

MICRO SWITCH

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.

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

ELECTRICAL PERFORMANCE

Insulation resistance	100M Ω 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	50m Ω Max.

DURABILITY

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

ENVIRONMENTAL

Ambient Temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C (without dew condensation)
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PART NUMBERING SYSTEM

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ESW-5 X X X X X X XX
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+---- Series name:
      ESW:Sealed micro switch
    
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+--- XX:Special product number

+--- Operation force:

1:Standard

+--- Actuators length

+--- Actuators type

+--- Circuit arrangement:

1:1c,SPDT

2:1a,SPST,NO

3:1b,SPST,NC

+--- Terminal dimensions

+--- Terminal type

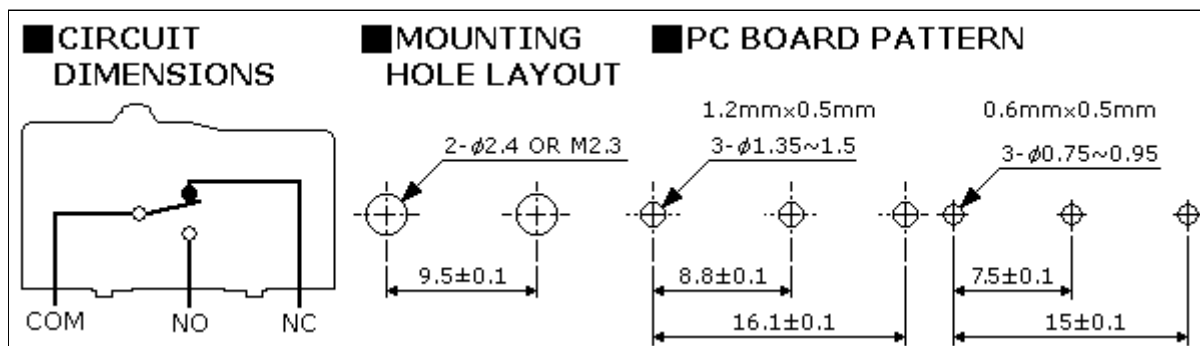
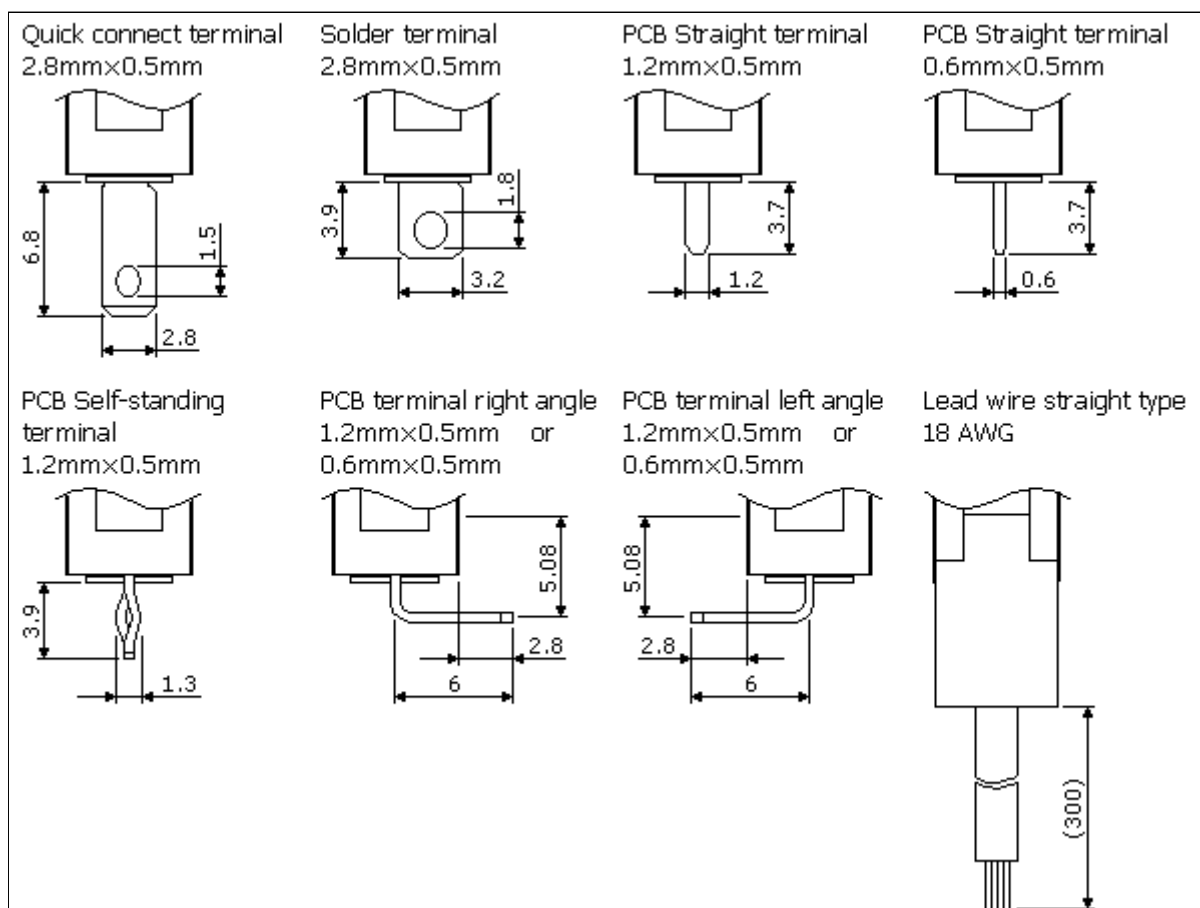
+--- Rating current:

