

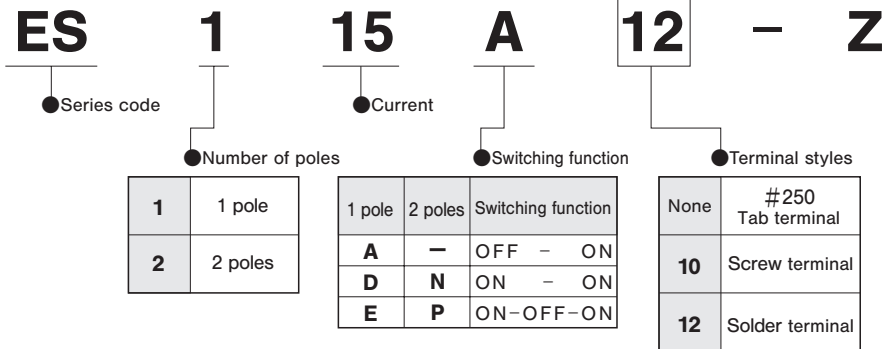
ES

Miniature Slide Switches

RoHS Compliant

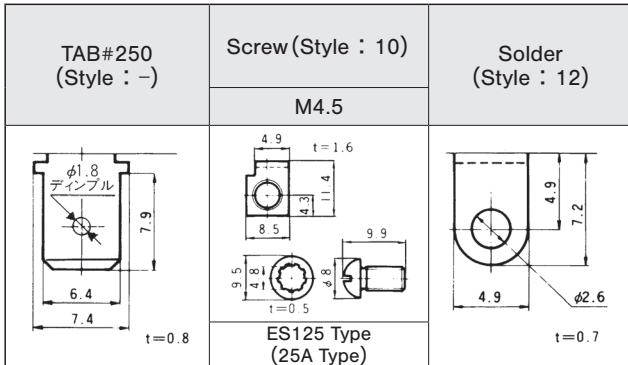


Part Numbering

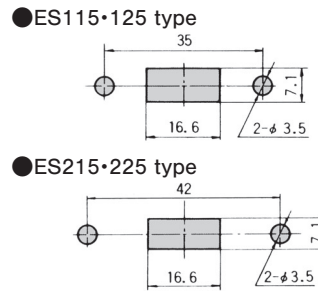


Note : Some model names may not be registered. Please refer to the product list for this series.

Terminal Styles

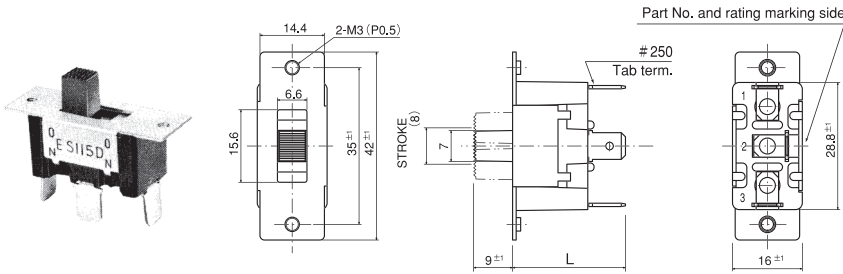


Panel Cut-Out Dimensions



ES115 1-pole

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



Dimension L

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

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

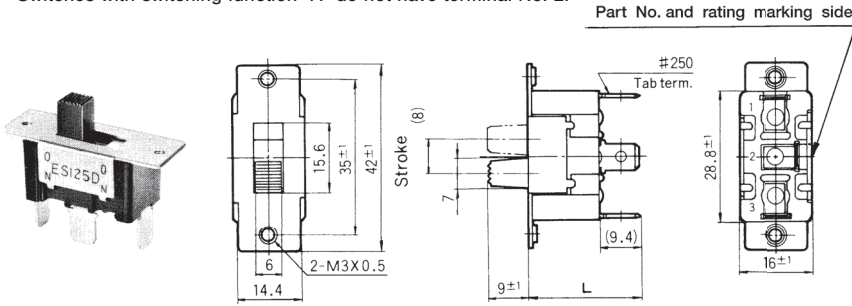
Specifications

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
ES115A■-Z ES115D■-Z	20mΩ Max. (DC2~4V 100mA)	AC1500V minute	100MΩ Min. (DC500V)	20,000 cycles
ES115E■-Z				

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

ES125 1-pole

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



Terminal numbers are shown on the bottom of the switch.

