



MICRO SWITCH ESW SERIES



FEATURES

- Sealed construction by epoxy resin and rubber cap for use in adverse environment such as dust or wet areas
- 2-piece spring mechanism design offering durable acute operation and long life
- Small compact size suitable for electric equipment
- RoHS Compliant
- Halogen Free series available

APPLICATIONS

- Communication equipment
- OA/FA machines
- Air purifier
- Ice-making equipment



SPECIFICATIONS

● Ratings	AC 125V 5A / 250V 3A DC 30V 3A
● Circuit arrangement	Single pole Double throw (1c) Single pole single throw (1a)(1b)
● Protective construction classification of IEC	Dust protected type IP50 Immersion protected type IP67

1.ELECTRICAL PERFORMANCE

● Insulation resistance	100MΩ Min. at 500VDC
● Dielectric strength	Between non-continuous terminals: AC 1000Vrms Between each terminal and other exposed metal parts: AC 1500Vrms Between each terminal and ground: AC 1500Vrms
● Initial contact resistance	200mΩ Max.

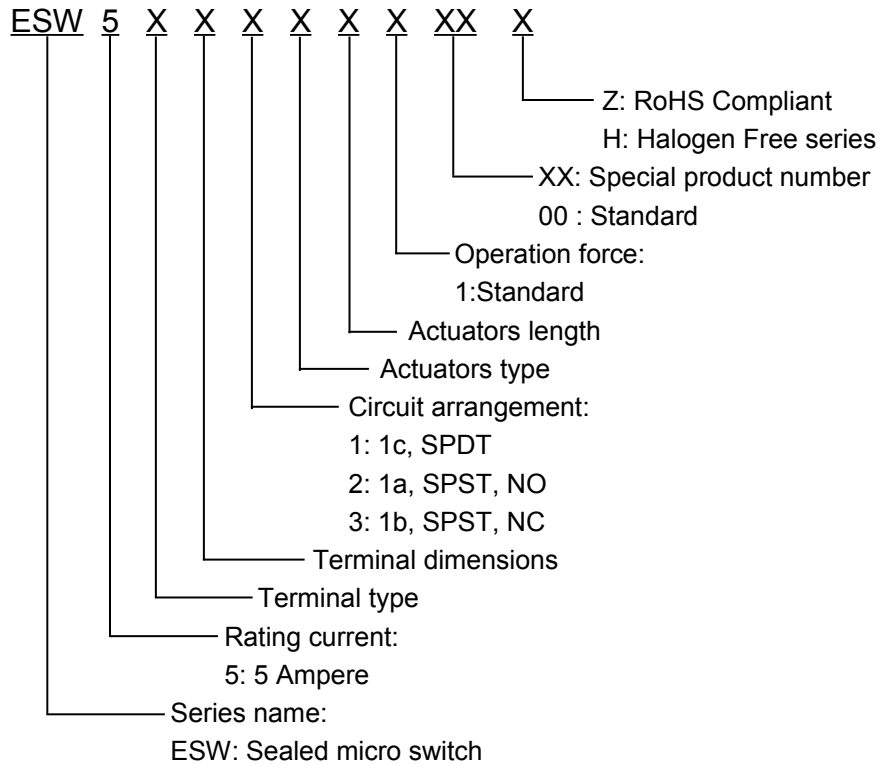
2.DURABILITY

● Mechanical Life	5,000,000 cycles Operations
● Electrical Life	100,000 cycles Operations