5:5Ampere

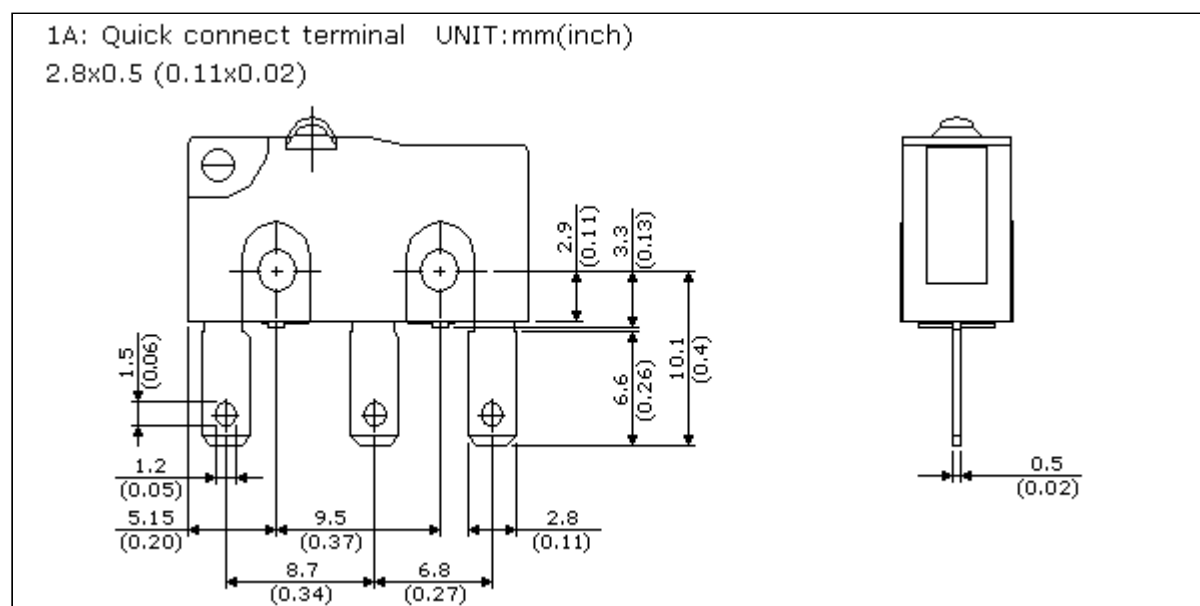
Code	Actuators type	Actuators length	
		Code A	Code B
00	Without lever	---	---
1	Straight lever	14.5mm	16.5mm
2	Simulated roller lever	15.8mm	---
3	Roller lever	14.5mm	---

