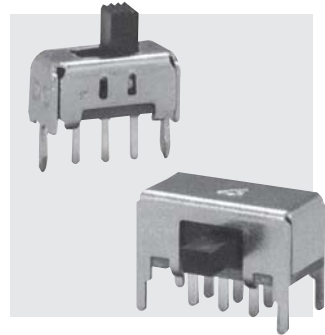


MCS



RoHS Compliant



Sub-miniature Slide Switches

Common Specifications

- **Initial contact resistance**
30mΩ max. at 1.5mA 200 μ VAC
- **Dilectric strength**
AC500V for 1 minute
- **Initial insulation resistance**
100MΩ min. at 500VDC
- **Electical life**
10,000 cycles
- **Operating temperature range**
-10°C~+60°C

Part Numbering

MCS 1 2 1 D - 1001

Series code

Registration number

Fig.	Number of poles
1	1-pole
2	2-poles
4	4-poles
6	6-poles

Fig.	Number of position
2	2position
3	3position
4	4position

Fig.	Terminal style
1	PC terminal
2	Right angle terminal
3	Surface mount type
4	Solder terminals

Code		Switching function
Odd	D	ON - ON
	E	ON - OFF - ON
	EA	ON - ON - ON
	DD	ON - ON - ON - ON
Even	N	ON - ON
	P	ON - OFF - ON
	PA	ON - ON - ON
	NN	ON - ON - ON - ON

Soldering Specifications

- (1) Manual Soldering
Device : Soldering iron.
① 350°C, Max.; 3 seconds, Max.
- (2) 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.

MCS

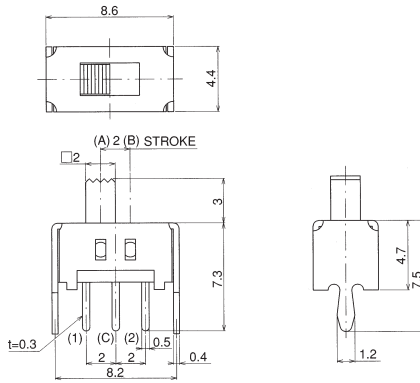
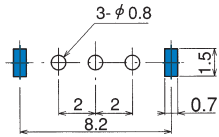
MCS121D-1001

Non-shorting



PC Hole Layouts

(Top view)



Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		3
(C) - (1)	(C) - (2)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

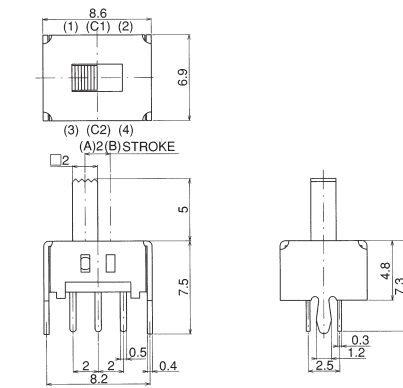
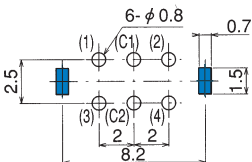
★MCS221N-1006

Non-shorting



PC Hole Layouts

(Top view)



Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

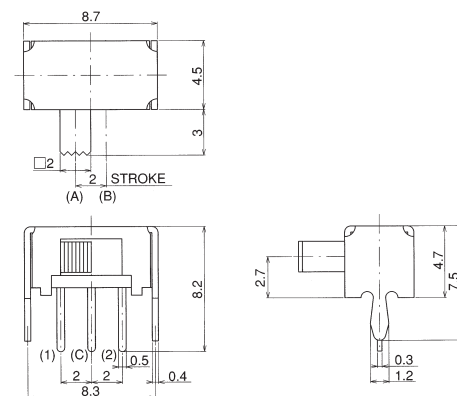
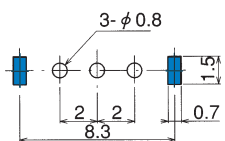
MCS122D-1002

