

MICRO SWITCH EJF 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; 30VDC 0.05A
● Circuit arrangement	Single pole Double throw (1c), snap action
● Pitch between terminals	5.08mm

1.ELECTRICAL PERFORMANCE

● Insulation resistance	100M Ω Min. at 500VDC
● Dielectric strength	1000VAC Min. for 60sec
● Initial contact resistance	100m Ω 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 $^{\circ}$ C ~+65 $^{\circ}$ C (60%RH Max. with no icing)
● Ambient humidity	+5 $^{\circ}$ C ~+35 $^{\circ}$ C (85%RH Max.)

4.DURABILITY

● Mechanical life	1,000,000 cycles Operations
● Electrical life	30,000 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.

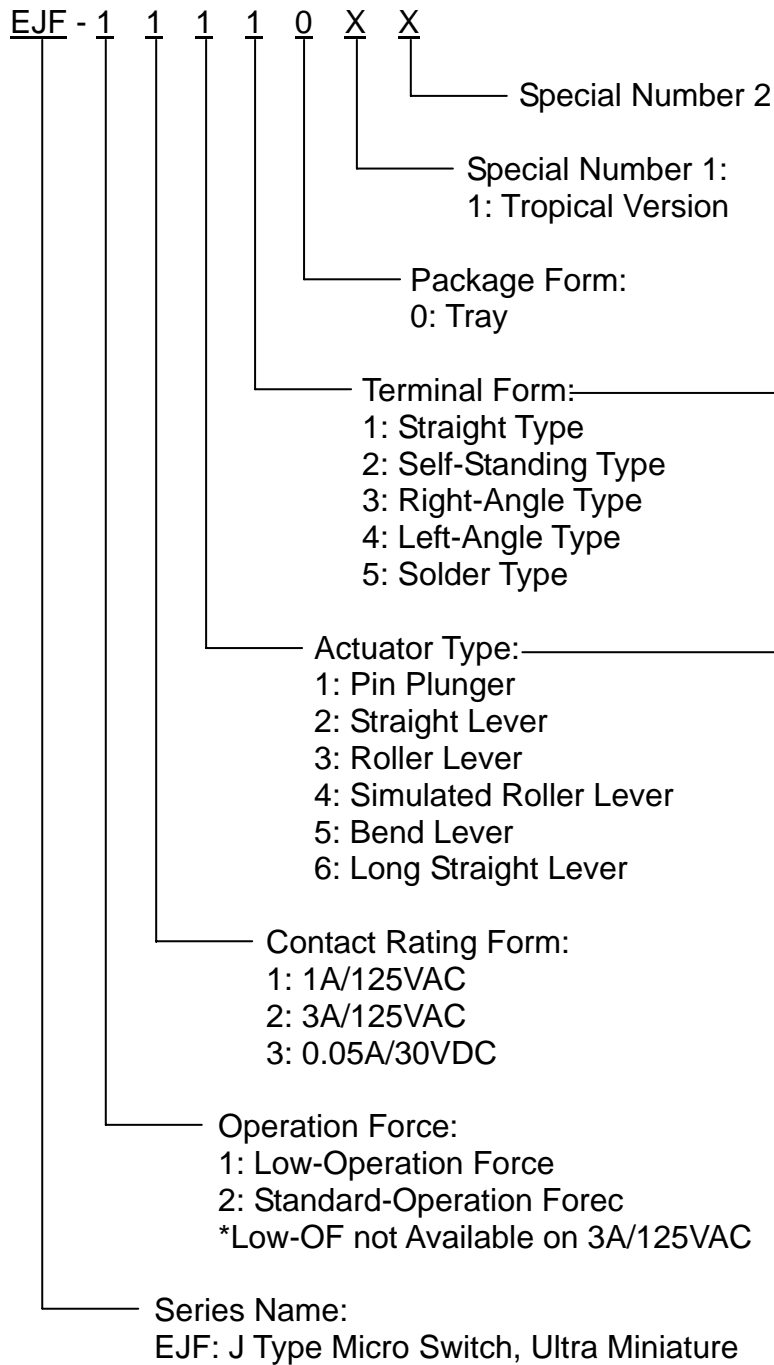
Applying a soldering iron for more than 3s or using one that is rated at more than 30W may deteriorate the switch characteristics.





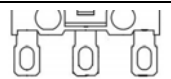
When soldering the lead wire to the PCB terminal, pay careful attention so that the flux and solder liquid level does not exceed the PCB level.


