

TP308 Series Micro Switches

MICRO SWITCH TP308 SERIES



■ FEATURES

- 1-piece spring mechanism design offering durable acute operation and nice touch feeling
- Heavy/Light operation force specifications
- High flux-tight structure
- High solder reliability
- RoHS Compliant

■ APPLICATIONS

- Communication equipment
- Security systems
- Office automation appliances
- General industrial machines

■ SPECIFICATIONS

● Ratings	125VAC 3A; 125VAC 1A
● Circuit arrangement	Single pole Double throw (1c), snap action
● Pitch between terminals	5.08mm

1.ELECTRICAL PERFORMANCE

● Insulation resistance	100MΩ Min. at 500VDC
● Dielectric strength	1000VAC Min. for 60sec
● Initial contact resistance	100mΩ Max.

2.MECHANICAL PERFORMANCE

● Operating Force (OF) Release Force (RF) Pre-travel (PT) Operating Position (OP) Free Position (FP)	see attached drawing
● Vibration Resistance(Without lever)	10 to 55 Hz amplitude of 1.5mm
● Terminal strength	1.2Kg(1 minute) in the direction of the axis of solder terminals

3.ENVIRONMENTAL

● Ambient temperature	-25°C ~+65°C (60%RH Max. with no icing)
● Ambient humidity	+5°C ~+35°C (85%RH Max.)

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4.DURABILITY

● Mechanical life	1,000,000 cycles Operations
● Electrical life	10,000 cycles Operations

5.CORRECT USE

● Terminal Connection:

When soldering a lead wire to the terminal, first insert the lead wire conductor into the terminal hole and then perform soldering.

Make sure that the capacity of the soldering iron is 30W maximum and that the temperature of the soldering iron tip is approximately 300°C. (350°C maximum)

Complete the soldering within 3s.

Using a switch with improper soldering may result in abnormal heating, possibly resulting in burn.

Applying a soldering iron for more than 3s or using one that is rated at more than 30W may deteriorate the switch characteristics.

When soldering the lead wire to the PCB terminal, pay careful attention so that the flux and solder liquid level does not exceed the PCB level.

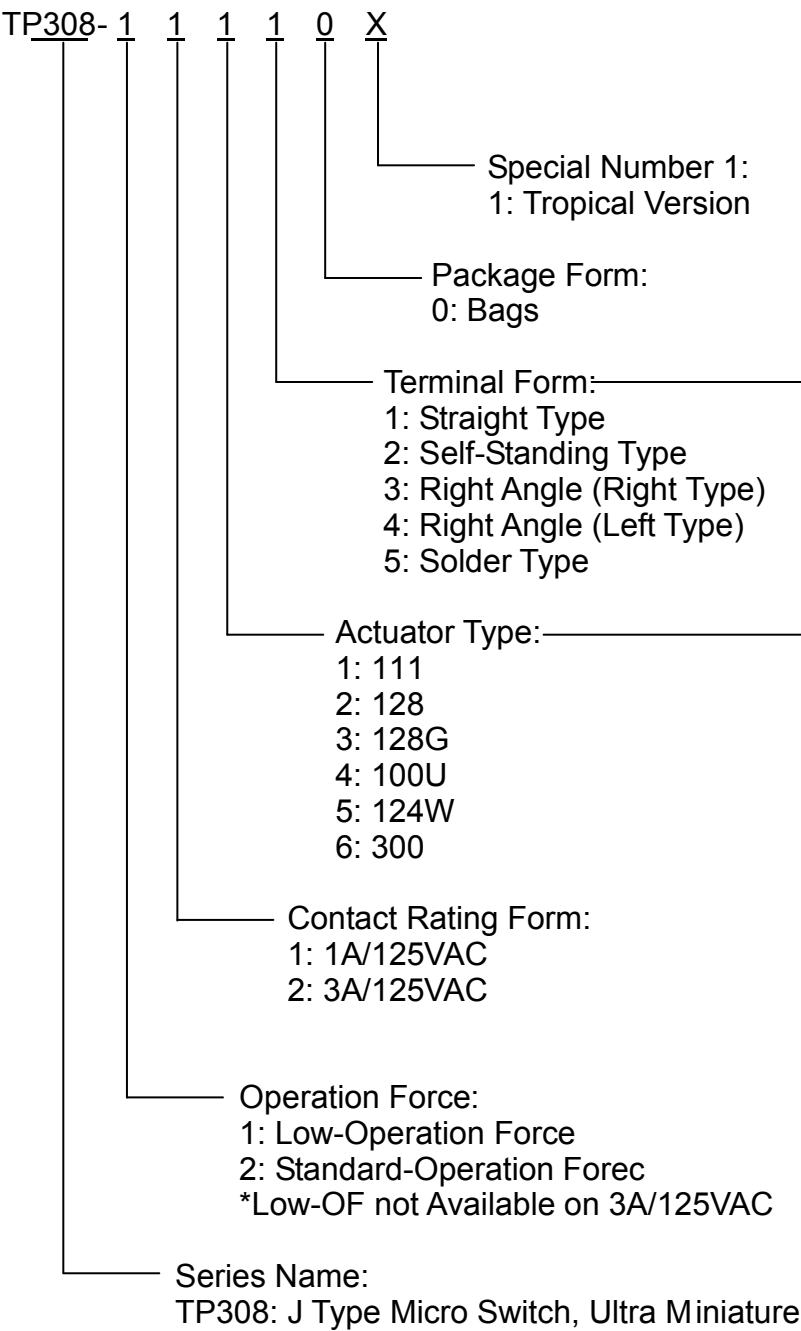
● Operating Stroke Setting:

