

# MICRO SWITCHES



internal snap-fit leaf



external snap-fit lever

## SM1-NX/GX SERIES

### SPECIFICATIONS

#### Contact Resistance(initial)

Max. 300 mΩ

(Measured by ohm meter-open voltage<1VDC, driver current-100 mA)

#### Insulation Resistance(at 250 VDC/minute)

Min. 100 MΩ

#### Dielectric Strength

500 VAC ( 50~ 60 Hz)

#### Operating Temperature Range

SM1-N1/N3/N6 series -40°C to 125°C (with no icing)

SM1-G1/G3/G6 series -40°C to 125°C (with no icing)

#### Vibration

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

#### Electrical Service Life

Min. 10,000 operations

#### Electrical Operating Frequency

10~30 operations per minute

#### Mechanical Service Life

SM1-N1/N3/N6 series (S/L/D force) Min. 5,000,000 operations

SM1-G1/G3/G6 series (S/L/D force) Min. 5,000,000 operations

#### Mechanical Operating Frequency

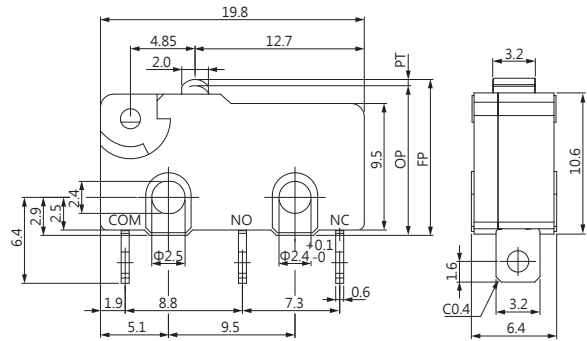
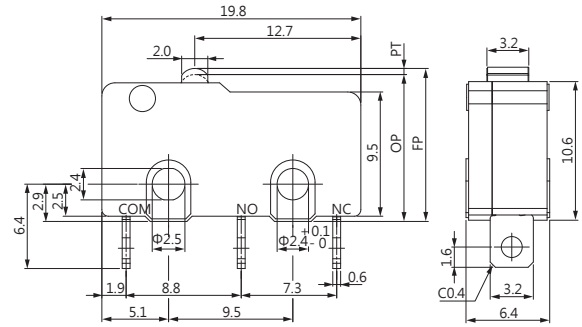
120 operations per minute

### APPLICATIONS

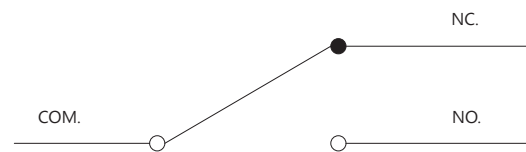
Telephone, Air conditioner, Computer, Humidifier, Alarm, Time recorder, Mixer & Chopper, Solder gun, Neon phone, Fax machine, Joystick, Water pump, Gas detector, Pencil sharpener, Money sorter, Food processor, Electric knife, Toy car, Juice maker, Electric steak pan.

### DIMENSIONS

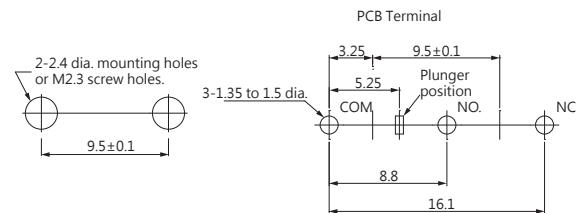
Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.



### CONTACT CONFIGURATION



### MOUNTING HOLES



### CERTIFICATE INFORMATION

Model Name	UL, cUL	ENEC15
SM1-N1 SM1-G1	0.1A 125/250VAC(Temp:125°C) 0.1A 30VDC (Temp:125°C) Min. 10,000 operations	0.1A 125/250VAC,μT125 0.1A 30VDC,μT125
SM1-N3 SM1-G3	3A 125/250VAC(Temp:125°C) 3A 30VDC (Temp:125°C) Min. 10,000 operations	3A 125/250VAC,μT125 3A 30VDC,μT125
SM1-N6 SM1-G6	6A 125/250VAC(Temp:125°C) 5A 30VDC (Temp:125°C) Min. 10,000 operations	6A 125/250VAC,μT125 5A 30VDC,μT125

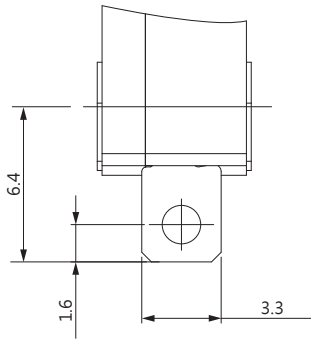
### THE SELECTION OF RATING & FORCE

MODEL	Rating	D	L	S	H
SM1-NX SM1-GX	0.1A	*	*	*	*
	3A	*	*	*	*
	6 A	*	*	*	*

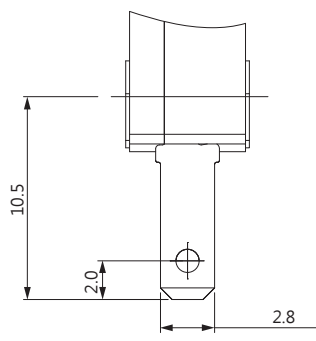
NOTE : The Symbol " \* " to represent the result is accepted for AC

TERMINAL TYPES (The thickness of terminal is 0.6)

