



Industrial & Electrical Components

Subminiature General  
Micro Switch

Part No.

NS-10W  
NS-5W



- Economical, subminiature, long service life
- Free from overtravel restrictions, easy setting
- Standard operating force, low force models
- Housing material PMC or PBT
- RoHS Compliant

**ORDERING INFORMATION**

NS-   -  -     
 ① ② ③ ④ ⑤ ⑥

**1. Ratings**

5: 5A at 250VAC  
10: 10A at 250VAC

**2. Actuator**

None: Pin plunger  
Z: Hinge lever  
W: Simulated roller lever  
G: Hinge roller lever

**3. Maximum Operating Force**

None: 1.47N  
F: 0.59N

**4. Contact Form**

None: SPDT  
2: SPST-NC  
3: SPST-NO

**5. Terminals**

None: Solder terminals  
T: Quick-connect terminal (#110)  
D: PCB terminals (Even pitch)  
D1: Left angle PCB terminals  
D2: Right angle PCB terminals

**6. Shell Material**

None: PMC  
P: PBT

**SAFETY APPROVAL**

UL61058

CSA-C22.2 No.61058-1

Rated voltage	NS-10	NS-5
AC125V	—	5A
AC250V	10A	5A
30VDC	—	5A

ENEC (EN61058-1)

Rated voltage	SL- J10	SL- J5
AC125V	—	5A
AC250V	0.5A	5A
30VDC	—	5A

CQC

GB15092.1

Rated voltage	SL- J10	SL- J5
AC125V	10A	5(2)A
AC250V	10A	5(2)A

## TECHNICAL DATA

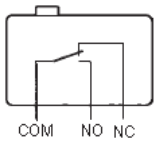
Item Type		NS-10W / NS-5W
Allowable operating speed		0.1~1000mm/s
Operating frequency	Mechanical	400 times/min
	Electrical	30 times/min
Insulation resistance		Min.:100MΩ
Contact resistance		Max.:50mΩ
Dielectric strength	BTW same polarity terminals	AC1000V 50/60Hz 1min
	BTW current-carrying parts	AC1500V 50/60Hz 1min
	BTW terminal & metal parts	AC1500V 50/60Hz 1min
Vibration resistance	Malfunction	10~55Hz amplitude 1.5mm
Shock resistance	Durable	1000m/s
	Malfunction	300m/s
Expected life	Mechanical life	1x10 <sup>6</sup> (60 operations/minute)
	Electrical life	1x10 <sup>5</sup> (30 operations/minute)
Protection degree		IEC IP40
Ambient operation temperature		-20°C~+125°C
Ambient humidity		60%RH
Weight		Approx. 1.6 g pin plunger type

## CONTACT SPECIFICATION

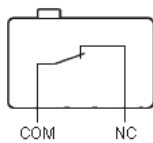
Item		NS-10W	NS-5W
Specification		Rivet	
Material		Silver alloy	
Gap (Standard value)		0.5mm	
Inrush current	NC	20A max.	20A max.
	NO	15A max.	10S A max.
Minimum applicable load		160mA at 5VDC	

## CONTACT FORM

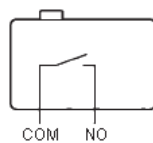
SPDT



SPST-NC

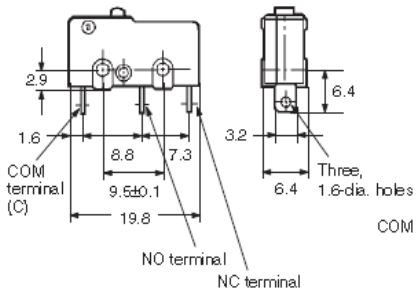


SPST-NO

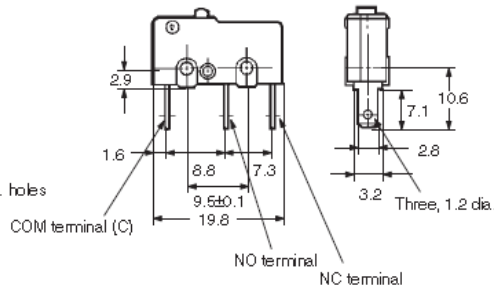


## TERMINAL

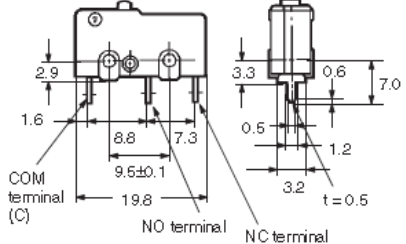
Solder Terminal



Quick-connect Terminal (#110)