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 Straight terminal	1.2mmx0.5mm	0.6mmx0.5mm
4	PCB Terminal right Angle	1.2mmx0.5mm	0.6mmx0.5mm
5	PCB Terminal left Angle	1.2mmx0.5mm	0.6mmx0.5mm
6	Solder terminal	3.2mmx0.5mm	---
7	Lead wire straight type	18 AWG	---

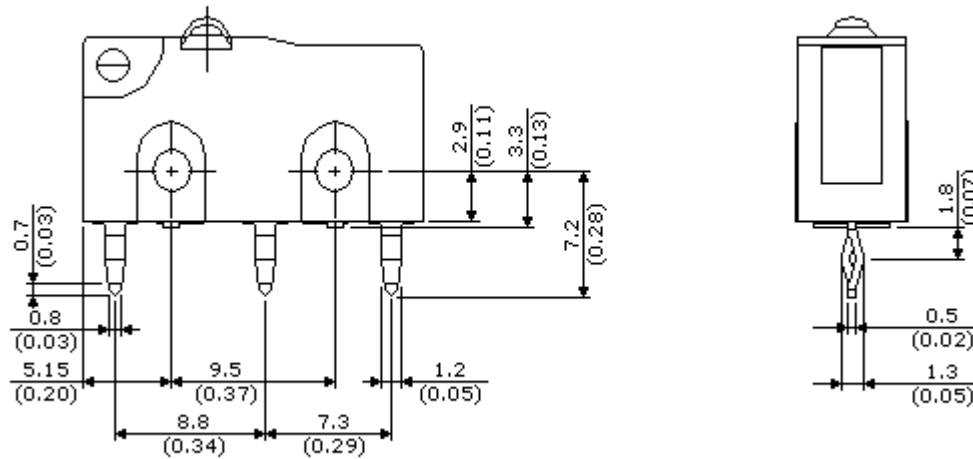
TERMINAL OPTIONS UNIT:mm



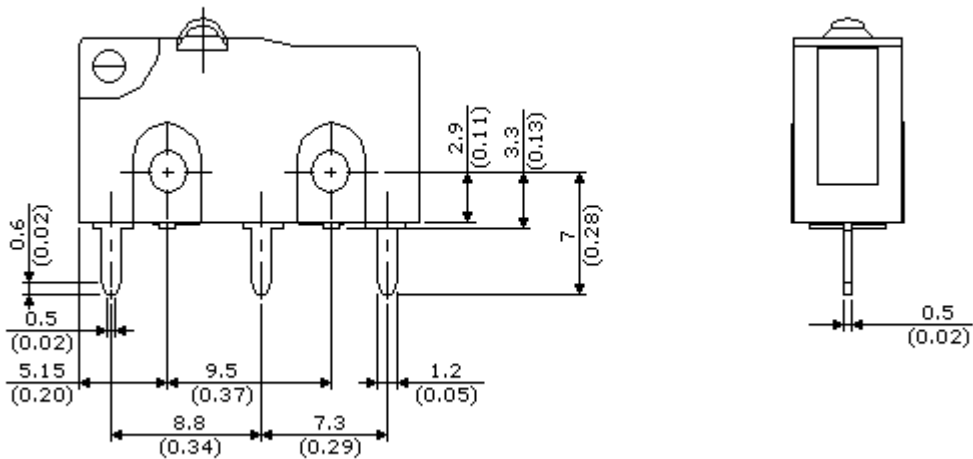
TERMINAL TYPE UNIT:mm(inch)



