

# **EXCEL CELL ELECTRONIC CO., LTD.** SPECIFICATION

NO. A30890

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**Edition** 

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# 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  $100 \,\mathrm{m}\Omega$  Max.

2.1.3 Insulation Resistance  $1000 \,\mathrm{M}\Omega$  Min. at  $100 \,\mathrm{VDC}$ 

250 VAC Min. for 60 seconds 2.1.4 Dielectric Strength

2.1.5 Capacitance 5 pF Max. at 1 KHz

#### 2.2 MECHANICAL AND ENVIRONMENTAL

2.2.1 Temperature Rating

 $-25^{\circ}$ C to  $+70^{\circ}$ C Operating

 $-40^{\circ}$ C to  $+85^{\circ}$ C (at 45-85% RH) Storage

2.2.2 Operation Force 500 gf-cm Max.

2.2.3 Mechanical Life 2000 steps per positions

10 Hz - 55 Hz - 10 Hz for 6 Hrs. 2.2.4 Vibration

2.2.5 Solderability After flux,  $230\pm 5^{\circ}$ C for  $5\pm 0.5$  seconds

95% coverage

 $260\pm 5^{\circ}$ C for  $5\pm 1$  seconds. 2.2.6 Resistance to soldering heat

2.2.7 Reflow soldering heat for SMT type reflow zone 230± 5°C for 20 sec. Max.



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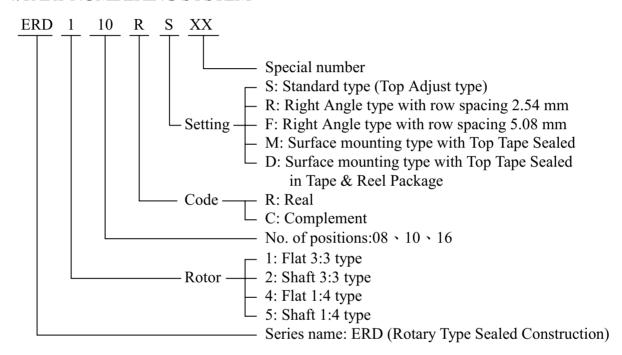
**Edition** 

6

#### 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.

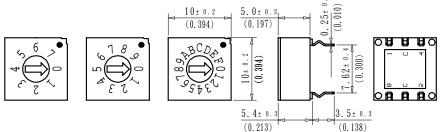
(5) TESTER NO.

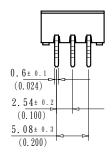
#### 6. DRAWINGS:

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

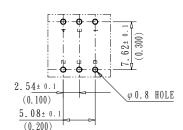
### ERD1xxxS

#### 8 POSITIONS 10 POSITIONS 16 POSITIONS





# P. C. B LAYOUT (TOP VIEW)

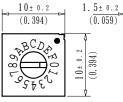


# ERD2xxxS

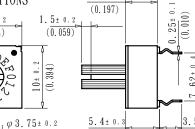






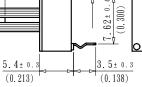


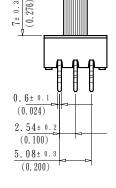
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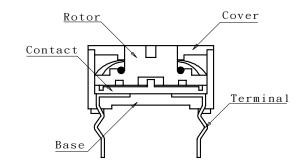
5.0± 0.3

(0.197)





# CONSTRUCTION



Γ	PIN NO	POSITION															
		0	1	2	3	4	5	6	7	8	9	A	В	С	D	Е	F
Г	1	0	•	0	•	0	•	0	•	0	•	0	•	0	•	0	•
	2	0	0	•	•	0	0	•	•	0	0	•	•	0	0	•	•
	4	0	0	0	0	•	•	•	•	0	0	0	0	•	•	•	•
	8	0	0	0	0	0	0	0	0	•	•	•	•	•	•	•	•

Real Code Rotor color: white O .... Complimetary Code Rotor color : red