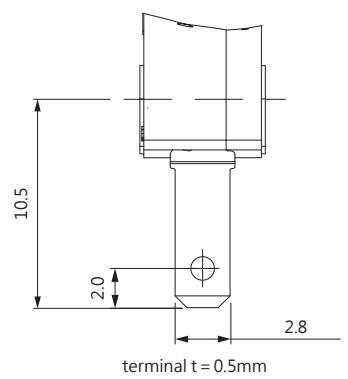
A TYPE



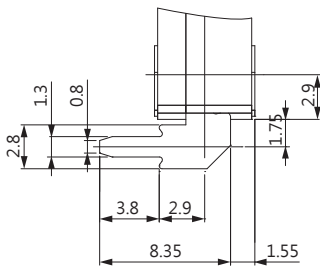
B TYPE



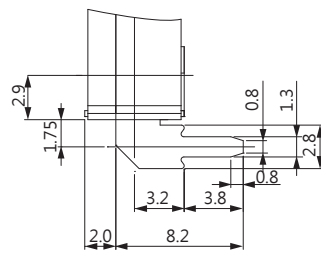
G TYPE



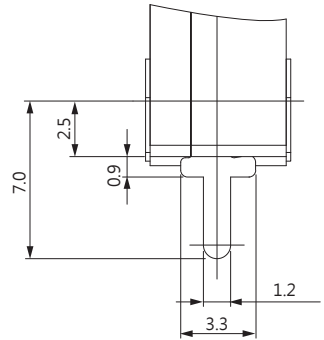
C TYPE



D TYPE



P TYPE



ORDERING INFORMATION

S M 1		N 6		S		INTERNAL SNAP-FIT LEVER OR INTERNAL SNAP-FIT LEVER		A		0		Z	
SERIES PREFIX	C O D E	RATING CURRENT	C O D E	OPERATING FORCE	C O D E	INTERNAL ACTUATOR TYPE	C O D E	EXTERNAL ACTUATOR TYPE	C O D E	TERMINAL TYPE	C O D E	CONTACT ARRANGEMENT	ROHS CODE
	N1	0.1A 125/250VAC	S	STANDARD	00		00		A		0	S.P.D.T	
	G1	0.1A 30VDC	L	LIGHT	01		01		B		1	S.P.S.T NO	
	N3	3A 125/250VAC	D	SLIGHT	02		02		C		2	S.P.S.T NC	
	G3	3A 30VDC	H	HEAVIER	03		03		D				
	N6	6A 125/250VAC			04		04		P				
	G6	5A 30VDC			05		05		G				
					06		06						
					07		07						
					08		08						
					09		09						

OPERATING CHARACTERISTICS

internal snap-fit leaf

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	S						
SM1- □□□ -00 □□ -Z		H	355	11.4±0.3	1.1	0.4	0.2	12.2	100
		S	150						25
		L	95						10
SM1- □□□ -01 □□ -Z		H	118	11.4±1.1	4.63	0.53	1.45	14.6	20
		S	50	11.8±0.8	3.6	0.6	0.8		6
		L	28						1
SM1- □□□ -02 □□ -Z		H	107	11.4±1.3	5.29	0.48	1.67	14.94	17
		S	45	11.8±0.9	4.03	0.67	0.9		5
		L	25						1
SM1- □□□ -03 □□ -Z		H	87	11.0±1.8	7.47	0.18	2.40	15.96	11
		S	34	11.8±1.5	5.35	0.89	1.19		2
		L	20						1
SM1- □□□ -04 □□ -Z		H	111	13.3±1.2	5.02	0.51	1.58	16.66	19
		S	47	13.7±0.9	3.86	0.64	0.86		5
		L	26						1
SM1- □□□ -05 □□ -Z		H	117	17.1±1.1	4.60	0.55	1.44	20.5	21
		S	50	17.5±0.8	3.8	0.6	0.8		6
		L	28						1
SM1- □□□ -06 □□ -Z		H	97	18.0±1.5	6.12	0.4	1.95	23.2	15
		S	42	19.0±1.5	5.7	1.0	1.0		2
		L	23						1
SM1- □□□ -07 □□ -Z		H	55	9.9±2.7	11.20	0.5	4.1	18.4	8
		S	25	11.8±2.0	8.6	1.5	1.8		1
		L	16						1
SM1- □□□ -08 □□ -Z		S	25	-2.3±3.0	6.0	X	1.9	5.4	1
		L	17						1
SM1- □□□ -09 □□ -Z		S	15	11.8±3.0	13.3	1.0	2.9	22.1	2
		L	12						1

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	S						
SM1- □□□ -500 □□ -Z		H	355	11.4±0.3	1.1	0.4	0.2	12.2	100
		S	150						25
		L	95						10
SM1- □□□ -501 □□ -Z		H	120	11.8±1.10	4.6	0.9	0.8	15.3	15
		S	50						6
		L	40						1
SM1- □□□ -502 □□ -Z		H	120	11.8±1.2	5.1	0.7	0.8	15.70	10
		S	50						5
		L	40						-
SM1- □□□ -503 □□ -Z		H	100	11.8±1.60	6.90	0.9	1.10	17.10	10
		S	45						4
		L	35						-
SM1- □□□ -504 □□ -Z		H	120	13.7±1.1	4.80	1.50	0.8	17.40	15
		S	50						6
		L	40						1
SM1- □□□ -505 □□ -Z		H	125	17.9±1.0	4.05	0.55	0.9	21.00	15
		S	55						6
		L	40						1
SM1- □□□ -506 □□ -Z		H	160	11.8±0.8	3.2	0.6	0.6	14.2	25
		S	70						10
		L	50						2
SM1- □□□ -507 □□ -Z		H	80	11.8±2.6	10.8	1.2	1.9	20.00	5
		S	35						1
		L	30						-
SM1- □□□ -508 □□ -Z		H	120	14.9±1.1	4.10	1.0	0.8	17.95	40
		S	50						3
		L	40						1
SM1- □□□ -509 □□ -Z		H	65	11.8±3.5	14.8	2.8	2.6	17.9	1
		S	30						1
		L	25						-