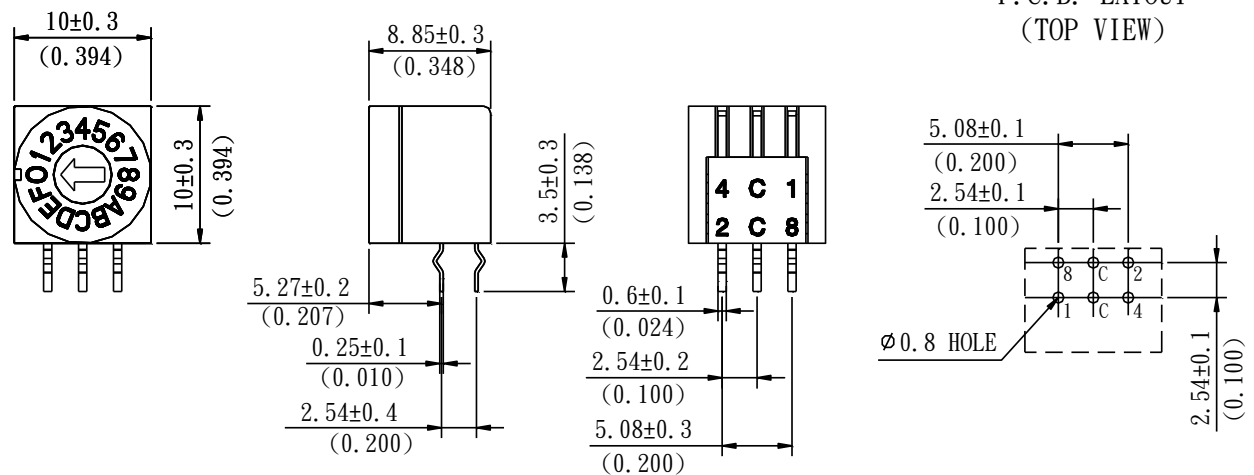
## ERD9XXXFZ Flat Type



## ERDAXXXFZ Shaft Type



## ERD9XXRZ Flat Type



## ERDAXXRZ Shaft Type