Non-shorting



PC Hole Layouts

(Top view)



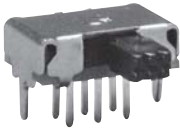
Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		3
(C) - (1)	(C) - (2)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

MCS

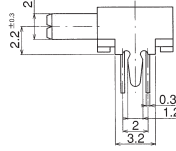
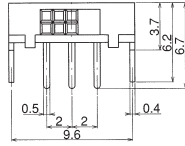
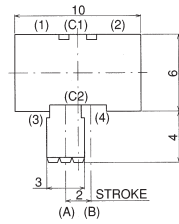
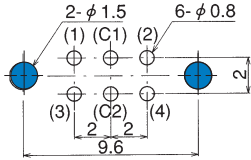
★MCS222N-2004

Non-shorting



■PC Hole Layouts

(Top view)

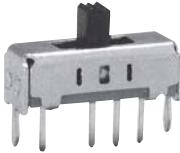


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC50V 0.2A
- Operating force : 2.45±0.98N

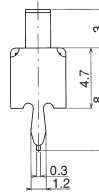
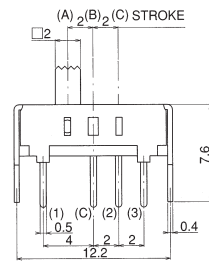
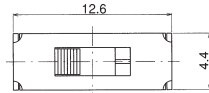
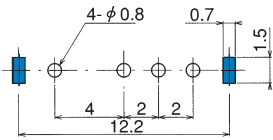
MCS131EA-1004

Shorting



■PC Hole Layouts

(Top view)

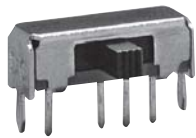


Circuit arrangement			Circuit diagram	No. of terminals
Pos.A	Pos.B	Pos.C		
ON	ON	ON		4
(C) - (1)	(C) - (2)	(C) - (3)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

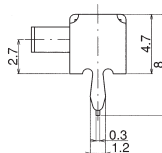
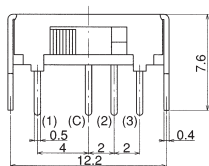
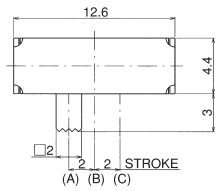
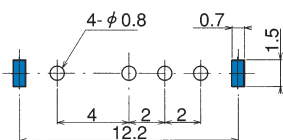
★MCS132EA-1005

Shorting



■PC Hole Layouts

(Top view)



Circuit arrangement			Circuit diagram	No. of terminals
Pos.A	Pos.B	Pos.C		
ON	ON	ON		4
(C) - (1)	(C) - (2)	(C) - (3)		

- Rating : DC50V 0.3A
- Operating force :
(A) ⇒ (B), (C) ⇒ (B) 1.96±0.98N
(B) ⇒ (A), (B) ⇒ (C) 2.94±0.98N

MCS

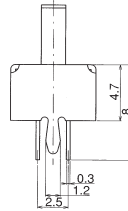
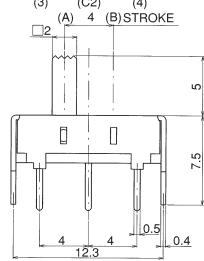
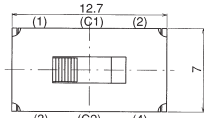
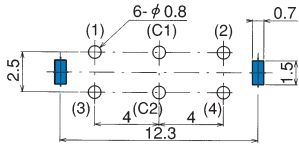
★MCS221N-1008

Non-shorting



PC Hole Layouts

(Top view)

