



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MHS

Hyper-miniature Slide Switches

RoHS Compliant



PICOTOP

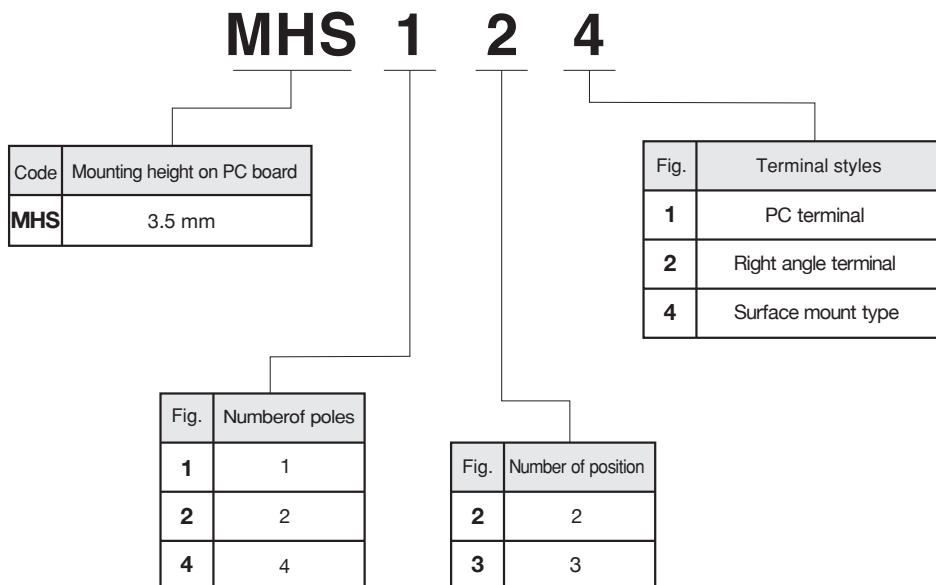
■ Features

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



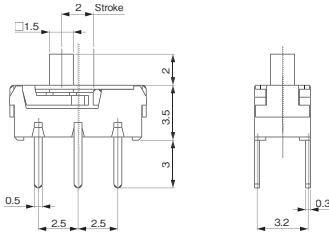
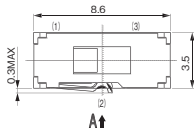
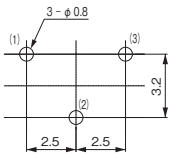
MHS

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		

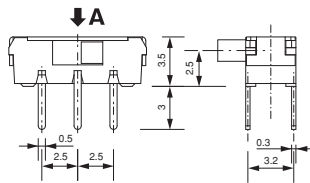
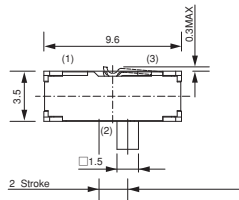
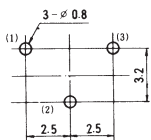
●Operating force : 0.49~3.92 N [50~400 gf]

MHS122 Non-shorting



R/A

PC Hole Layouts
(Top view)

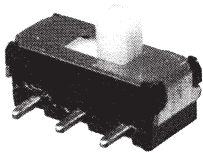


Terminal numbers are not shown on the switch.

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

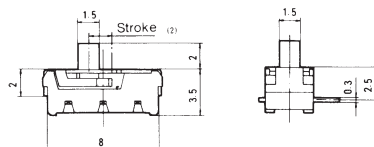
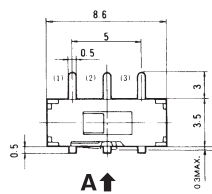
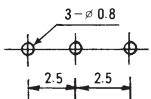
●Operating force : 0.49~3.92 N [50~400 gf]

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		

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

MHS

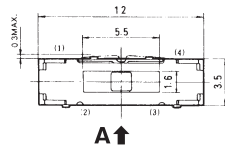
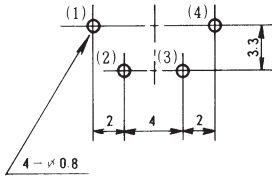
MHS131 Non-shorting



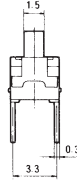
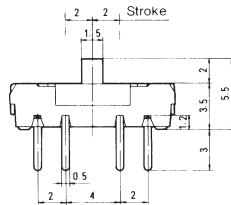
PC

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 : 0.49~3.92 N [50~400 gf]

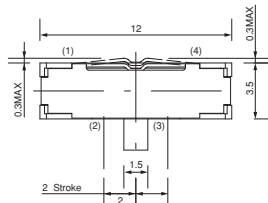
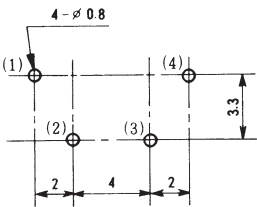
★ **MHS132** Non-shorting