Take particular care in setting the operating stroke for the pin plunger models. Make sure that the operating stroke is 70% to 100% of the rated OT distance. Do not operate the actuator exceeding the OT distance, otherwise the durability of the Switch may be shortened.

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■ PART NUMBERING SYSTEM



Terminal Form		
1	Straight Type	
2	Self-Standing Type	
3	Right Angle (Right Type)	
4	Right Angle (Left Type)	
5	Solder Type	

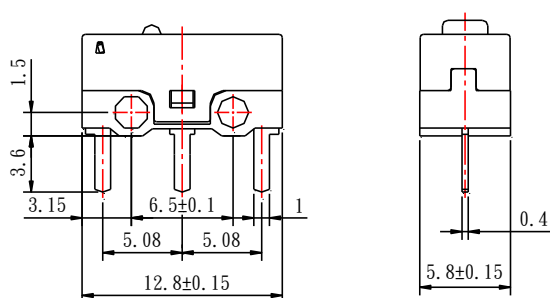
Actuator Type		
1	111	
2	128	
3	128G	
4	100U	
5	124W	
6	300	

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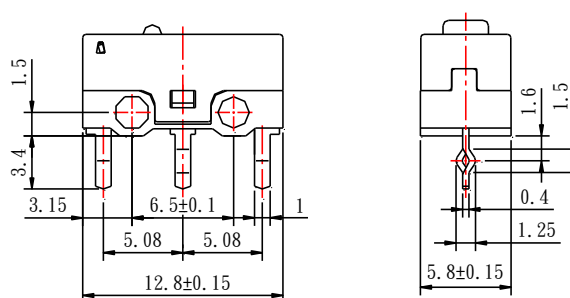
■ DIMENSIONS

