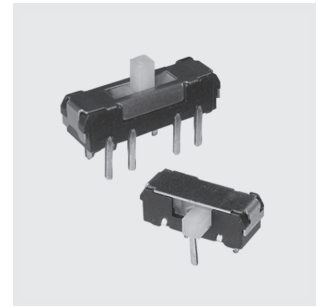


MHS

Hyper-miniature Slide Switches



RoHS Compliant

PICOTOP

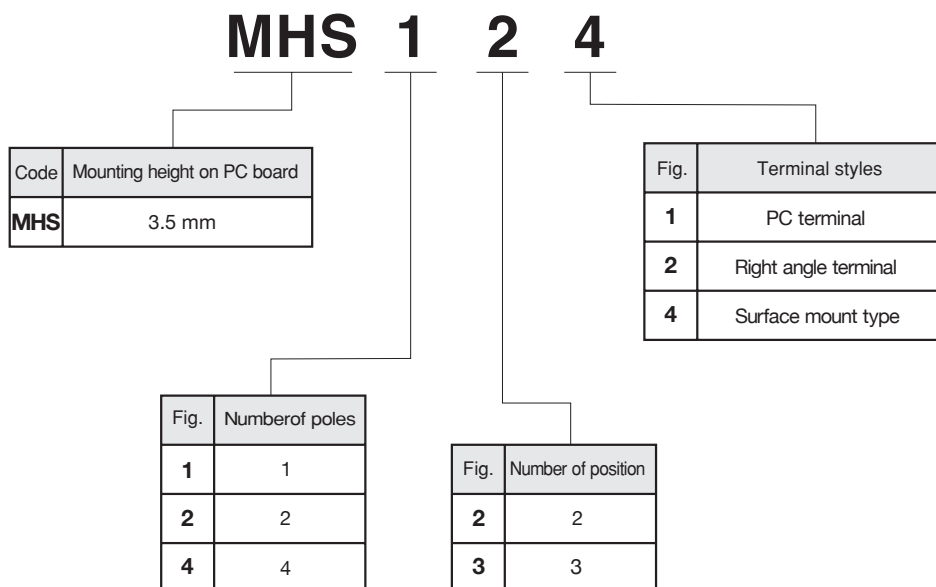
■ Features

1. Extremely small and low-profile slide switch.
2. Available in a wide variety of circuits.

■ Specifications

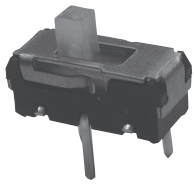
Rating	Max.	0.2A 12VDC	(Resistive load)
	Min.	10mA 5VDC	(Resistive load)
Initial contact resistance	50mΩ max. (1.5mA 200μVAC)		
Dielectric strength	500VAC 1 minute		
Insulation resistance	100MΩ min. (500VDC)		
Electrical life	5,000 cycles		
Operating temperature range	-10~+70°C		
Storage temperature range	-20~+80°C		

■ Part Numbering



MHS

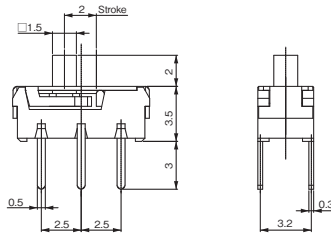
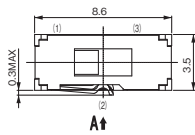
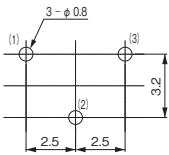
MHS121 Non-shorting



PC

PC Hole Layouts

(Top view)



Terminal numbers are not shown on the switch.

Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-1	2-3		

● Operating force : 0.49~3.92 N [50~400 gf]

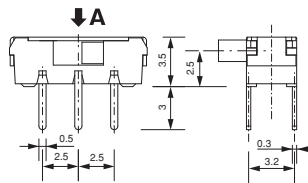
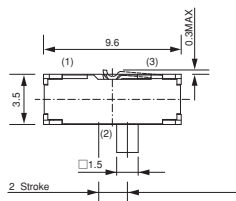
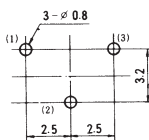
MHS122 Non-shorting



R/A

PC Hole Layouts

(Top view)

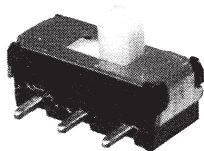


Terminal numbers are not shown on the switch.

Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-3	2-1		

● Operating force : 0.49~3.92 N [50~400 gf]

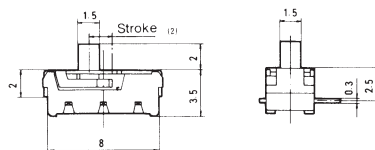
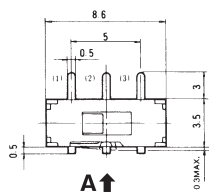
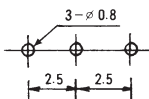
MHS122 -1 Non-shorting



R/A

PC Hole Layouts

(Top view)

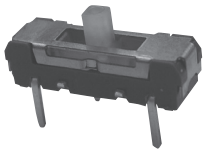


Terminal numbers are not shown on the switch.

Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-1	2-3		

● 作動力/Operating force : 0.49~3.92 N [50~400 gf]

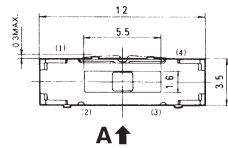
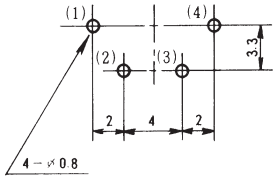
MHS131 Non-shorting



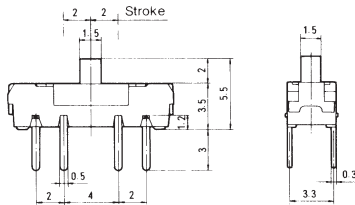
PC

PC Hole Layouts

(Top view)



A ↑

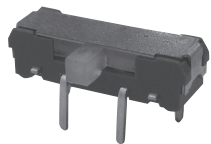


Terminal numbers are not shown on the switch.

Switching function (Viewed from A)			Circuit diagram	No. of terminals
ON	ON	ON		
3-1	3-2	3-4		

● Operating force : 0.49~3.92N [50~400 gf]

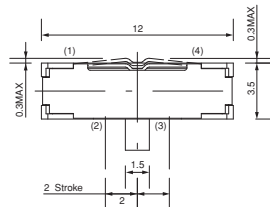
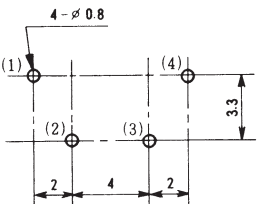
★MHS132 Non-shorting



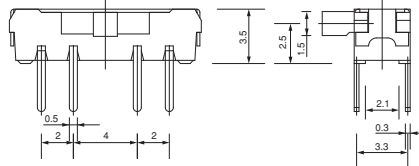
R/A

PC Hole Layouts

(Top view)



A ↓

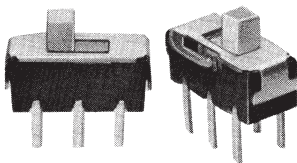


Terminal numbers are not shown on the switch.

Switching function (Viewed from A)			Circuit diagram	No. of terminals
ON	ON	ON		
3-4	3-2	3-1		

● Operating force : 0.49~3.92 N [50~400 gf]

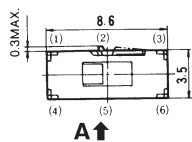
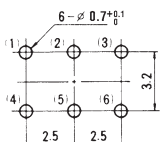
MHS221 Non-shorting



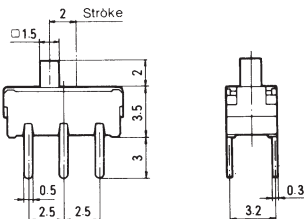
PC

PC Hole Layouts

(Top view)



A ↑

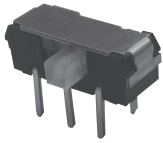


Terminal numbers are not shown on the switch.

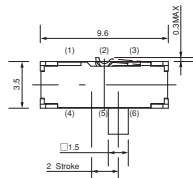
Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-1 5-4	2-3 5-6		

● Operating force : 0.49~3.92 N [50~400 gf]

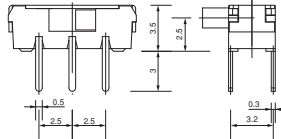
MHS222 Non-shorting



R/A



↓ A

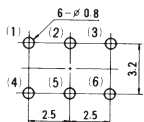


Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-3 5-6	2-1 5-4		

● Operating force : 0.49~3.92 N (50~400 gf)

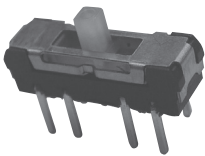
PC Hole Layouts

(Top view)

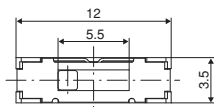


Terminal numbers are not shown on the switch.