Specifications

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

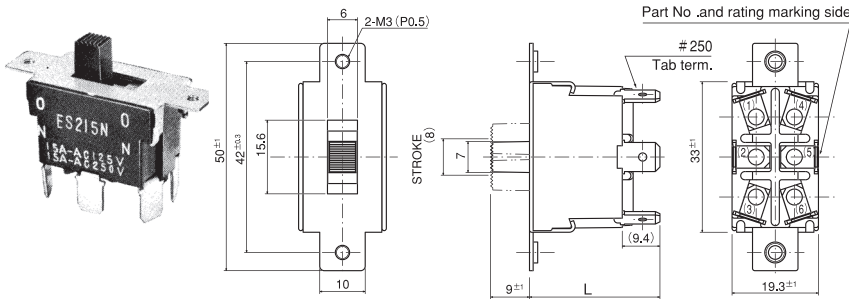
Dimension L

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".

ES215 2-poles



Terminal numbers are shown on the bottom of the switch.

Specifications

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

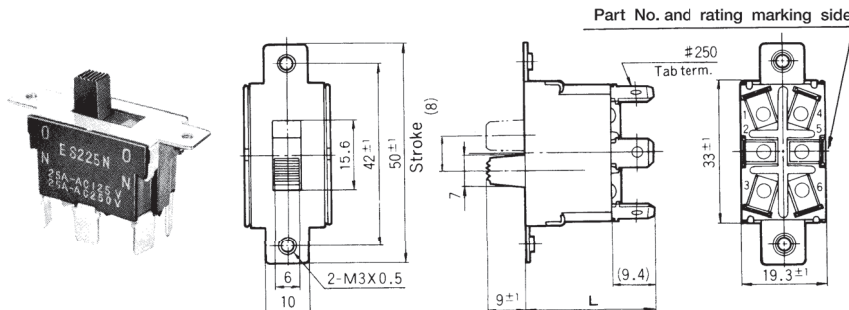
Dimension L

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".

ES225 2-poles



Terminal numbers are shown on the bottom of the switch.

Specifications

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

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".

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

■ 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用)	OFF - ON	★ ES115A-Z	—	—	★ ES115A12-Z	—
	ON - ON	★ ES115D-Z	ES215N-Z	—	★ ES115D12-Z	—
	ON-OFF-ON	★ ES115E-Z	★ ES215P-Z	—	—	—
ES (25A用)	OFF - ON	—	—	★ ES125A10-Z	★ ES125A12-Z	—
	ON - ON	—	—	—	★ ES125D12-Z	★ ES225N12-Z

★ : Made to order products.

■ Handling Precautions

1. Soldering Specifications

(1) Manual Soldering

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

2. Flux Cleaning

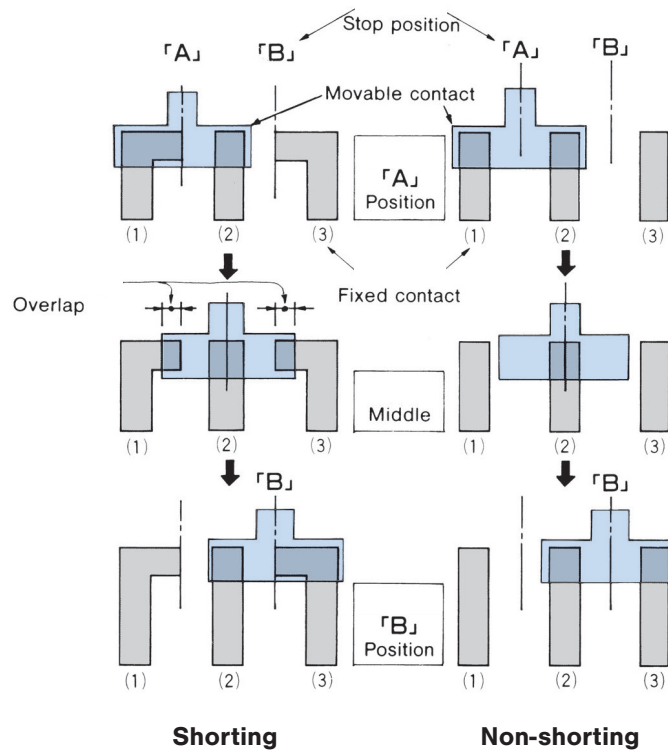
(1) Solvent : Fluorine or Alcohol type.

(2) ES series are not process sealed. If the PC board is to be cleaned, clean the soldering surface of the 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.

■ 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]