Terminals

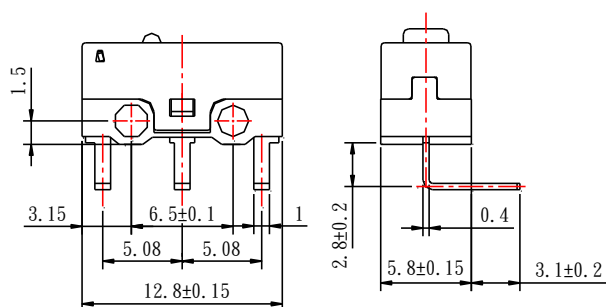
Straight Type



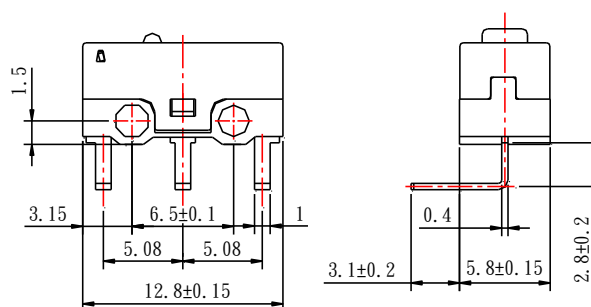
Self-Standing Type



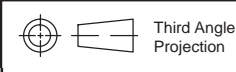
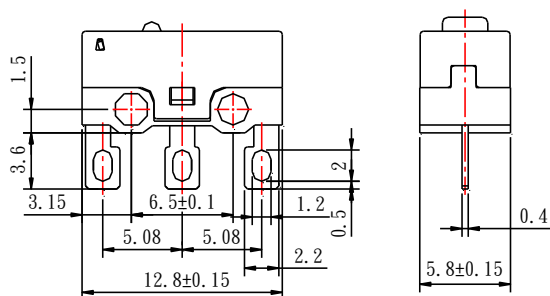
Right Type



Left Type



Solder Type



Third Angle
Projection

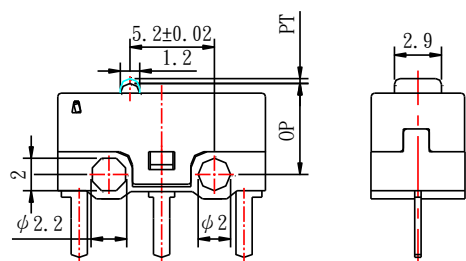
Dimensions are shown: mm
Specifications and dimensions subject to change

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■ DIMENSIONS

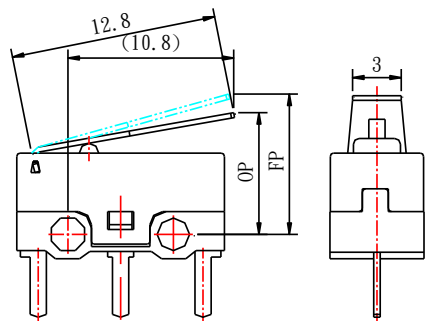
Actuator

111



Operating Characteristics	OF type	
	Low-OF	Standard-OF
1. Operating Force (OF)	75gf (0.74N) Max.	150gf (1.47N) Max.
2. Release Force (RF)	5gf (0.05N) Min.	20gf (0.20N) Min.
3. Pretravel (PT)	0.5mm Max.	
4. Movement Differential (MD)	0.12mm Max.	
5. Operating Position (OP)	5.5±0.3mm	

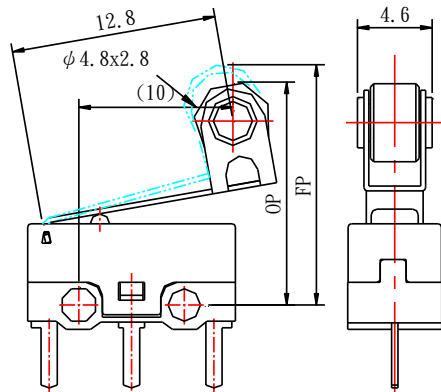
128



Stainless steel lever t=0.3

Operating Characteristics	OF type	
	Low-OF	Standard-OF
1. Operating Force (OF)	40gf (0.39N) Max.	80gf (0.78N) Max.
2. Release Force (RF)	2gf (0.02N) Min.	5gf (0.05N) Min.
3. Free Position (FP)	10mm Max.	
4. Movement Differential (MD)	0.5mm Max.	
5. Operating Position (OP)	6.8±1.5mm	

