

## SA SERIES –SUBMINIATURE SNAP ACTION SWITCHES



### Features and Advantages:

- Subminiature snap action switch: 12.8mm x 5.8mm x 6.6mm
- Available in solder lug and PCB pin termination options
- Available in pin plunger, lever, roller actuator options
- Available in different current ratings and operating forces
- RoHS Compliant

### Applications

- Consumer electronics
- Computer mice
- Appliances
- Automobile industries
- Industrial control systems

### Specifications:

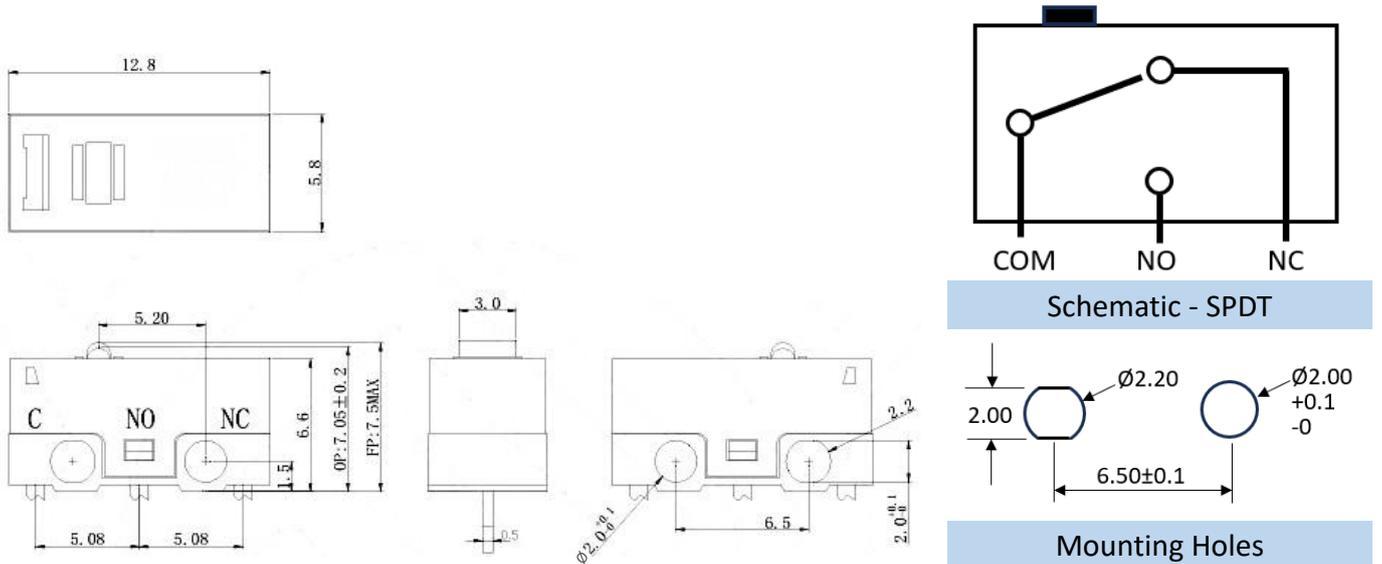
| Type                                | 0.05A                                   | 0.1A                         | 1mA   | 1A                      | 3A                      |
|-------------------------------------|---|------------------------------|---|-------------------------|-------------------------|
| Current Rating:                     | 0.05A 125V AC<br>50mA 30V DC            | 0.1A 125V AC<br>100mA 30V DC | 2A 125V AC 1mA<br>MIN 5V DC   | 1A 125V AC 1A<br>48V DC | 3A 125V AC 3A<br>48V DC |
| Contact Diameter:                   | 0.6                                     | 0.6                          | 0.6   | 1.2                     | 1.2                     |
| Contact Material:                   | Silver plated                           | Silver alloy                 | Gold alloy  | Silver alloy            | Silver alloy            |
| Operating Force:                    | 70gf / 110gf                            |                              | 70gf / 110gf / 130gf  |                         |                         |
| Contact Resistance (Initial value): | 500mΩ MAX                               |                              | 30mΩ MAX  | 100mΩ MAX               | 50mΩ MAX                |
| Max. Operating Frequency:           | Electrical: 100/min, Mechanical: 30/min |                              |   |                         |                         |
| Operating Speed:                    | N/A                                     |                              | 1mm/s to 500mm/s  |                         |                         |
| Insulation Resistance:              | >100MΩ (500V DC)                        |                              |   |                         |                         |
| Diaelectric Strength:               | 500 VAC 50/60Hz for 60 seconds          |                              | 600 VAC 50/60Hz for 60 seconds (between terminals) 1500 VAC 50/60Hz for 60 seconds (metal parts to ground/casing) |                         |                         |
| Mechanical Life:                    | 300k/1000k/3000k cycles                 |                              | 1000k/5000k/10000k/30000k cycles  |                         |                         |
| Electrical Life:                    | 300k/1000k/3000k cycles                 |                              | 50k to 100k cycles  | 6k cycles               | 10k to 30k cycles       |
| Operating Temp.:                    | -25°C to 85°C (Below 60%RH)             |                              |   |                         |                         |
| Weight:                             | 0.6g                                    |                              |   |                         |                         |