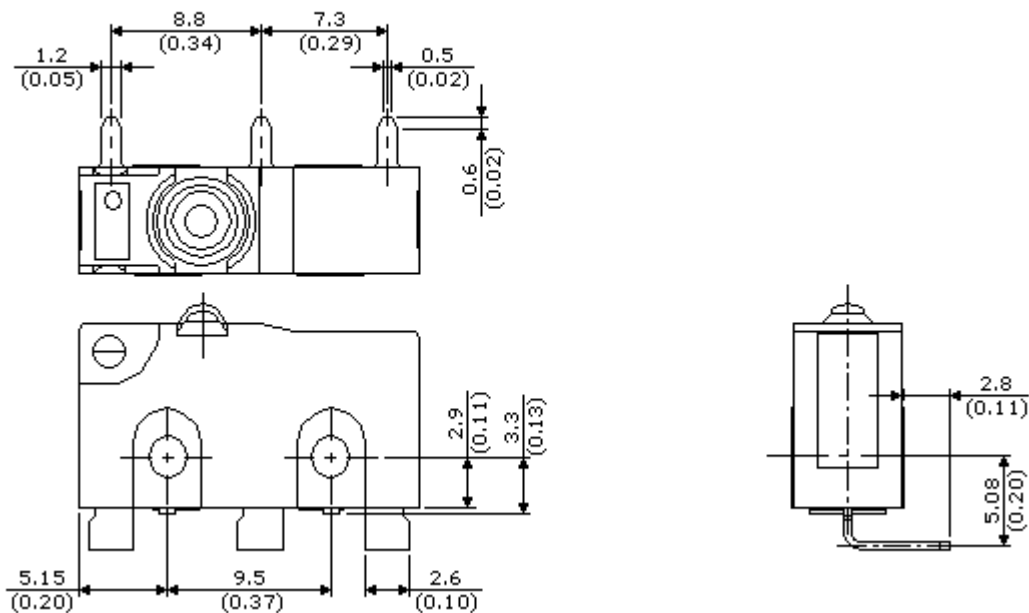
2A: PCB Self-standing terminal UNIT:mm(inch)
1.2x0.5 (0.05x0.02)



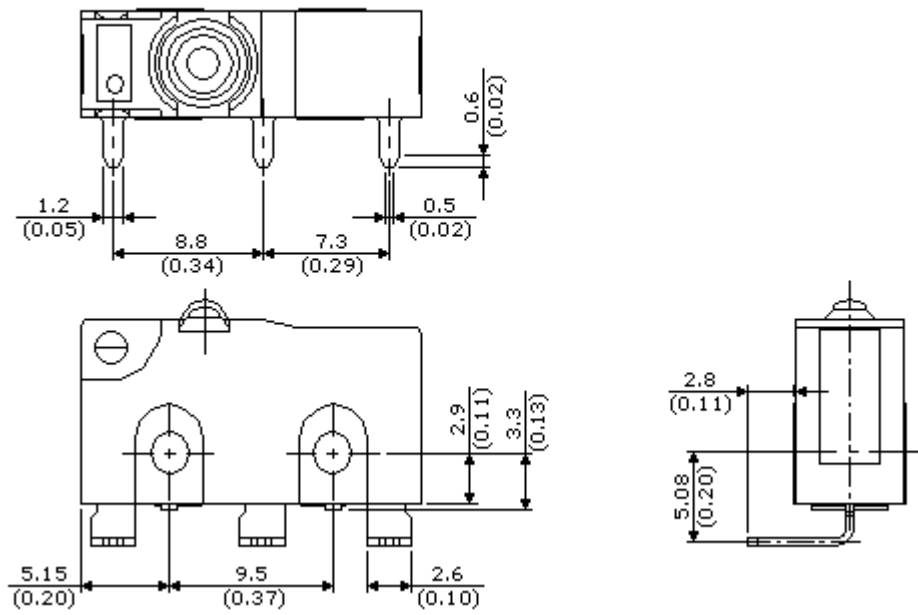
3A: PCB Straight terminal UNIT:mm(inch)
1.2x0.5 (0.05x0.02)