3.ENVIRONMENTAL

● Ambient Temperature	-40°C to +85°C (without dew condensation)
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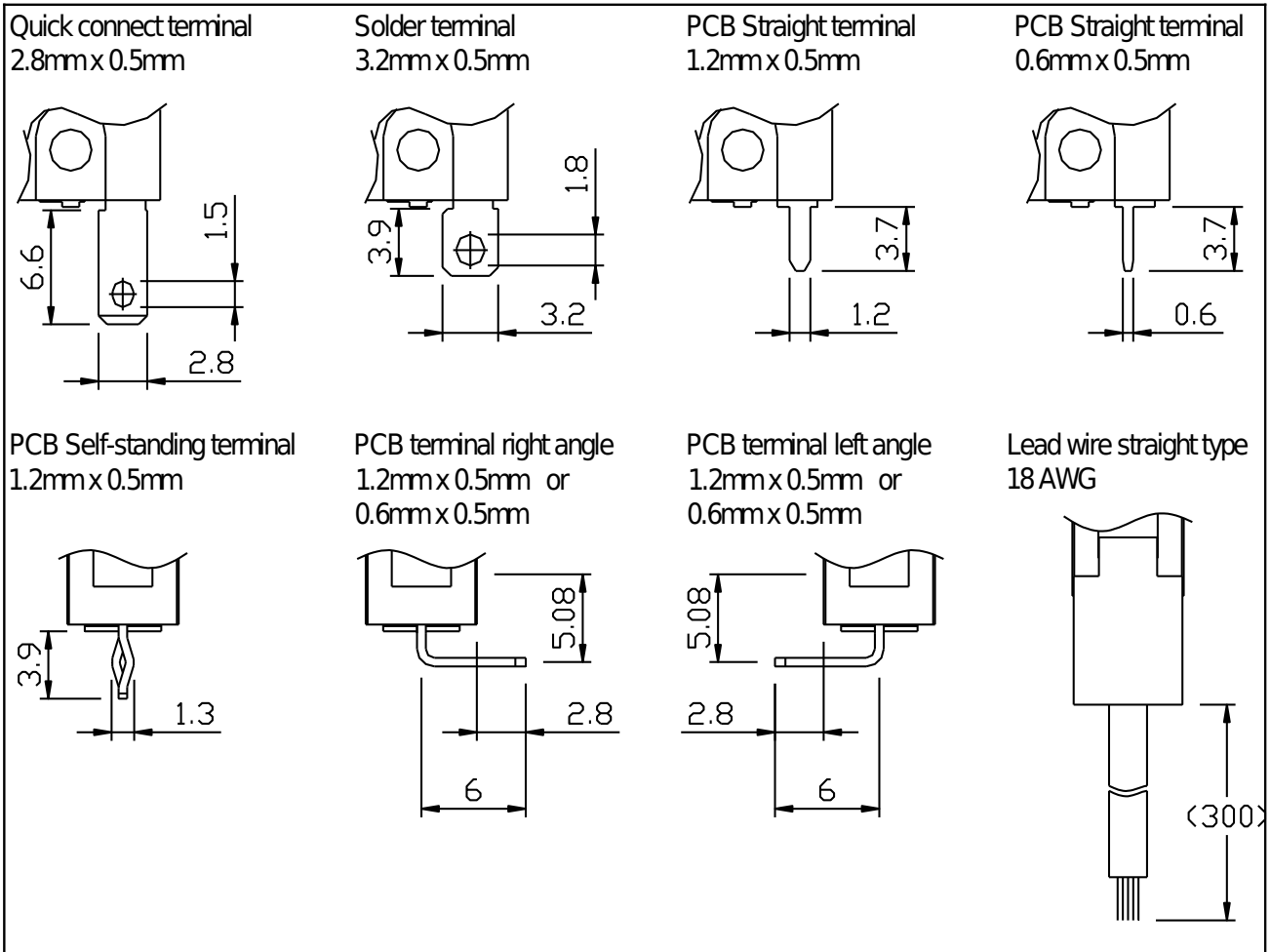
■ PART NUMBERING SYSTEM



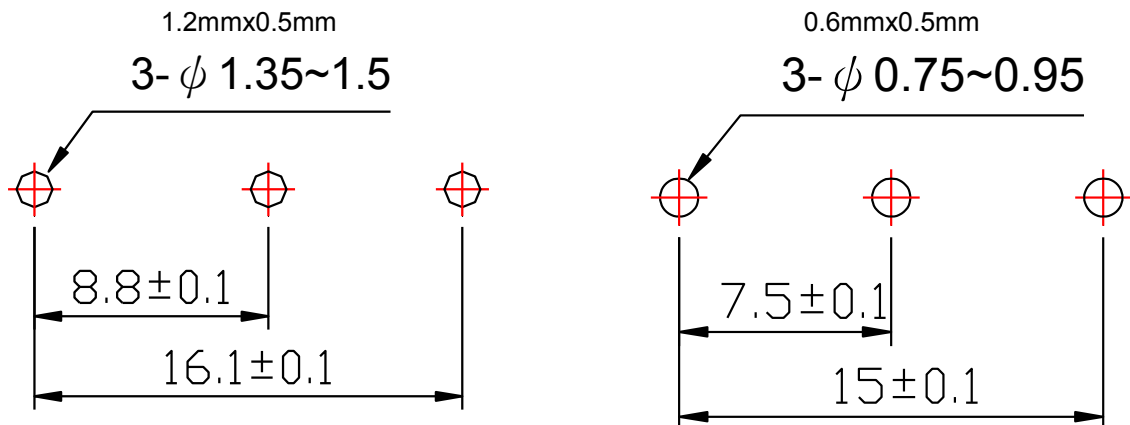
Code	Actuators type	Actuators length	
		Code A	Code B
00	Without lever	---	---
1	Straight lever	14.5mm	16.5mm
2	Simulated roller lever	15.8mm	---
3	Roller lever	14.5mm	---