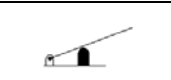
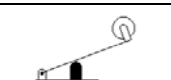
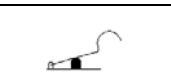
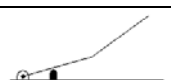

- Operating Stroke Setting:

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.

■ PART NUMBERING SYSTEM



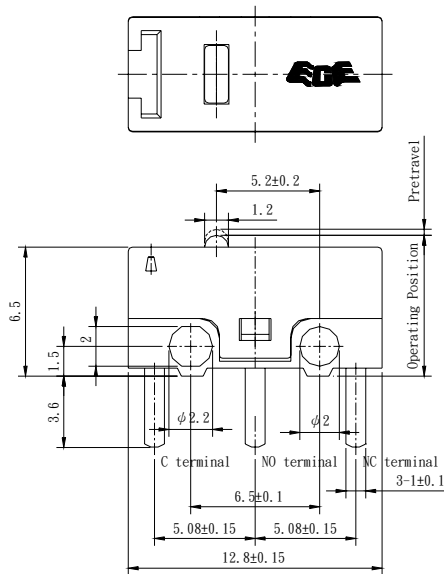
Terminal Form	
1	Straight Type 
2	Self-Standing Type 
3	Right-Angle Type 
4	Left-Angle Type 
5	Solder Type 

Actuator Type	
1	Pin Plunger 
2	Straight Lever 
3	Roller Lever 
4	Simulated Roller Lever 
5	Bend Lever 
6	Long Straight Lever 

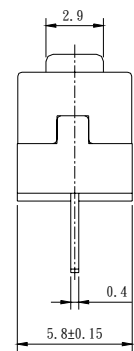
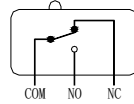
DIMENSIONS

EJF-11110 DIMENSIONS

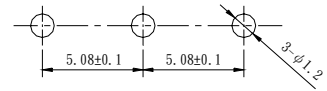
P/N.: EJF1111000 Unit:mm(inch)



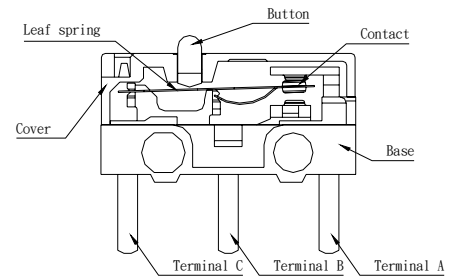
CIRCUIT DIAGRAM



P. C. B LAYOUT



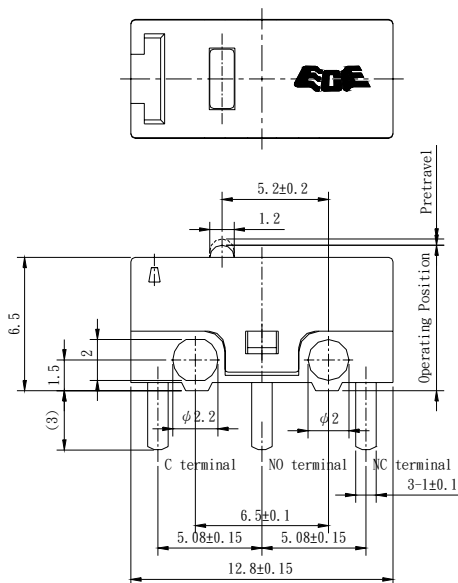
CONSTRUCTION



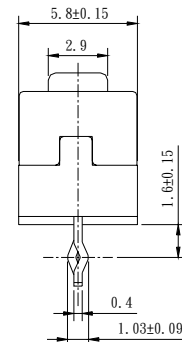
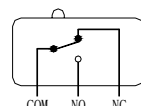
1. Operating Force (OF)	75gf (0.74N) Max.
2. Release Force (RF)	10gf (0.098N) Min.
3. Pretravel (PT)	0.5mm Max.
4. Movement Differential (MD)	0.12mm Max.
5. Operating Position (OP)	5.5±0.3mm

EJF-11120 DIMENSIONS

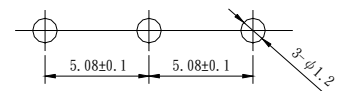
P/N.: EJF1112000 Unit:mm(inch)



