

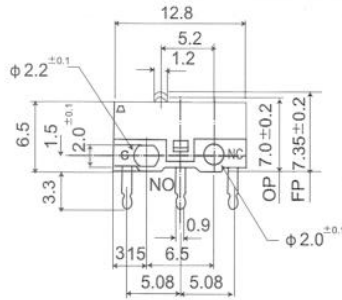
# DM Series Miniature Micro Switches



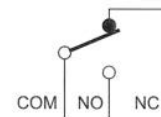
## SPECIFICATION:

Rating : DM1 : 1A 125VAC, DM0 : 0.1A125VAC DM3 : 3A 125VAC	Mechanical Life : 500,000 cycles
Insulation Resistance : > 100M Ω DC500V	Electrical Life : 300,000 cycles
Withstand Voltage : AC500V 1minute	Ambient Temper. Used : -25°C to +65°C
Contact Resistance : ≤ 50mΩ	Ambient Humidity Used : < 85% RH
Soldering Temper : < 245±5°C max, 5 sec .	Operating Force : On request

DM1-00P-110G  
DM3-00P-110G



**SCHEMATIC**

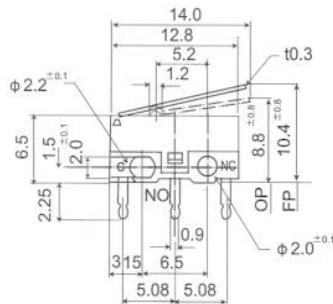


Operating Force (gf):  
60,90,110,130g

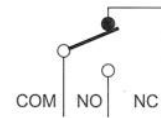
※ ※

※ : standard

DM1-01P-30G  
DM3-01P-30G



**SCHEMATIC**

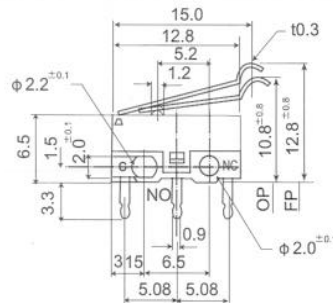


Operating Force (gf):  
20,25,30,40g

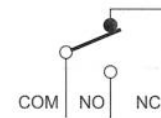
※ ※

※ : standard

DM1-02P-30G  
DM3-02P-30G



**SCHEMATIC**

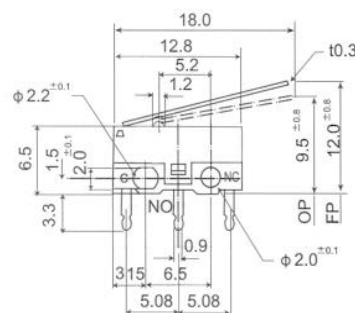


Operating Force (gf):  
20,25,30,40g

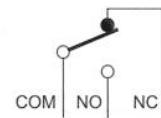
※ ※

※ : standard

DM1-03P-25G  
DM3-03P-25G



**SCHEMATIC**



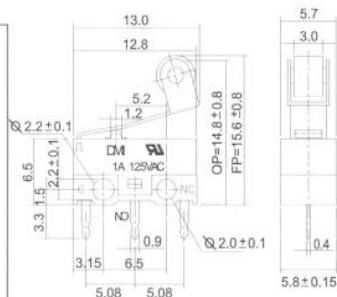
Operating Force (gf):  
15,20,25,35g

※ ※

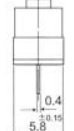
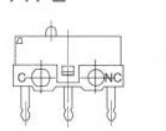
※ : standard

## Rolling Type

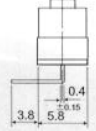
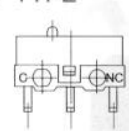
DM1-13P-25G  
DM3-13P-25G



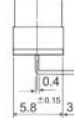
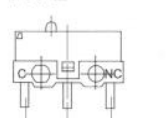
P TYPE



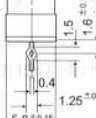
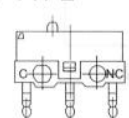
C TYPE



D TYPE



T TYPE



# SM-XXXW Series Dust and Splash proof Micro Switches



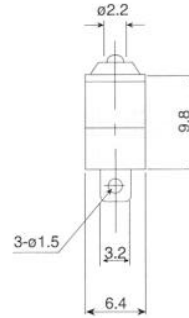
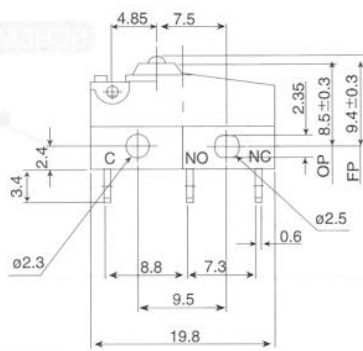
(pending)



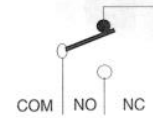
## SPECIFICATION:

Rating: SM5: 5A 125VAC/250VAC	Mechanical Life: 1,000,000 cycles
Insulation Resistance: >100MΩ DC500V	Electrical Life: 200,000 cycles
Withstand Voltage: AC 1,000V 1minute	Ambient Temper. Used: -25°C to +80°C
Contact Resistance: <50mΩ	Ambient Humidity Used: <85%RH
Soldering Temper: 255°C max. 5sec.	Operating Force: On request

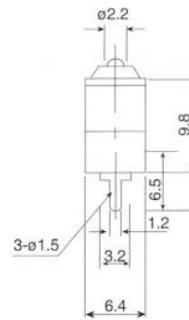
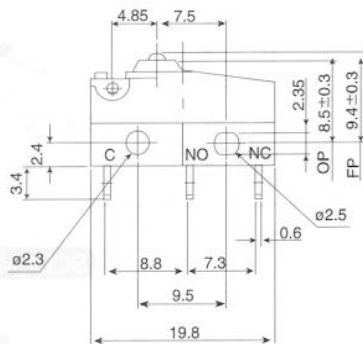
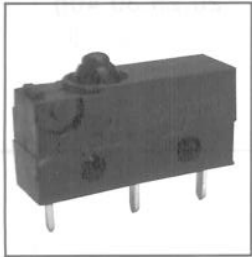
SM5-00NW



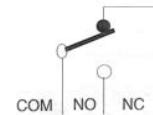
SCHEMATIC



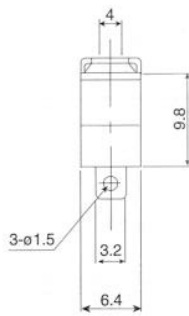
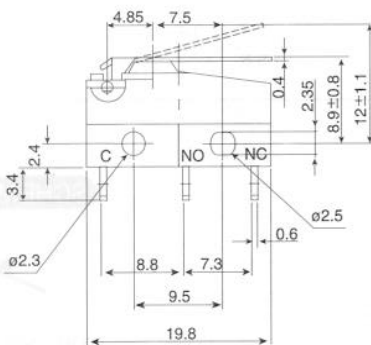
SM5-00PW



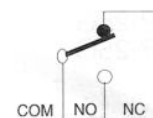
SCHEMATIC



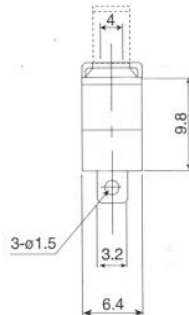
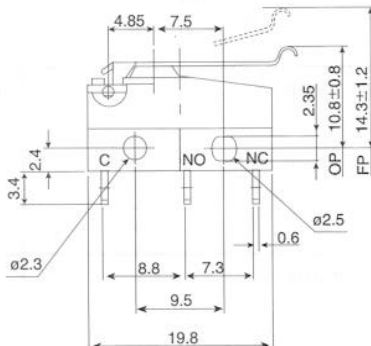
SM5-01NW



SCHEMATIC



SM5-04NW



SCHEMATIC

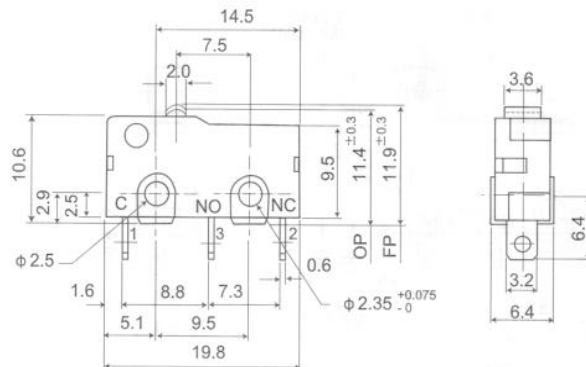


(uL pending)

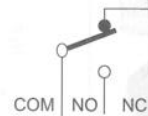
## ■ SPECIFICATION:

Rating: SM3: 3A 125VAC/250VAC SM5: 5A 125VAC/250VAC	Mechanical Life: 100,000 cycles
Insulation Resistance: >100MΩ DC500V	Electrical Life: 10,000 cycles
Withstand Voltage: AC1,500V 1 minute	Ambient Temper. Used: -25°C to +80°C
Contact Resistance: ≤ 50mΩ	Ambient Humidity Used: < 85%RH
Soldering Temper: 245±5°C max 5sec.	Operating Force: On request

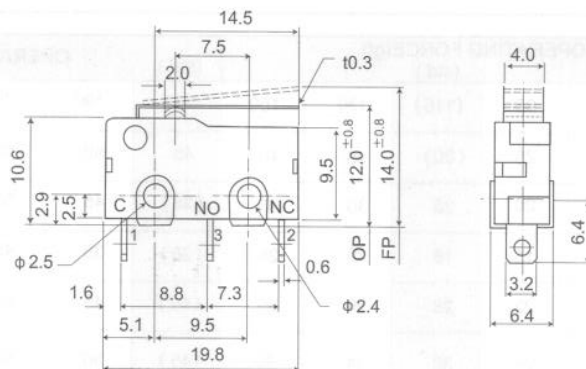
SM3-00N-115G  
SM5-00N-115G



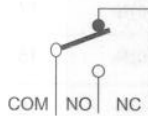
SCHEMATIC



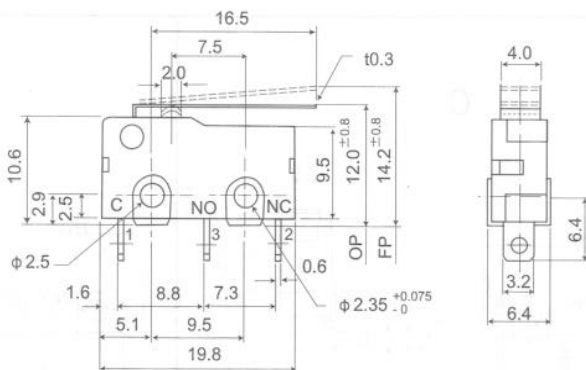
SM3-01N-30G  
SM5-01N-30G



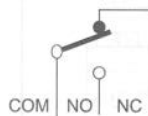
SCHEMATIC



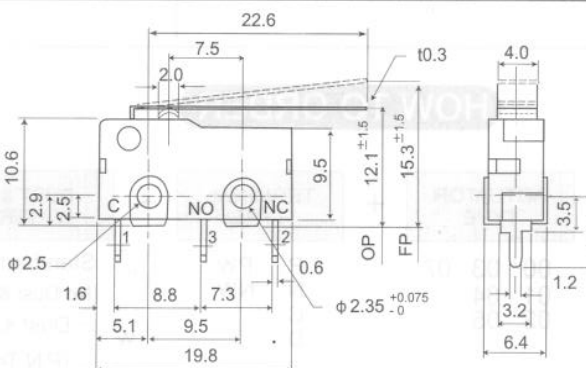
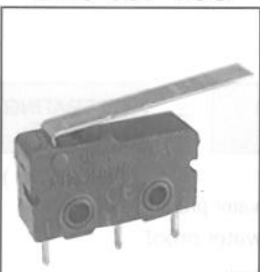
SM3-02N-38G  
SM5-02N-38G



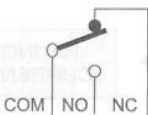
SCHEMATIC



SM3-03P-28G  
SM5-03P-28G



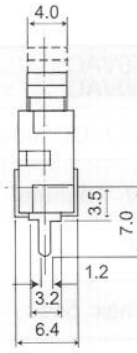
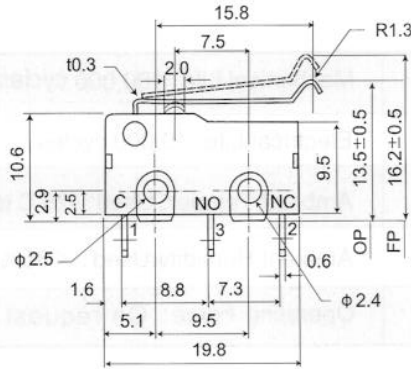
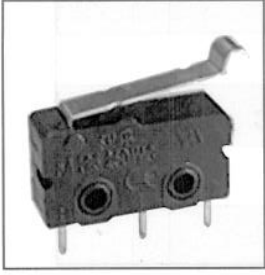
SCHEMATIC



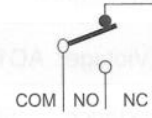
# SM Micro Switches



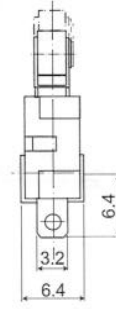
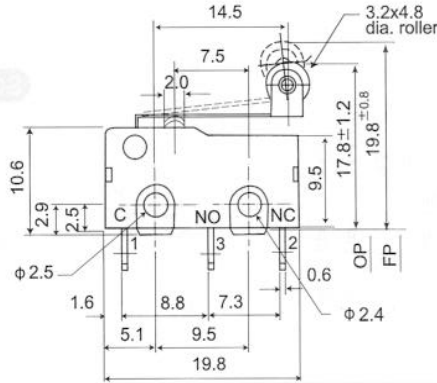
SM3-04P-40G  
SM5-04P-40G



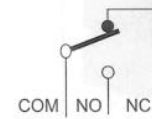
**SCHEMATIC**



SM3-05N-45G  
SM5-05N-45G

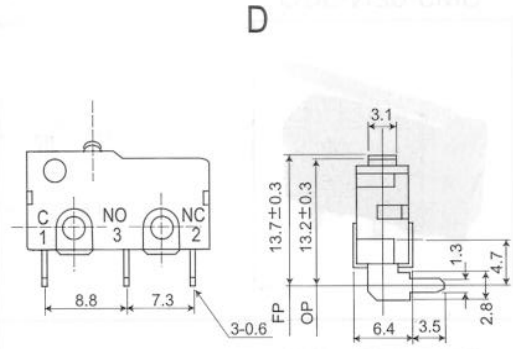
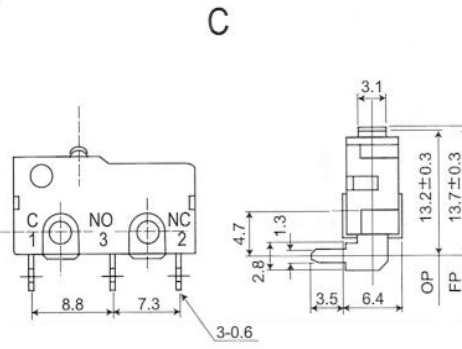
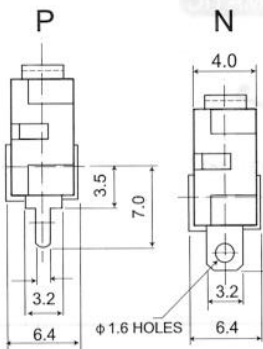


**SCHEMATIC**



MODEL NO.	OPERATING FORCE(gf)						(std.)	OPERATING FORCE(gf)					
	(std.)	(std.)	(std.)	(std.)	(std.)	(std.)		(std.)	(std.)	(std.)	(std.)		
SM3-00N- / SM5-00N-	60	80	95	(115)	130	150	175	190	250	295	330		
SM3-01N- / SM5-01N-	17	20	25	(30)	35	40	45	50	60	75	85		
SM3-02N- / SM5-02N-	15	17	20	25	30	35	(38)	45	55	65	75		
SM3-03N- / SM5-03N-	10	13	15	18	20	25	(28)	35	45	53	65		
SM3-04N- / SM5-04N-	13	18	23	28	30	35	(40)	45	60	70	75		
SM3-05N- / SM5-05N-	14	20	25	30	34	40	(45)	50	68	75	90		

## TERMINAL TYPE



## HOW TO ORDER

MODEL NO.	+	RATING CURRENT	-	ACTUATOR TYPE	+	TERMINAL TYPE	+	DUST & SPLASH WATER PROOF	-	OPERATING FORCE
SM		3: 3A 125V, 250VAC 5: 5A 125V, 250VAC		00 03 07 01 04 02 05		P PW N NW C D		<input type="checkbox"/> : Standard (No Dust & Splash water proof) <input type="checkbox"/> w : Dust & Splash water proof (P,N Terminal) only		( as above )

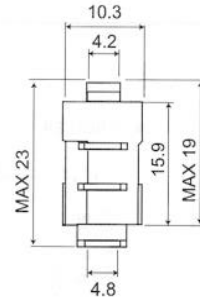
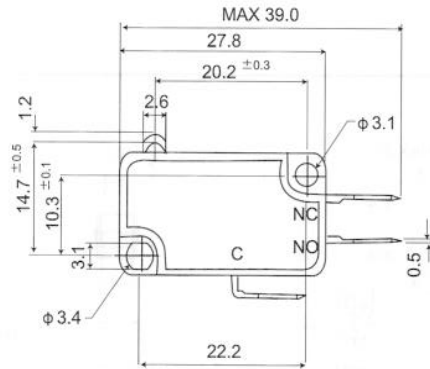
# VM Series Micro Switches



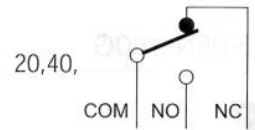
## SPECIFICATION:

Rating : VM1 : 1A 250VAC , VM3 : 3A 250VAC , VM5 : 5A 250VAC VM10 : 10A 250VAC , VM16 : 16A 250VAC	Mechanical Life : 100,000 cycles
Insulation Resistance : > 100MΩ DC500V	Electrical Life : 10,000 cycles
Withstand Voltage : AC1,500V 1minute	Ambient Temper. Used : -25°C to +80°C
Contact Resistance : ≤ 100 mΩ	Ambient Humidity Used : < 85% RH
Soldering Temper : < 245±5°C max , 5 sec	Operating Force : On request

VM3-00N-110G  
VM5-00N-110G

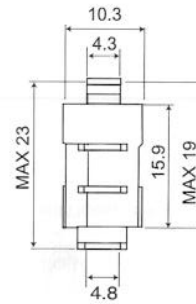
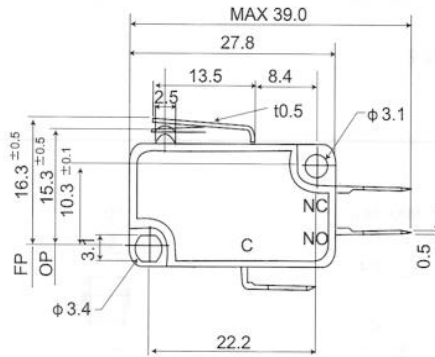


### SCHEMATIC

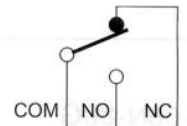


Operating Force (gf):  
20,40,60,80,110,160,250g  
(std.)