Code	Terminal type	Terminal dimensions	
		Code A	Code B
1	#110 Quick connect terminal	2.8mmx0.5mm	---
2	PCB Self-standing terminal	1.2mmx0.5mm	---
3	PCB terminal (Straight)	1.2mmx0.5mm	0.6mmx0.5mm
4	PCB terminal (Right)	1.2mmx0.5mm	0.6mmx0.5mm
5	PCB terminal (Left)	1.2mmx0.5mm	0.6mmx0.5mm
6	Solder terminal	3.2mmx0.5mm	---
7	Lead wire straight type	18 AWG	---

■ TERMINAL OPTIONS UNIT:mm

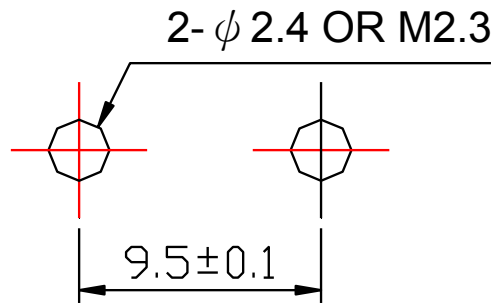
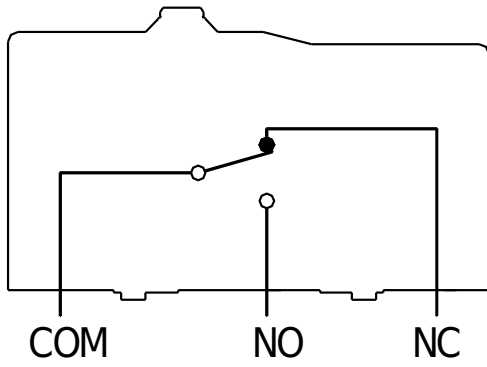