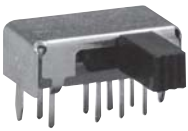


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

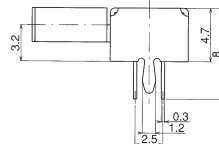
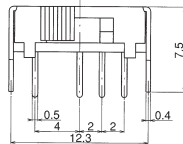
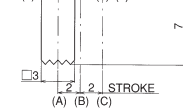
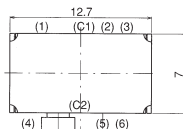
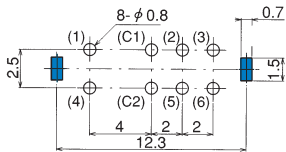
MCS232PA-1012

Shorting



PC Hole Layouts

(Top view)

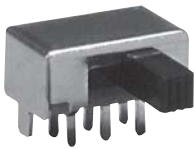


Circuit arrangement			Circuit diagram	No. of terminals
Pos.A	Pos.B	Pos.C		
ON	ON	ON		8
(C1) - (1) (C2) - (4)	(C1) - (2) (C2) - (5)	(C1) - (3) (C2) - (6)		

- Rating : DC50V 0.3A
- Operating force :
(A)⇒(B)、(C)⇒(B) 1.47±0.49N
(B)⇒(A)、(B)⇒(C) 2.94±0.98N

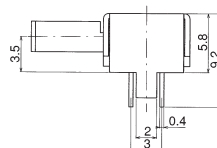
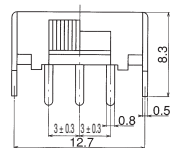
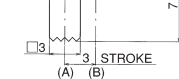
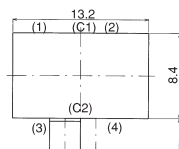
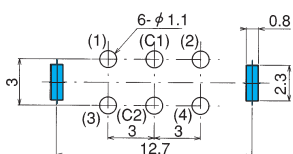
MCS222N-1009

Non-shorting



PC Hole Layouts

(Top view)



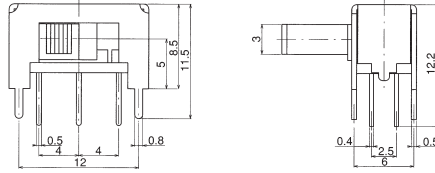
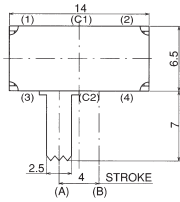
Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

MCS

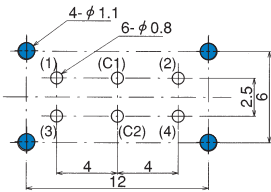
★MCS222N-1010

Non-shorting



■PC Hole Layouts

(Top view)

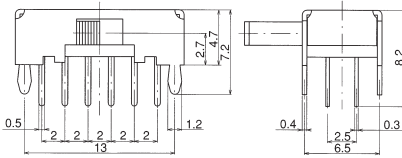
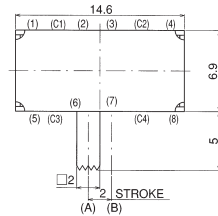


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

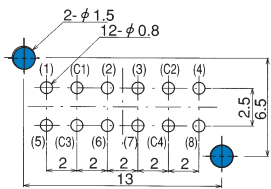
★MCS422N-1015

Non-shorting



■PC Hole Layouts

(Top view)

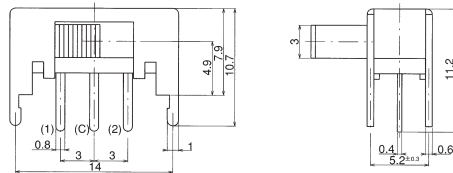
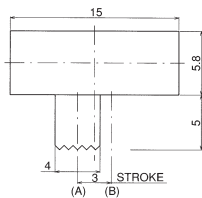


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		12
(C1) - (1) (C2) - (3) (C3) - (5) (C4) - (7)	(C1) - (2) (C2) - (4) (C3) - (6) (C4) - (8)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

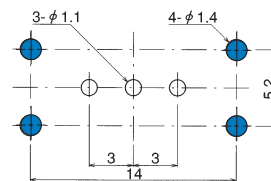
★MCS122D-2001

Non-shorting



■PC Hole Layouts

(Top view)