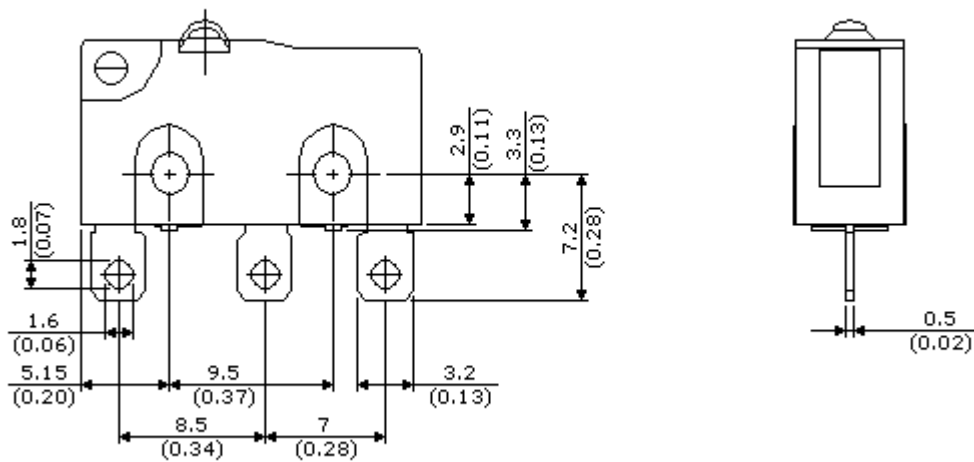
4A: PCB Right angle terminal UNIT:mm(inch)
1.2x0.5 (0.05x0.02)



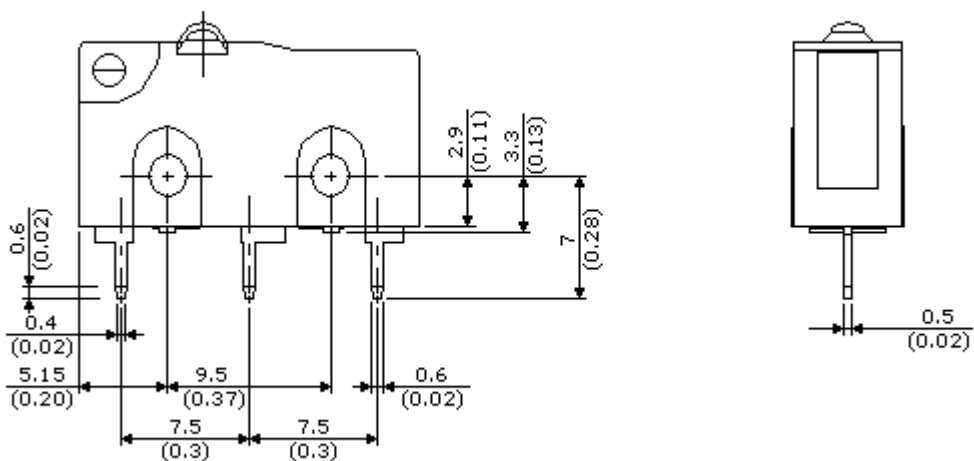
5A: PCB Left angle terminal UNIT:mm(inch)
 1.2x0.5 (0.05x0.02)



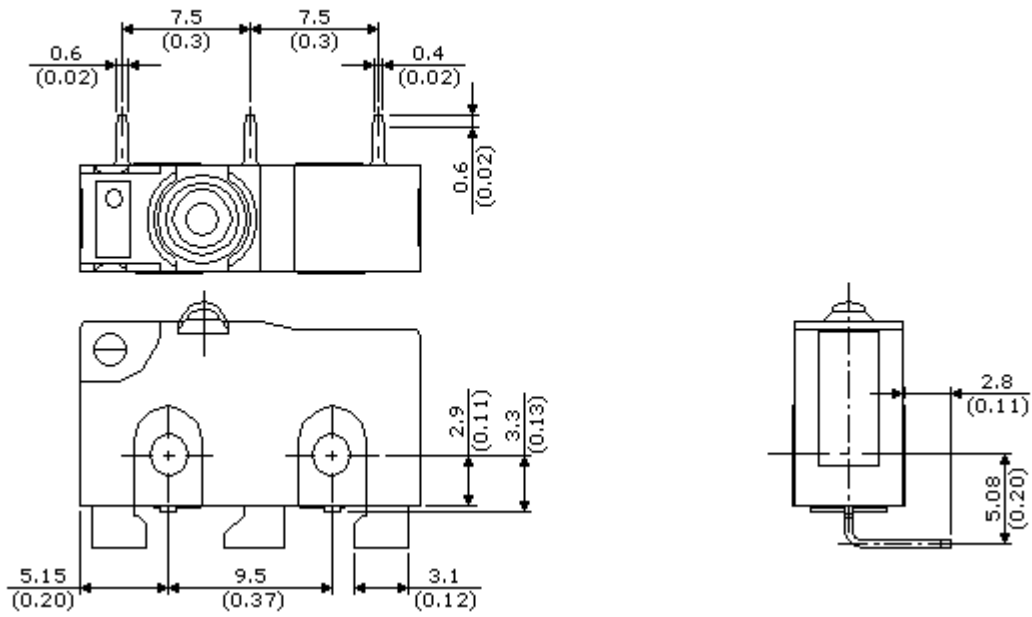
6A: Solder terminal UNIT:mm(inch)
 3.2x0.5 (0.13x0.02)