■ PC BOARD PATTERN

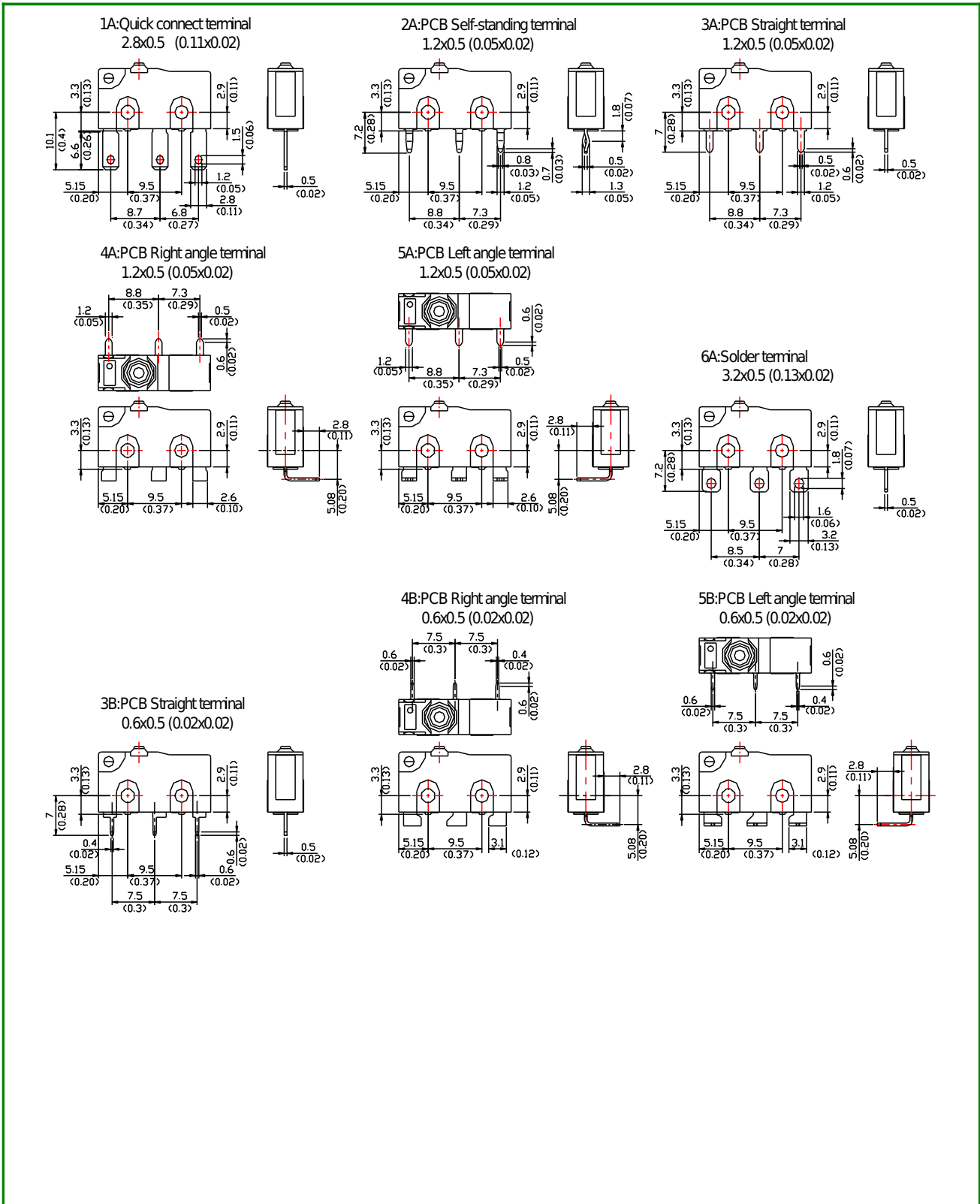


■ CIRCUIT DIMENSIONS

■ MOUNTING HOLE LAYOUT

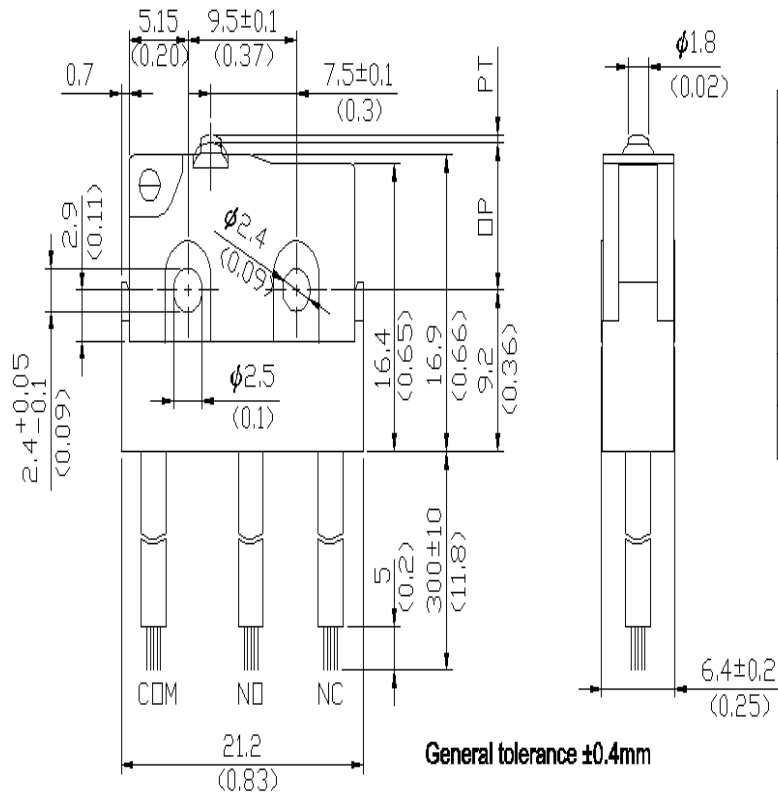


■ TERMINAL TYPE UNIT:mm(inch)



