

## 3 mm Size Slide Switches

Japan

Type: **ESD11**

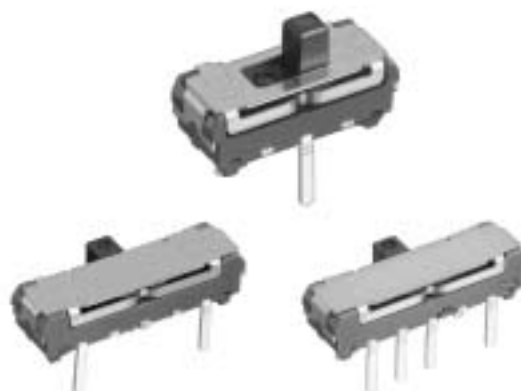
Small-sized, wave soldering type

## ■ Features

- A wide range of customizable features (lever direction and circuit diagram)
- Self-standing type on printed circuit board
- Available for automatic wave soldering

## ■ Recommended Applications

- Signal switches for Telephones, Audio Equipment and LCD TVs



## ■ Explanation of Part Numbers

|              |   |   |      |   |                |                  |   |            |
|--------------|---|---|------|---|----------------|------------------|---|------------|
| 1            | 2 | 3 | 4    | 5 | 6              | 7                | 8 | 9          |
| E            | S | E | 1    | 1 |                |                  |   |            |
| Product Code |   |   | Type |   | Lever Position | Poles and Throws |   | Design No. |

## ■ Standard Products

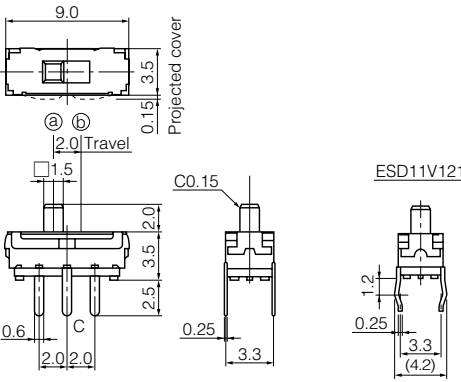
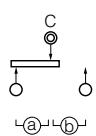
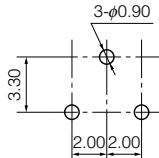
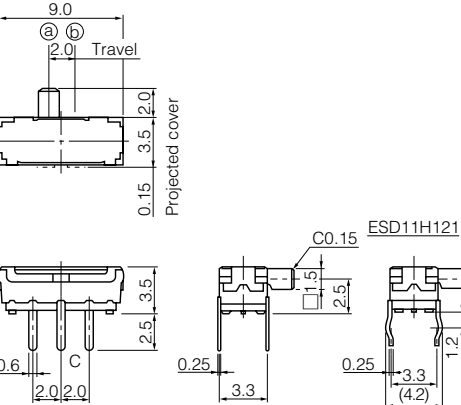
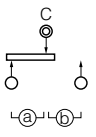
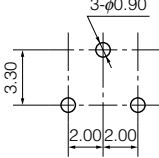
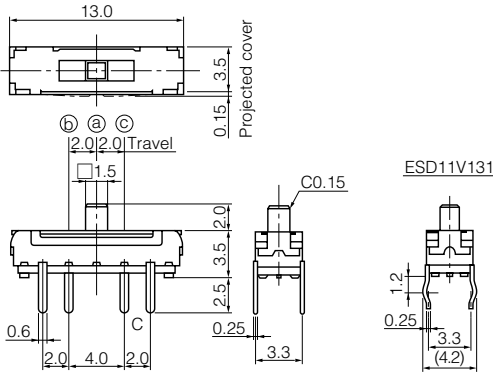
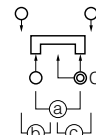
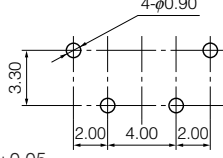
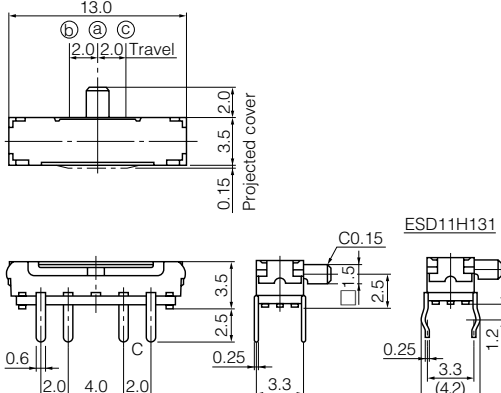
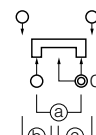
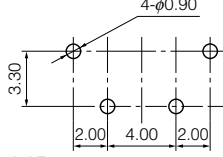
| Poles | Throws | Straight Terminals |            | Formed Terminals |            |
|-------|--------|--------------------|------------|------------------|------------|
|       |        | Vertical           | Horizontal | Vertical         | Horizontal |
| 1     | 2      | ESD11V120          | ESD11H120  | ESD11V121        | ESD11H121  |
| 2     |        | ESD11V220          | ESD11H220  | ESD11V221        | ESD11H221  |
| 1     | 3      | ESD11V130          | ESD11H130  | ESD11V131        | ESD11H131  |
| 2     |        | ESD11V230          | ESD11H230  | ESD11V231        | ESD11H231  |

