 <b>EXCEL CELL ELECTRONIC CO., LTD.</b>	<b>NO.</b>		<b>A31120</b>		
	<b>SPECIFICATION</b>		<b>Edition</b>	<b>1</b>	<b>page</b>

<h2>EDG(RA 33) DIP SWITCH</h2>
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### 1. FEATURES:

- 1-1. Tactile response is performed directly by larger contact pressure to ensure very stable contact.
- 1-2. All plastic are UL 94V-0 grade five retardant.
- 1-3. Bottom epoxy sealed standard to ensure free of flux immersion during wave soldering.
- 1-4. Contact wiping on make and break.
- 1-5. Gold, Silver or Tin plated contacts to ensure low contact resistance and long mechanical life.
- 1-6. Ideal for data processing, communications, remote controls and burglar alarm system use, where manual programming is required.
- 1-7. RoHS Compliant

### 2. SPECIFICATIONS:


#### 2-1. ELECTRICAL

##### 2-1-1. Contact rating

switching	25 mA, 24 VDC
non-switching	100 mA

##### 2-1-2. Contact resistance

initial	50 mΩ Max.
after life test	100 mΩ Max.

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- 2-1-3. Insulation resistance            1,000 MΩ Min. at 100 VDC
- 2-1-4. Dielectric strength            500 VDC Min. for 60 seconds
- 2-1-5. Capacitance between        5 pF Max.  
adjacent switches

**2-2. MECHANICAL AND ENVIRONMENTAL**

- 2-2-1. Temperature rating
  - operating                                -25°C to + 70°C
  - storage                                    -40°C to + 85°C
- 2-2-2. Operation force                800g Max. (SPST only)
- 2-2-3. Mechanical life                2,000 Operations
- 2-2-4. Humidity                        95% RH, 40°C for 96 Hrs.
- 2-2-5. Vibration                        10Hz-55Hz-10Hz for 6 Hrs.
- 2-2-6. Solderability                    After flux 230±5°C for  
5±0.5 seconds 95% coverage
- 2-2-7. Resistance to soldering heat    260±5°C for 5±1 seconds.

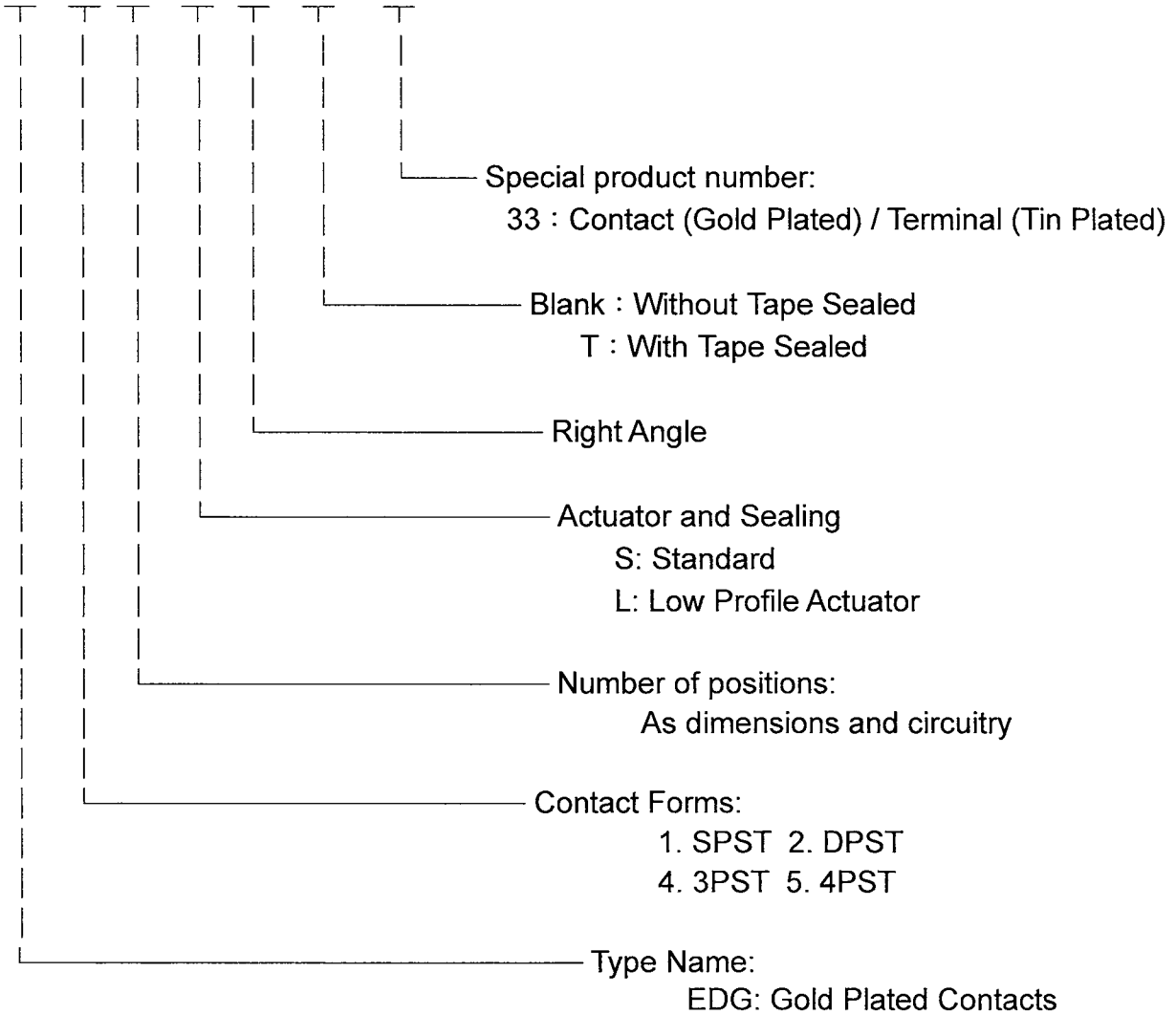
**3. OPTIONS:**


- 3-1. Special top or side marking available.
- 3-2. Right angle for spst 1-12 positions.
- 3-3. Low profile actuator.
- 3-4. Low profile actuator plus top tape sealed.