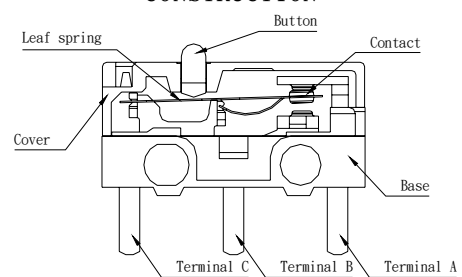
CIRCUIT DIAGRAM



P. C. B LAYOUT



CONSTRUCTION

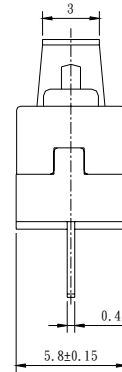
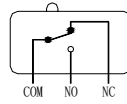
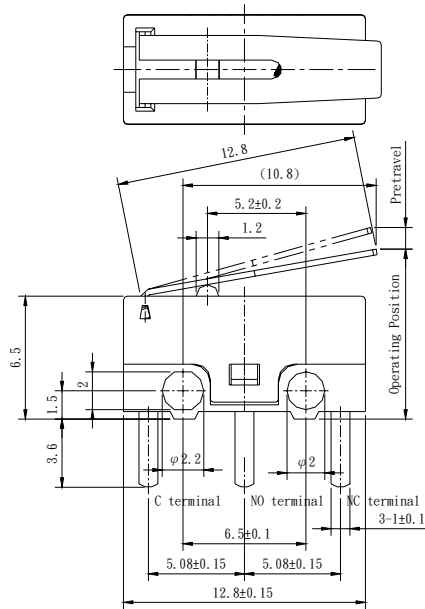


1. Operating Force (OF)	75gf (0.74N) Max.
2. Release Force (RF)	10gf (0.098N) Min.
3. Pretravel (PT)	0.5mm Max.
4. Movement Differential (MD)	0.12mm Max.
5. Operating Position (OP)	5.5±0.3mm

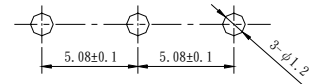
EJF-11210 DIMENSIONS

P/N. : EJF1121000 Unit:mm(inch)

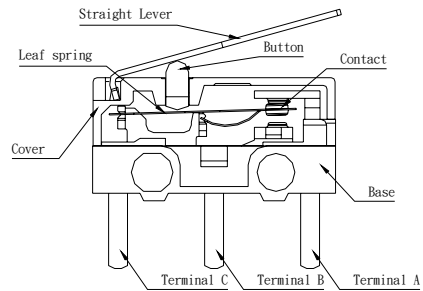
CIRCUIT DIAGRAM



P. C. B LAYOUT



CONSTRUCTION

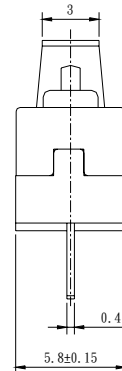
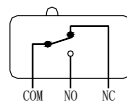
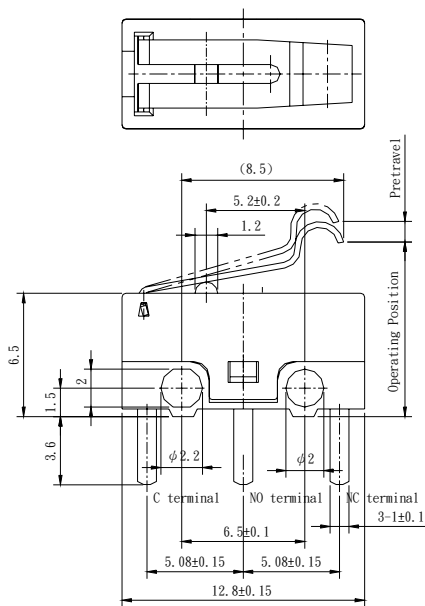


1. Operating Force (OF)	50gf (0.49N) Max.
2. Release Force (RF)	10gf (0.1N) Min.
3. Pretravel (PT)	2.1mm Max.
4. Movement Differential (MD)	0.5mm Max.
5. Operating Position (OP)	8.3±0.12mm

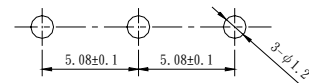
EJF-11410 DIMENSIONS

P/N. : EJF1141000 Unit:mm(inch)

