

## ERD ROTARY DIP SWITCH

### 1. FEATURES :

- 1.1 Molded-in terminals and fully sealed construction.
- 1.2 Standard 2.54mm pin spacing.
- 1.3 UL 94V-0 grade fire retardant plastics.
- 1.4 Reliable contact and long-term stability
- 1.5 Binary decimal (8 or 10 positions) and Hexadecimal (16 positions), real and complementary codes available.
- 1.6 Pin-out compatible with most of current equivalents.
- 1.7 Gold plated contact to ensure low contact resistance.

### 2. SPECIFICATIONS :

#### 2.1 ELECTRICAL

2.1.1 Contact Rating	
Switching:	25 mA, 24 VDC
Non-Switching:	100 mA
2.1.2 Contact Resistance	100 m $\Omega$ Max.
2.1.3 Insulation Resistance	1000 M $\Omega$ Min. at 100 VDC
2.1.4 Dielectric Strength	250 VAC Min. for 60 seconds
2.1.5 Capacitance	5 pF Max. at 1 KHz

#### 2.2 MECHANICAL AND ENVIRONMENTAL

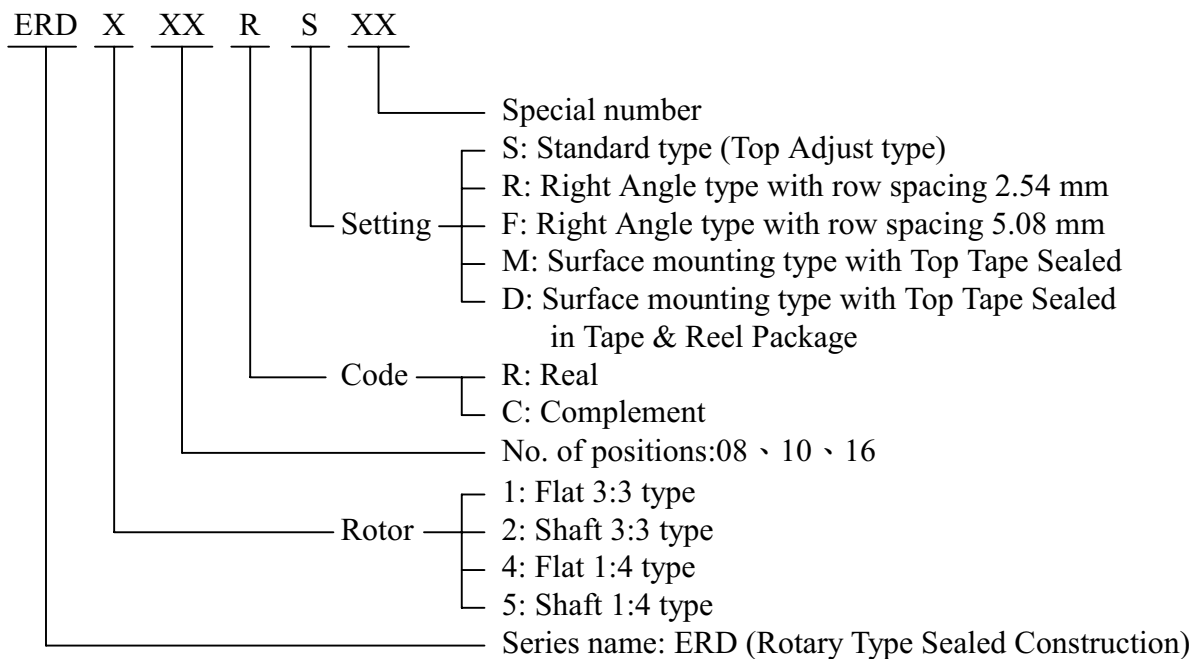
2.2.1 Temperature Rating	
Operating	-25 $^{\circ}$ C to +70 $^{\circ}$ C
Storage	-40 $^{\circ}$ C to +85 $^{\circ}$ C (at 45-85% RH)
2.2.2 Operation Force	500 gf-cm Max.
2.2.3 Mechanical Life	2000 steps per positions
2.2.4 Vibration	10 Hz - 55 Hz - 10 Hz for 6 Hrs.
2.2.5 Solderability	After flux, 230 $\pm$ 5 $^{\circ}$ C for 5 $\pm$ 0.5 seconds 95% coverage
2.2.6 Resistance to soldering heat	260 $\pm$ 5 $^{\circ}$ C for 5 $\pm$ 1 seconds.
2.2.7 Reflow soldering heat for SMT type	reflow zone 230 $\pm$ 5 $^{\circ}$ C for 20 sec. Max.

 <b>EXCEL CELL ELECTRONIC CO., LTD.</b> <small>An ISO 9001 Company</small>	<b>NO.</b>	<b>A30890</b>	<b>PAGE</b> <b>2/2</b>
	<b>SPECIFICATION</b>		<b>Edition</b> <b>6</b>

### 3. OPTIONS :

- 3.1 Special marking available.
- 3.2 Shaft cover.
- 3.3 Tape & Reel Packing (Flat type only & per EIA STANDARD)

### 4. PART NUMBERING SYSTEM :



### 5. PACKING :

#### 5.1 PACKING METHOD

5.1.1 All switches are packed into IC tubes as an inner packing unit, and ten IC tubes are bundled together with rubber bands.

