

# MICRO SWITCHES



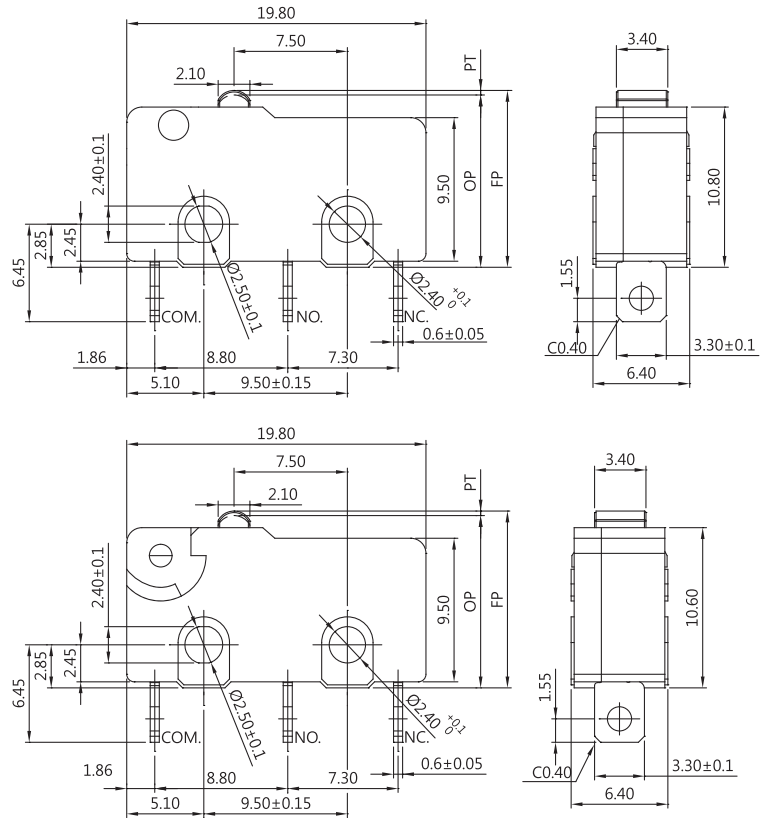
Internal snap-fit lever



External snap-fit lever

## DIMENSIONS

Unless otherwise specified, a tolerance of  $\pm 0.4\text{mm}$  applies to all dimensions.



## SM1-N & SM1-G SERIES

### SPECIFICATIONS

#### Contact Resistance(initial)

Max. 300 m $\Omega$   
(Measured by ohm meter-open voltage<1VDC, driver current-100 mA)

#### Insulation Resistance ( at 500VDC/minute )

Min. 100M $\Omega$

#### Dielectric Strength

Min. 500VAC(50-60HZ)/minute between Live parts.  
Min. 1500VAC(50-60HZ)/minute between Live parts and dead metal parts

#### Operating Temperature Range

-40°C to 125°C ( with no icing )

#### Vibration

10~55Hz, displacement 0.75 mm (p-p)

#### Electrical Service Life

Min. 10,000 operations

#### Electrical Operating Frequency

10~30 operations per minute

#### Mechanical Service Life

All series for H force: No define the life cycles  
All series for F force: Min. 1,000,000 operations  
Others: Min. 5,000,000 operations

#### Mechanical Operating Frequency

120 operations per minute

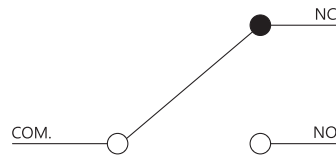
#### Operating application of the switch

Set the switch pushing distance from 60% to 90% of the specified OT value

### APPLICATIONS

Telephone, Air conditioner, Computer, Humidifier, Alarm, Time recorder, Mixer & Chopper, Solder gun, Neon phone, Fax machine, Joystick, Water pump, Gas detector, Pencil sharpener, Money sorter, Food processor, Electric knife, Toy car, Juice maker, Electric steak pan.