VM3-01N-160G  
VM5-01N-160G

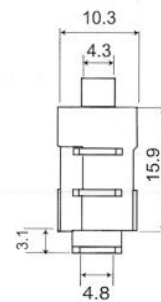
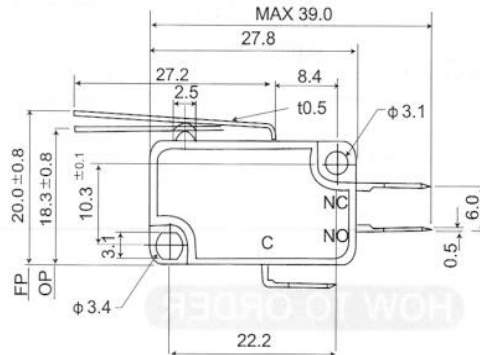
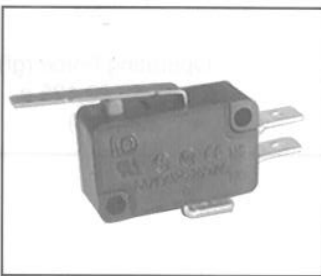


### SCHEMATIC

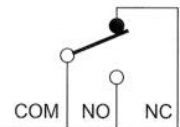


Operating Force (gf):  
60,80,110,160,250g  
(std.)

VM3-02N-70G  
VM5-02N-70G

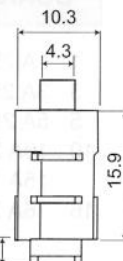
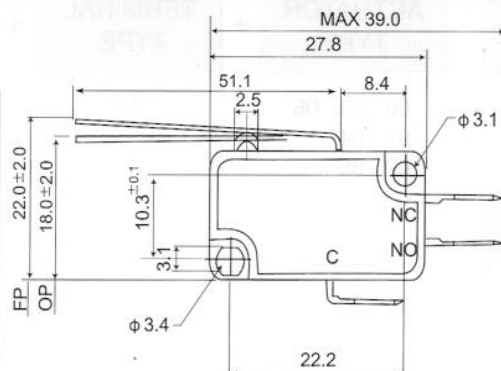
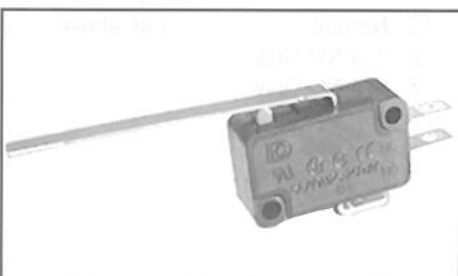


### SCHEMATIC

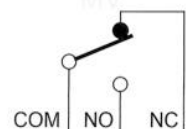


Operating Force (gf):  
25,32,40,70,110g  
(std.)

VM3-03N-40G  
VM5-03N-40G



### SCHEMATIC

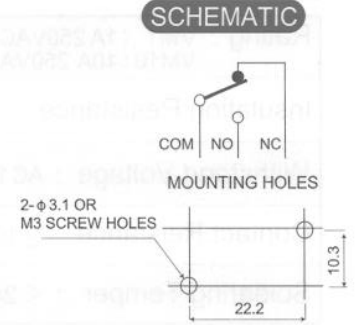
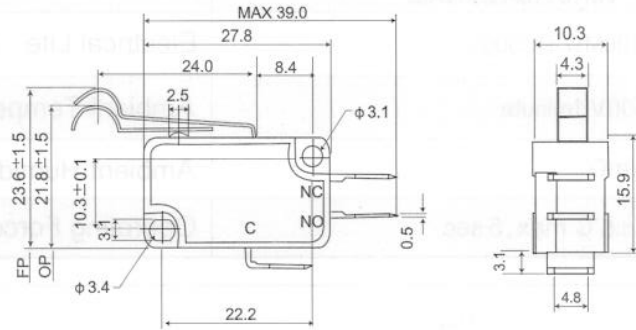


Operating Force (gf):  
12,20,25,40,60g  
(std.)

# VM Series Micro Switches

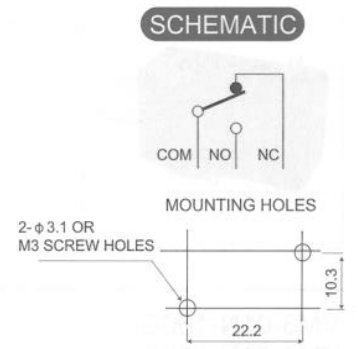
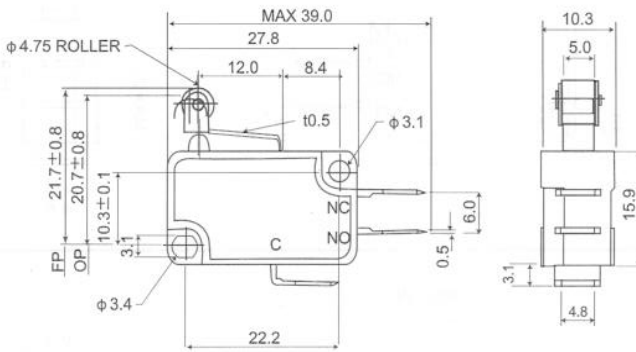


VM3-04N-80G  
VM5-04N-80G



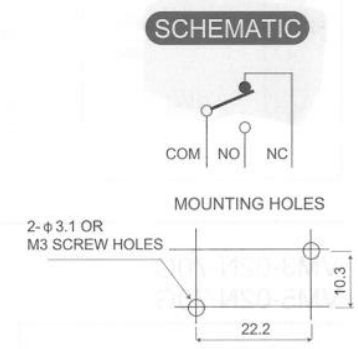
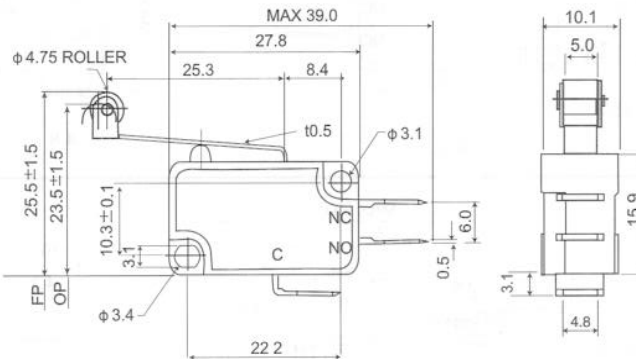
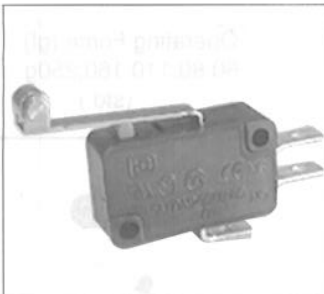
Operating Force (gf):  
28,35,45,80,125 g  
(std.)

VM3-05N-160G



Operating Force (gf):  
60,80,110,160,250g  
(std.)

VM3-06N-80G



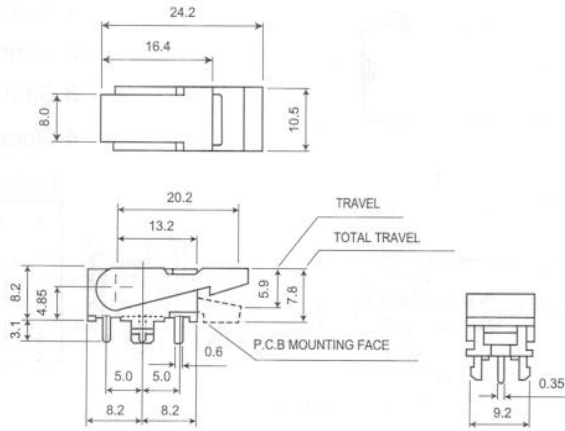
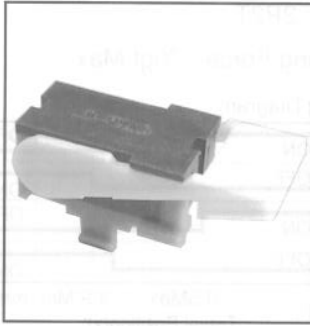
Operating Force (gf):  
28,35,45,80,125 g  
(std.)

## HOW TO ORDER

MODEL NO.	RATING CURRENT	ACTUATOR TYPE	TERMINAL TYPE	DUST & SPLASH WATER PROOF	OPERATING FORCE
VM	1: 1A 250V 3: 3A 250V 5: 5A 250V 10: 10A 250V, 15A 125VAC 16: 16A 250VAC	00 03 06 01 04 02 05	N	□ : Normal 2: C & NO Only 3: C & NC Only	(as above)

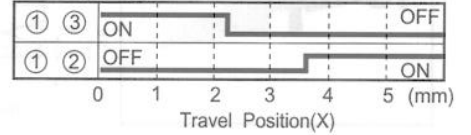
# Hook Switches

IH-1241

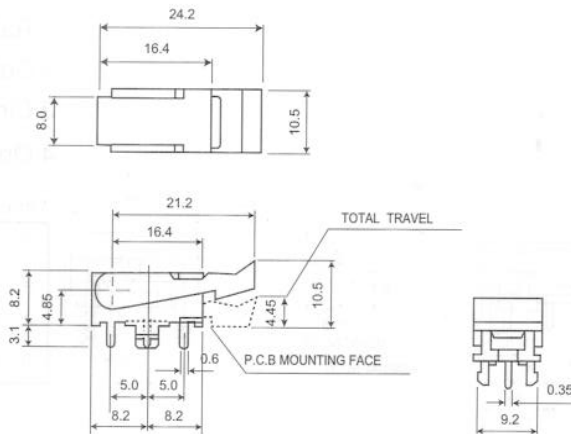
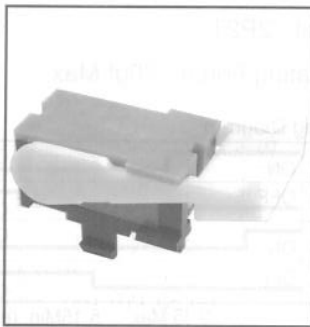


1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 1P2T
4. Operating Force : 70gf Max.

Time Lag Diagram

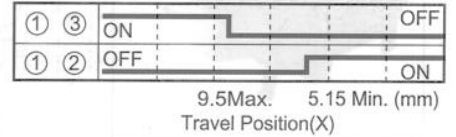


IH-1241A

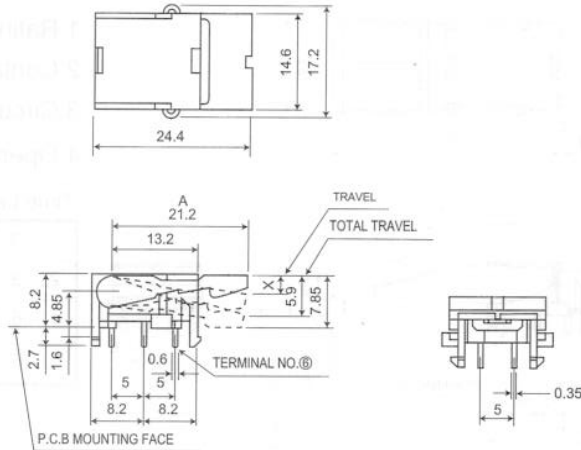


1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 1P2T
4. Operating Force : 70gf Max.

Time Lag Diagram

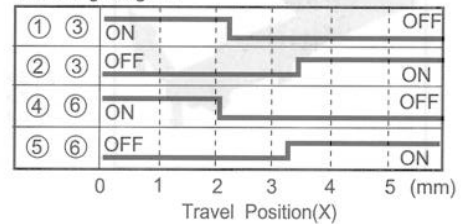


IH-2240

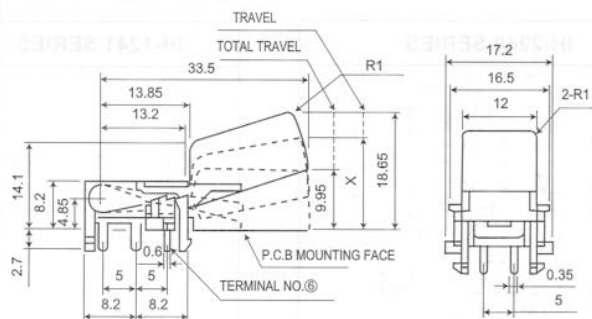


1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 2P2T
4. Operating Force : 70gf Max.

Time Lag Diagram

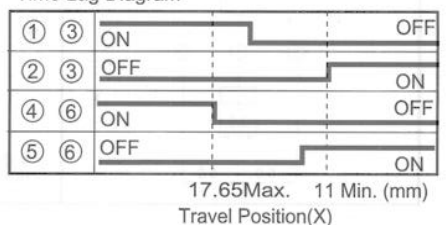


IH-2240A



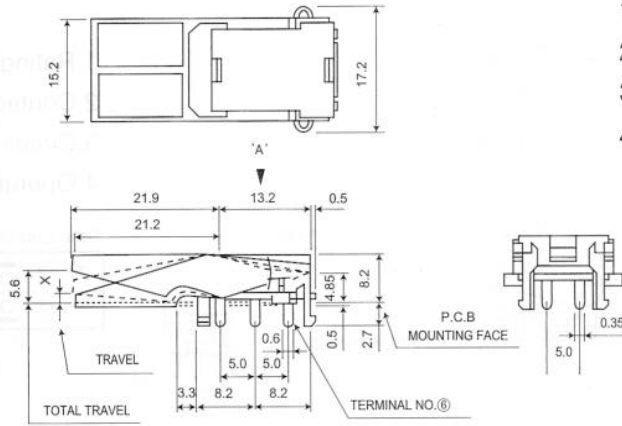
1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 2P2T
4. Operating Force : 70gf Max.

Time Lag Diagram



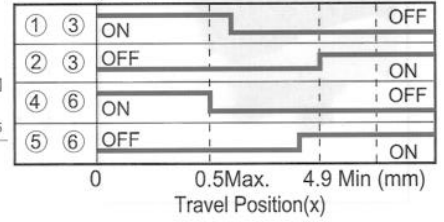
# Hook Switches

IH-2240B

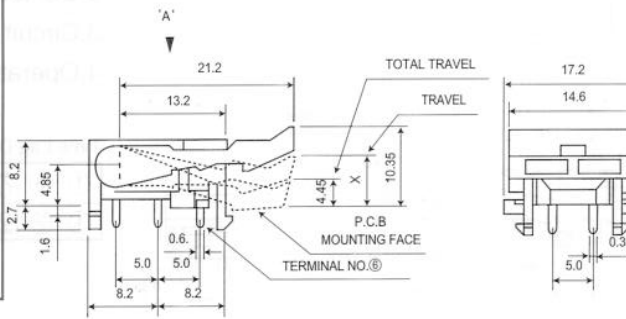


1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 2P2T
4. Operating Force : 70gf Max.

Time Lag Diagram

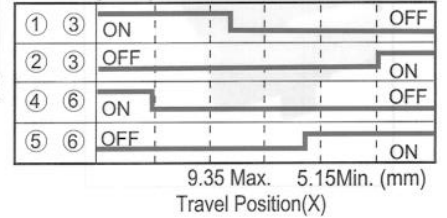


IH-2240C

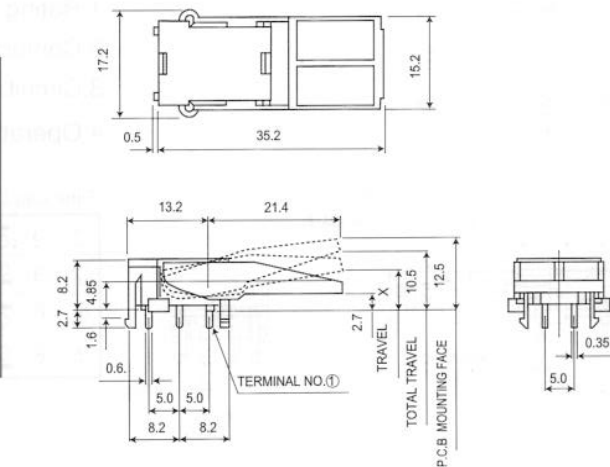


1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 2P2T
4. Operating Force : 70gf Max.