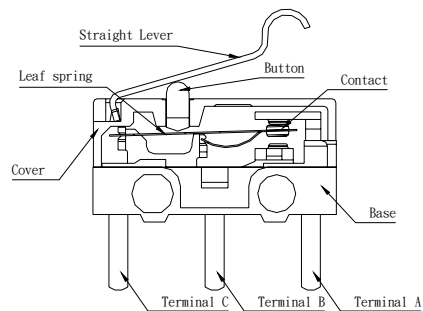
CIRCUIT DIAGRAM



P. C. B LAYOUT



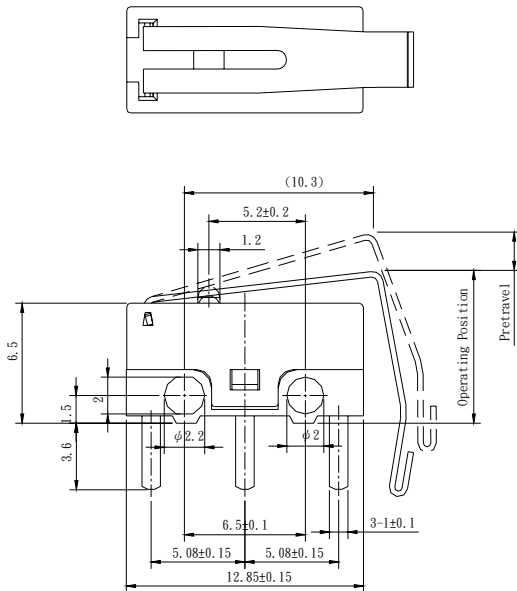
CONSTRUCTION



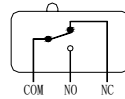
1. Operating Force (OF)	50gf (0.49N) Max.
2. Release Force (RF)	10gf (0.1N) Min.
3. Pretravel (PT)	2.1mm Max.
4. Movement Differential (MD)	0.5mm Max.
5. Operating Position (OP)	9.2±0.12mm

EJF-11510 DIMENSIONS

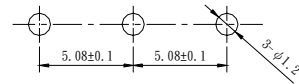
P/N. : EJF1151010 Unit:mm(inch)



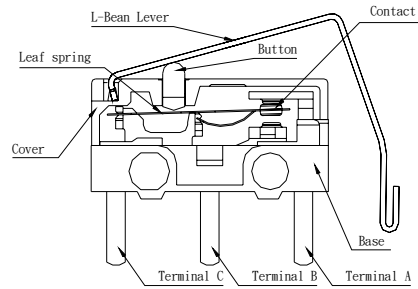
CIRCUIT DIAGRAM



P. C. B LAYOUT



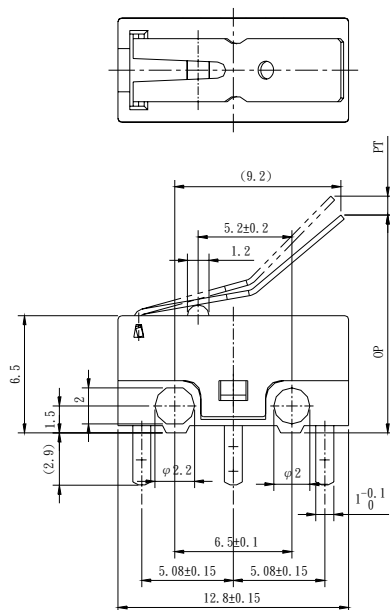
CONSTRUCTION



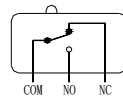
1. Operating Force (OF)	50gf (0.5N) Max.
2. Release Force (RF)	10gf (0.1N) Min.
3. Pretravel (PT)	2.2mm Max.
4. Movement Differential (MD)	0.5mm Max.
5. Operating Position (OP)	8.3±0.5mm

EJF-11520 DIMENSIONS

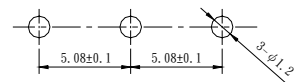
P/N. : EJF1152000 Unit:mm(inch)