128G



Stainless steel lever t=0.3

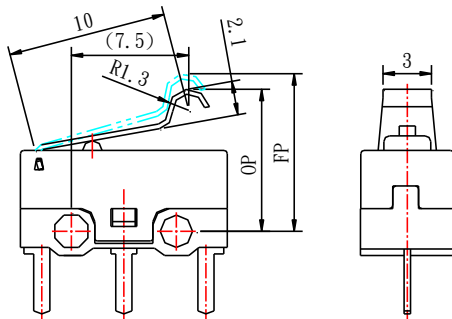
Operating Characteristics	OF type	
	Low-OF	Standard-OF
1. Operating Force (OF)	40gf (0.39N) Max.	80gf (0.78N) Max.
2. Release Force (RF)	2gf (0.02N) Min.	5gf (0.05N) Min.
3. Free Position (FP)	16.5mm Max.	
4. Movement Differential (MD)	0.5mm Max.	
5. Operating Position (OP)	13±2.0mm	

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■ DIMENSIONS

Actuator

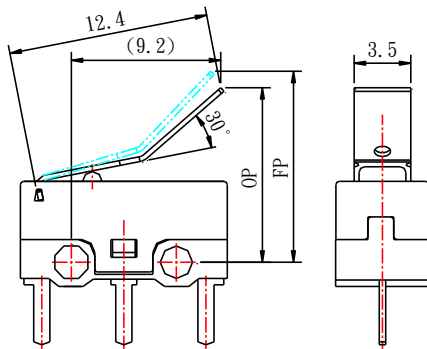
100U



Stainless steel lever t=0.3

Operating Characteristics	OF type	
	Low-OF	Standard-OF
1. Operating Force (OF)	40gf (0.39N) Max.	80gf (0.78N) Max.
2. Release Force (RF)	2gf (0.02N) Min.	5gf (0.05N) Min.
3. Free Position (FP)	13mm Max.	
4. Movement Differential (MD)	0.45mm Max.	
5. Operating Position (OP)	8.5±1.2mm	

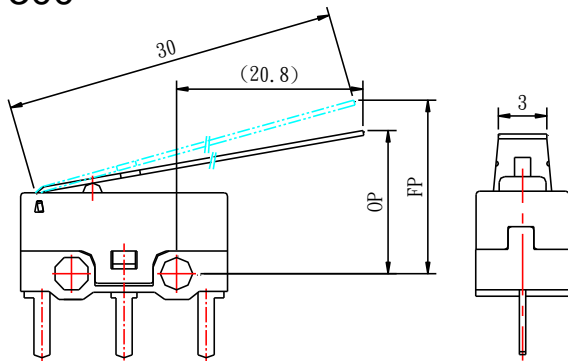
124W



Stainless steel lever t=0.3

Operating Characteristics	OF type	
	Low-OF	Standard-OF
1. Operating Force (OF)	40gf (0.39N) Max.	80gf (0.78N) Max.
2. Release Force (RF)	2gf (0.02N) Min.	5gf (0.05N) Min.
3. Free Position (FP)	14mm Max.	
4. Movement Differential (MD)	0.5mm Max.	
5. Operating Position (OP)	9.5±1.5mm	

300



Stainless steel lever t=0.3

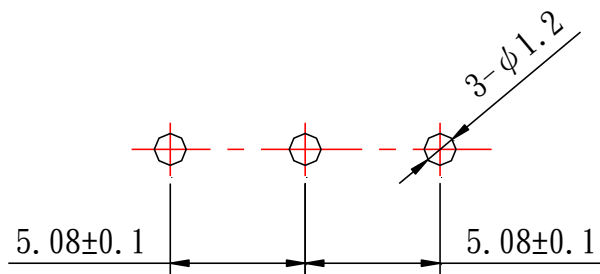
Operating Characteristics	OF type	
	Low-OF	Standard-OF
1. Operating Force (OF)	15gf (0.39N) Max.	22gf (0.78N) Max.
2. Release Force (RF)	2gf (0.02N) Min.	3gf (0.03N) Min.
3. Free Position (FP)	15.4mm Max.	
4. Movement Differential (MD)	3.0mm Max.	
5. Operating Position (OP)	7.4±2.1mm	

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■ DIMENSIONS

Mounting

P. C. B LAYOUT



Mounting Holes