Time Lag Diagram

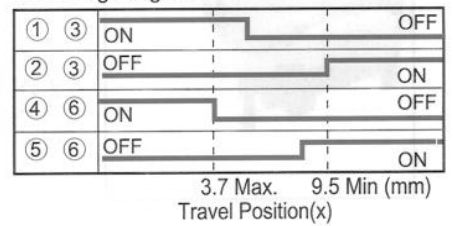


IH-2240D

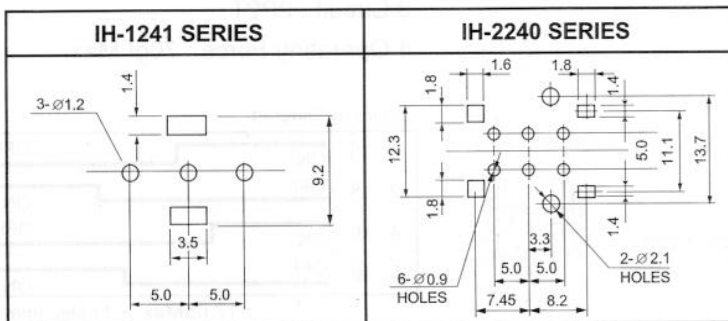


1. Rating : DC 48V 0.2A
2. Contact Resistance : 50mΩ Max.
3. Circuit : 2P2T
4. Operating Force : 70gf Max.

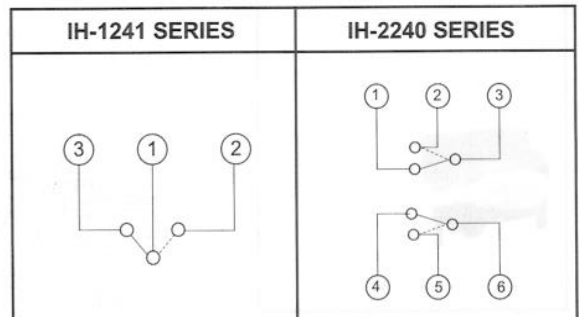
Time Lag Diagram



## P.C.B Mounting Hole Dimensions (View from Direction "A")



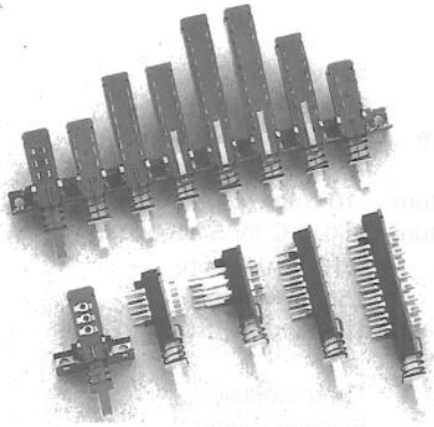
## Circuit Diagram (View from Direction "A")





# P10 Series Push Switches (Multiple Keys)

Rotary Dip Switches



## 電器特性: GENERAL SPECIFICATION

回路	CIRCUIT	: ON-ON
定格	RATING	: AC 250V 0.5A
接觸電阻	CONTACT R. (MAX)	: DC 5V 1A 100mΩ
絕緣電阻	INSULATION R. (MAX)	: DC 500V 100mΩ
耐電壓	WITHSTAND VOL.	: AC 500V 1Minute
動作力	OPERATING FORCE	: A-300±100g, B-200±100g
壽命	LIFE CYCLE (Max)	: 10,000 Cycles 40mΩ

TERMINAL STYLE							
PART NO.	A	B	C	D	E	F	G
SPECIFICATION							
	H=	9	13	16	14	18	21
SCHEMATIC							
	COM	COM					

		2	4	6	8	10
Circuit Poles						
L=		24.5	36.5	48.5	60.5	72.5

**P10**

1: 2Pole  
2: 4Pole  
3: 6Pole  
4: 8Pole  
No. of Pole

Terminal

A: Lock, N: Non Lock

B: With Bracket N: W/O Bracket

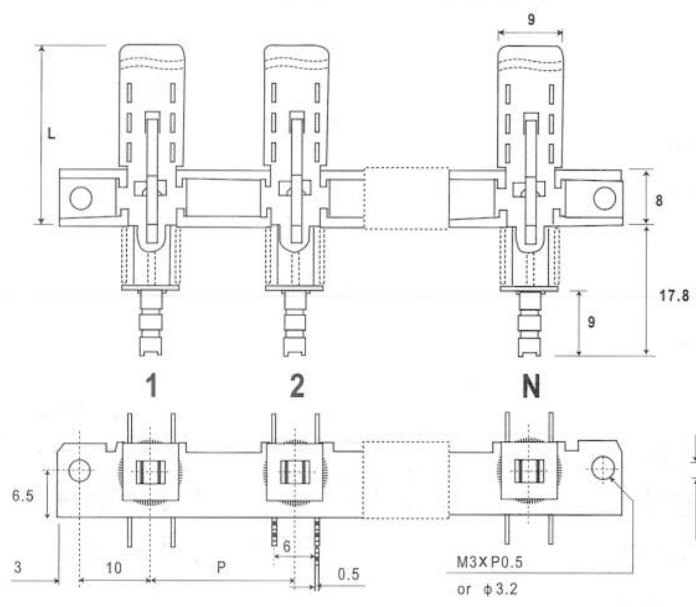
M: M3 x P0.5 O: φ3.2

Cap Pitch

L: Self.Lock  
T: Inter.Lock

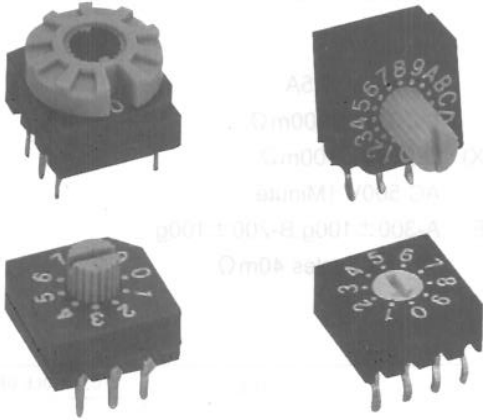
NO. of keys

Class of Push Button (Cap)	
A	
B	
C	
D	



TYPE	P(Pitch)
A	10
B	12.5
C	15
D	17.5
E	20

RS□13□□



**SPECIFICATION:**

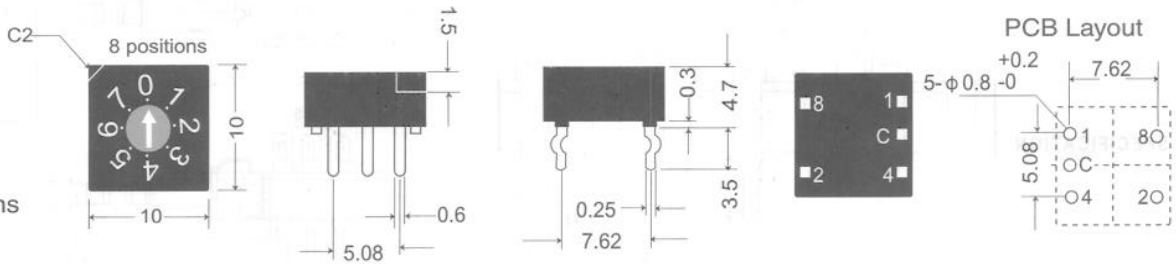
- Rating : 50mA, 24V DC
- Contact resistance : 100m Ω max.
- Insulation resistance : 1,000M Ω at 100V DC
- Dielectric strength : 250V AC for 1 minute
- Operating temperature : -10°C to +70°C
- Soldering temperature : 250±5°C for 5 seconds.
- Switching positions : 8, 10, 16 positions
- Operating force : 350gf-cm max.
- Life : 10,000 detents

**MATERIALS:**

- Housing/Knob : Thermoplastic
- O-Ring : Silicone rubber
- Terminals : Precious metal on phosphor bronze, gold plated.

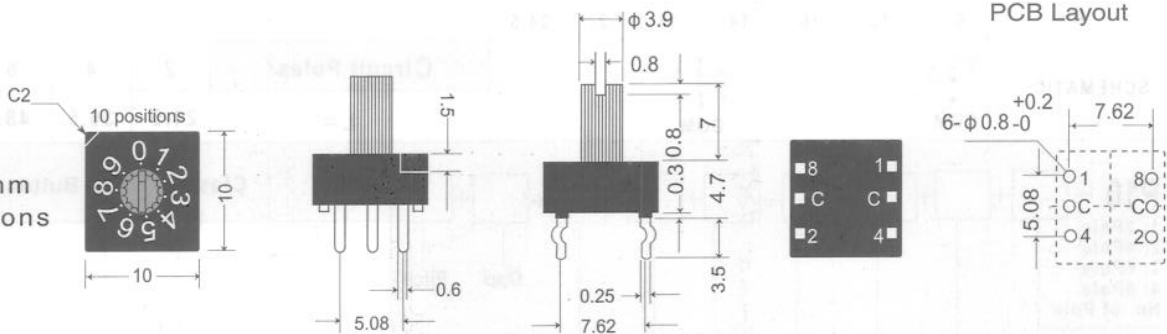
**RS20011**

- RS : Vertical
- 2 : 2+3 Pins
- 00 : Flat type
- 11 : 8 positions



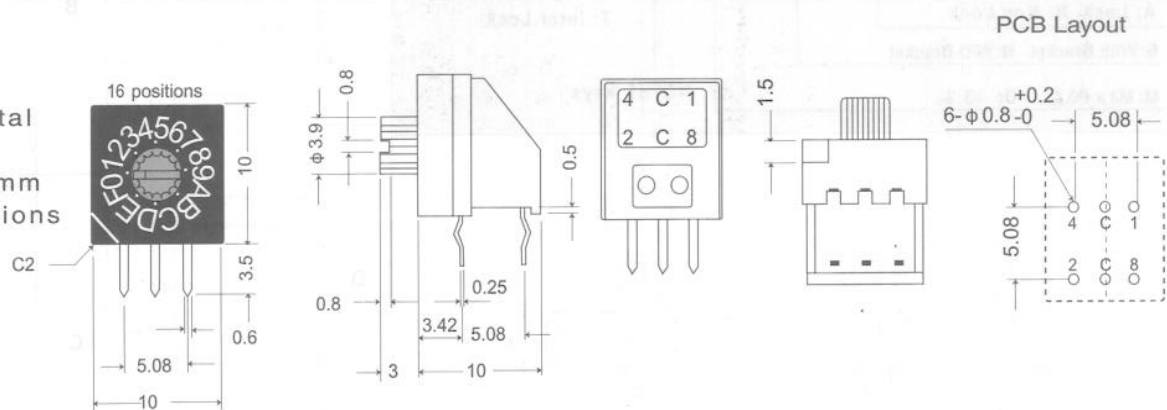
**RS32712**

- RS : Vertical
- 3 : 3+3 Pins
- 27 : Rotor 7mm
- 12 : 10 positions



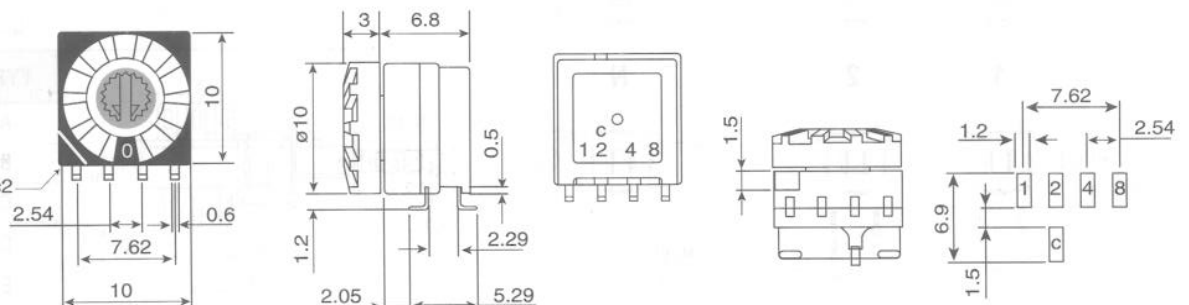
**RR32314**

- RR : Horizontal
- 3 : 3+3 Pins
- 23 : Rotor 3mm
- 14 : 16 positions

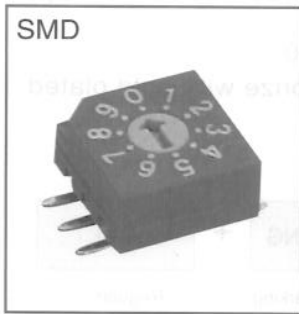


**RJ41312**

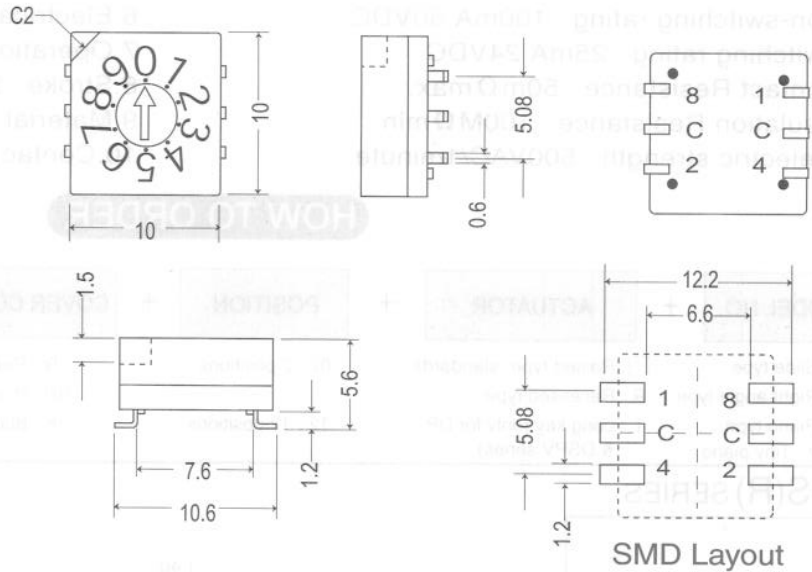
- RJ: SMD
- Right Angle
- 4 : 4+1 Pins
- 13 : Rotor 3mm
- W/ Knob φ10
- 12 : 10 Positions



RM30012



- RM : SMD Vertical
- 3 : 3+3Pins (For RM only)
- 00 : Flat type
- 12 : 10 positions



## CODES

CODE NO:11  
BCD 8  
POSITION

Position	Commen Contacted				
	1	2	4	8	C
0					
1	●				●
2		●			●
3	●	●			●
4			●		●
5	●		●		●
6		●	●		●
7	●	●	●		●

CODE NO:12  
BCD 10  
POSITION

Position	Commen Contacted				
	1	2	4	8	C
0					
1	●				●
2		●			●
3	●	●			●
4			●		●
5	●		●		●
6		●	●		●
7	●	●	●		●
8			●		●
9	●				●

CODE NO:14  
BCD 16  
POSITION

Position	Commen Contacted				
	1	2	4	8	C
0					
1	●				●
2	●	●			●
3	●	●	●		●
4			●		●
5	●		●		●
6	●	●	●		●
7	●	●	●		●
8			●		●
9	●				●
A	●	●	●		●
B	●	●	●		●
C	●	●	●		●
D	●	●	●		●
E	●	●	●		●
F	●	●	●		●

CODE NO:31  
BCD  
COMPLEMENT  
10 POSITION

Position	Commen Contacted				
	1	2	4	8	C
0	●	●	●	●	●
1		●	●	●	●
2	●		●	●	●
3			●	●	●
4	●	●		●	●
5		●		●	●
6	●			●	●
7			●	●	●
8	●	●	●		●
9		●	●	●	●

CODE NO:33  
BCD  
COMPLEMENT  
16 POSITION

Position	Commen Contacted				
	1	2	4	8	C
0	●	●	●	●	●
1		●	●	●	●
2	●		●	●	●
3			●	●	●
4	●	●		●	●
5		●		●	●
6	●			●	●
7			●	●	●
8	●	●	●		●
9		●	●	●	●
A	●		●	●	●
B			●	●	●
C	●	●	●		●
D		●		●	●
E	●			●	●
F		●	●	●	●

## HOW TO ORDER



- ※ S : Vertical Dip type
- ※ R : Horizontal Dip type (Right-Angle)(P : 5.08mm)
- ※ M : SMD type
  - I : Horizontal Dip type (Right-Angle)(P : 2.54mm)
  - T : SMD Right Angle type (P : 5.08mm)
  - J : SMD Right Angle type (P : 2.54mm)

- 2 : 2+3pins
- 3 : 3+3pins
- 4 : 4+1pins

- 00 : Flat Type
- 13 : 3mm W/KNOB  $\phi$  10
- 23 : L=3mm shaft hole
- 27 : L=7mm shaft hole

- 11 : 8Positions(Real)
- 12 : 10Positions(Real)
- 14 : 16Positions(Real)
- Complementary
- 31 : 10Positions
- 33 : 16Positions

# DS,DA,DP,DSPV Series Dip Switches

Rotary SMD Switches

## SPECIFICATION:

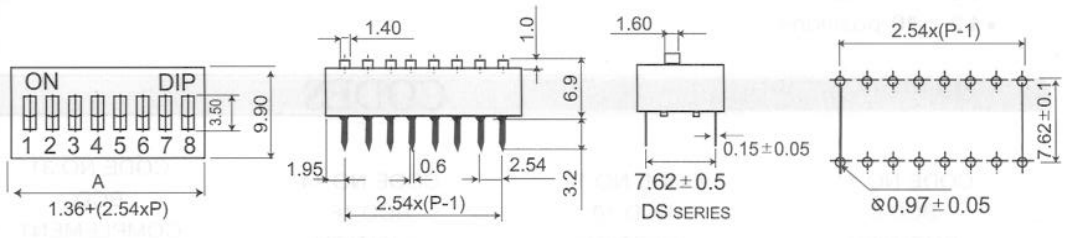
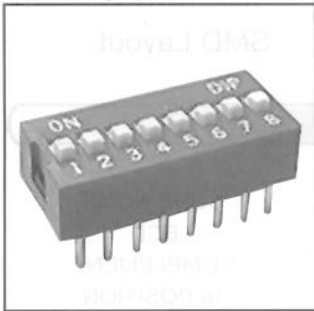
1. Non-switching rating : 100mA 50VDC
2. Switching rating : 25mA 24VDC
3. Contact Resistance : 50mΩ max.
4. Insulation Resistance : 100MΩ min.
5. Dielectric strength : 500VAC/1minute

6. Electrical life : 2000 operations
7. Operation force : 400 gf~1000gf
8. Stroke : 2.0m/m
9. Material : P.B.T. UL94V-0
10. Contact : phosphor bronze with gold plated

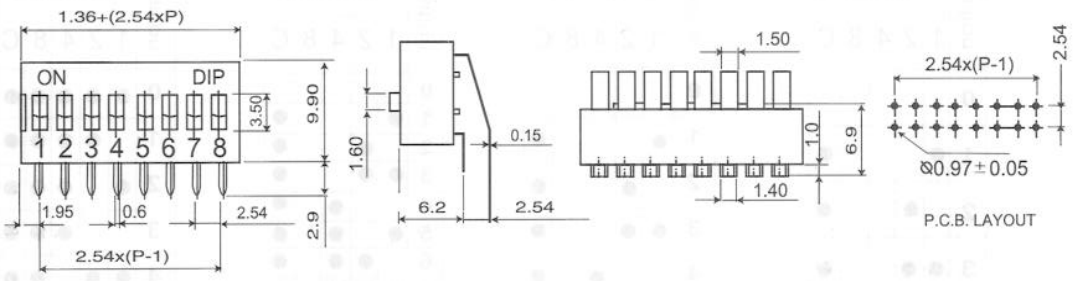
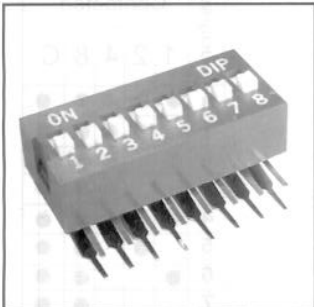
## HOW TO ORDER

MODEL NO.	+	ACTUATOR	+	POSITION	+	COVER COLOR	+	MARKING	+	SEAL
DS : Slide type DA : Right angle type DP : Piano type DSPV : Tiny piano		□ : Raised type (standard) R : Recessed type L : Long key (only for DP & DSPV series)		02 : 2 positions 1 12 : 12 positions		R : Red BU : Blue K : Black		N : No marking		□ : Regular T : Top tape sealed