PCB Terminal

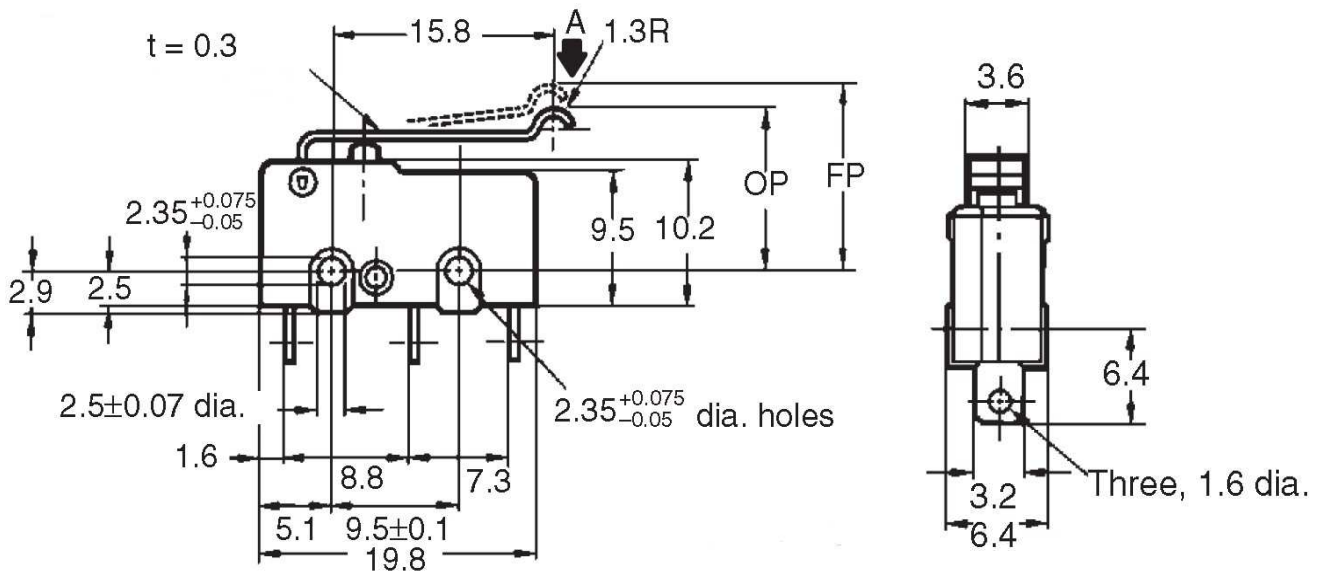


## RATINGS (REFERENCE VALUES)

Reted voltage	No-inductive load				Inductive load			
	Resistive load		Lamp load		Inductive load		Motor load	
	NC	NO	NC	NO	NC	NO	NC	NO
AC125V	5A(10A)		1.5A	0.7A	3A		2.5A	1.3A
AC250V	3A(10A)		1A	1.5A	2A		1.5A	0.8A
DC8V	5A(10A)		2A		5A	4A	3A	
DC14V	5A(10A)		2A		4A		3A	
DC30V	4A		2A		3A		3A	
DC125V	0.4A		0.05A		0.4A		0.05A	
DC250V	0.2A		0.03A		0.2A		0.03A	

## DIMENSIONS (mm)

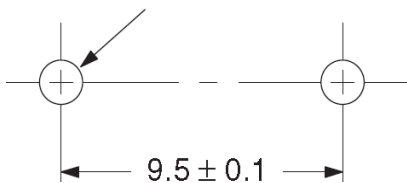
Simulated Roller Lever Models



## OPERATING CHARACTERISTICS

Operating performance	NS-10W	NS-5W	NS-5W-F
OF max.	0.49N	0.49N	0.16N
RF min.	0.06N	0.06N	0.02N
OT min.	1.0mm	1.2mm	1.2mm
MD max.	1.0mm	0.8mm	0.8mm
FP max.	15.5mm		
OP	10.7±0.8mm		

## MOUNTING HOLES



All switches may be panel mounted using M2.3 mounting screws with plane washers or spring washers to securely mount the switch.

Tighten the screws to a torque of 0.23 to 0.26 N·m.