

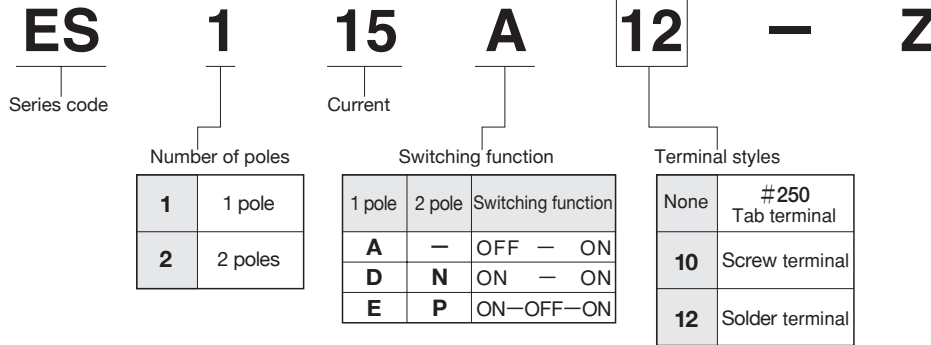
# ES

## Miniature Slide Switches

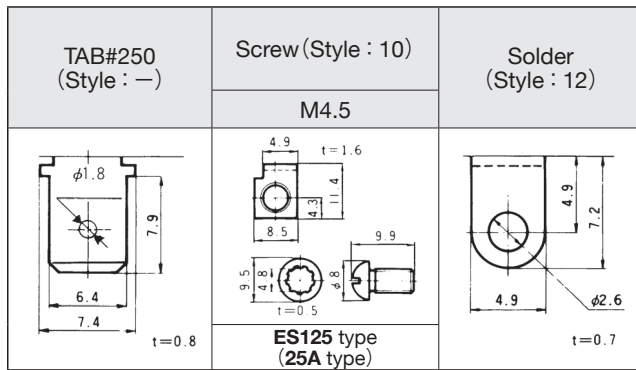
RoHS Compliant



### Part Numbering

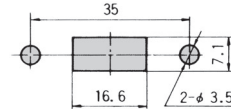


### Terminal Styles

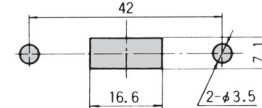


### Panel Cut-Out Dimensions

#### ES115•125 type

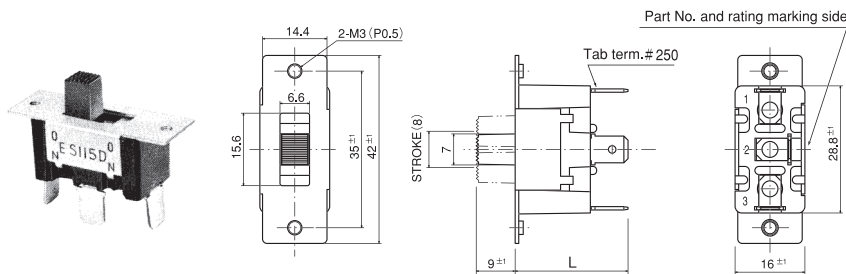


#### ES215•225 type



### ES115 1-pole

Switches with switching function "A" do not have terminal No. 2.



Terminal numbers are shown on the bottom of the switch.

### Dimension L

Part No.	Terminal style		
	TAB	Screw	Solder
ES115A■—Z	25.2±1	—	22.3±1
ES115D■—Z	—	—	—
ES115E■—Z	25.7±1	—	22.8±1

Part No.	Switching function		
	Viewed from part No. marking side		
ES115A■—Z	OFF	—	ON
ES115D■—Z	ON	—	ON
ES115E■—Z	ON	OFF	ON
Connecting terminals	2—1	—	2—3

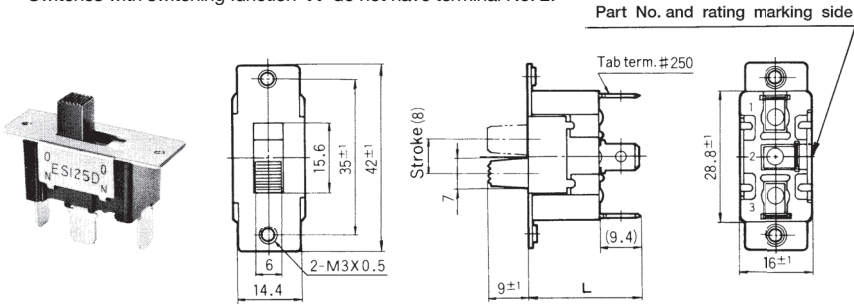
### Specifications

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
ES115A■—Z AC125V 15A ES115D■—Z AC250V 15A	20mΩ Max. (DC2~4V 100mA)	AC1500V 1分間/minute	100MΩ Min. (DC500V)	20,000 cycles
ES115E■—Z AC125V 15A AC250V 7A				

To check the full part number of the products marked with the ■, please refer to "Table of Part Numbers" on P. 505.