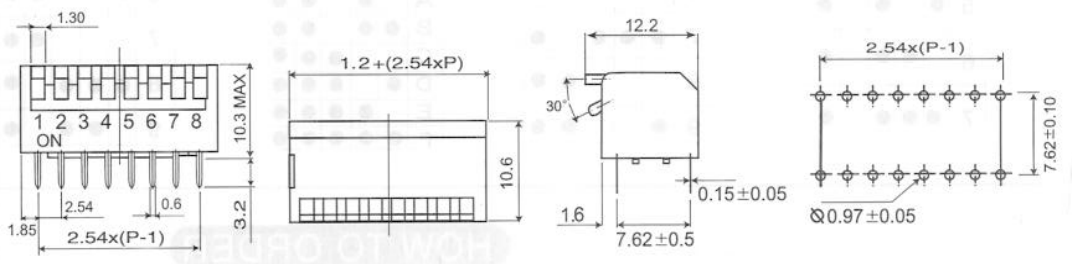
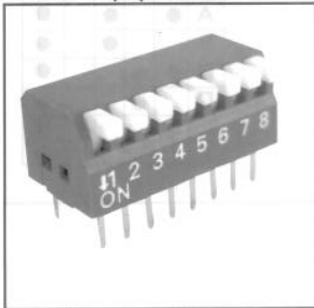
### DS(R) SERIES



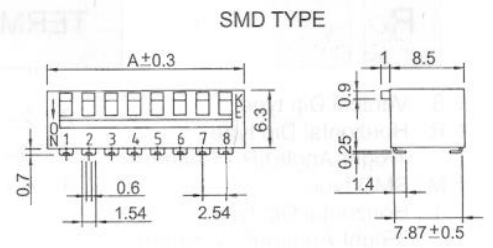
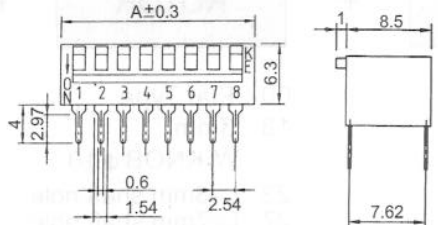
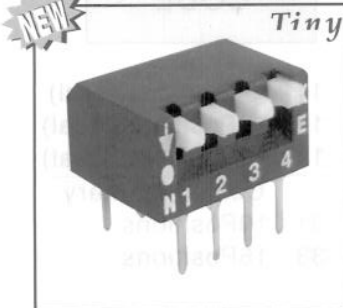
### DA SERIES



### DP(L) SERIES



### DSPV SERIES

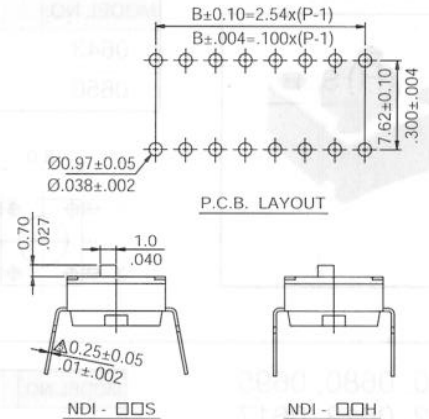
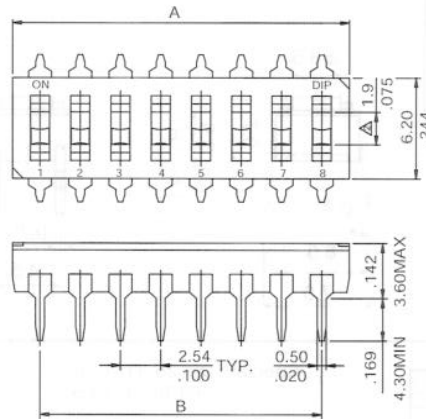


Positions NO.	2	3	4	5	6	7	8	9	10	12	
A	mm	6.08	8.72	11.90	14.44	16.98	19.52	22.06	24.60	27.14	32.22

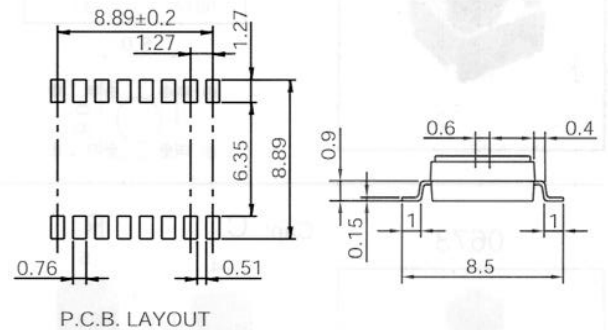
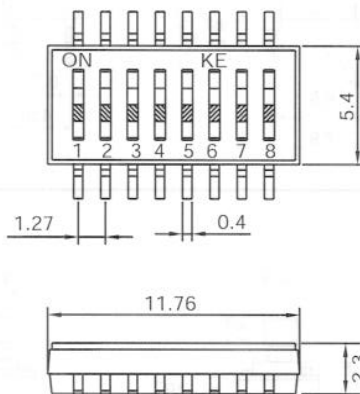
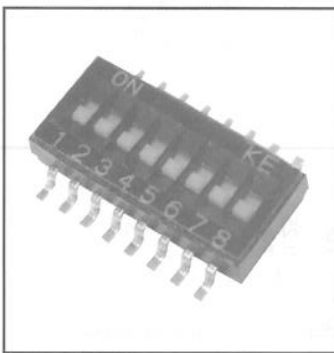
HOW TO ORDER

MODEL NO.	+	ACTUATOR	+	POSITION	+	TERMINAL SHAPE
DI : Insertable type DSHP : 1.27mm pitch SMD type DM : Surface mounting type		<input type="checkbox"/> : Raised type <input type="checkbox"/> R : Recessed type		01 : 1 positions (for DI only) 02 : 2 positions 1 12 : 12 positions		<input type="checkbox"/> : Regular S : Splay terminal H : Straight terminal (For DI Series Only)

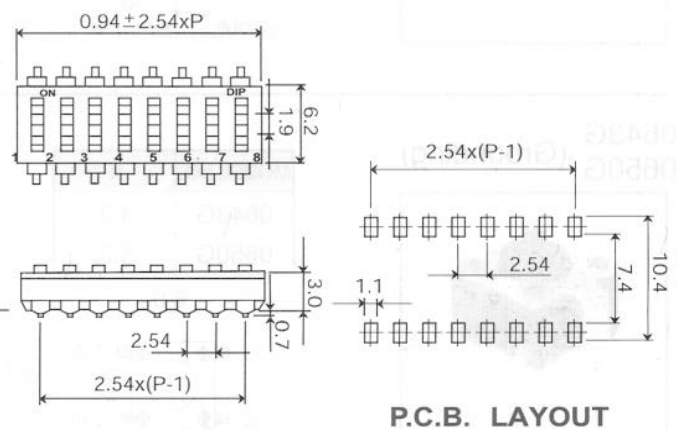
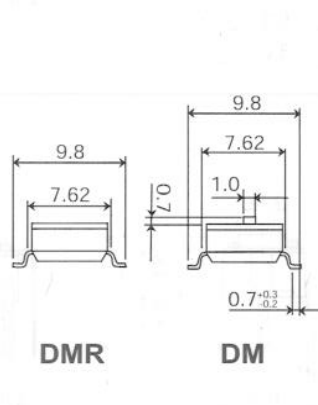
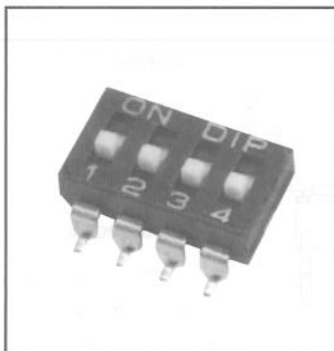
NDI,DI,DIR Series



DSHP Series  
Half pitch 1.27mm



DM,DMR Series



# 06,07 Series Tact Switches (SMD, Taping, Tape & Reel optional)

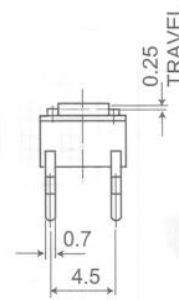
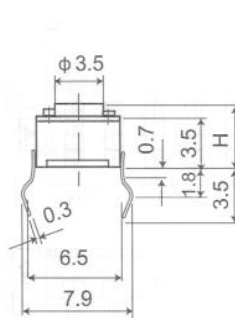
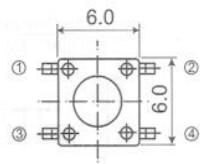
## ■ SPECIFICATION:

Rating : DC 12V 50mA	Mechanical Life : 1,000,000 cycles
Insulation Resistance : > 100M Ω DC250V	Electrical Life : 100,000 cycles
Withstand Voltage : AC250V 1minute	Ambient Temper. Used : -25°C to +70°C
Contact Resistance : < 100mΩ	Ambient Humidity Used : < 85% RH
Soldering Temper : < 255°C max, 5sec	Operating Force : 130, 160 ± 30g or 250 ± 50g

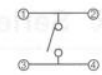
0643,0650



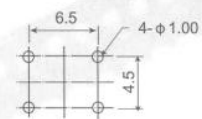
MODEL NO.	H
0643	4.3
0650	5.0



SCHEMATIC



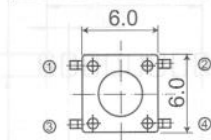
P.C.B. HOLE DETAIL



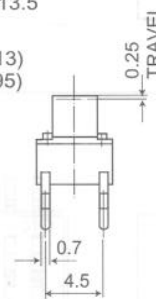
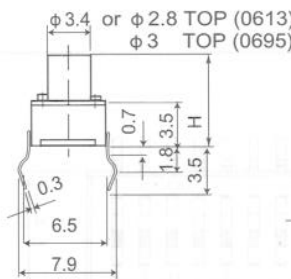
0670, 0680, 0695  
0612, 0613, 0617



MODEL NO.	H
0670	7.0
0680	8.0
0695	9.5
0612	12
0613	13
0617	17



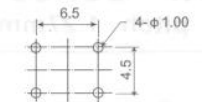
Special : 06125, H=12.5  
06135, H=13.5



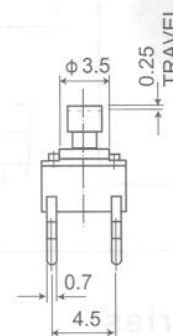
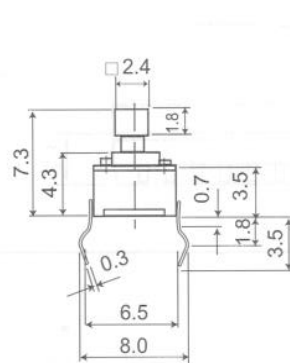
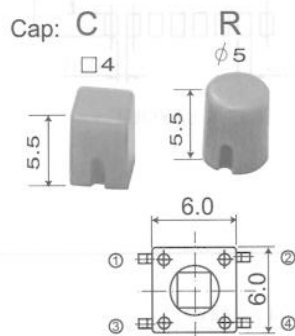
SCHEMATIC



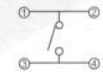
P.C.B. HOLE DETAIL



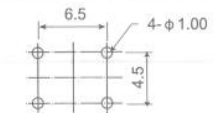
0673



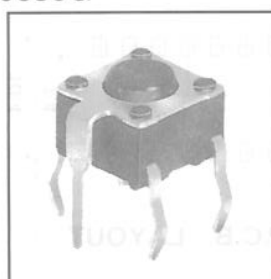
SCHEMATIC



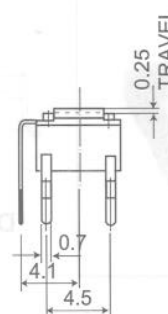
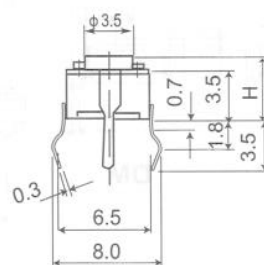
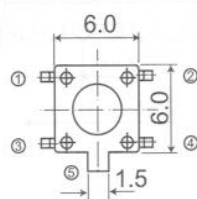
P.C.B. HOLE DETAIL



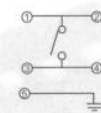
0643G  
0650G (Grounding)



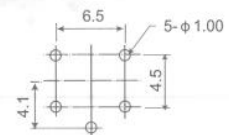
MODEL NO.	H
0643G	4.3
0650G	5.0



SCHEMATIC



P.C.B. HOLE DETAIL

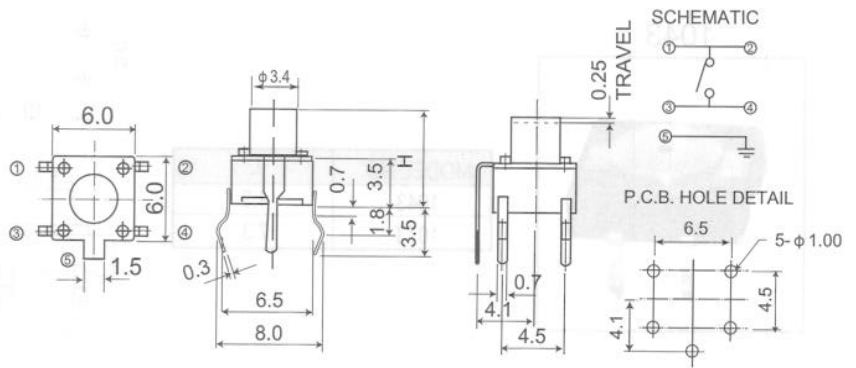


# 06,07 Series Tact Switches

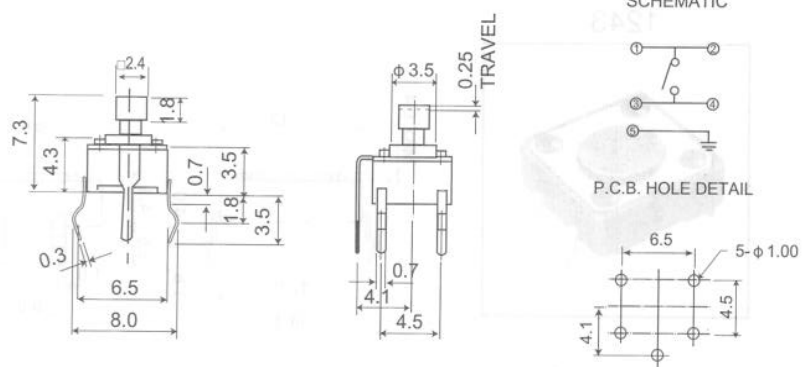
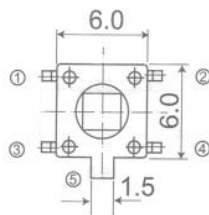
0670G,0680G,0695G, (Grounding)  
06125G,06135G



MODEL NO.	H
0670G	7.0
0680G	8.0
0695G	9.5
06125G	12.5
06135G	13.5



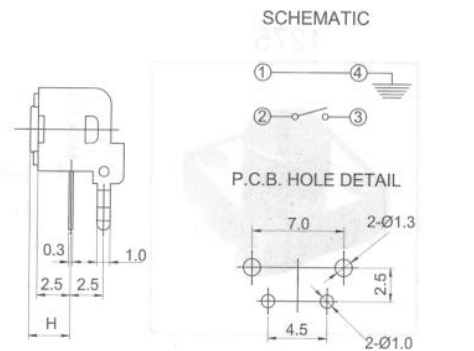
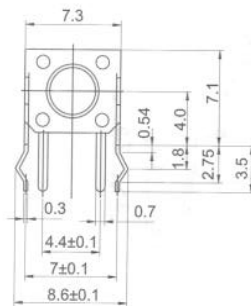
0673G (Grounding)



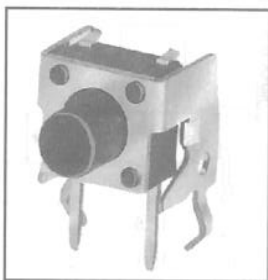
0743, 0750



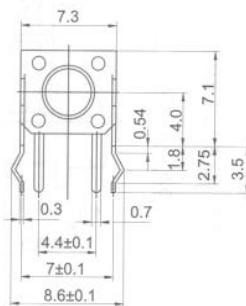
MODEL NO.	H
0743	3.15
0750	3.85



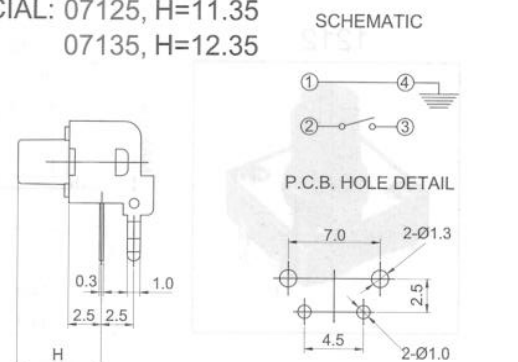
0770, 0795, 0780



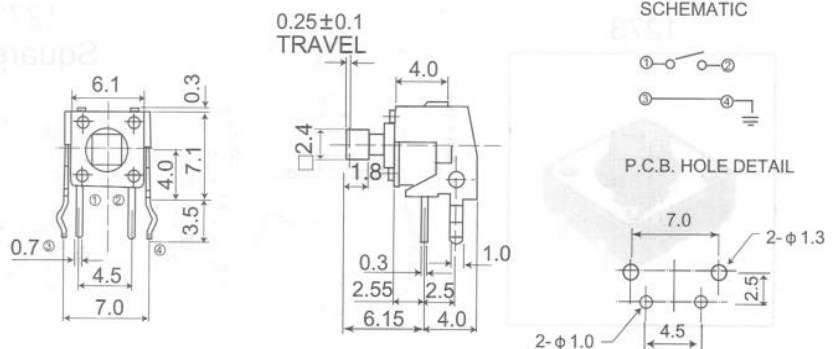
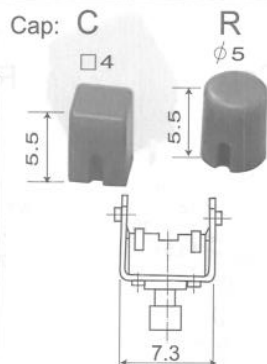
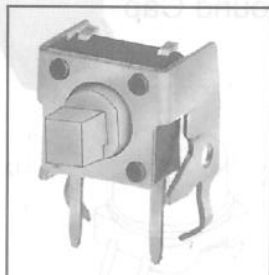
MODEL NO.	H
0770	5.85
0795	8.35
0780	6.85