5.1.2 Length of IC tube: 560 mm

5.2 Switches may also be packed using tape & reel methods (flat type only & per EIA STANDARD). Each reel contains 700 pcs switches with a 390 mm minimum leader and a 160 mm minimum trailer.

5.3 INFORMATION ON LABEL (stuck to each bundle of IC tubes).

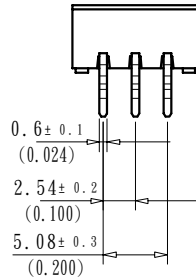
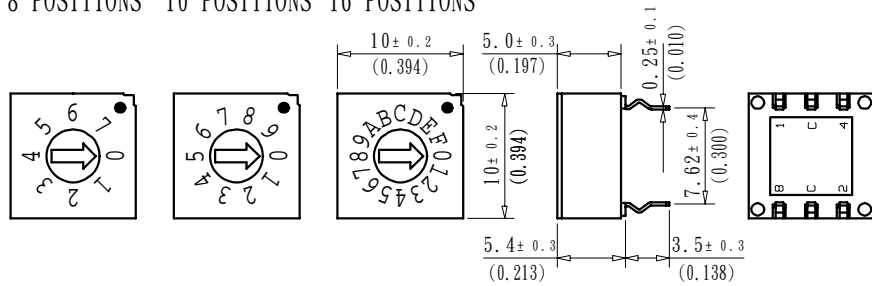
- |                   |                         |
|-------------------|-------------------------|
| (1) DESCRIPTION   | (6) ECE MARK            |
| (2) LOT NO.       | (7) QC STAMP            |
| (3) REPROCESS NO. | (8) DATE.               |
| (4) QUANTITY.     | (9) MANUFACTURERS NAME. |
| (5) TESTER NO.    |                         |

### 6. DRAWINGS :

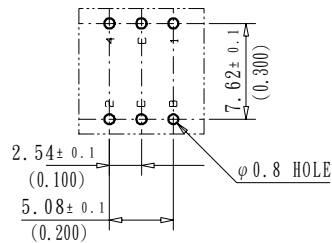
- |                        |                       |
|------------------------|-----------------------|
| Dip switch dimensions: | see attached drawing. |
| Circuit diagram:       | see attached drawing. |
| P.C.B. layout diagram: | see attached drawing. |

# ERD1xxxS

8 POSITIONS 10 POSITIONS 16 POSITIONS

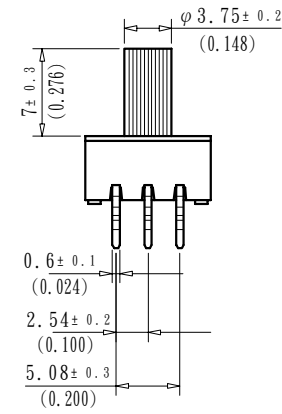
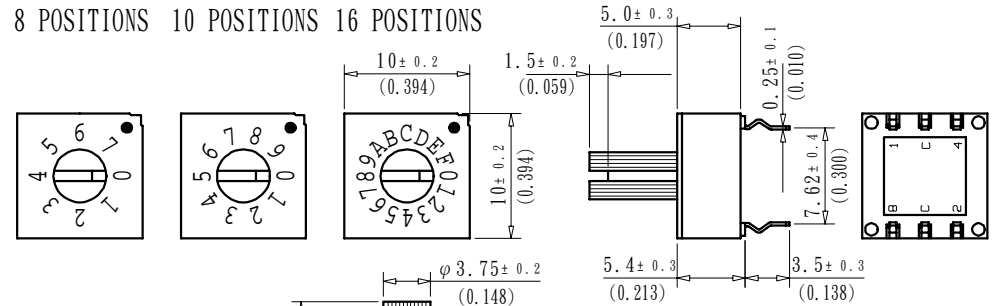


P. C. B LAYOUT  
(TOP VIEW)

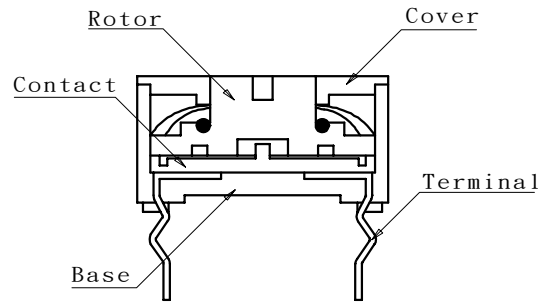


# ERD2xxxS

8 POSITIONS 10 POSITIONS 16 POSITIONS



CONSTRUCTION



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  
○ ..... Complimentary Code Rotor color : red

NO.	DETAILS	ALTERED BY	DATE	NORMAL TOLERANCE		PART NUMBER	UNIT	MM (INCH)	PART NAME	ERD		
				RANGE	TOLERANCE							
				0 - 1	± 0.1	-----		5 : 3	TYPE	3 : 3 (RS&CS)		
				1 - 4	± 0.3	MATERIAL			FILE NAME	71833X0A.PRT		
				4 - 16	± 0.5	CHECK GARY	DESIGN JC. Y	DRAWN JC. Y	QUANTITY	-----		
				16 - 63	± 0.8				PROCESSING	-----	ASSEMBLY NUMBER	-----
				63 - 250	± 1.0				PROJECTION	-----	SURFACE TREATMENT	-----