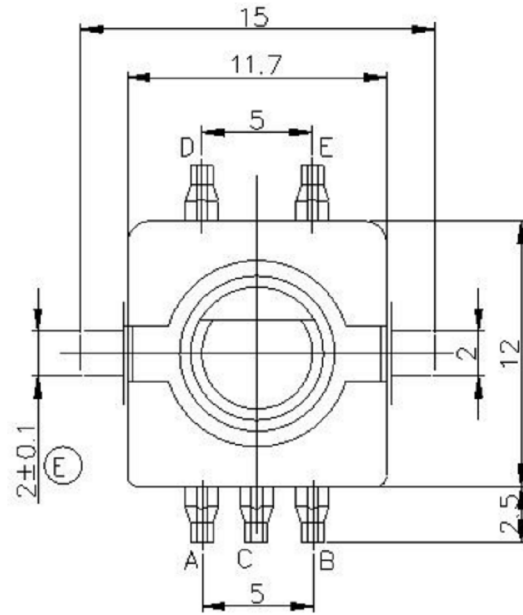
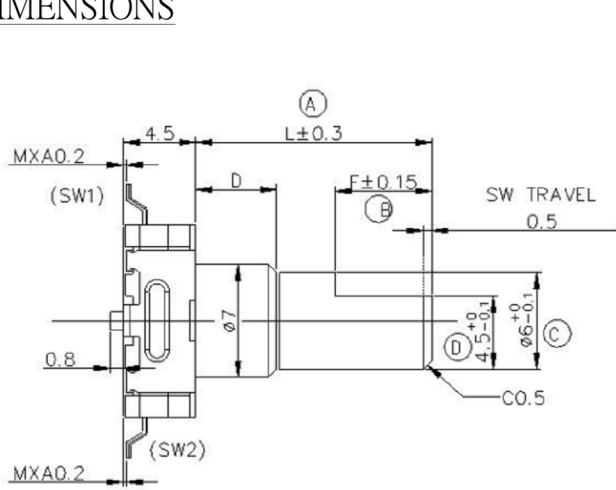
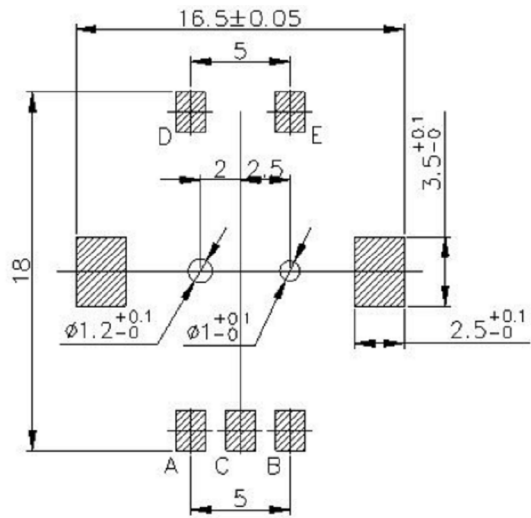
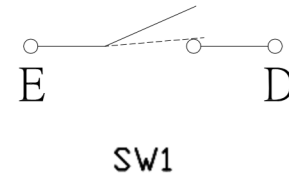


# DIMENSIONS

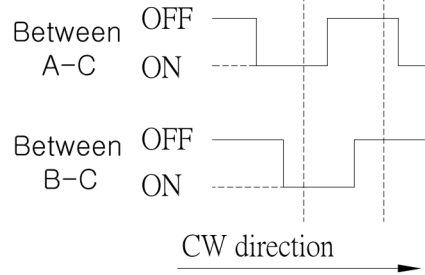


| Electrical characteristics 电气特性     |  |
|-------------------------------------|--|
| Rating Power 额定功率                   | DC5V 10mA  |
| Fluttering 振荡                       | T1,T3≤3ms  |
| Sliding Noise(Bounce)滑动杂音           | T2≤2ms   |
| Dielectric Voltage 耐电压              | For 1 minute or more AC 300V                           |
| Insulation resistance 绝缘阻抗          | More than 100MΩ at DC 250V                             |
| Phase Difference 相位差                | ΔT≥0.08T   |
| Mechanical characteristics 机械特性     |  |
| Total Rotational Angle 旋转角度         | 360°   |
| Rotational Torque 旋转力矩              | 30gf.cm~200 gf.cm                                      |
| Number of click 档位数量                | 30 Detents(Angle:1.2°±2°)<br>20 Detents(Angle:1.8°±2°) |
| Push-Pull Strength 轴推拉强度            | 10Kgf.cm Min for 10Sec                                 |
| Bushing & nut tight strength 轴套锁紧强度 | 10.0Kgf Min  |
| Switch Specifications 开关特性          |  |
| Maximum Ratings 额定电压                | DC5V 10mA(1mA Min)                                     |
| Contact resistance 接触阻抗             | 200mΩ Max  |
| Travel of switch 开关移动量              | 0.5+0.4/-0.3 mm OR 1.5+0.4/-0.3 mm                     |
| Operating force of switch 开关动作力     | 500±200gf  |
| Environmental characteristics       |  |
| Rotational Life 旋转寿命                | 30,000 cycles  |
| Switch Life 开关寿命                    | 20,000 cycles  |

