

MHS

Hyper-miniature Slide Switches



RoHS Compliant



PICOTOP

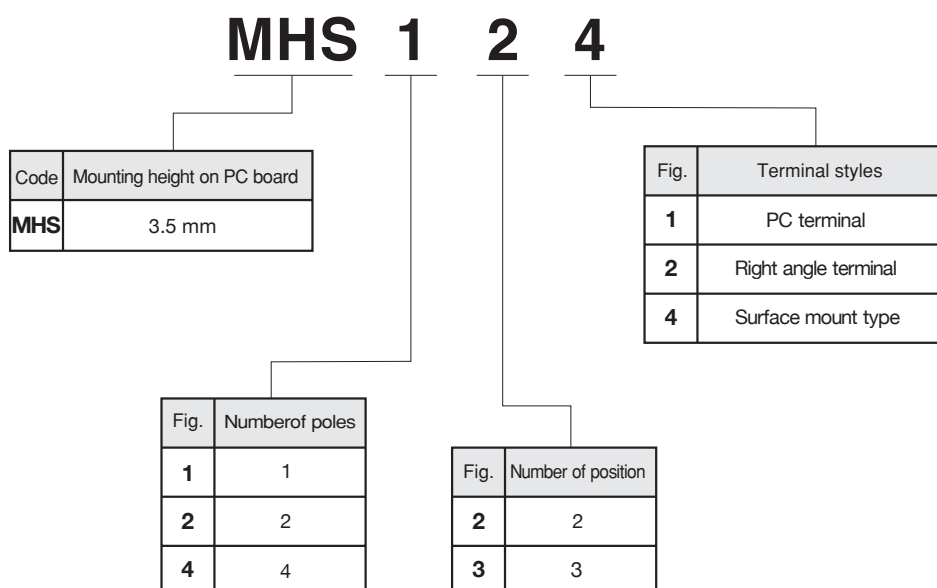
■ Features

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	500Ω 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		

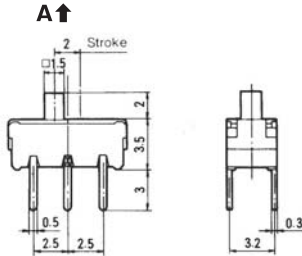
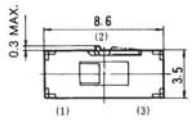
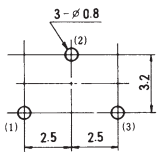
■ Part Numbering



MHS121 Non-shorting



PC Hole Layouts (Top view)



Terminal numbers are not shown on the switch.

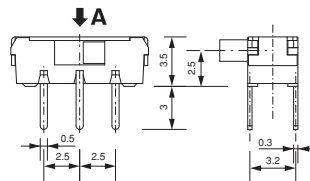
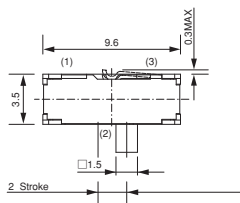
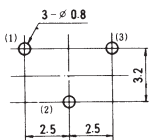
Switching function (Viewed from A)		Circuit diagram	No. of terminals
			3
ON	ON		
2-1	2-3		

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

MHS122 Non-shorting



PC Hole Layouts (Top view)

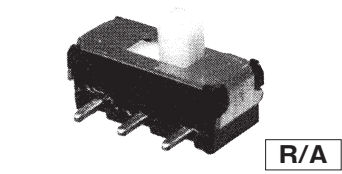


Terminal numbers are not shown on the switch.

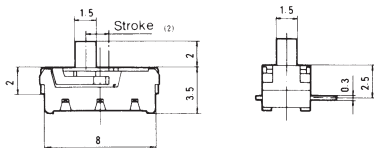
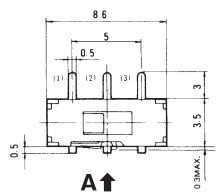
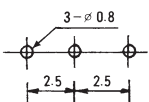
Switching function (Viewed from A)		Circuit diagram	No. of terminals
			3
ON	ON		
2-3	2-1		

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

MHS122 -1 Non-shorting



PC Hole Layouts (Top view)



Terminal numbers are not shown on the switch.

