

# MICRO SWITCHES



internal snap-fit lever



external snap-fit lever

## SM1 SERIES

### SPECIFICATIONS

#### Contact Resistance(initial)

Max. 300 mΩ

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

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

Min. 100MΩ

#### 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

SM1-P1/03/06/10/16 series -40°C to 125°C ( with no icing )

SM1-C1/C3/C5 series -40°C to 85°C ( with no icing )

SM1-S5 series -40°C to 55°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

For SM1-10S series: Min. 1,000,000 operations

Others : Min. 10,000,000 operations

#### Mechanical Operating Frequency

120 operations per minute

#### Operating application of the switch

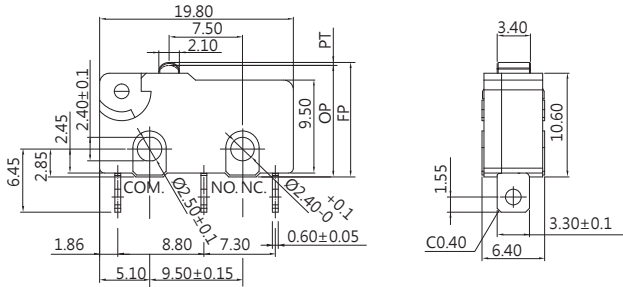
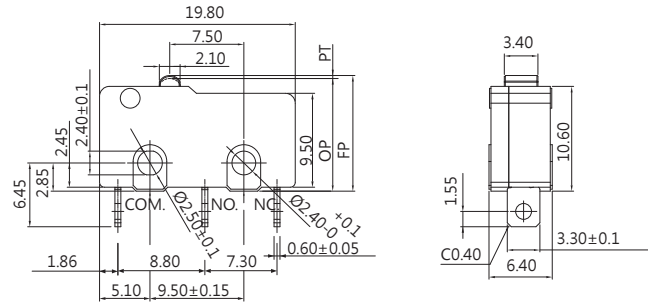
Set the switch pushing distance from 60% to 90% of the specified OT value

### 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

### DIMENSIONS

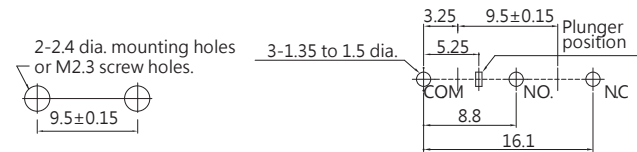
Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions



### CONTACT CONFIGURATION



### MOUNTING HOLES



### CERTIFICATE INFORMATION

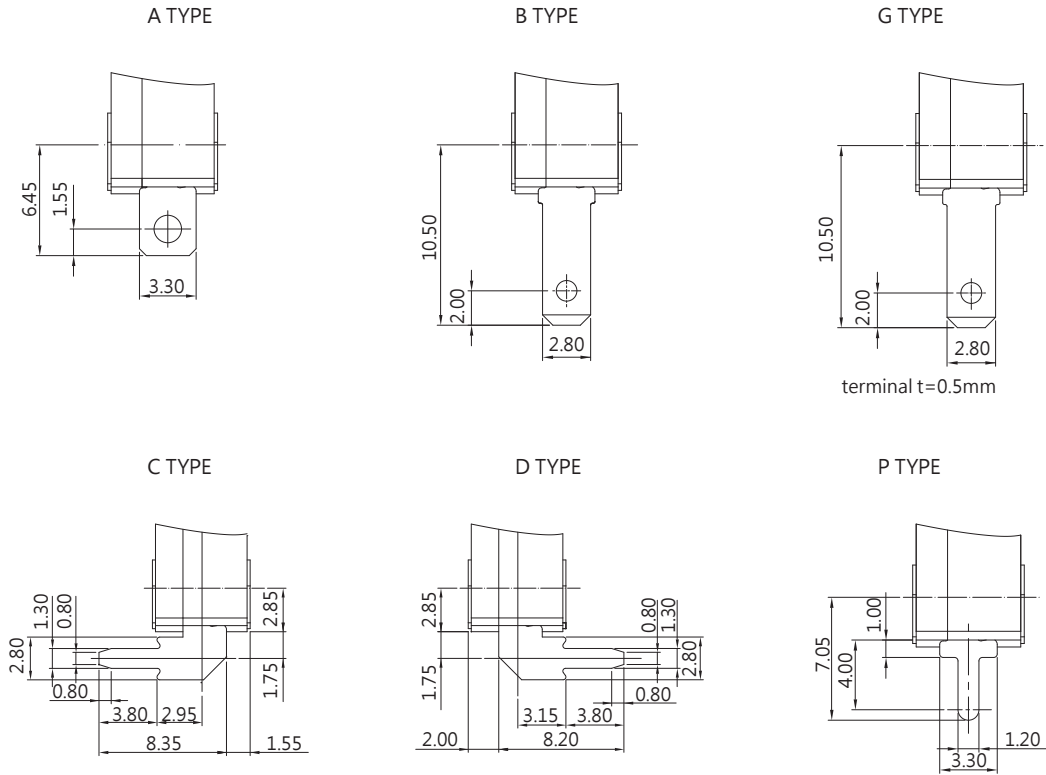
Model	UL, cUL	ENEC
SM1-P1	0.1A 125/250VAC (Temp: 125°C) Min. 10,000 operations	0.1A 125/250VAC μ40T125 1E4
SM1-03	3A 125/250VAC (Temp: 125°C) Min. 10,000 operations	3A 125/250VAC μ40T125 1E4
SM1-06	6A 125/250VAC (Temp: 125°C) Min. 10,000 operations	6A 125/250VAC μ 40T125 1E4 6(2)A 125/250VAC μ 40T125 1E4
SM1-10	10.1A 125/250VAC (Temp: 125°C) Min. 10,000 operations	10.1A 125/250VAC μ 40T125 1E4 6(2)A 125/250VAC μ 40T125 1E4
SM1-16	16A 125/250VAC (Temp: 125°C) Min. 10,000 operations	16.1A 125/250VAC μ 40T125 1E4 6(3)A 125/250VAC μ 40T125 1E4
SM1-C1	0.1A 125/250VAC (Temp: 85°C) Min. 10,000 operations	0.1A 125/250VAC μ T85 1E4
SM1-C3	3A 125/250VAC (Temp: 85°C) Min. 10,000 operations	3A 125/250VAC μ T85 1E4
SM1-C5	5A 125/250VAC (Temp: 85°C) Min. 10,000 operations	5A 125/250VAC μ T85 1E4
SM1-S5S	5RA 125/250VAC uT55 1E5	5A 125/250VAC uT55 1E5 ( Safety : ENEC15 )