**ES125 1-pole**

Switches with switching function "A" do not have terminal No. 2.



Terminal numbers are shown on the bottom of the switch.

**Dimension L**

Terminal style	TAB	Screw	Solder
Part No.			
ES125A■-Z	25.2±1	26.4±1	22.3±1
ES125D■-Z			

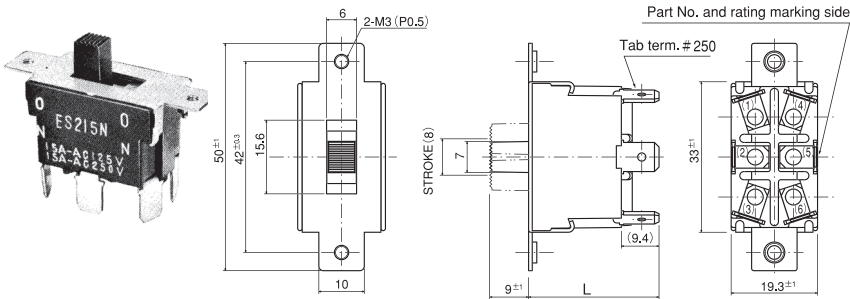
Switching function	Viewed from part No. marking side		
Part No.			
ES125A■-Z	OFF	—	ON
Connecting terminals	—	—	1-3
ES125D■-Z	ON	—	ON
Connecting terminals	2-1	—	2-3

To check the full part number of the products marked with the ■, please refer to "Table of Part Numbers" on P. 505.

**Specifications**

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
ES125A■-Z AC125V 25A	20mΩ Max. (DC2~4V 100mA)	AC1500V 1分間/minute	100MΩ Min. (DC500V)	20,000 cycles
ES125D■-Z AC250V 25A				

**ES215 2-poles**



Terminal numbers are shown on the bottom of the switch.

**Dimension L**

Terminal style	TAB	Screw	Solder
Part No.			
ES215N■-Z	29.3±1	27.1±1	26.4±1
ES215P■-Z		—	

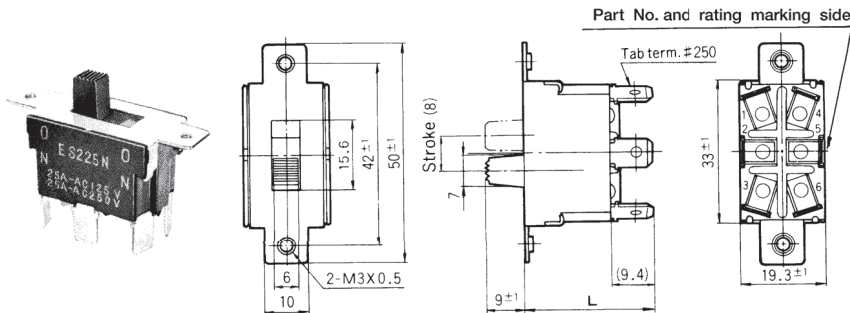
Switching function	Viewed from part No. marking side		
Part No.			
ES215N■-Z	ON	—	ON
ES215P■-Z	ON	OFF	ON
Connecting terminals	2-1 5-4	—	2-3 5-6

To check the full part number of the products marked with the ■, please refer to "Table of Part Numbers" on P. 505.

**Specifications**

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
ES215N■-Z AC125V 15A AC250V 15A	20mΩ Max. (DC2~4V 100mA)	AC1500V 1分間/minute	100MΩ Min. (DC500V)	20,000 cycles
ES215P■-Z AC125V 15A AC250V 7A				

**ES225 2-poles**



Terminal numbers are shown on the bottom of the switch.

**Dimension L**

Terminal style	TAB	Screw	Solder
Part No.			
ES225N■-Z	29.3±1	30.6±1	26.4±1

Switching function	Viewed from part No. marking side		
Part No.			
ES225N■-Z	ON	—	ON
Connecting terminals	2-1 5-4	—	2-3 5-6

To check the full part number of the products marked with the ■, please refer to "Table of Part Numbers" on P. 505.