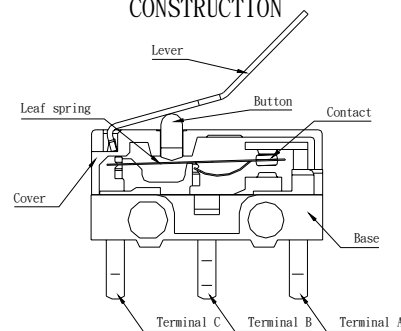
CIRCUIT DIAGRAM



P. C. B LAYOUT



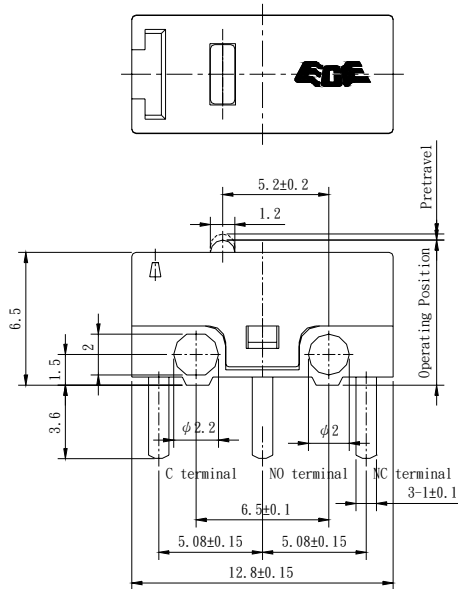
CONSTRUCTION



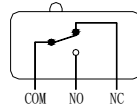
1. Operating Force (OF)	50gf (4.9N) Max.
2. Release Force (RF)	10gf (0.98N) Min.
3. Pretravel (PT)	2.1mm Max.
4. Movement Differential (MD)	0.5mm Max.
5. Operating Position(OP)	12.8±0.15mm

EJF-21110 DIMENSIONS

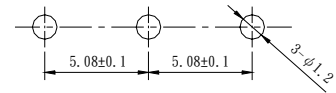
P/N.: EJF2111000 Unit:mm(inch)



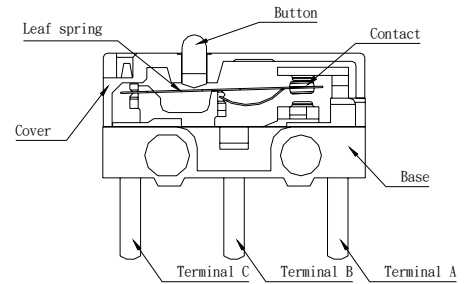
CIRCUIT DIAGRAM



P. C. B LAYOUT



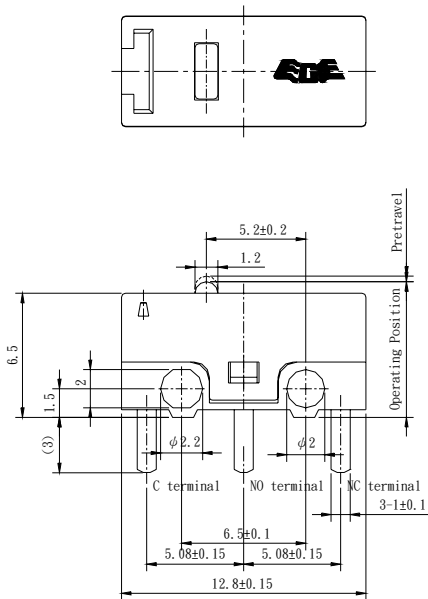
CONSTRUCTION



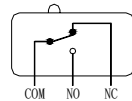
1.	Operating Force (OF)	150gf (1.47N) Max.
2.	Release Force (RF)	30gf (0.29N) Min.
3.	Pretravel (PT)	0.5mm Max.
4.	Movement Differential (MD)	0.12mm Max.
5.	Operating Position (OP)	5.5±0.3mm

EJF-21120 DIMENSIONS

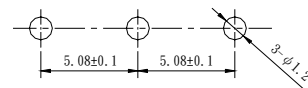
P/N.: EJF2112000 Unit:mm(inch)



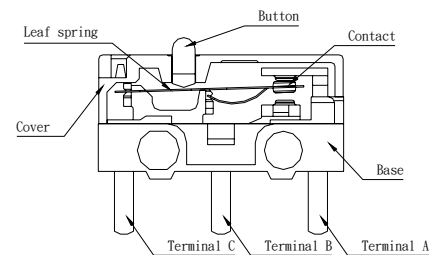
CIRCUIT DIAGRAM



P. C. B LAYOUT



CONSTRUCTION



1.	Operating Force (OF)	150gf (1.47N) Max.
2.	Release Force (RF)	30gf (0.29N) Min.
3.	Pretravel (PT)	0.5mm Max.
4.	Movement Differential (MD)	0.12mm Max.
5.	Operating Position (OP)	5.5±0.3mm