### THE SELECTION OF RATING & FORCE

MODEL	Rating	D	L	S	H
SM1	0.1A	*	*	*	*
	3A	*	*	*	*
	5A	*	*	*	*
	6A	*	*	*	*
	10.1A			*	*
	16A				*

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

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



ORDERING INFORMATION

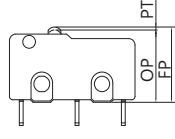
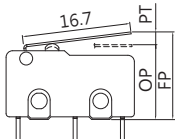
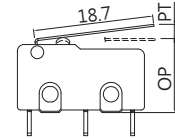
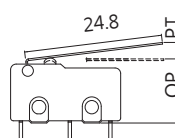
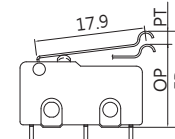
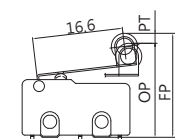
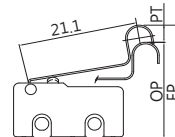
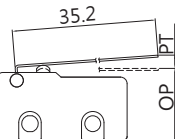
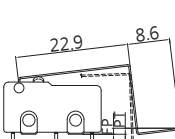
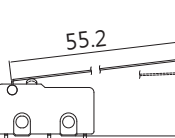
**S M 1** — **0 6** — **S** — **0 0** / **5 0 0** — **A** — **0** — **Z**

SERIES PREFIX	CODE	RATING CURRENT	CODE	OPERATING FORCE	INTERNAL SNAP-FIT LEVER	OR	EXTERNAL SNAP-FIT LEVER	CODE	TERMINAL TYPE	CODE	CONTACT ARRANGEMENT	ROHS CODE
	P1	0.1A 125/250VAC	S	STANDARD	00		00	A	A	0	S.P.D.T	
	03	3A 125/250VAC	L	LIGHT	01		01		B	1	S.P.S.T NO	
	06	6A 125/250VAC 6(2)A 125/250VAC	D	SLIGHT	02		02		C	2	S.P.S.T NC	
	10	10.1A 125/250VAC 6(2)A 125/250VAC	H	HEAVIER	03		03		D			
	16	16A 125/250VAC 6(3)A 125/250VAC			04		04		P			
	C1	0.1A 125/250VAC			05		05		G			
	C3	3A 125/250VAC			06		06					
	C5	5A 125/250VAC			07		07					
	S5	5A 125/250VAC HIGH LIFE			08		08					
					09		09					

NOTE#	ITEM	RATING CURRENT	OPERATING FORCE
1	CODE:P1		ALL
2	CODE:03		ALL
3	CODE:06		ALL
4	CODE:10		S,H
5	CODE:16		H
6	CODE:C1		ALL
7	CODE:C3		ALL
8	CODE:C5		ALL
9	CODE:S5		S

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	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 □□ -ZZ		S	15	11.8±3.0	13.3	1.0	2.9	22.1	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	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±1.20	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	20.0	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	23.1	1
		S	30						1
		L	25						---