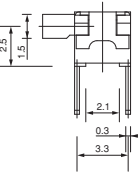
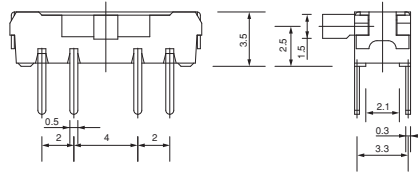
R/A

PC Hole Layouts

(Top view)



A ↓

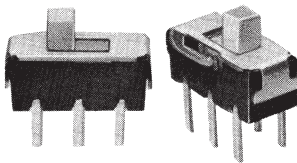


Terminal numbers are not shown on the switch.

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]

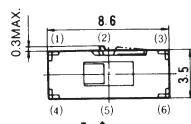
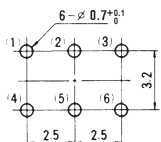
MHS221 Non-shorting



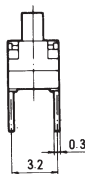
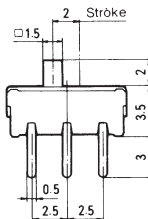
PC

PC Hole Layouts

(Top view)



A ↑



Terminal numbers are not shown on the switch.

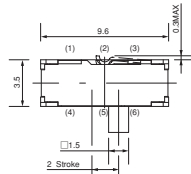
Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-1 5-4	2-3 5-6		

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

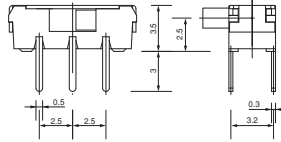
MHS222 Non-shorting



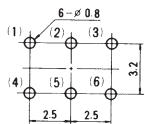
R/A



↓ A



PC Hole Layouts
(Top view)



Terminal numbers are not shown on the switch.

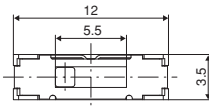
Switching function (Viewed from A)		Circuit diagram	No. of terminals
ON	ON		
2-3 5-6	2-1 5-4		

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

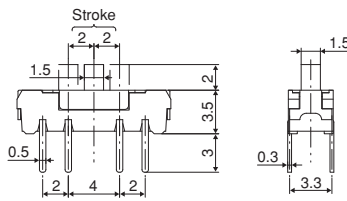
MHS231 Non-shorting



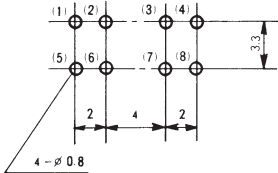
PC



↑ A



PC Hole Layouts
(Top view)

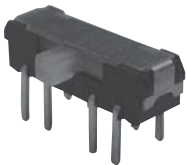


Terminal numbers are not shown on the switch.

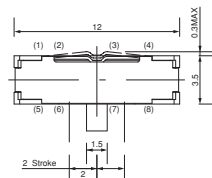
Switching function (Viewed from A)			Circuit diagram	No. of terminals
ON	ON	ON		
3-1 7-5	3-2 7-6	3-4 7-8		

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

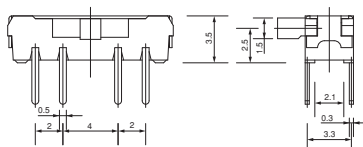
★MHS232 Non-shorting



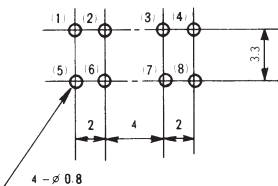
R/A



↓ A



PC Hole Layouts
(Top view)

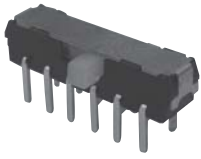


Terminal numbers are not shown on the switch.

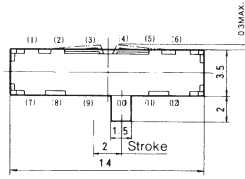
Switching function (Viewed from A)			Circuit diagram	No. of terminals
ON	ON	ON		
3-4 7-8	3-2 7-6	3-1 7-5		

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

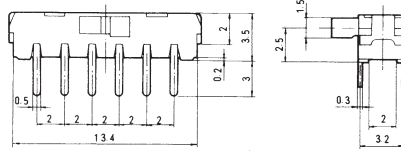
MHS422 Non-shorting



R/A

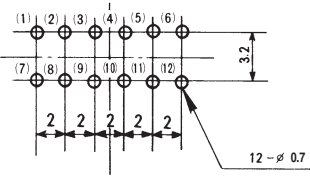


↓ A



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