**Specifications**

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
ES225N■-Z AC125V 25A AC250V 25A	20mΩ Max. (DC2~4V 100mA)	AC1500V 1分間/minute	100MΩ Min. (DC500V)	20,000 cycles

■ indicates the terminal style number ("None", "10", or "12").

# Certifications

## ■ Handling Precautions

### 1. Soldering Specifications

(1) Manual Soldering



Device : Soldering iron 350°C, Max.; 3 seconds, Max.

### 2. Flux Cleaning

(1) Solvent : Fluorine or Alcohol type.

(2) are not process sealed. If the PC board is to be cleaned, clean the soldering surface of the substrate with a brush so that the switch is not exposed to the cleaning solution.

## ■ UL Recognized / CSA Certified

Classification	Part No.		page	Part No.		page
Slide switches	ASE1D-2M-10-Z	●	494	ASE1D-5M-10-Z	●	494
	ASE1E-2M-10-Z	●	494	ASE2D-5M-10-Z	●	494
	ASE2D-2M-10-Z	●	494	ASE1D-6M-10-Z	●	494
	ASE2E-2M-10-Z	●	494	ASE2D-6M-10-Z	●	494
	ASE2N-2M-10-Z	●	494	ASE2N-6M-10-Z	●	494
	8SS1011-Z	●	501			
	8SS1012-Z	●	501			
	8SS1021-Z	●	501			
	8SS1022-Z	●	501			
	8SS2011-Z	●	501			
	8SS2012-Z	●	501			
	8SS2021-Z	●	501			
	8SS2022-Z	●	501			

● UL-recognized or CSA-certified products.

● : UL File No. E43275

CSA File No. LR38341

Note: Please refer to P.575 for more details on UL-recognized / CSA-certified products.

Additional cost will be required.

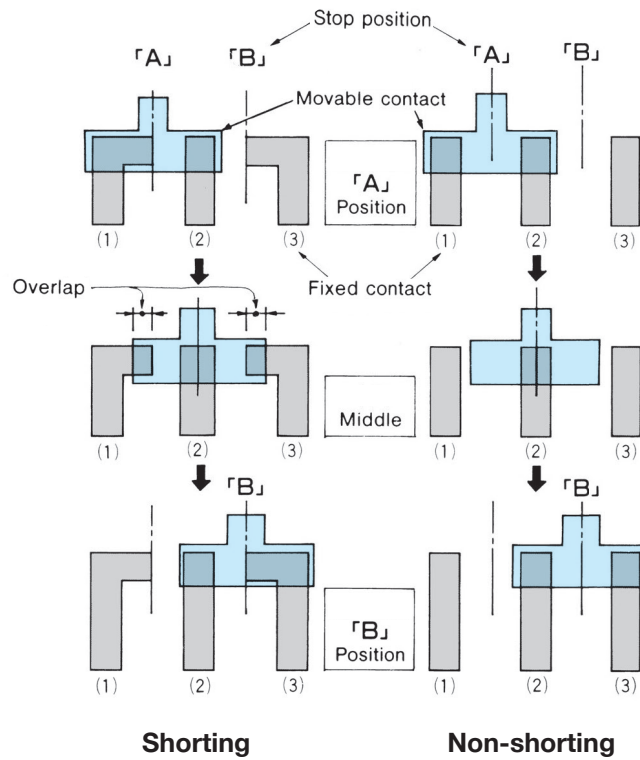
## ■ Table of Part Numbers

Series	Switching function	TAB terminals		Screw terminals	Solder terminals	
		1-pole	2-poles	1-pole	1-pole	2-poles
ES (15A)	OFF - ON	★ ES115A-Z	—	—	★ ES115A12-Z	—
	ON - ON	★ ES115D-Z	ES215N-Z	—	★ ES115D12-Z	—
	ON-OFF-ON	★ ES115E-Z	★ ES215P-Z	—	—	—
ES (25A)	OFF - ON	—	—	★ ES125A10-Z	★ ES125A12-Z	—
	ON - ON	—	—	—	★ ES125D12-Z	★ ES225N12-Z

■ **Shorting (Make-Before-Break)**

A switch which momentarily connects both circuits when the actuator is moved from Point A to B in the below figure.

All switches which are not marked as "Shorting" are "Non-shorting" (Break-Before-Make).



[Fig.1.]