#### 4. PART NUMBERING SYSTEM

EDG 1 X S RA X XX



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## 5. PACKING

### 5-1. PACKING METHOD

All switches are packed into IC tubes as an inner packing unit, then ten tubes are bundles together with rubber bands.

Length of IC tube: 560 mm (EDG 1 pole only: 280 mm).

### 5-2. INFORMATION ON LABEL (stuck to each bundle of IC tubes).

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

## 6. DRAWINGS

Dip switch dimensions: see attached drawing.

Circuit diagram: see attached drawing

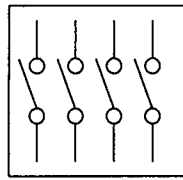
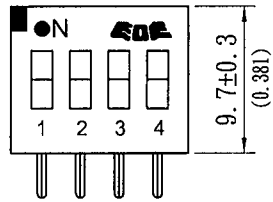
P.C.B. layout diagram: see attached drawing.

## 7. WARNING

Please keep contacts in OFF position during wave soldering.

# EDG/EDS SPST-RA DIMENSIONS

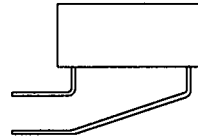
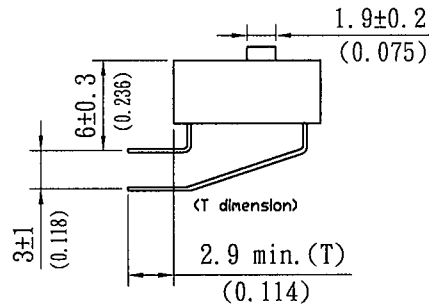
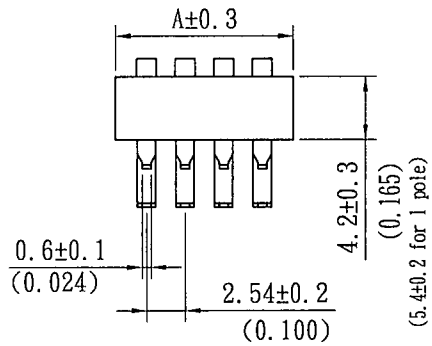
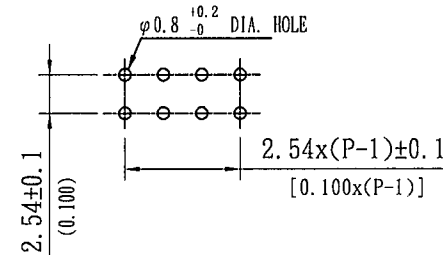
Unit:mm(Inch)



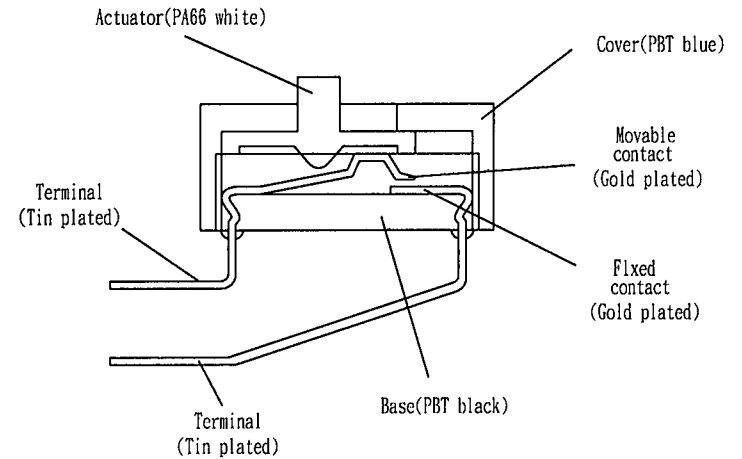
Right angle type

Low profile type

## P.C.B LAY OUT FOR RIGHT ANGLE TYPE ONLY



## CONSTRUCTION



## Dimension A

Positions	3	4	5	6	7	8	9	10	12
A	9.2 (0.362)	11.7 (0.461)	14.2 (0.559)	16.7 (0.657)	19.2 (0.756)	21.7 (0.854)	24.2 (0.953)	26.7 (1.051)	31.8 (1.252)

Remark: 3 position switches don't have the "ECE" Mark.

		NORMAL TOLERANCE		ECE EXCEL CELL ELECTRONIC CO., LTD.				PART NUMBER		EDG1XXS(L)RA33	
		RANGE	TOLERANCE	CHECK	Gary (2016.12.27)	DESIGN P.C.L	DRAWN Marcus (2016.12.27)	UNIT	MM (INCH)	PART NAME	EDG
		0-1	±0.1					SCALE	2:1	TYPE	SPST-RA
		1-4	±0.3					SIZE	A4	FILE NAME	7041XX3133A.DWG
		4-16	±0.5					PROJECTION		EDITION	A
		16-63	±0.8								
		63-250	±1.0								
		X	±5°								
		X.X	±2.5°								
NO.	DETAILS	ALTERED BY	DATE								