SPECIAL: 07125, H=11.35  
07135, H=12.35



0773



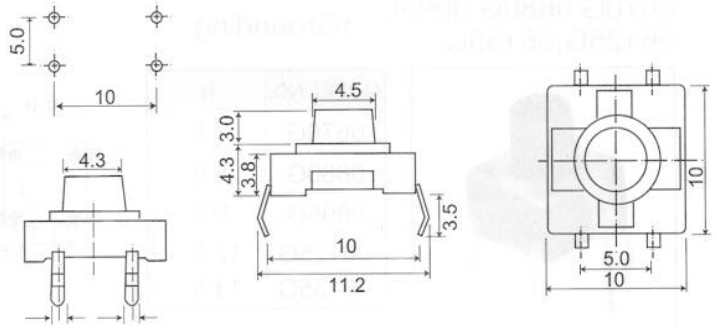
# 10, 12 Series Tact Switches

(SMD Type optional)

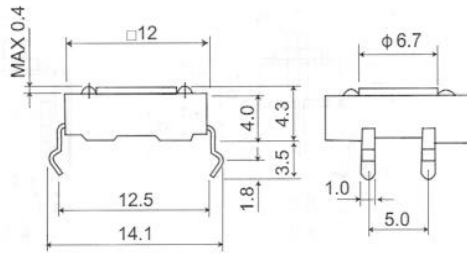
1043



MODEL NO.	L
1043	4.3
1073	7.3



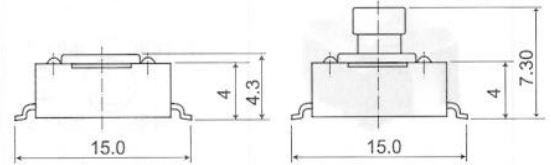
1243



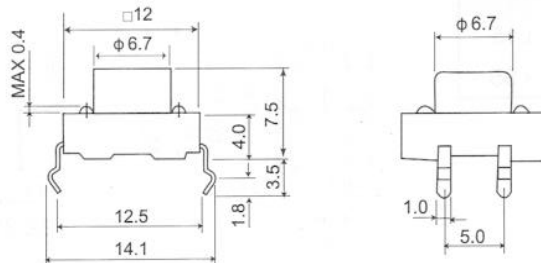
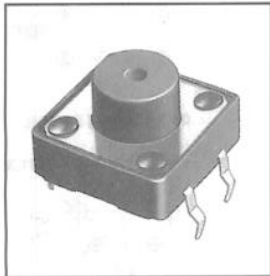
SMD TYPE

1243 SMD

1273 SMD

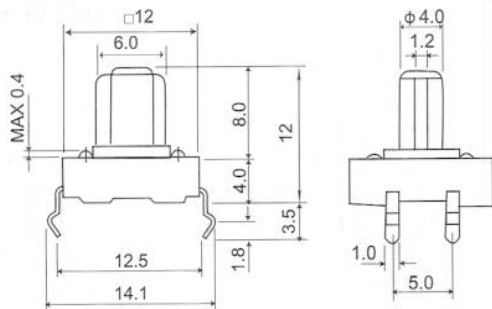
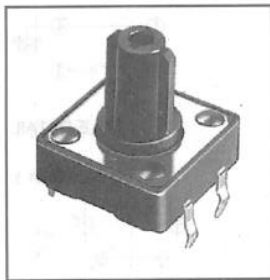


1275

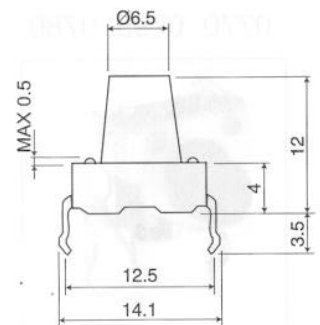


1. Contact: Mechanical Contact
2. Rating: DC 12V 50mA
3. Travel:  $0.3 \pm 0.15$  m/m
4. Operating force:  $160 \pm 30$  g,  $250 \pm 50$  g
5. Contact Resistance: 100mΩ Max
6. Life: 100,000 Cycles Min.

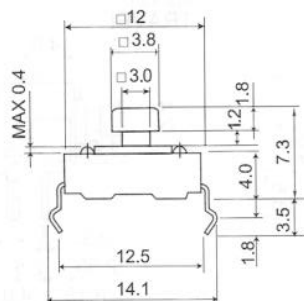
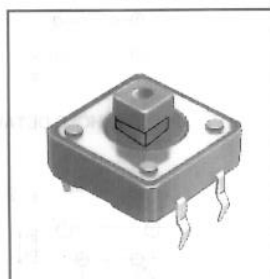
1212



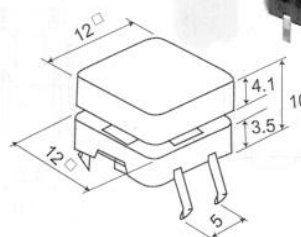
1212D



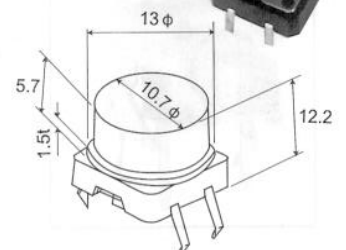
1273



1273C Square Cap



1273R Round Cap





### SPECIFICATION:

Rating : 25mA,24VDC  
 Contact resistance : 5Ω(for all)  
 Temperature : <100°C  
 Rolling Ball Switches : RBS Series  
 Vibration Switches : VBS Series

### APPLICATION:

It's suitable to light vibration applied such as burglar alarm, vibration toys, sporting shoes, earthquake detecting system, cordless mouse power saving, bicycle alarm, automobile burglar alarm, and home security system etc., all occasion requesting for vibration or of stroke functions.

Plastic body, Single ball  
 Terminals Tin plated



**RBS310300**

RBS 31 03 00 NORMAL TYPE	STRUCTURAL DRAWING	$\theta < 5^\circ$	P.C.B. LAYOUT TOP VIEW

Tin or silver, gold plated



**RBS0209**

RBS 02 09 00 SMT TYPE	STRUCTURAL DRAWING	$\theta < 10^\circ$	P.C.B. LAYOUT TOP VIEW

Tin plated body  
 Terminal gold plated



**VBS010100**

VBS 01 01 00 NORMAL TYPE	STRUCTURAL DRAWING	SHOCK ON	P.C.B. LAYOUT TOP VIEW

Plastic body, Tin cover  
 Terminal gold plated



**VBS020100**

VBS 02 01 00 SINGLE AXIAL TYPE	STRUCTURAL DRAWING	A < 0.05G, OFF; A > 0.3G, ON	P.C.B. LAYOUT TOP VIEW

Tin plated body  
 Terminal gold plated



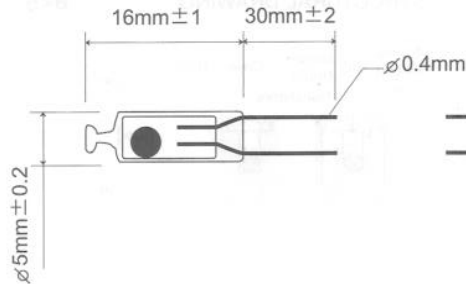
**VBS030200**

VBS 03 02 00 RIGHT ANGLE TYPE	STRUCTURAL DRAWING	TOUCH OFF (ANY POSITION)	P.C.B. LAYOUT TOP VIEW

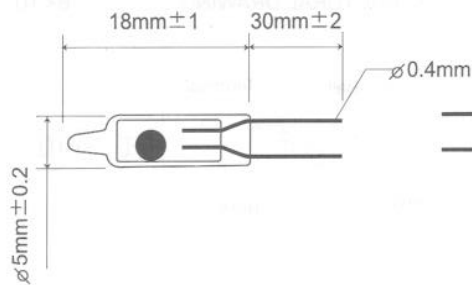
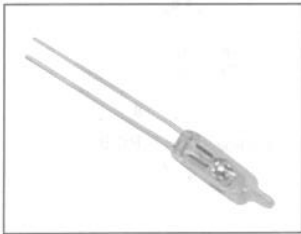
## PRODUCT FEATURES & SPECIFICATION:

- Max. Current : 200mA
- Inside Resistance : 0.2Ω
- Dimensions :  $\phi$  5x16mm.  $\phi$  6.0x19mm.  
 $\phi$  10x25mm.  $\phi$  5.5x18mm.  
 $\phi$  9.0x24mm.  $\phi$  5x18mm.
- Life : 100,000 Times
- Glass tube has undergone special treatment. Thus, it is not easily broken.
- Its effectiveness is excellent as its contact is made of special conductive material.

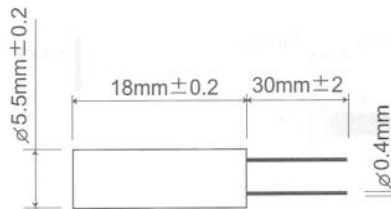
M516



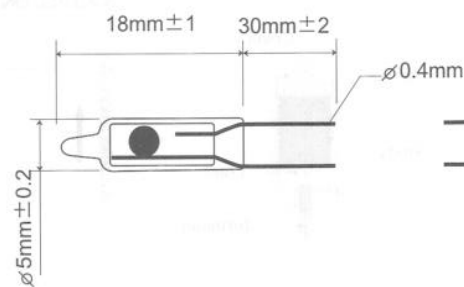
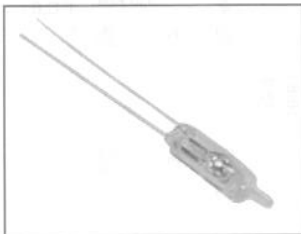
M518



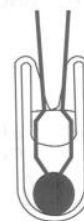
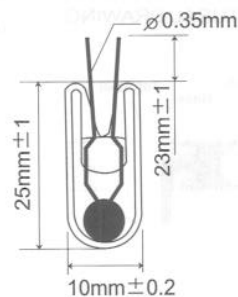
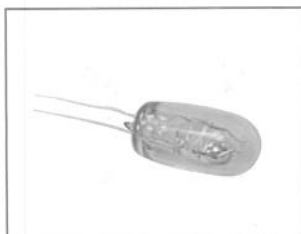
鍍金外殼 Metal shell  
M5518



M518LS



M1025



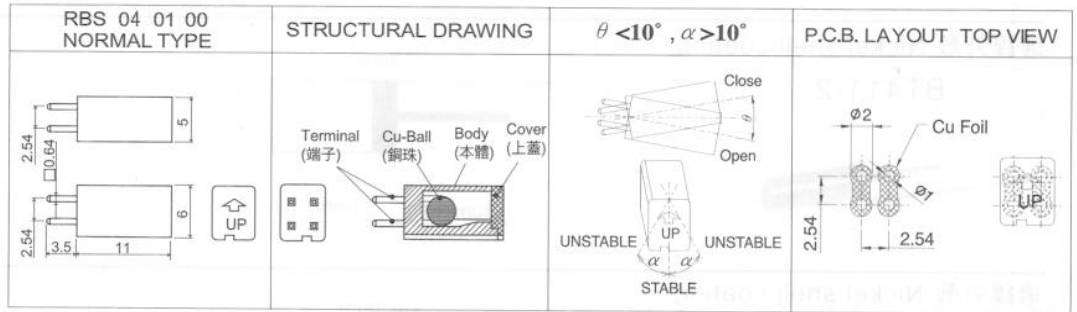
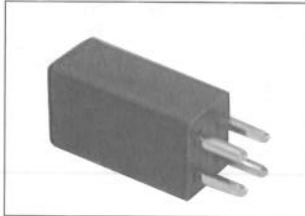
### SPECIFICATION:

Rating : <10mA,24VDC  
 Contact resistance : 2Ω (for all)  
 500mΩ (AT514 only)  
 Temperature : <100°C  
 NO-of Rolling ball : 2 Rolling balls

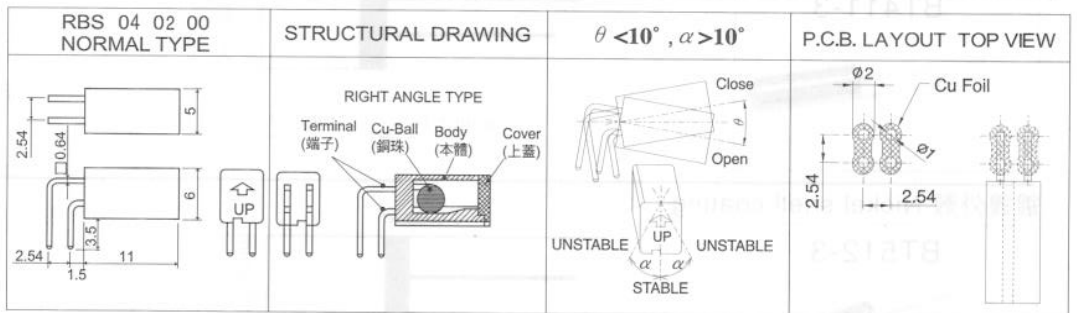
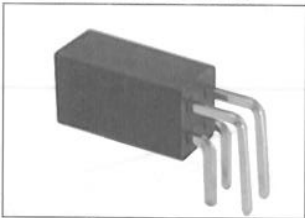
### APPLICATION:

toys, alarms for motor-cars and motorcycles  
 vibrating sensors, meters for sports, lamps on shoes, ...  
 AT,BT are vibration switches sensitive to triggering,  
 according to the environment protection requirement.  
 Can be activated in a small range. Durable.  
 Can be used in low current and low voltage.

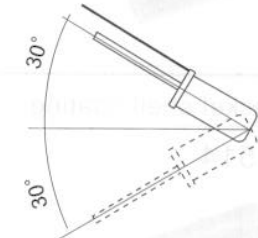
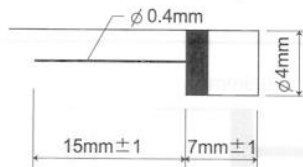
Plastic body, Single ball  
 Terminals gold plated  
**RBS040100**



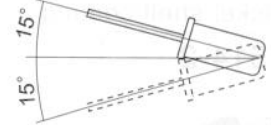
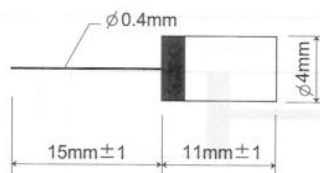
Plastic body, Single ball  
 Terminals gold plated  
**RBS040200**



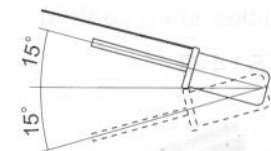
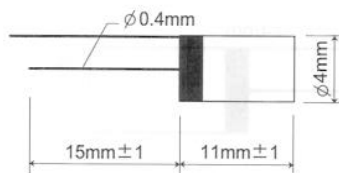
鍍金外殼 Gold shell coating, single ball



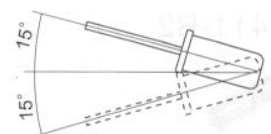
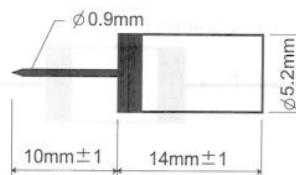
鍍金外殼 Gold shell coating



鍍金外殼 Gold shell coating



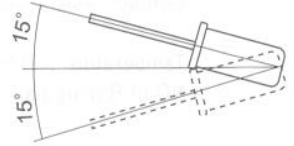
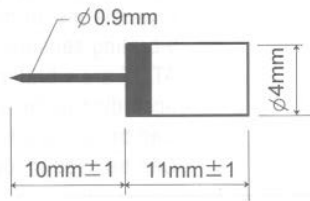
鍍金外殼 Gold shell coating



鍍鎳外殼 Nickel shell coating



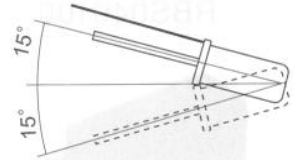
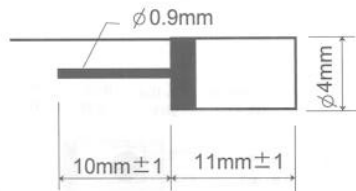
BT411



鍍鎳外殼 Nickel shell coating



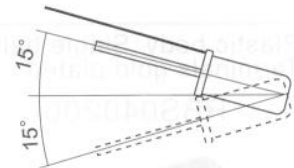
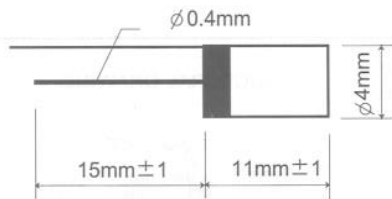
BT411-2



鍍鎳外殼 Nickel shell coating



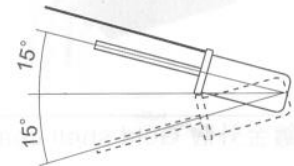
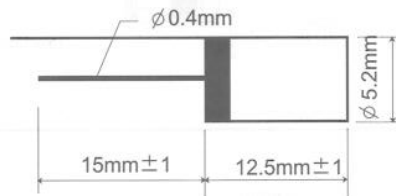
BT411-3



鍍鎳外殼 Nickel shell coating



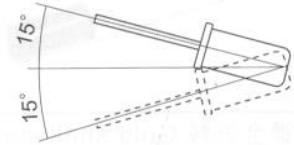
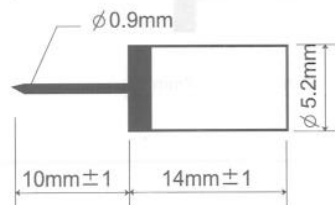
BT512-3



鍍鎳外殼 Nickel shell coating



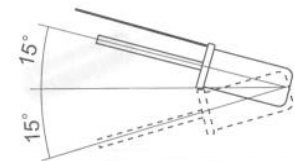
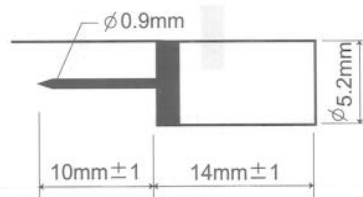
BT514



鍍鎳外殼 Nickel shell coating



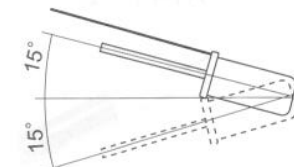
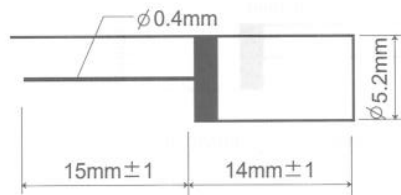
BT514-2



鍍鎳外殼 Nickel shell coating



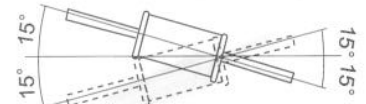
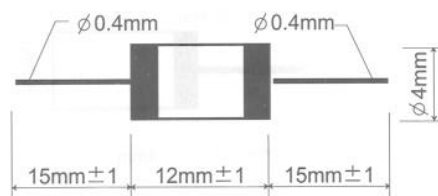
BT514-3



