

### 3 mm Size Slide Switches

Japan

Type: **ESD11**

Small-sized, wave soldering type

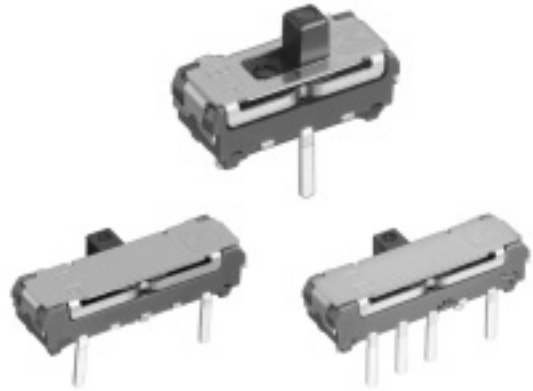
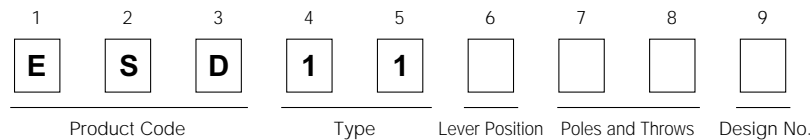
#### ■ Features

- 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



#### ■ Standard Products

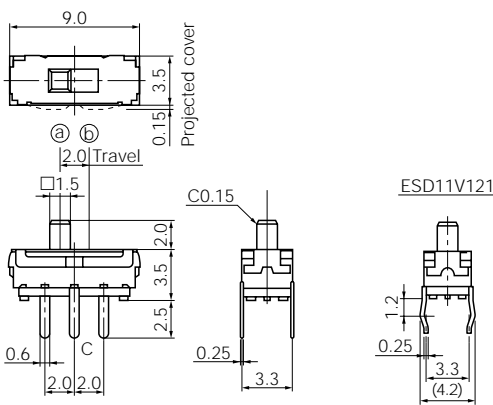
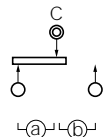
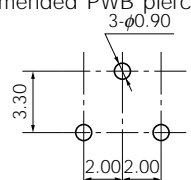
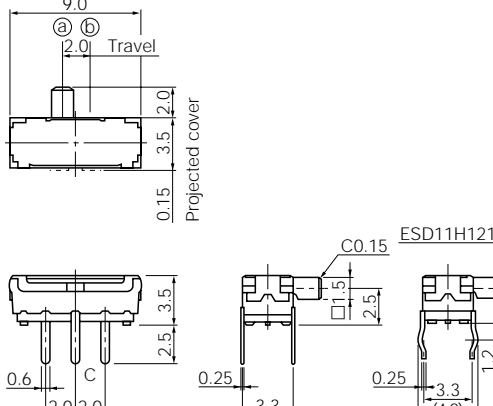
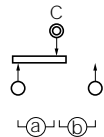
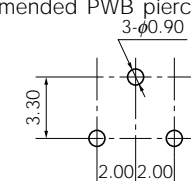
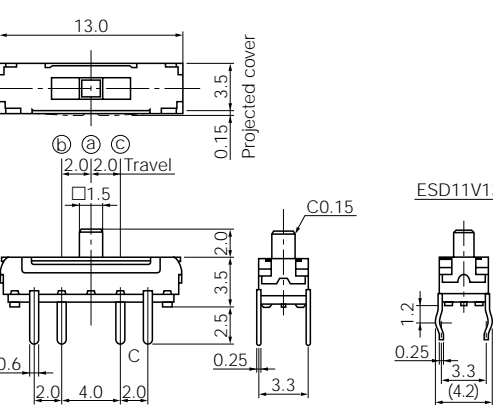
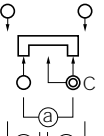
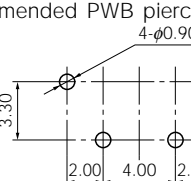
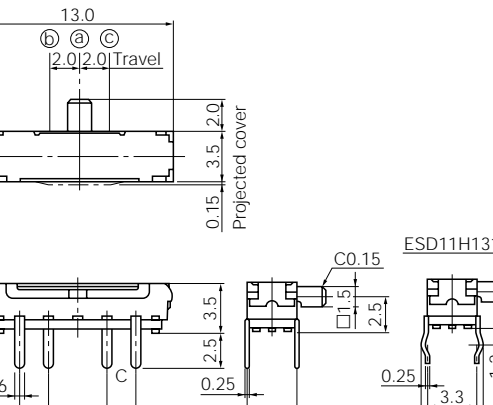
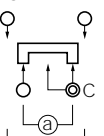
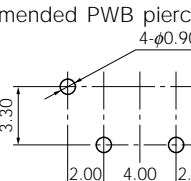
Poles	Throws	Straight Terminals		Formed Terminals	
		Vertical	Horizontal	Vertical	Horizontal
1	2	ESD11V120	ESD11H120	ESD11V121	ESD11H121
2		ESD11V220	ESD11H220	ESD11V221	ESD11H221
1	3	ESD11V130	ESD11H130	ESD11V131	ESD11H131
2		ESD11V230	ESD11H230	ESD11V231	ESD11H231

#### ■ Specifications

Lever Position	Vertical	Horizontal
Rating	50 $\mu$ A 3 Vdc to 0.1 A 12 Vdc (Resistive load)	
Travel	2.0 mm	
Mounting Height	3.5 mm	
Poles and Throws	1-pole 2-throws, 1-pole 3-throws 2-poles 2-throws, 2-poles 3-throws	
Terminal Pitch	2.0 mm	
Switching Mode	Non-shorting	
Lever Length	2.0 mm	
Minimum Quantity/Packing Unit	2-Throws	1000 pcs. Polyethylene Bag (Bulk)
	3-Throws	500 pcs. Polyethylene Bag (Bulk)
Quantity/Carton	2-Throws	8000 pcs.
	3-Throws	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>No. 1</p>	<p>ESD11V120 1-pole 2-throws Operating Force a ↔ b 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>No. 2</p>	<p>ESD11H120 1-pole 2-throws Operating Force a ↔ b 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>No. 3</p>	<p>ESD11V130 1-pole 3-throws Operating Force b → a ← c 1.96 N ± 1.47 N  b ← a → c 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>No. 4</p>	<p>ESD11H130 1-pole 3-throws Operating Force b → a ← c 1.96 N ± 1.47 N  b ← a → c 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

■ Dimensions in mm (not to scale)

<p><b>No. 5</b></p> <p><b>ESD11V220</b> 2-poles 2-throws Operating Force ①↔② 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> 2-poles 2-throws Operating Force ①↔② 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> 2-poles 3-throws Operating Force ③→①←② 1.96 N±1.47 N  ③←①→② 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> 2-poles 3-throws Operating Force ③→①←② 1.96 N±1.47 N  ③←①→② 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