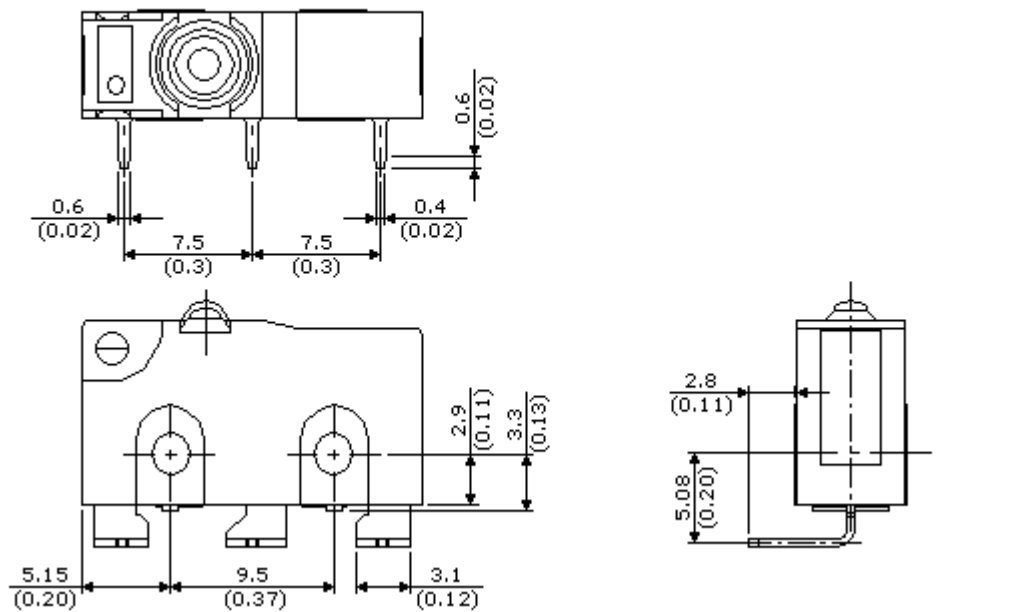
3A: PCB Straight terminal UNIT:mm(inch)
 1.2x0.5 (0.05x0.02)



4B: PCB Right angle terminal UNIT:mm(inch)
0.6x0.5 (0.02x0.02)