鍍金外殼 Gold shell coating, single ball



AT411-R2



# SS Series Slide Switches

## SPECIFICATION:

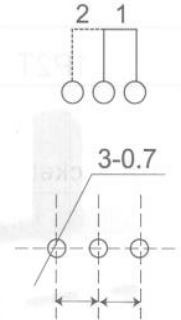
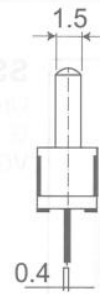
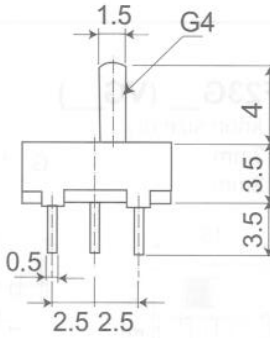
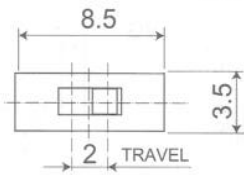
Rating	: DC 30V, 0.3A
Contact Resistance	: 30m ohm max. at 1A DC
Insulation Resistance	: 100M ohm at 500V DC
Withstand Voltage	: AC 500V for 1 minute
Switching Life	: 10,000 Cycles (unloading/15-18 Cycles per minute)

1P2T



**SS12D01G4**

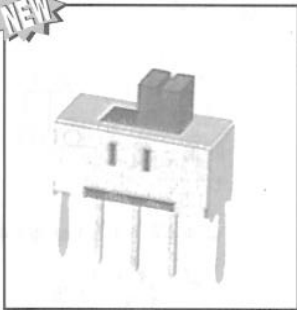
Optional knob 0size (L)  
G : 4mm



HOLE LAYOUT  $\pm 0.05$

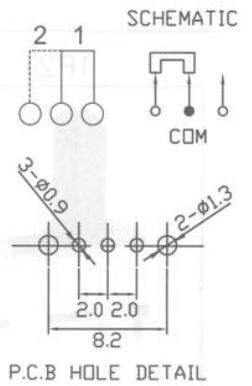
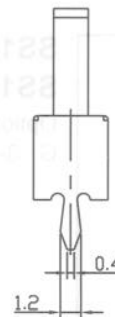
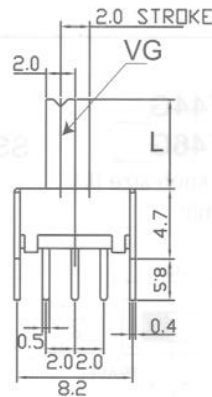
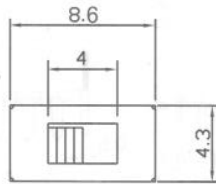


1P2T



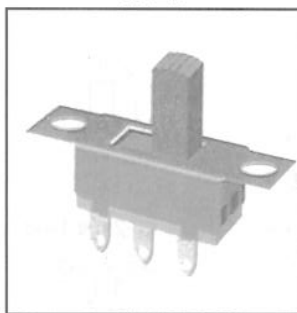
**SS12D07VG**

Optional knob size (L)  
VG : 2 - 9mm (standard : 2, 4, 6mm)



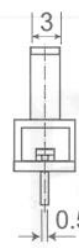
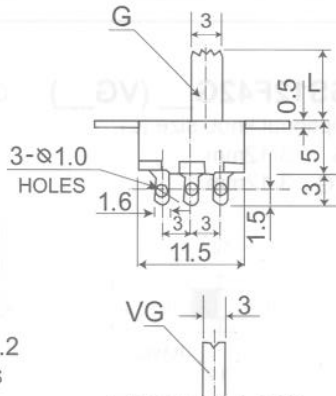
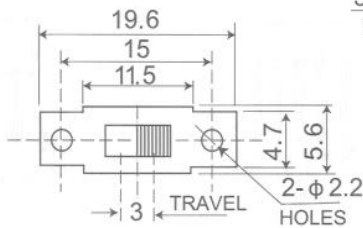
P.C.B HOLE DETAIL

1P2T



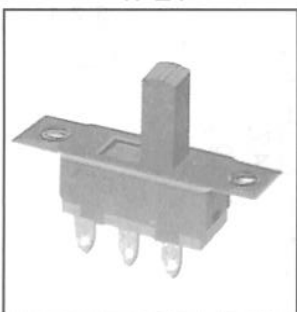
**SS12F15G**

Optional knob size (L)  
G : 2-11mm



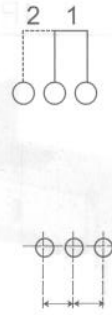
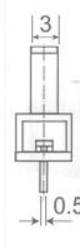
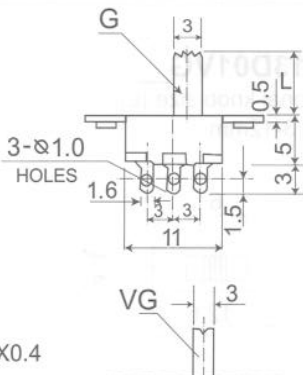
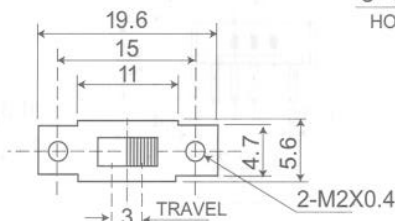
HOLE LAYOUT  $\pm 0.05$

1P2T



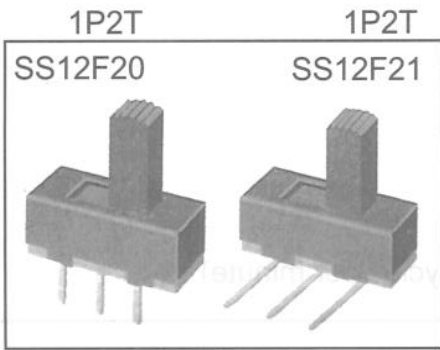
**SS12F16G (VG)**

Optional knob size (L)  
G : 3-12mm  
VG : 3-12mm

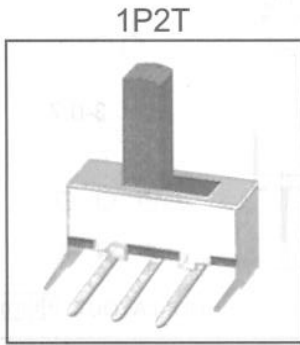
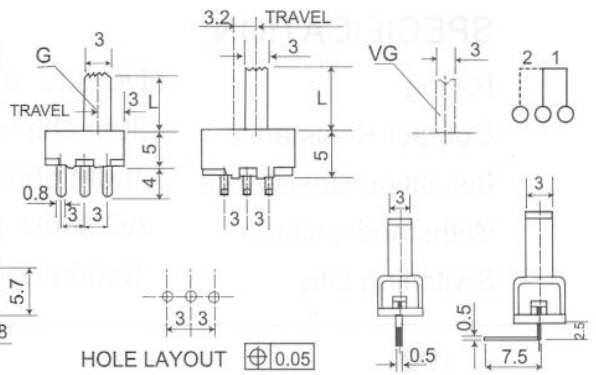
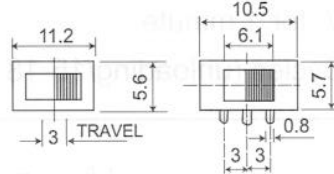


HOLE LAYOUT  $\pm 0.05$

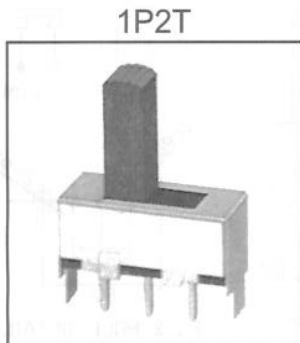
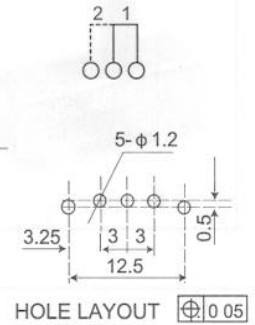
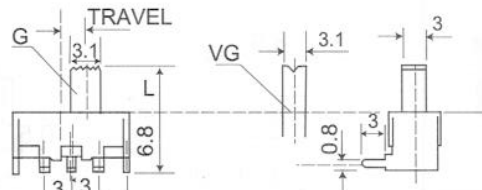
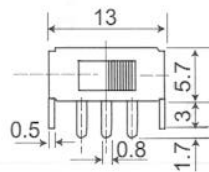
# SS Slide Switches



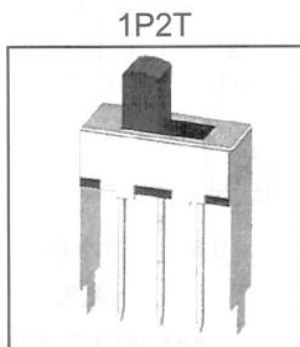
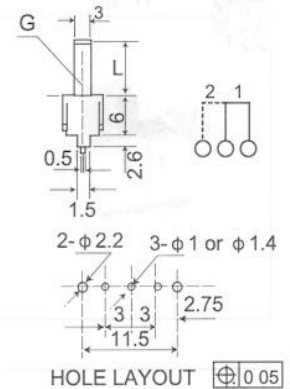
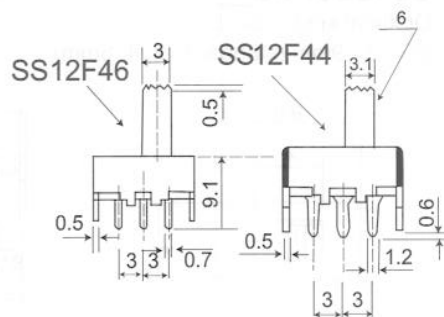
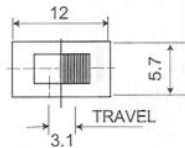
**SS12F20G\_\_ (VG\_\_)**  
**SS12F21G\_\_ (VG\_\_)**  
 Optional knob size (L)  
 G : 3-12mm  
 VG : 3-12mm



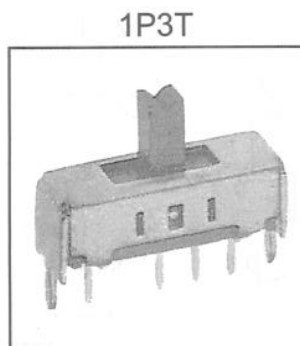
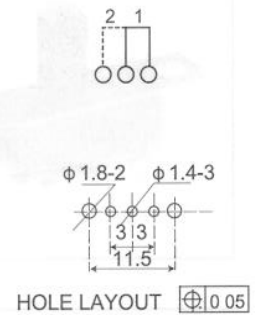
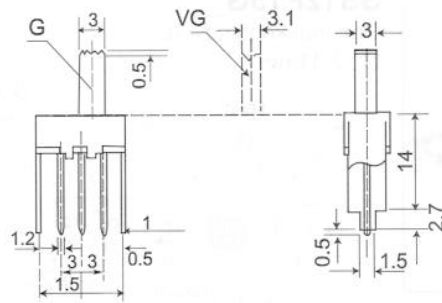
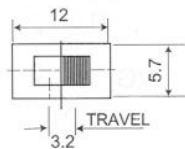
**SS12F23G\_\_ (VG\_\_)**  
 Optional knob size (L)  
 G : 3-12mm  
 VG : 3-12mm



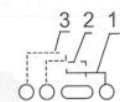
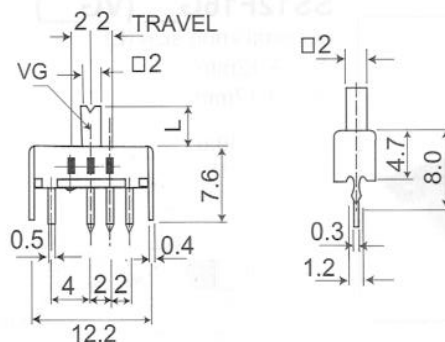
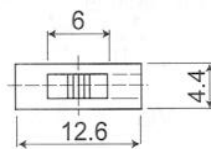
**SS12F44G\_\_**  
**SS12F46G\_\_**  
 Optional knob size (L)  
 G : 3-12mm



**SS12F42G\_\_ (VG\_\_)**  
 Optional knob size (L)  
 G : 3-12mm  
 VG : 3-12mm

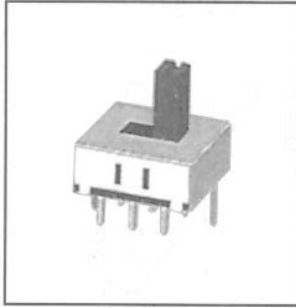


**SS13D01VG\_\_**  
 Optional knob size (L)  
 VG : 3-12mm

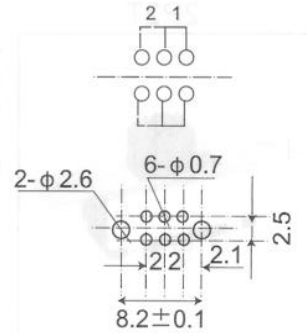
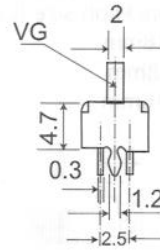
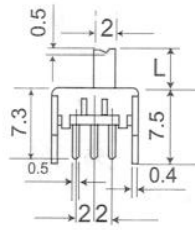
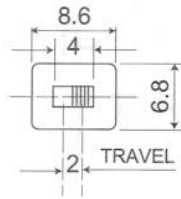


# SS Slide Switches

2P2T

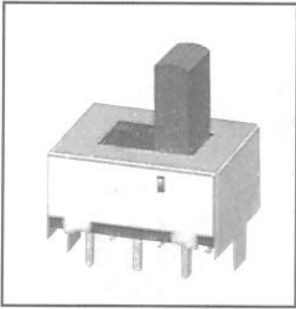


**SS22D03VG**  
Optional knob size (L)  
VG : 3-12mm

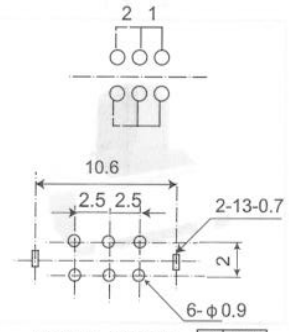
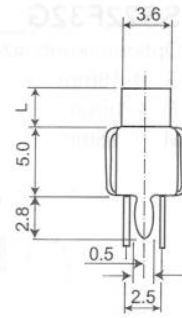
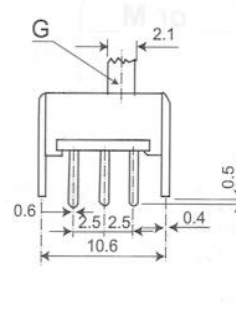
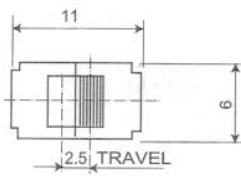


HOLE LAYOUT  $\oplus 0.05$

2P2T

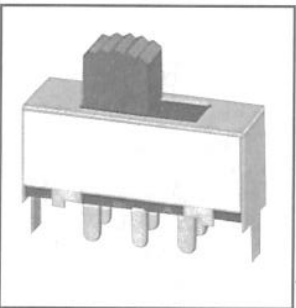


**SS22E01G**  
Optional knob size (L)  
G : 2-9mm



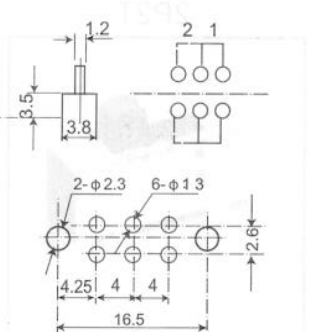
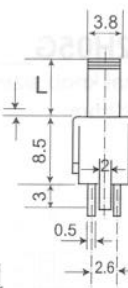
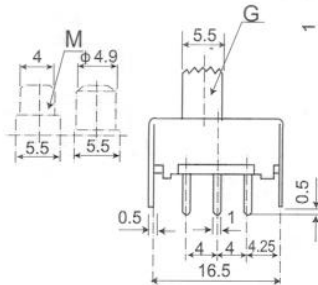
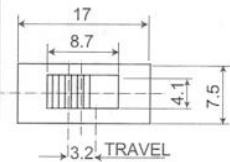
HOLE LAYOUT  $\oplus 0.05$

2P2T



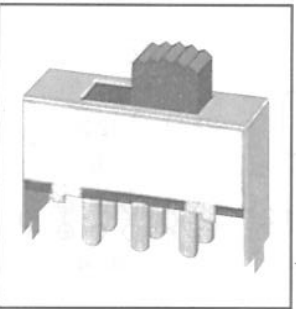
**SS22F07G** (T or M)

Optional knob size (L)  
G : 4-18mm  
T : 4-18mm  
M : 7-16mm



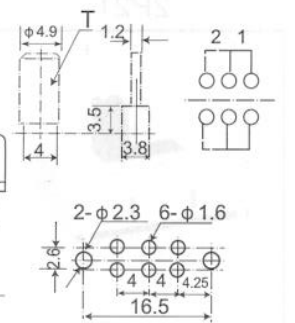
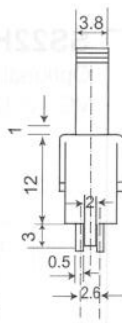
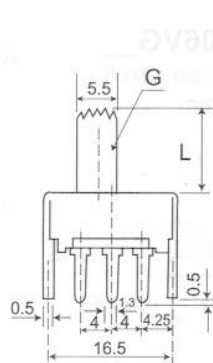
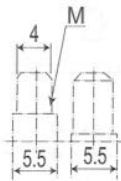
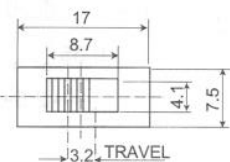
HOLE LAYOUT  $\oplus 0.05$

2P2T



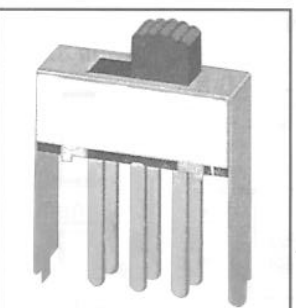
**SS22F48G** (T or M)

Optional knob size (L)  
G : 4-18mm  
T : 4-18mm  
M : 7-16mm



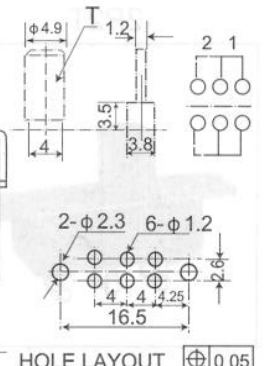
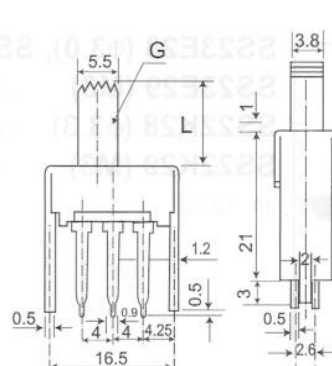
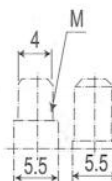
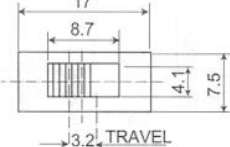
HOLE LAYOUT  $\oplus 0.05$