## ■ Major Specifications

|                               |        |                                                                        |                       |
|-------------------------------|--------|------------------------------------------------------------------------|-----------------------|
| Lever Position                |        | Vertical                                                               | Horizontal            |
| Rating                        |        | 50 $\mu$ A 3 Vdc to 0.1 A 12 Vdc                                       |                       |
| Travel                        |        | 2.0 mm                                                                 |                       |
| Mounting Height               |        | 3.5 mm                                                                 |                       |
| Poles and Throws              |        | 1-pole 2-throws, 1-pole 3-throws<br>2-poles 2-throws, 2-poles 3-throws |                       |
| Terminal Pitch                |        | 2.0 mm                                                                 |                       |
| Switching Mode                |        | Non-shorting                                                           |                       |
| Lever                         | Size   | □ 1.5 mm                                                               |                       |
|                               | Length | 2.0 mm                                                                 |                       |
| Minimum Quantity/Packing Unit |        | 2-Throw                                                                | 1000 pcs. (Vinyl Bag) |
|                               |        | 3-Throw                                                                | 500 pcs. (Vinyl Bag)  |
| Quantity/Carton               |        | 2-Throw                                                                | 8000 pcs.             |
|                               |        | 3-Throw                                                                | 4000 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.

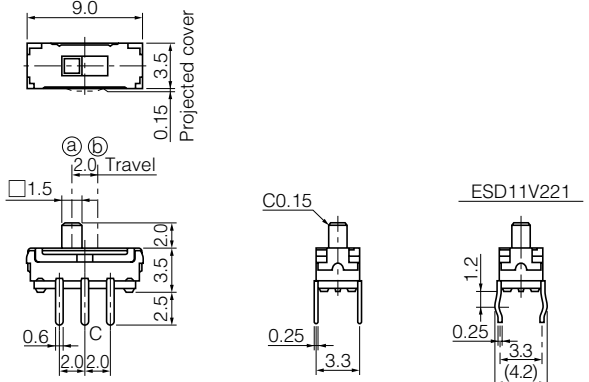
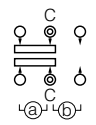
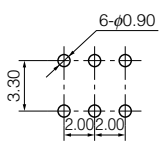
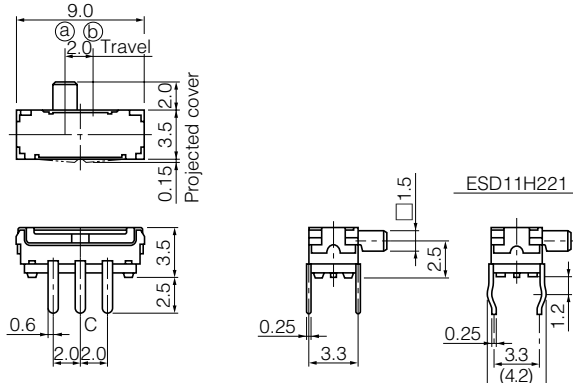