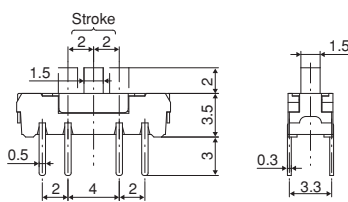
MHS231 Non-shorting



PC



↑ A

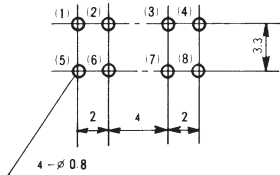


Switching function (Viewed from A)			Circuit diagram	No. of terminals
ON	ON	ON		
3-1 7-5	3-2 7-6	3-4 7-8		

● Operating force : 0.49~3.92 N (50~400 gf)

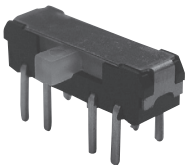
PC Hole Layouts

(Top view)

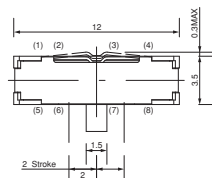


Terminal numbers are not shown on the switch.

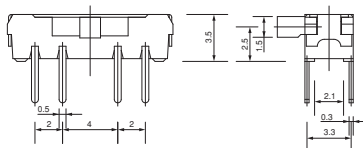
★MHS232 Non-shorting



R/A



↓ A

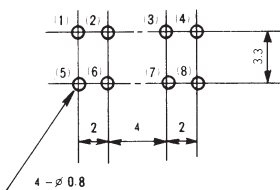


Switching function (Viewed from A)			Circuit diagram	No. of terminals
ON	ON	ON		
3-4 7-8	3-2 7-6	3-1 7-5		

● Operating force : 0.49~3.92 N (50~400 gf)

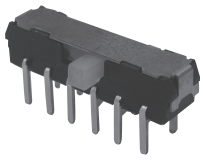
PC Hole Layouts

(Top view)

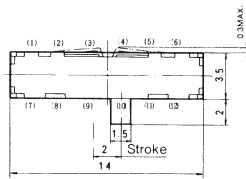


Terminal numbers are not shown on the switch.

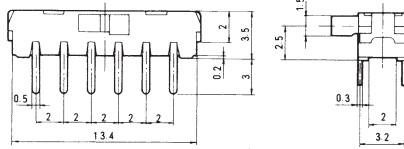
MHS422 Non-shorting



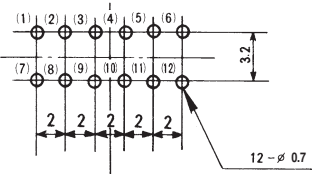
R/A



↓A



PC Hole Layouts
(Top view)



Terminal numbers are not shown on the switch.

Switching function (Viewed from A)		Circuit diagram	No. of terminals
			12
2-3	2-1		
5-6	5-4		
8-9	8-7		
11-12	11-10		

● Operating force : 1.47~3.92N {150~400 gf}

Soldering Specifications

- (1) Manual Soldering
Device : Soldering iron
① 380°C, Max.; 3 seconds, Max.
- (2) Auto Soldering (MHS121/MSH131/MHS221/MHS231 only)
Device : Jet wave type or dip type
① 275°C, Max.; 6 seconds, Max.
- Pre-heating should be done at temperatures ranging from 80°C to 120°C and within 120 seconds
- (3) When soldering two or more terminals to the common land, use solder resist to solder them independently.

Flux Cleaning

- (1) Solvent : Fluorine or Alcohol type.
- (2) Not process sealed, if the PC board is to be cleaned, clean the soldering surface of substrate with a brush so that the switch is not exposed to the cleaning solution.

Frequency of switch use

If the switch is not likely to be operated frequently (e.g. two or three operations a year) in the dry circuit area, a sulfide film is likely to be formed on the contacts, resulting in contact failure. If this is the case, gold-plated products are recommended. Please contact your local Nidec Copal Electronics sales representative.

Packaging Specifications