2P2T



**SS22F51G** (T or M)

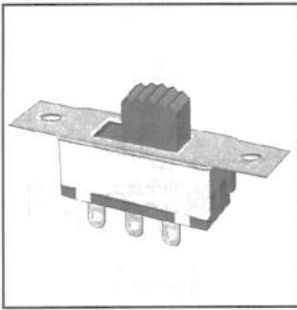
Optional knob size (L)  
G : 4-18mm  
T : 4-18mm  
M : 7-16mm



HOLE LAYOUT  $\oplus 0.05$

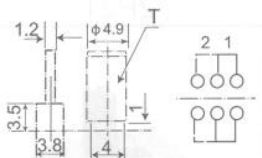
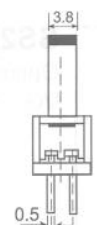
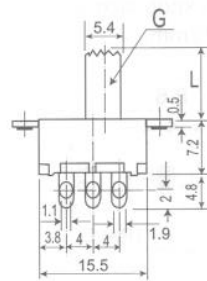
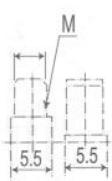
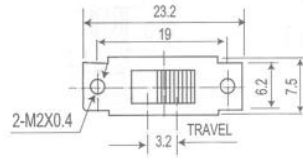
# SS Slide Switches

2P2T



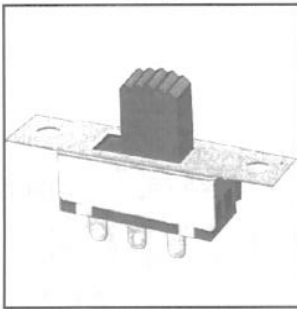
## SS22F25G\_\_ (T\_\_ or M\_\_)

Optional knob size (L)  
 G : 4-18mm  
 T : 4-18mm  
 M : 7-16mm



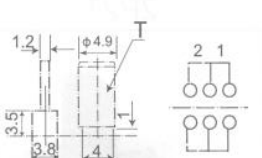
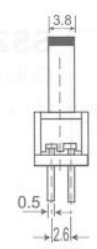
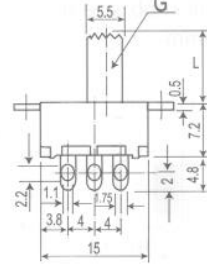
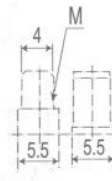
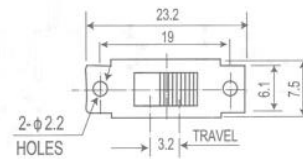
HOLE LAYOUT  $\oplus 0.05$

2P2T



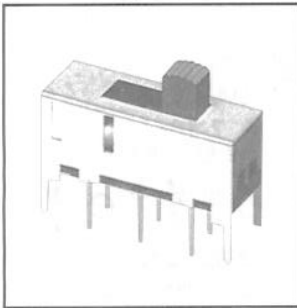
## SS22F32G\_\_ (T\_\_ or M\_\_)

Optional knob size (L)  
 G : 4-18mm  
 T : 4-18mm  
 M : 7-16mm



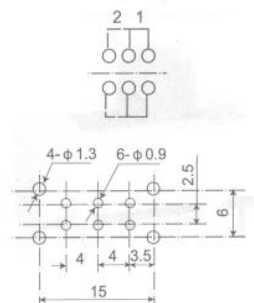
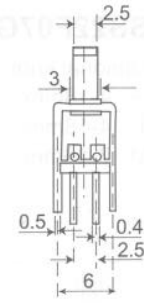
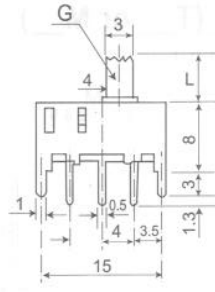
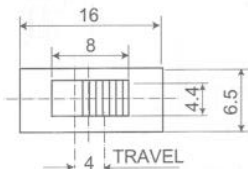
HOLE LAYOUT  $\oplus 0.05$

2P2T



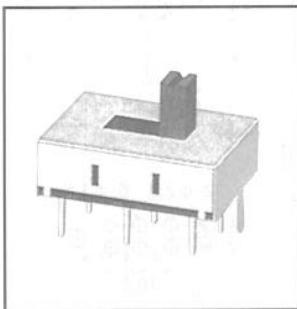
## SS22H05G\_\_

Optional knob size (L)  
 G : 3-12mm



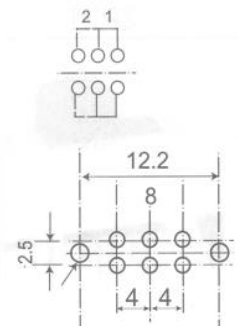
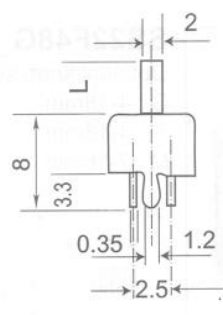
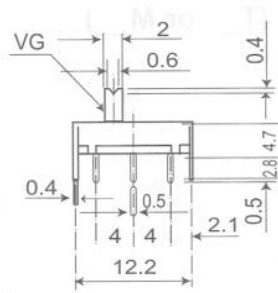
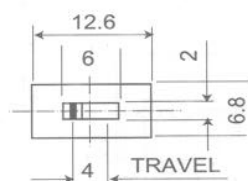
HOLE LAYOUT  $\oplus 0.05$

2P2T



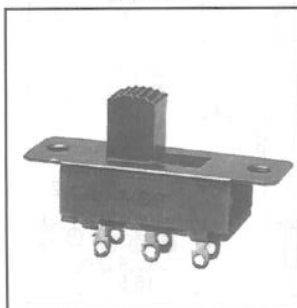
## SS22H06VG\_\_

Optional knob size (L)  
 VG : 3-12mm



HOLE LAYOUT  $\oplus 0.05$

2P2T



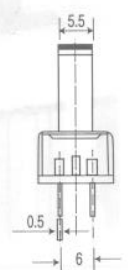
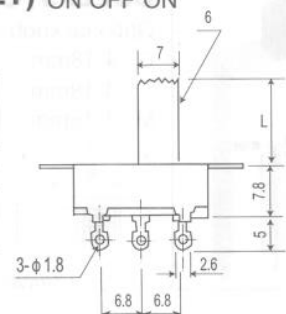
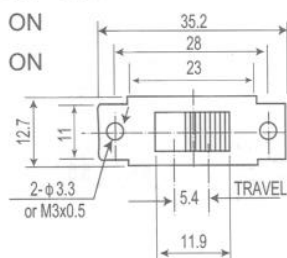
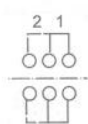
## SS23E28 (φ3.0), SS23E26 (W/O BRACKET) ON OFF ON

SS23E29 (M3) ON OFF ON

SS22K28 (φ3.3) ON ON

SS22K29 (M3) ON ON

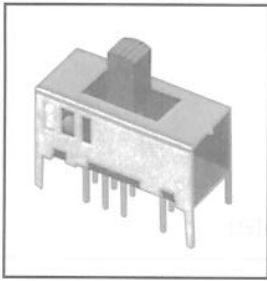
3A 125V



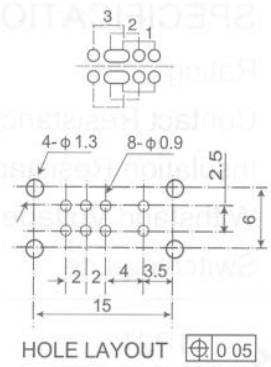
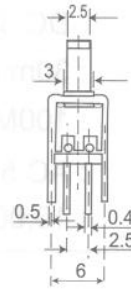
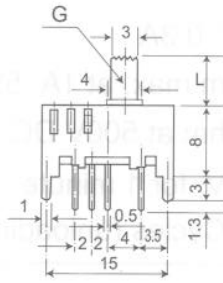
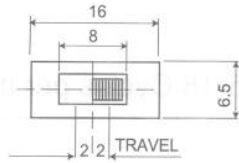


# SS Slide Switches

2P3T



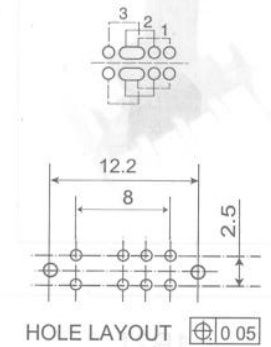
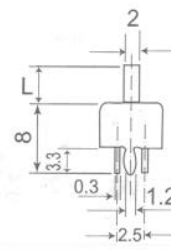
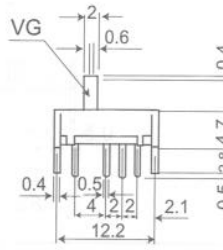
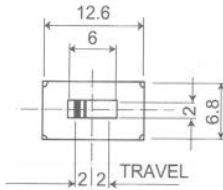
**SS23D03G**  
Optional knob size (L)  
G : 3-12mm



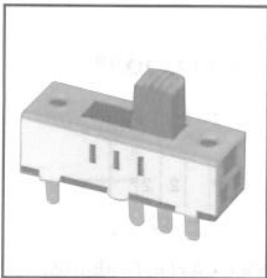
2P3T



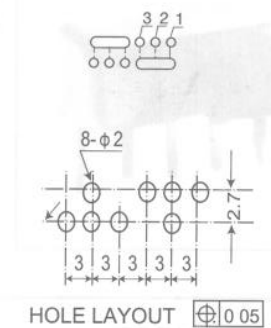
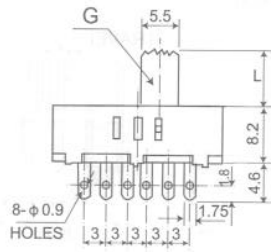
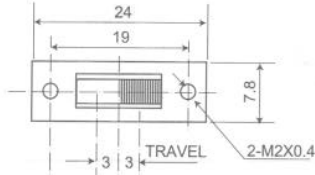
**SS23D06VG**  
Optional knob size (L)  
VG : 3-12mm



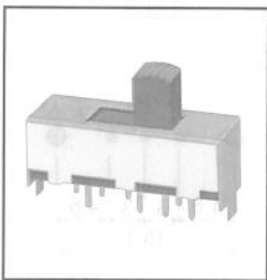
2P3T



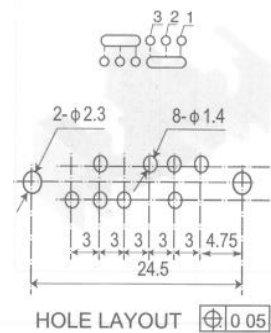
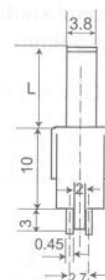
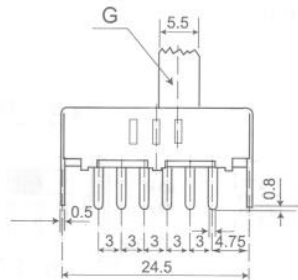
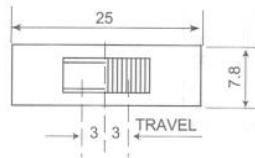
**SS23F02G**  
Optional knob size (L)  
G : 4-18mm



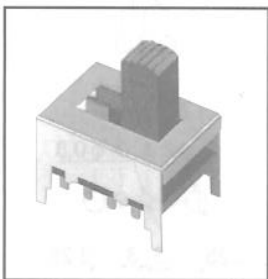
2P3T



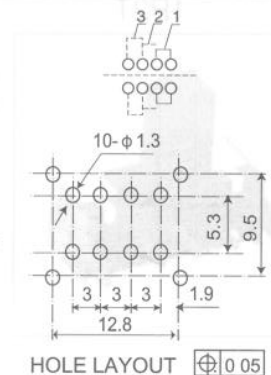
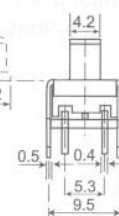
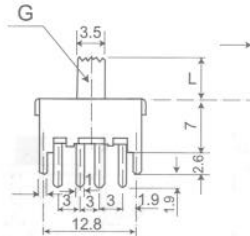
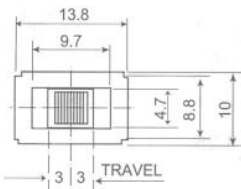
**SS23F07G**  
Optional knob size (L)  
G : 4-18mm



2P3T



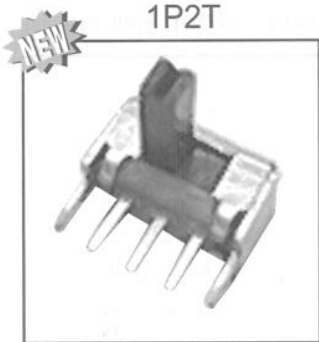
**SS23F06G**  
Optional knob size (L)  
G : 3-15mm



# SK Series Slide Switches

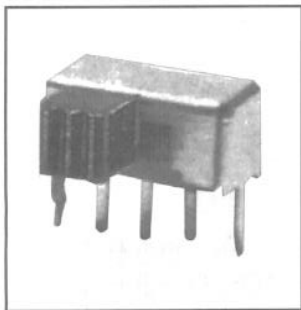
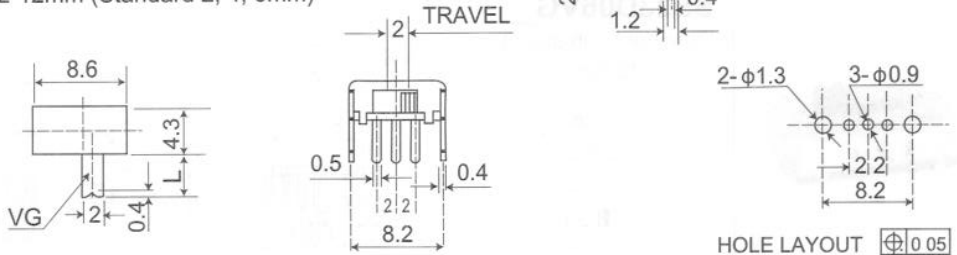
## SPECIFICATION:

Rating	: DC 30V, 0.3A
Contact Resistance	: 30m ohm max. at 1A 5V DC
Insulation Resistance	: 100M ohm at 500V DC
Withstand Voltage	: AC 500V for 1 minute
Switching Life	: 10,000 Cycles (unloading/15-18 Cycles per minute)



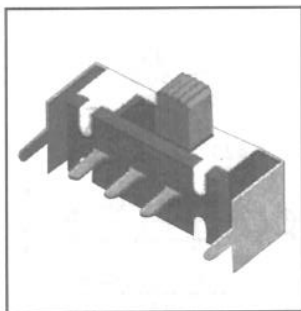
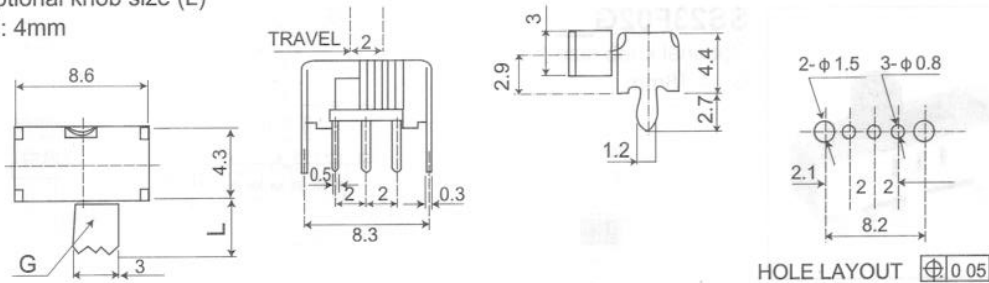
1P2T

**SK12D07VG**  
Optional knob size (L)  
VG : 2-12mm (Standard 2, 4, 6mm)



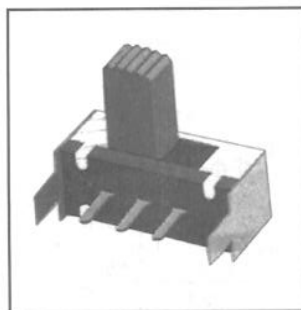
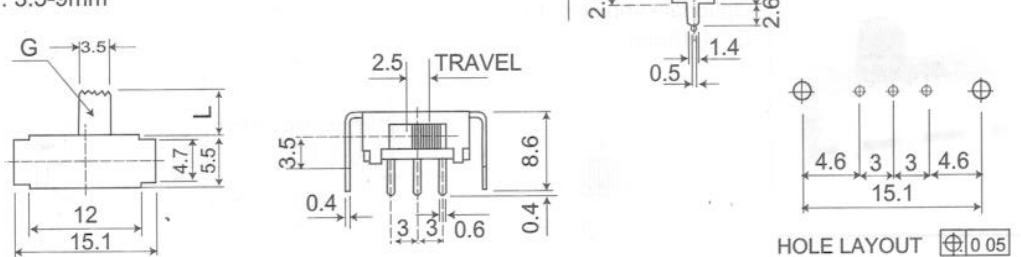
1P2T

**SK12G01G4**  
Optional knob size (L)  
G : 4mm



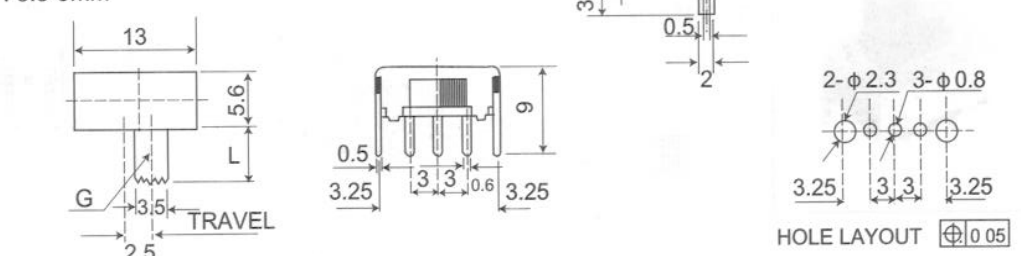
1P2T

**SK12F02G**  
Optional knob size (L)  
G : 3.5-9mm



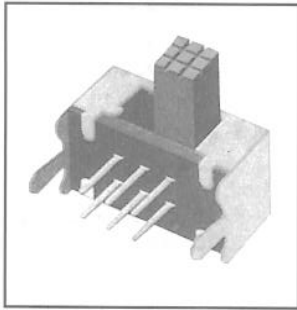
1P2T

**SK12F14G**  
Optional knob size (L)  
G : 3.5-9mm

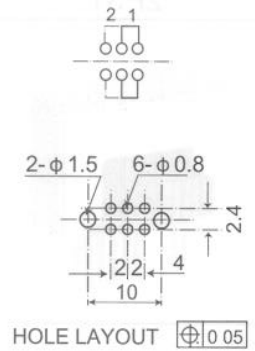
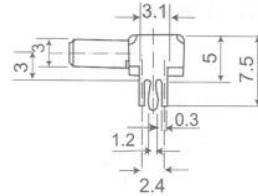
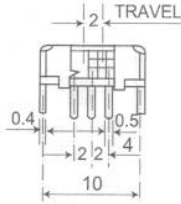
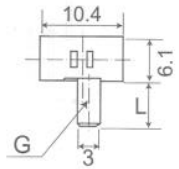


