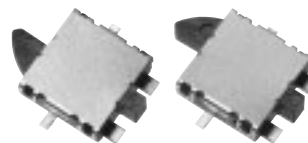


### 2HL Detector Switches

Type: **ESE31**



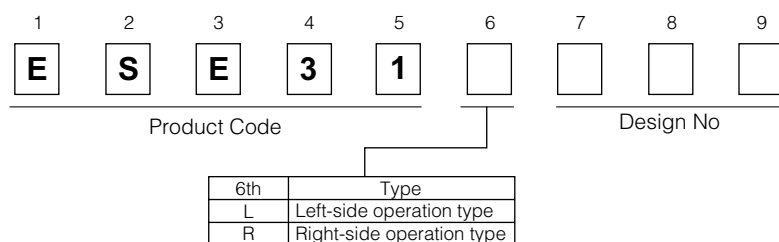
#### ■ Features

- Increased the mounting strength Mounting strength: 80 N
- Decreased the profile of the switch body Height: 1.7 mm
- Increased the contact reliability and lifespan.  
Lifespan: 100,000 operations or more

#### ■ Recommended Applications

- Detection of media in portable electronic equipment

#### ■ Explanation of Part Numbers



#### ■ Specifications

|                                   |                                                  |
|-----------------------------------|--------------------------------------------------|
| Rating                            | 50 $\mu$ A 3 Vdc to 10 mA 5 Vdc (Resistive load) |
| Contact Resistance                | 500 m $\Omega$ max. (Initial)                    |
| Insulation Resistance             | 100 M $\Omega$ min. (100 Vdc)                    |
| Dielectric Withstanding Voltage   | 100 Vac for 1 minute                             |
| Operating Force                   | 390 mN max.                                      |
| Mounting Height                   | 1.7 mm                                           |
| Poles and Throws                  | 1-pole 1-throw                                   |
| Full Travel<br>(Pushing distance) | 3.2 mm (2.15 mm)                                 |
| Operating Life                    | 50000 cycles min.                                |
| Temperature Range                 | -10 °C to +70 °C                                 |
| Heat Resistance                   | +85 °C for 96 hours                              |
| Low Temperature Resistance        | -40 °C for 96 hours                              |
| Humidity Resistance               | +60 °C 90 % to 95 % RH for 96 hours              |
| Minimum Quantity/Packing Unit     | 2500 pcs. Embossed Taping (Reel Pack)            |
| Quantity/Carton                   | 15000 pcs.                                       |

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.

### No. 1 ESE31L11T

1-pole 1-throw

PWB mounting hole for reference

### No. 2 ESE31R11T

1-pole 1-throw

PWB mounting hole for reference

1-pole 1-throw (N . O)

ESE31L11T

ESE31R11T

**Taping Reel**

Technical drawing of a Taping Reel showing a top view and a side view. The top view is a circle with a diameter of  $\phi 380.0 \pm 2.0$  and three small circles inside. The side view shows a thickness of 16.4.

**Embossed Carrier Taping**

Technical drawing of an Embossed Carrier Taping showing a side view. The drawing includes dimensions and labels for various parts:

- Overall width:  $16.0 \pm 0.3$
- Carrier tape thickness:  $7.5 \pm 0.1$
- Carrier tape width:  $1.75 \pm 0.1$
- END label
- Pilot holes:  $\phi 1.5 \pm 0.1$
- Pitch (P):  $12.0 \pm 0.1$
- Carrier tape width:  $4.0 \pm 0.1$
- Carrier tape width:  $2.0 \pm 0.1$
- Drawing direction (indicated by an arrow)
- Leading portion 400 mm min.
- Non-packed portion (160 mm min.)
- Packed portion
- Non-packed portion (100 mm min.)
- Cover tape
- TOP label
- Overall height: 13.5

00 Oct. 2012