■ DIMENSIONS UNIT:mm(inch)

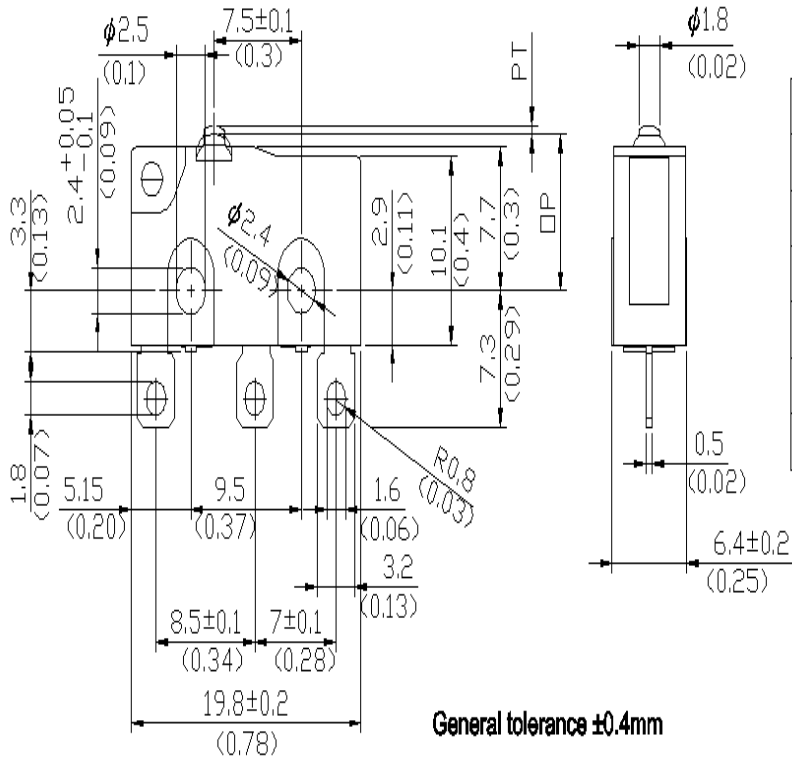
ESW57□1001 Without lever



1	Operating Force (OF)	180gf (1.76N) Max.
2	Release Force (RF)	30gf (0.29N) Min.
3	Pre-travel (PT)	0.6mm Max.
4	Overtravel (OT)	0.5mm Min.
5	Movement Differential (MD)	0.1mm Max.
6	Operating Position (OP)	8.4±0.3mm
7	Free Position (FP)	

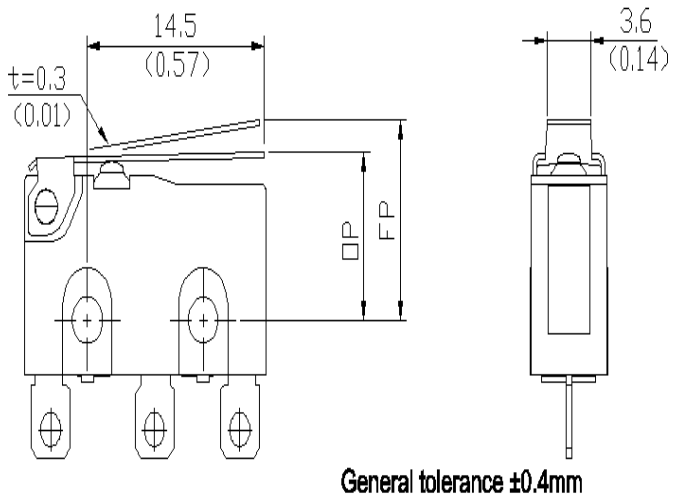
UL approval type: AWG 18
 Color of lead wire: COM--Black
 N.O.--Blue
 N.C.--Red

ESW5□1001 Without lever



1	Operating Force (OF)	180gf (1.76N) Max.
2	Release Force (RF)	30gf (0.29N) Min.
3	Pre-travel (PT)	0.6mm Max.
4	Overtravel (OT)	0.5mm Min.
5	Movement Differential (MD)	0.1mm Max.
6	Operating Position (OP)	8.4 ± 0.3mm
7	Free Position (FP)	