# SK Slide Switches

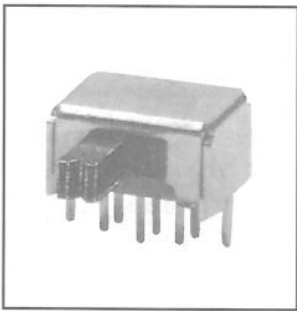
2P2T



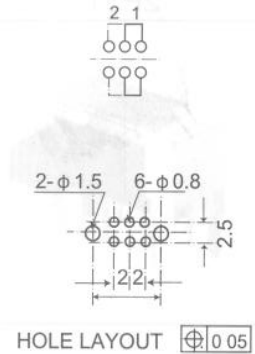
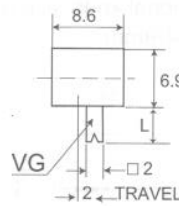
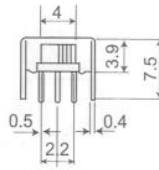
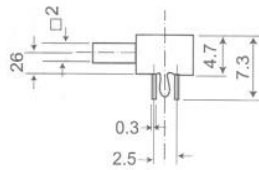
**SK22D02G**  
Optional knob size (L)  
G : 2-7mm



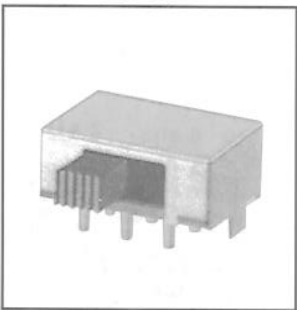
2P2T



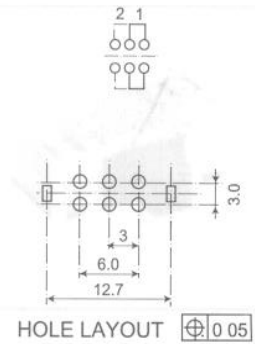
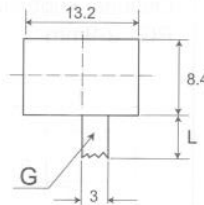
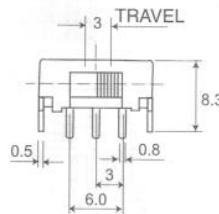
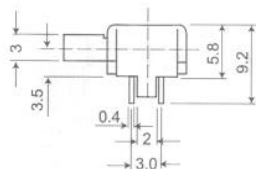
**SK22D03VG**  
Optional knob size (L)  
VG : 3-12mm



2P2T



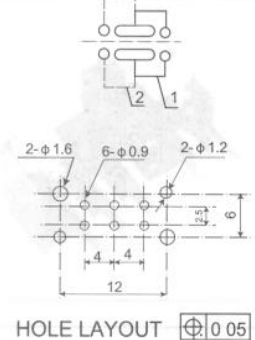
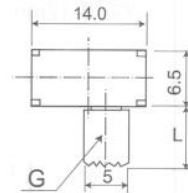
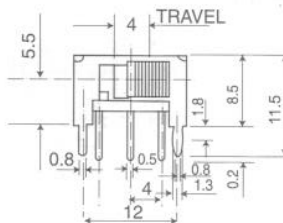
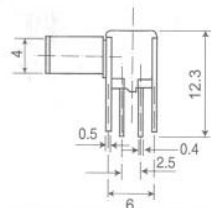
**SK22F14G**  
Optional knob size (L)  
G : 4-9mm



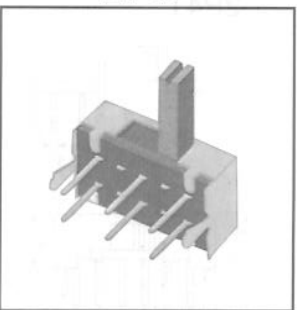
2P2T



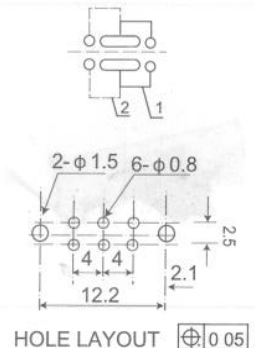
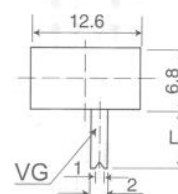
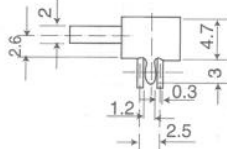
**SK22H09G**  
Optional knob size (L)  
G : 4-9mm



2P2T

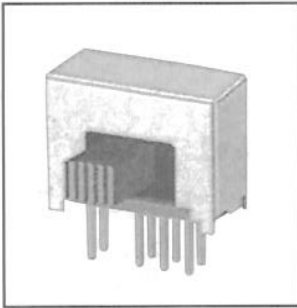


**SK22H07VG**  
Optional knob size (L)  
VG : 3-12mm

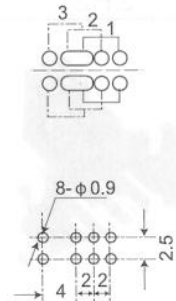
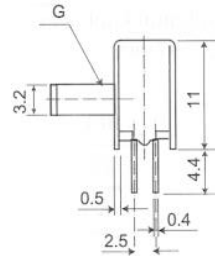
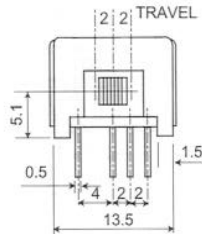
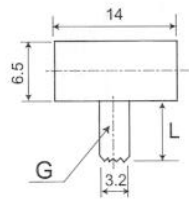


# SK Slide Switches

2P3T

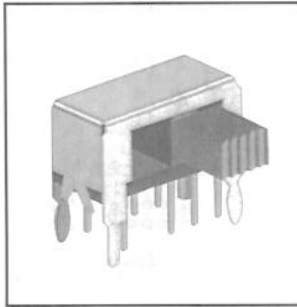


**SK23D01G**  
Optional knob size (L)  
G : 4-9mm

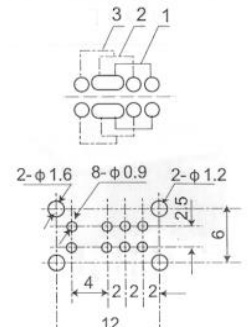
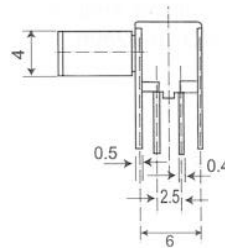
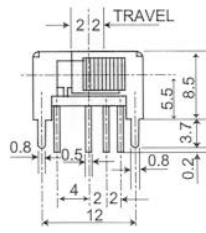
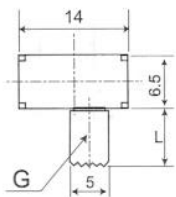


HOLE LAYOUT  $\pm 0.05$

2P3T



**SK23D29G**  
Optional knob size (L)  
G : 4-9mm

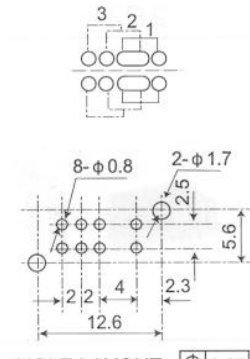
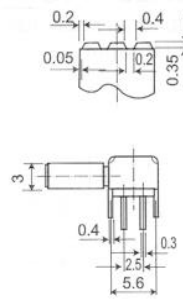
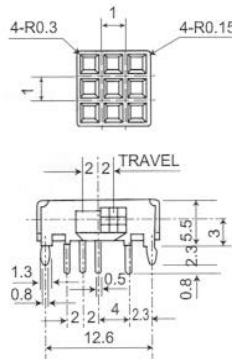
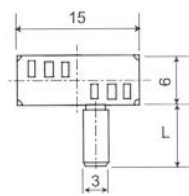


HOLE LAYOUT  $\pm 0.05$

2P3T

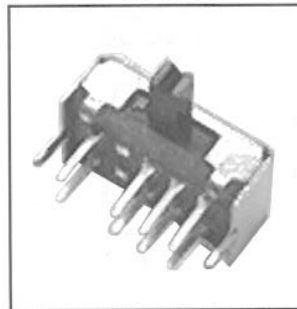


**SK23D06PG**  
Optional knob size (L)  
PG : 2-9mm

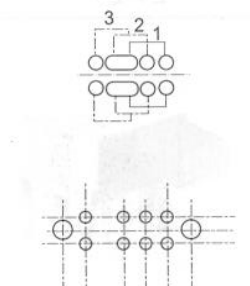
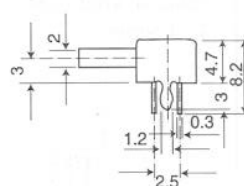
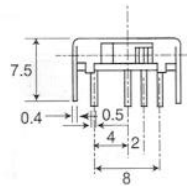


HOLE LAYOUT  $\pm 0.05$

2P3T

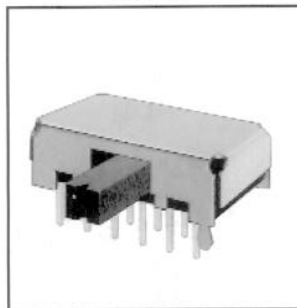


**SK23D07VG**  
Optional knob size (L)  
VG : 3-12mm

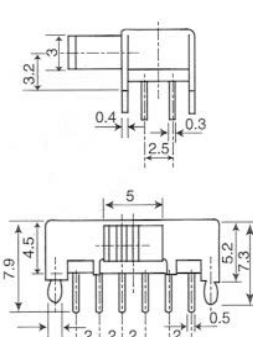
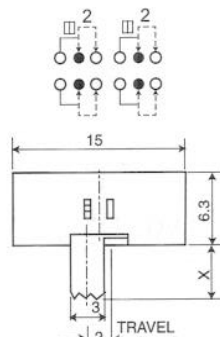


HOLE LAYOUT  $\pm 0.05$

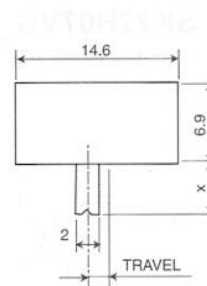
4P2T



**SK42D01G**

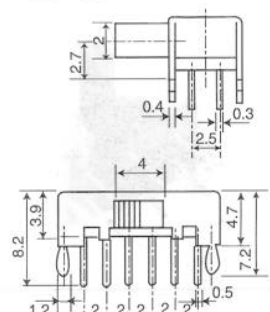


**SK42D02G**



**SK24D02G**

2P4T





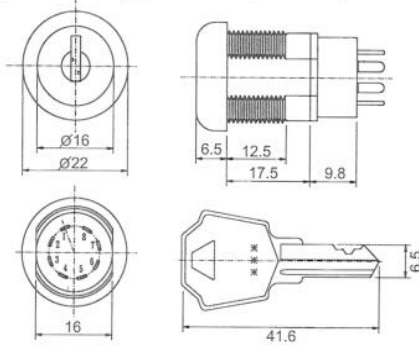


# Keylock , Cord Switch , Socket

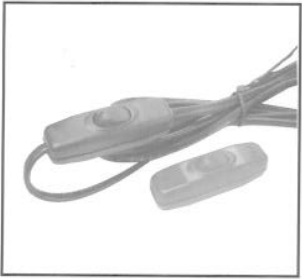
( Various types for optional )



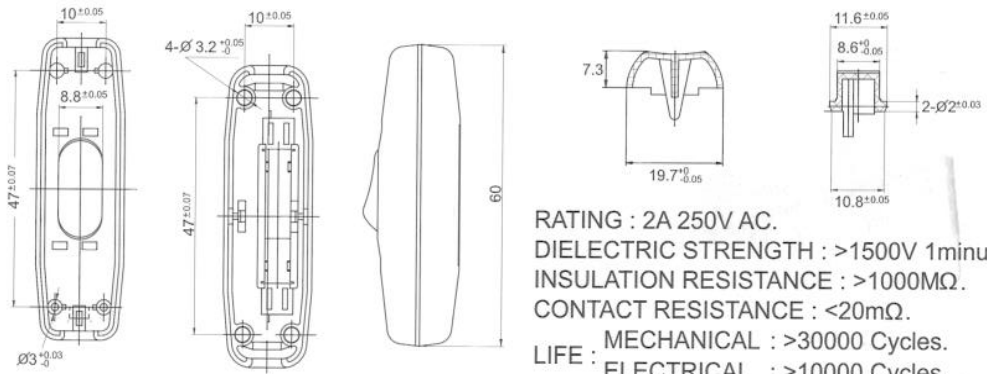
**S215-E**



LOCK : Bright nickel plated zinc alloy with nickel facing.  
 (Black & polished chrome facing available)  
 TUMBLER MECHANISM : 4-disc tumbler cylinder.  
 KEYS : Brass with code no.  
 CONTACTS : Silver plated cu.  
 TERMINALS : Gold plated cu.  
 CONTACT SPRING : Piano wire.



**LC303B**

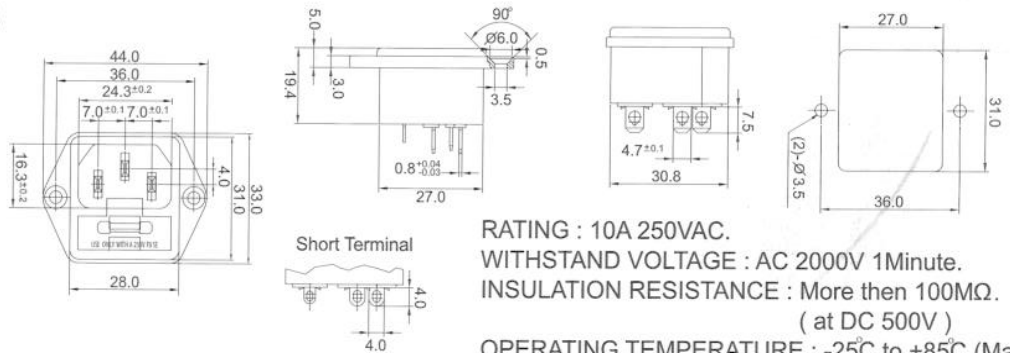


RATING : 2A 250V AC.  
 DIELECTRIC STRENGTH : >1500V 1minute.  
 INSULATION RESISTANCE : >1000M $\Omega$ .  
 CONTACT RESISTANCE : <20m $\Omega$ .  
 LIFE : MECHANICAL : >30000 Cycles.  
 ELECTRICAL : >10000 Cycles.

( Socket with fuse holder )



**JR-101-1F**

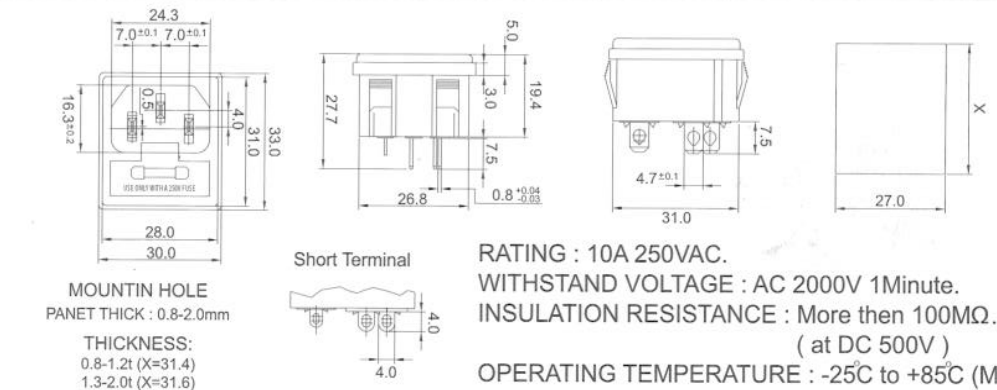


RATING : 10A 250VAC.  
 WITHSTAND VOLTAGE : AC 2000V 1Minute.  
 INSULATION RESISTANCE : More then 100M $\Omega$ .  
 ( at DC 500V )  
 OPERATING TEMPERATURE : -25 $^{\circ}$ C to +85 $^{\circ}$ C (Max).

( Socket with fuse holder )



**JR-101-1FS**

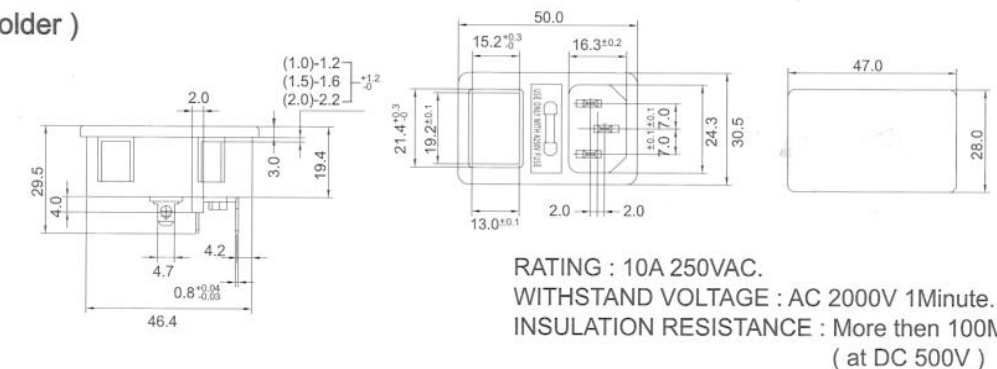


RATING : 10A 250VAC.  
 WITHSTAND VOLTAGE : AC 2000V 1Minute.  
 INSULATION RESISTANCE : More then 100M $\Omega$ .  
 ( at DC 500V )  
 OPERATING TEMPERATURE : -25 $^{\circ}$ C to +85 $^{\circ}$ C (Max).

( Socket with switch & fuse holder )



**JR-101-1FRS**



RATING : 10A 250VAC.  
 WITHSTAND VOLTAGE : AC 2000V 1Minute.  
 INSULATION RESISTANCE : More then 100M $\Omega$ .  
 ( at DC 500V )