### CONTACT CONFIGURATION



### CERTIFICATE INFORMATION

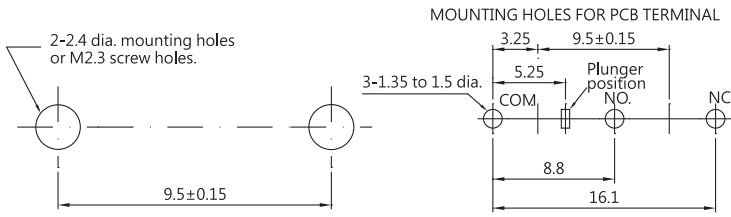
Model Name	UL, cUL	ENEC
SM1-G1 SM1-NC1 SM1-GC1	0.1RA 125/250VAC $\mu$ T125 1E4 0.1RA 30VDC $\mu$ T125 1E4	0.1A 125/250VAC $\mu$ T125 1E4 0.1A 30VDC $\mu$ T125 1E4
SM1-N3 SM1-G3 SM1-NC3 SM1-GC3	3RA 125/250VAC $\mu$ T125 1E4 3RA 30VDC $\mu$ T125 1E4	3A 125/250VAC $\mu$ T125 1E4 3A 30VDC $\mu$ T125 1E4
SM1-N6 SM1-G6	6RA 125/250VAC $\mu$ T125 1E4 6GPA 125/250VAC $\mu$ T85 1E4 5RA 30VDC $\mu$ T125 1E4	6A 125/250VAC $\mu$ T125 1E4 5A 30VDC $\mu$ T125 1E4 6(3)A 125/250VAC $\mu$ T85 1E4 ( S, F, H force only )

### THE SELECTION OF RATING & FORCE

Model Name	Rating	D	L	S	F	H
SM1-G1 SM1-NC1 or SM1-GC1	0.1A	*	*	*	*	*
SM1-N3 or SM1-G3	3A	*	*	*	*	*
SM1-NC3 or SM1-GC3	3A		*	*	*	*
SM1-N6 or SM1-G6	6A	*	*	*	*	*
SM1-N6S, N6F, N6H	6(3)A			*	*	*

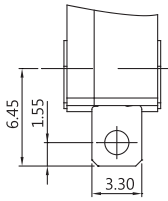
NOTE : The Symbol " \* " to represent the result is accepted for AC

## MOUNTING HOLES

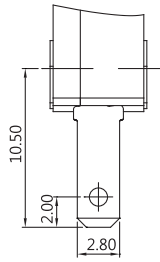


## TERMINAL TYPES ( The thickness of terminal is 0.6 mm, beside G type terminal )

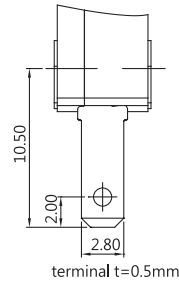
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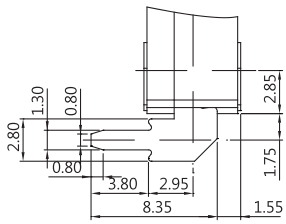
B TYPE