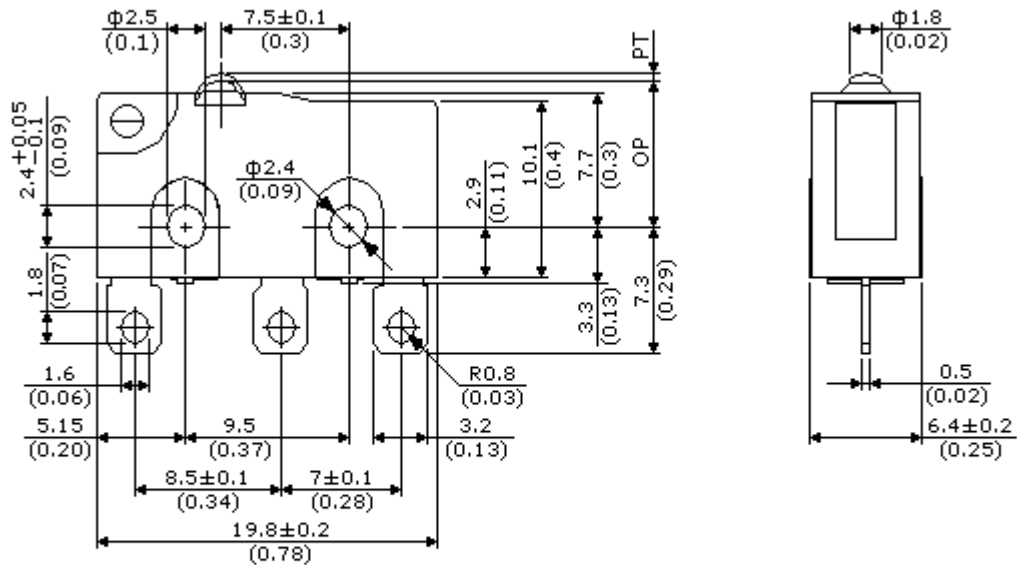
5B: PCB Left angle terminal UNIT:mm(inch)
0.6x0.5 (0.02x0.02)



DIMENSIONS UNIT:mm(inch)

ESW-5□□1001 DIMENSIONS UNIT:mm(inch)

Without lever

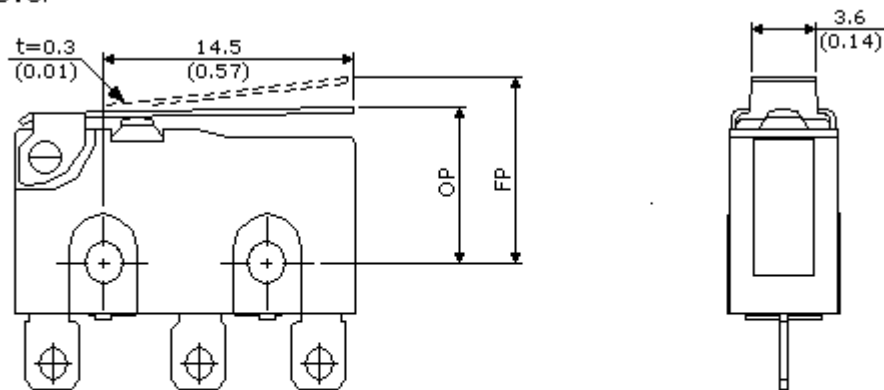


General tolerance $\pm 0.4\text{mm}$

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

ESW-5□□11A1 DIMENSIONS UNIT:mm(inch)

Straight lever

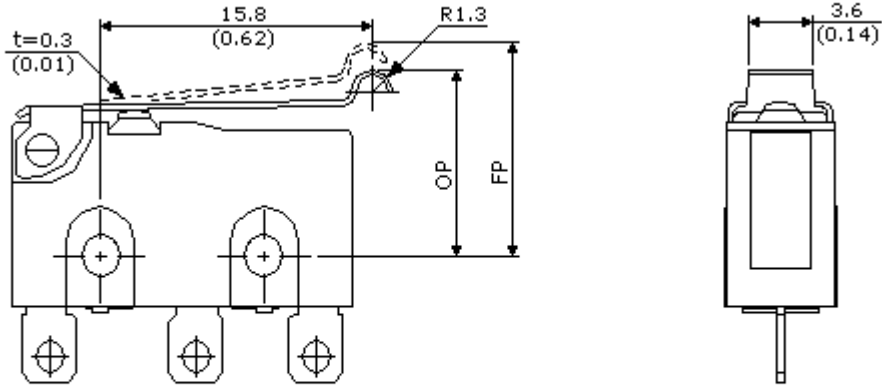


General tolerance $\pm 0.4\text{mm}$

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

ESW-5□□12A1 DIMENSIONS UNIT:mm(inch)