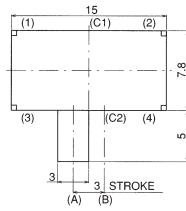
Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		3
(C) - (1)	(C) - (2)		

- Rating : DC50V 0.2A
- Operating force : 2.45±1.47N

MCS

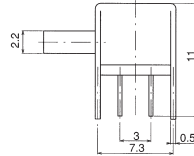
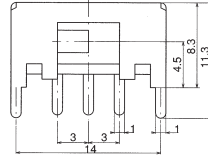
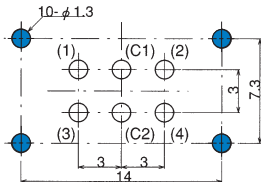
★MCS222N-2002

Non-shorting



■PC Hole Layouts

(Top view)

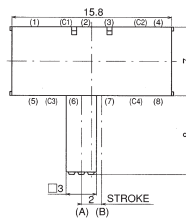


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC30V 0.2A
- Operating force : 2.45±0.98N

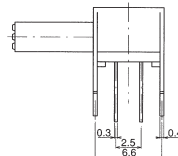
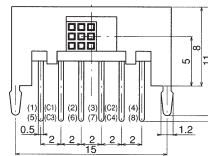
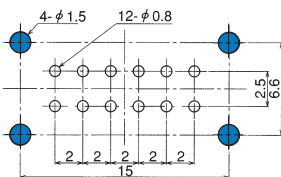
★MCS422N-2009

Non-shorting



■PC Hole Layouts

(Top view)

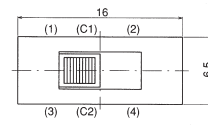


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		12
(C1) - (1) (C2) - (3) (C3) - (5) (C4) - (7)	(C1) - (2) (C2) - (4) (C3) - (6) (C4) - (8)		

- Rating : DC30V 0.2A
- Operating force : 1.96±0.98N

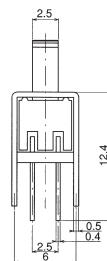
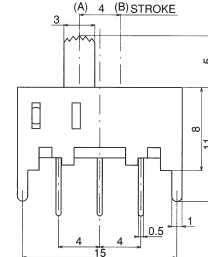
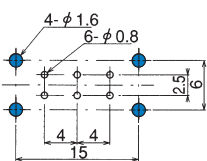
★MCS221N-1007

Non-shorting



■PC Hole Layouts

(Top view)



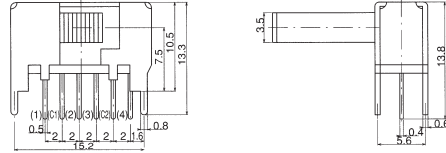
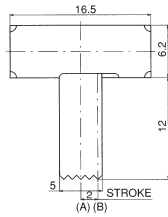
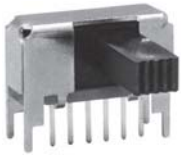
Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

MCS

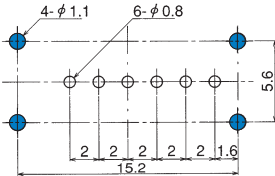
★MCS222N-2003

Non-shorting



■PC Hole Layouts

(Top view)

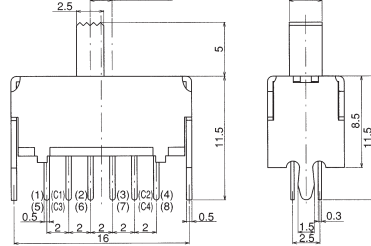
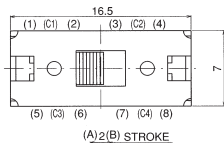


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		6
(C1) - (1) (C2) - (3)	(C1) - (2) (C2) - (4)		