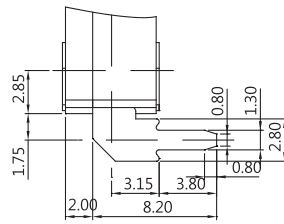
G TYPE



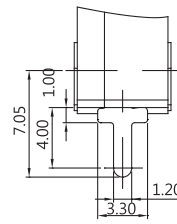
C TYPE



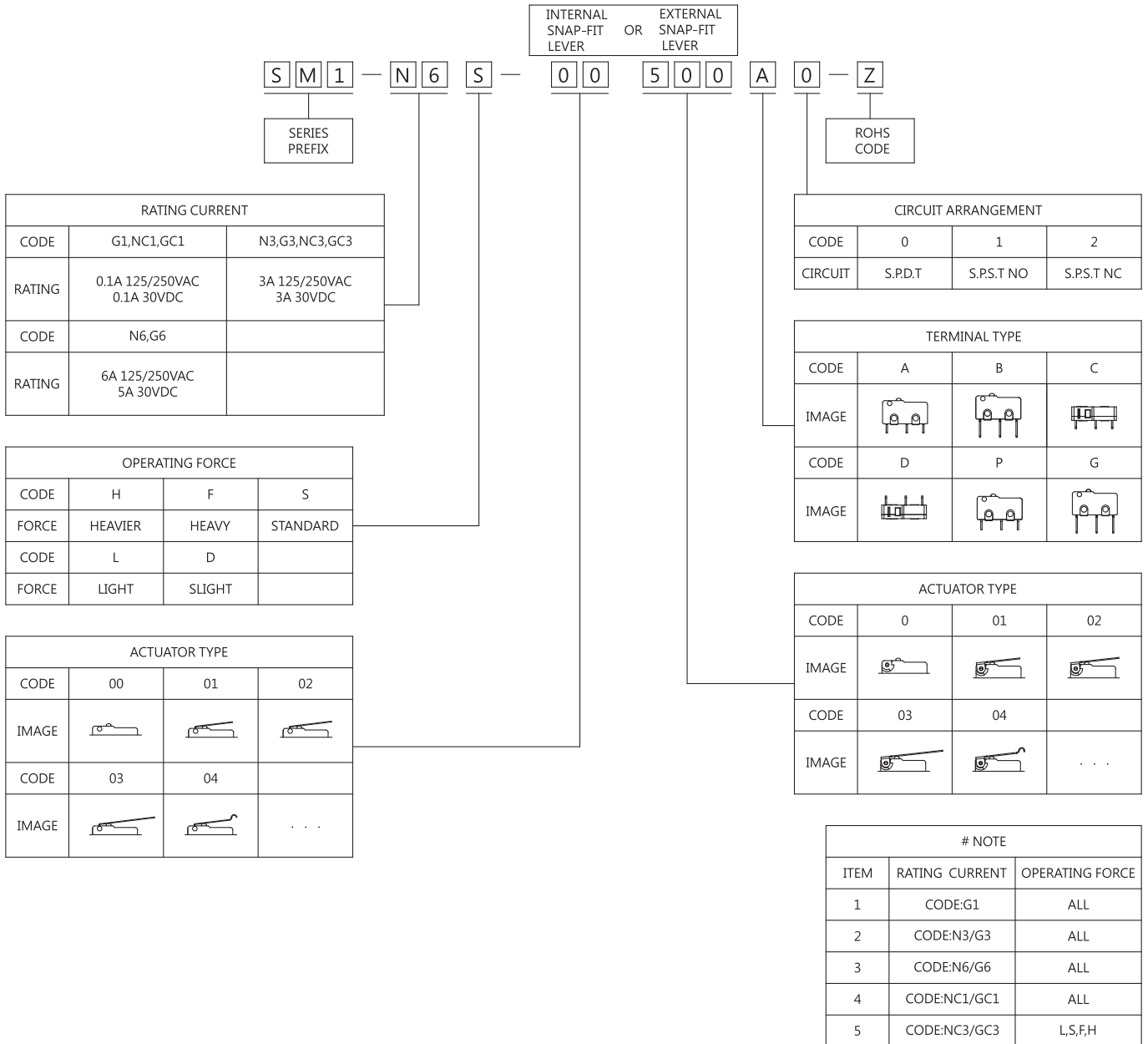
D TYPE



P TYPE



ORDERING INFORMATION



CAUTIONS

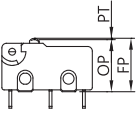
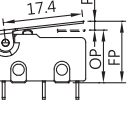
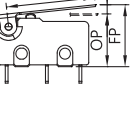
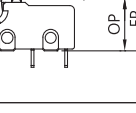
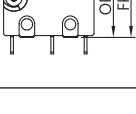
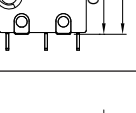
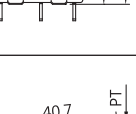
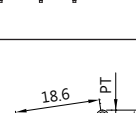
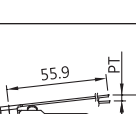



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OPERATING CHARACTERISTICS ( SM1 series - internal snap-fit lever )