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

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

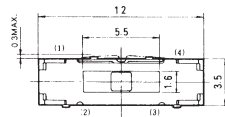
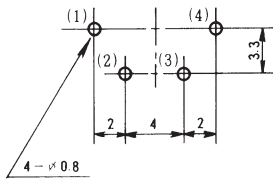
MHS131 Non-shorting



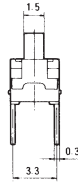
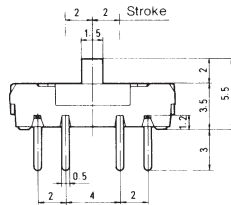
PC

PC Hole Layouts

(Top view)



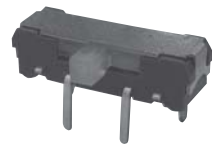
A↑



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

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

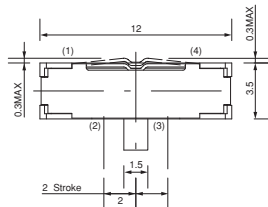
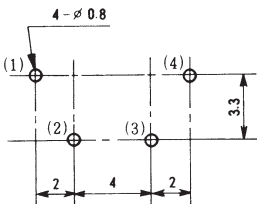
★MHS132 Non-shorting



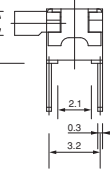
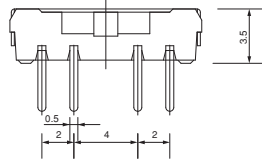
R/A

PC Hole Layouts

(Top view)



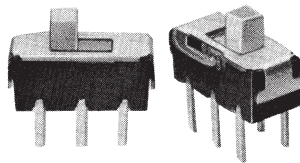
A↓



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

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

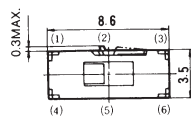
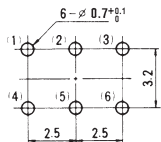
MHS221 Non-shorting



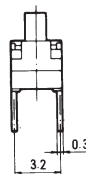
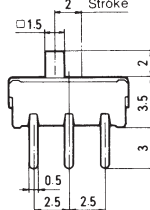
PC

PC Hole Layouts

(Top view)



A↑



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

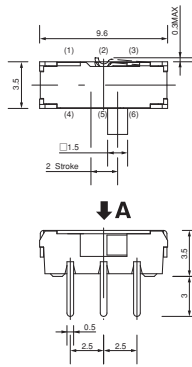
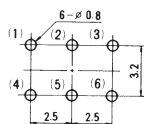
●Operating force : 0.49~3.92 N [50~400 gf]

MHS222 Non-shorting



R/A

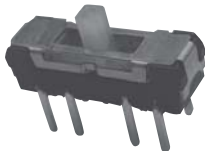
PC Hole Layouts (Top view)



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

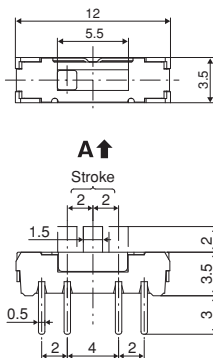
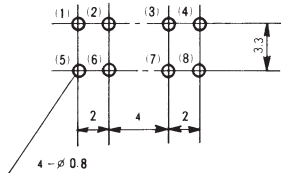
●Operating force : 0.49~3.92 N [50~400 gf]

MHS231 Non-shorting



PC

PC Hole Layouts (Top view)



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

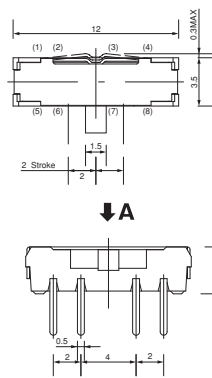
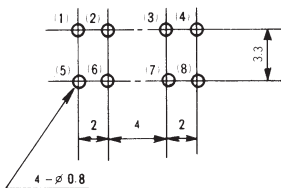
●Operating force : 0.49~3.92 N [50~400 gf]

★MHS232 Non-shorting



R/A

PC Hole Layouts (Top view)

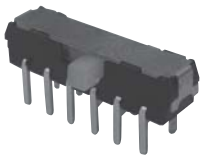


Switching function (Viewed from A)			Circuit diagram	No. of terminals
				8
ON	ON	ON		
3-4 7-8	3-2 7-6	3-1 7-5		

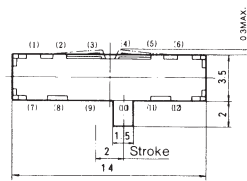
●Operating force : 0.49~3.92 N [50~400 gf]

MHS422

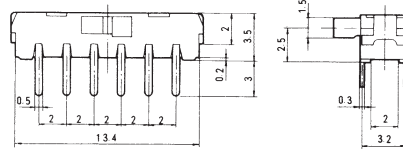
Non-shorting



R/A



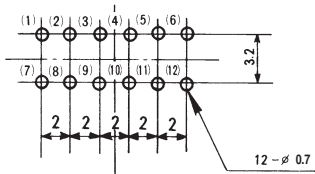
↓A



Terminal numbers are not shown on the switch.

PC Hole Layouts

(Top view)



Switching function (Viewed from A)		Circuit diagram	No. of terminals
			12
ON	ON		
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.

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.

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.

Packaging Specifications

Plastic Bag