- Rating : DC30V 0.2A
- Operating force : 1.96±0.98N

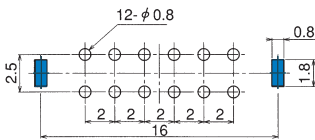
MCS421N-1014

Non-shorting



■PC Hole Layouts

(Top view)

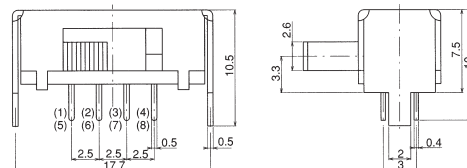
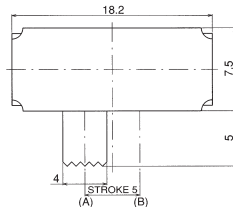


Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		12
(C1) - (1) (C2) - (3) (C3) - (5) (C4) - (7)	(C1) - (2) (C2) - (4) (C3) - (6) (C4) - (8)		

- Rating : DC50V 0.3A
- Operating force : 2.45±0.98N

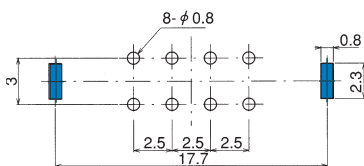
★MCS222N-2005

Non-shorting



■PC Hole Layouts

(Top view)



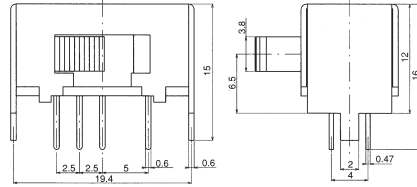
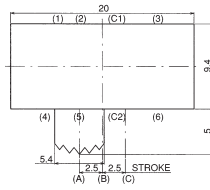
Circuit arrangement		Circuit diagram	No. of terminals
Pos.A	Pos.B		
ON	ON		8
(1) - (2) (5) - (6)	(3) - (4) (7) - (8)		

- Rating : DC30V 0.3A
- Operating force : 1.96±0.98N

MCS

★MCS232PA-1013

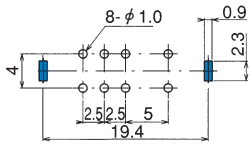
Shorting



Circuit arrangement			Circuit diagram	No. of terminals
Pos.A	Pos.B	Pos.C		
ON	ON	ON		8
(C1) - (1) (C2) - (4)	(C1) - (2) (C2) - (5)	(C1) - (3) (C2) - (6)		

■PC Hole Layouts

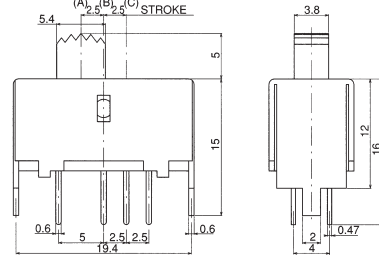
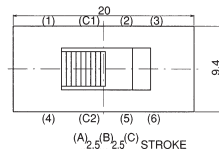
(Top view)



- Rating : DC50V 0.3A
- Operating force :
 - (A) ⇒ (B)、(C) ⇒ (B) 1.96±0.78N
 - (B) ⇒ (A)、(B) ⇒ (C) 2.94±0.98N

★MCS231PA-1011

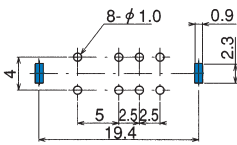
Shorting



Circuit arrangement			Circuit diagram	No. of terminals
Pos.A	Pos.B	Pos.C		
ON	ON	ON		8
(C1) - (1) (C2) - (4)	(C1) - (2) (C2) - (5)	(C1) - (3) (C2) - (6)		

■PC Hole Layouts

(Top view)



- Rating : DC50V 0.3A
- Operating force :
 - (A) ⇒ (B)、(C) ⇒ (B) 1.96±0.78N
 - (B) ⇒ (A)、(B) ⇒ (C) 2.94±0.98N