SWITCH TYPE	PART SUFFIX	OF Max. (gf)		OP (mm)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	RF Min. (gf)
		H	F						
SM1- □□□ -00 □□ -Z		H	355	11.4±0.3	1.1	0.4	0.2	12.2	100
		F	280						50
		S	150						25
		L	95						10
SM1- □□□ -01 □□ -Z		H	118	11.4±1.1	4.63	0.15	1.45	14.6	20
		F	90	11.8±0.8	3.6	0.6	0.8		9
		S	50						6
		L	28						1
SM1- □□□ -02 □□ -Z		H	107					11.4±1.3	5.29
		F	82	11.8±0.9	4.03	0.67	0.9	8	
		S	45					5	
		L	25					1	
SM1- □□□ -03 □□ -Z		H	87					11.0±1.8	7.47
		F	70	11.8±1.5	5.35	0.7	1.19	5	
		S	34					2	
		L	20					1	
SM1- □□□ -04 □□ -Z		H	111					13.3±1.2	5.02
		F	85	13.7±0.9	3.86	0.64	0.86	8	
		S	47					5	
		L	26					1	
SM1- □□□ -05 □□ -Z		H	117					17.1±1.1	4.60
		F	90	17.5±0.8	3.8	0.6	0.8	9	
		S	50					6	
		L	28					1	
SM1- □□□ -06 □□ -Z		H	97					18.0±1.5	6.12
		F	75	19.0±1.5	5.7	0.85	1.0	7	
		S	42					2	
		L	23					1	
SM1- □□□ -07 □□ -Z		H	55					9.9±2.7	11.20
		F	53	11.8±2.0	8.6	0.95	1.8	3	
		S	25					1	
		L	16					1	
SM1- □□□ -08 □□ -Z		F	58					-2.3±3.0	6.0
		S	25	1					
		L	17	1					
SM1- □□□ -09 □□ -Z		F	38	11.8±3.0	13.3	1.0	2.9	22.1	2
		S	15						2
		L	12						1

OPERATING CHARACTERISTICS ( SM1 series - external snap-fit lever )

SWITCH TYPE	PART SUFFIX	OF Max. (gf)		OP (mm)	PT Max. (mm)	OT Min. (mm)	MD Max. (mm)	FP Max. (mm)	RF Min. (gf)
		H	F						
SM1- □□□ -500 □□ -Z		H	355	11.4±0.3	1.1	0.4	0.2	12.2	100
		F	280						50
		S	150						25
		L	95						10
SM1- □□□ -501 □□ -Z		H	145	11.8±1.10	4.6	0.45	0.8	15.3	15
		F	105						12
		S	50						6
		L	40						1
SM1- □□□ -502 □□ -Z		H	135	11.8±1.20	5.1	0.5	0.8	15.70	10
		F	100						8
		S	50						5
		L	40						--
SM1- □□□ -503 □□ -Z		H	110	11.8±1.60	6.90	0.55	1.10	17.10	10
		F	80						7
		S	45						4
		L	35						--
SM1- □□□ -504 □□ -Z		H	140	13.7±1.1	4.80	1.50	0.8	17.40	15
		F	100						11
		S	50						6
		L	40						1
SM1- □□□ -505 □□ -Z		H	145	17.9±1.0	4.05	0.55	0.9	21.00	15
		F	110						12
		S	55						6
		L	40						1
SM1- □□□ -506 □□ -Z		H	195	11.8±0.8	3.2	0.35	0.6	14.2	25
		F	145						19
		S	70						10
		L	50						2
SM1- □□□ -507 □□ -Z		H	85	11.8±2.6	10.8	0.7	1.9	20.0	5
		F	60						3
		S	35						1
		L	30						---
SM1- □□□ -508 □□ -Z		H	140	14.9±1.1	4.10	1.0	0.8	17.95	40
		F	100						11
		S	50						3
		L	40						1
SM1- □□□ -509 □□ -Z		H	65	11.8±3.5	14.8	0.95	2.6	23.1	1
		F	50						1
		S	30						1
		L	25						---