ESW5□□11A1
Straight lever

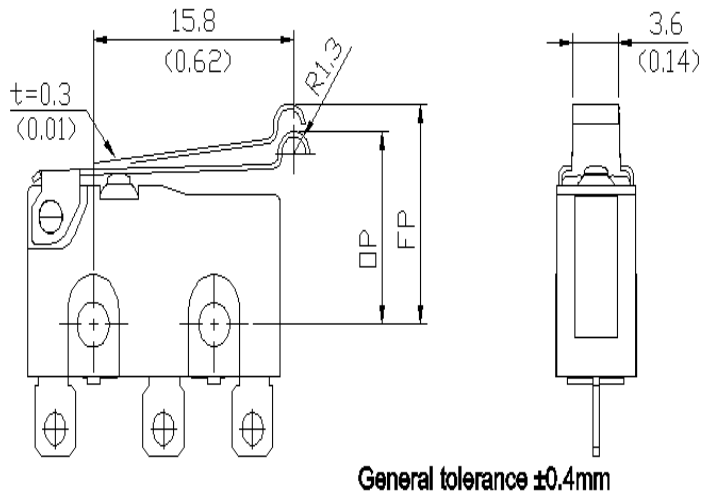


1	Operating Force (OF)	60gf (0.59N) Max.
2	Release Force (RF)	6gf (0.06N) Min.
3	Pre-travel (PT)	
4	Overtravel (OT)	1.0mm Min.
5	Movement Differential (MD)	0.8mm Max.
6	Operating Position (OP)	8.8 \pm 0.8mm
7	Free Position (FP)	13.6mm Max.



ESW5□□12A1

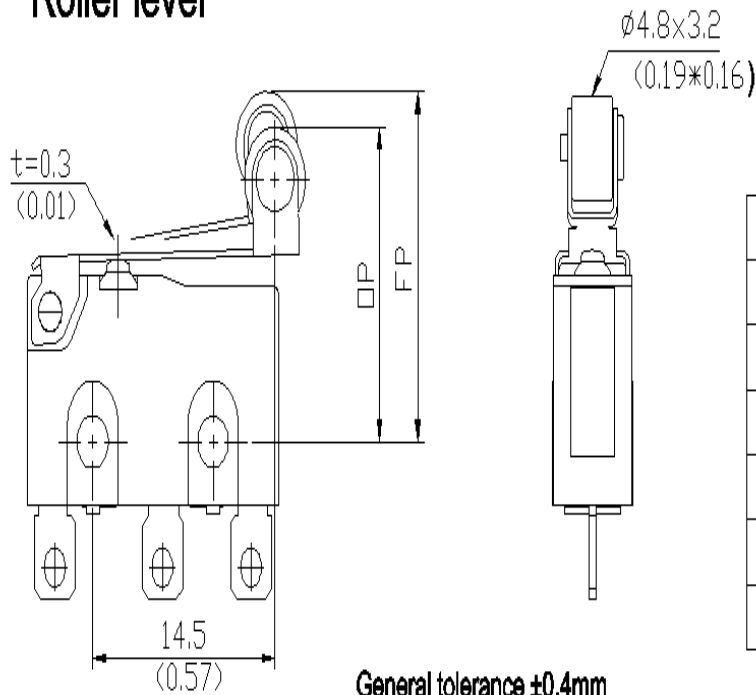
Simulated lever



1	Operating Force (OF)	60gf (0.59N) Max.
2	Release Force (RF)	6gf (0.06N) Min.
3	Pre-travel (PT)	
4	Overtravel (OT)	1.0mm Min.
5	Movement Differential (MD)	0.8mm Max.
6	Operating Position (OP)	10.7±0.8mm
7	Free Position (FP)	15.5mm Max.

ESW5□□13A1

Roller lever



General tolerance $\pm 0.4\text{mm}$

1	Operating Force (OF)	60gf (0.59N) Max.
2	Release Force (RF)	6gf (0.06N) Min.
3	Pre-travel (PT)	
4	Overtravel (OT)	1.0mm Min.
5	Movement Differential (MD)	0.8mm Max.
6	Operating Position (OP)	14.5 \pm 0.8mm
7	Free Position (FP)	19.3mm Max.