Simulated lever

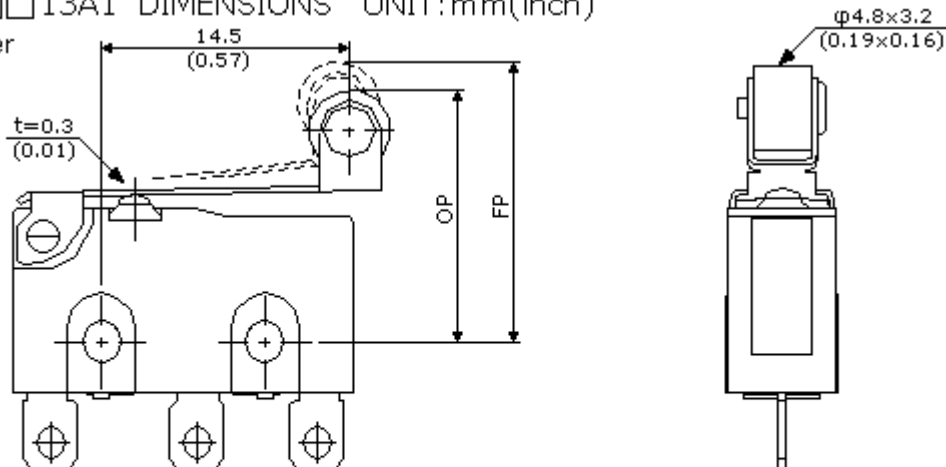


General tolerance $\pm 0.4\text{mm}$

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

ESW-5□□13A1 DIMENSIONS UNIT:mm(inch)

Roller lever

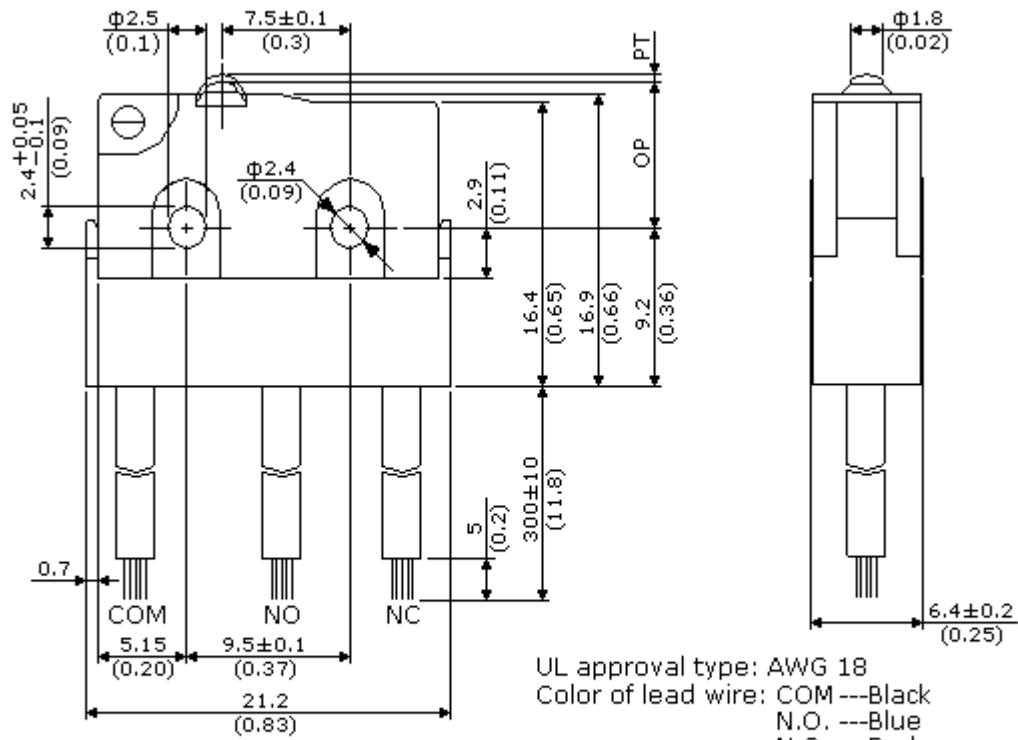


General tolerance $\pm 0.4\text{mm}$

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

ESW-57□1001 DIMENSIONS UNIT:mm(inch)

Without lever



General tolerance ±0.4mm

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