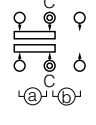
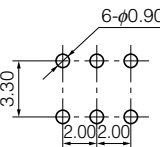
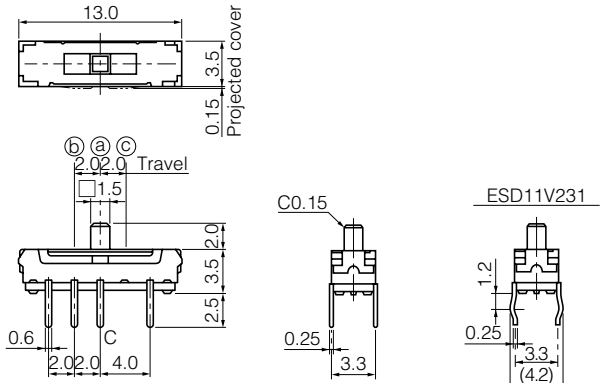
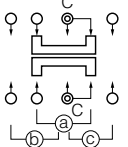
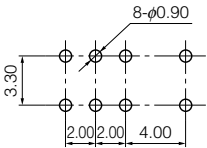
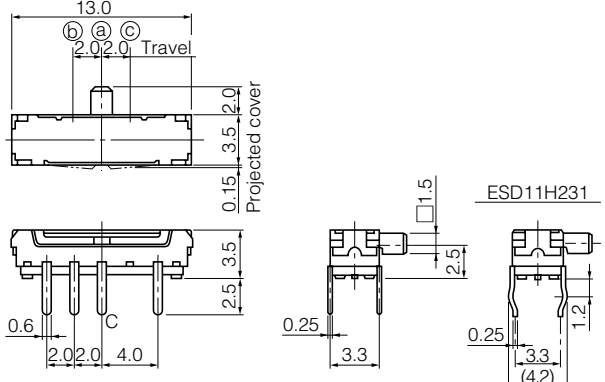
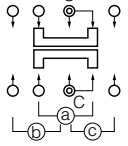
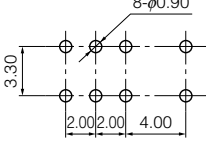
## ■ Dimensions in mm (not to scale)

|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>No. 1</b></p> <p><b>ESD11V120</b><br/>1-pole 2-throws<br/>Operating Force<br/>a↔b<br/>1.96 N±1.47 N</p>                                  | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p>     |
| <p><b>No. 2</b></p> <p><b>ESD11H120</b><br/>1-pole 2-throws<br/>Operating Force<br/>a↔b<br/>1.96 N±1.47 N</p>                                 | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p>    |
| <p><b>No. 3</b></p> <p><b>ESD11V130</b><br/>1-pole 3-throws<br/>Operating Force<br/>b→a←c<br/>1.96 N±1.47 N<br/>b←a→c<br/>2.45 N±1.47 N</p>  | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p> |
| <p><b>No. 4</b></p> <p><b>ESD11H130</b><br/>1-pole 3-throws<br/>Operating Force<br/>b→a←c<br/>1.96 N±1.47 N<br/>b←a→c<br/>2.45 N±1.47 N</p>  | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p> |

Note: ⊙C=Common terminal

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.

## ■ Dimensions in mm (not to scale)

|                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>No. 5</b></p> <p><b>ESD11V220</b><br/>2-poles 2-throws<br/>Operating Force<br/>①↔②<br/>1.96 N±1.47 N</p>                                  | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p>     |
| <p><b>No. 6</b></p> <p><b>ESD11H220</b><br/>2-poles 2-throws<br/>Operating Force<br/>①↔②<br/>1.96 N±1.47 N</p>                                 | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p>    |
| <p><b>No. 7</b></p> <p><b>ESD11V230</b><br/>2-poles 3-throws<br/>Operating Force<br/>②→①←③<br/>1.96 N±1.47 N<br/>③←①→②<br/>2.45 N±1.47 N</p>  | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p> |
| <p><b>No. 8</b></p> <p><b>ESD11H230</b><br/>2-poles 3-throws<br/>Operating Force<br/>②→①←③<br/>1.96 N±1.47 N<br/>③←①→②<br/>2.45 N±1.47 N</p>  | <p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>Tolerance: ±0.05</p> |

Note: ⓈC=Common terminal

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.