## (SW02)CIRCUIT DIAGRAM



(SW01) ENCODER  
(SW02) PUSH ON SW  
CLICK Position



(SW01) OUTPUT

### EC11 轴心轴套规格

| F-TYPE  | Y-TYPE             |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
|---|--------------------|------|--------------------|--------------------|-------------|-------------|---|-------|------|-------------------|--------------------|---------|-------------|
|   |                    |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| <table border="1"> <tr> <td>D=3.5</td> <td>D=5</td> </tr> <tr> <td>L 9 10</td> <td>L 10 12 13 15 16 7</td> </tr> <tr> <td>F 4 4</td> <td>F 4 6 7 5 7</td> </tr> </table>    | D=3.5              | D=5  | L 9 10             | L 10 12 13 15 16 7 | F 4 4       | F 4 6 7 5 7 | <table border="1"> <tr> <td>D=3.5</td> <td>D=5</td> </tr> <tr> <td>L 8 5</td> <td>L 9 5 11 11 8 12 5</td> </tr> <tr> <td>F 3 5</td> <td>F 4 4 5 5 5</td> </tr> </table> | D=3.5 | D=5  | L 8 5             | L 9 5 11 11 8 12 5 | F 3 5   | F 4 4 5 5 5 |
| D=3.5   | D=5                |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| L 9 10  | L 10 12 13 15 16 7 |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| F 4 4   | F 4 6 7 5 7        |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| D=3.5   | D=5                |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| L 8 5   | L 9 5 11 11 8 12 5 |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| F 3 5   | F 4 4 5 5 5        |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| <table border="1"> <tr> <td>D=7</td> <td>D=10</td> </tr> <tr> <td>L 12 5 13 15 17 20</td> <td>L 29 3 32</td> </tr> <tr> <td>F 4 4 5 7 7</td> <td>F 9 12</td> </tr> </table> | D=7                | D=10 | L 12 5 13 15 17 20 | L 29 3 32          | F 4 4 5 7 7 | F 9 12      | <table border="1"> <tr> <td>D=7</td> <td>D=10</td> </tr> <tr> <td>L 12 5 13 15 15 5</td> <td>L 19 5</td> </tr> <tr> <td>F 4 5 5</td> <td>F 6</td> </tr> </table>        | D=7   | D=10 | L 12 5 13 15 15 5 | L 19 5             | F 4 5 5 | F 6         |
| D=7   | D=10               |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| L 12 5 13 15 17 20  | L 29 3 32          |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| F 4 4 5 7 7   | F 9 12             |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| D=7   | D=10               |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| L 12 5 13 15 15 5   | L 19 5             |      |                    |                    |             |             |   |       |      |                   |                    |         |             |
| F 4 5 5   | F 6                |      |                    |                    |             |             |   |       |      |                   |                    |         |             |

### 输出信号

| 轴的旋转方向<br>Shaft rotational direction | 信号<br>Signal                 | 正向<br>Direction | 反向<br>Reverse |
|--------------------------------------|------------------------------|-----------------|---------------|
| 顺时针方向<br>C.C.W.                      | A(A`C端子间)<br>A(Terminal A`C) |                 |               |
| 逆时针方向<br>C.C.W.                      | B(B`C端子间)<br>B(Terminal B`C) |                 |               |

\* 具体轴心规格，可依客户需求订做。  
Specific axis specifications can be customized according to customer needs.

## P.C. BOARD MOUNTING HOLE DIMENSIONS

**广东科斯达电子科技有限公司**  
KSDKG Guang dong Keside Electronic Technology Co., Ltd.

TOLERANCE UNLESS OTHERWISE STATED:  
Up to 5 ±0.2  
Above 5 ~ 15 ±0.3  
Above 15 ~ 30 ±0.4  
Above 30 ~ 50 ±0.5  
Angle ±0.3°

3RD. ANGEL'S



UNITS MM

|                        |                |                  |                           |
|------------------------|----------------|------------------|---------------------------|
| DRAWN BY: Jack Lu      | DATE: 07/23/13 | MAT'L            | TITLE: EC ENCODING SWITCH |
| CHECKED BY: Jacky Chen | DATE: 07/23/13 | FINISH           | MODLE: EC编码开关系列           |
| APPROVED BY: Tony Kao  | DATE: 07/23/13 | SCALE: 1 : 1     | DWG NO. KSD-EC1103        |
|                        |                | SHEET NO. 1 of 1 | PART NO.                  |
|                        |                |                  | SIZE: A4                  |
|                        |                |                  | VER: R2                   |