### Part Number Coding:

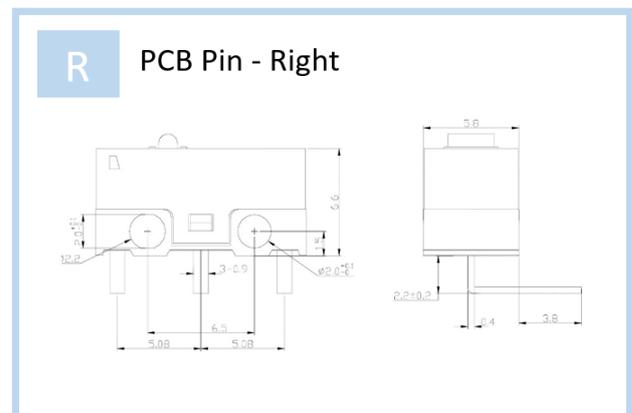
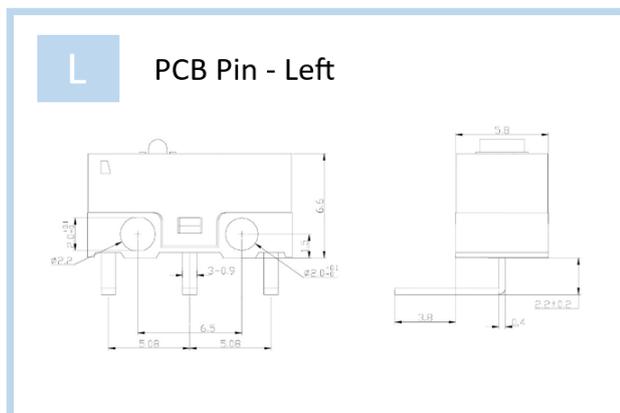
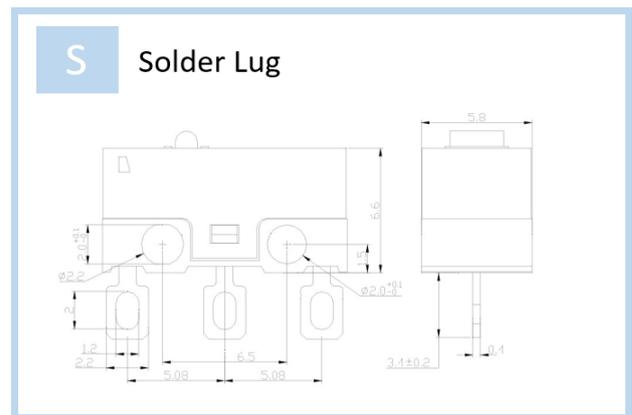
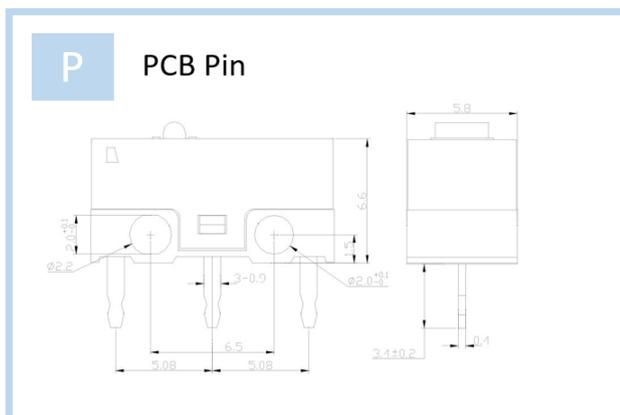
| SERIES | CURRENT                                    | ACTUATOR  | TERMINATION | TERMINATION LENGTH      | OPERATING FORCE                            | BUTTON COLOR                             | CONTACTS                  |
|--------|--|-----------|-------------|-------------------------|--|--|---------------------------|
| SA     | A=0.05A<br>B=0.1A<br>C=1mA<br>D=1A<br>E=3A | See Chart | See Chart   | 0=3.4<br>1=5.0<br>2=5.5 | 15=15gf<br>30=30gf<br>60=60gf<br>110=110gf | B=BLACK<br>W=WHITE<br>G=GRAY<br>O=ORANGE | S=SILVER<br>G=GOLD PLATED |

## MDB SERIES - SUBMINIATURE SNAP ACTION SWITCHES

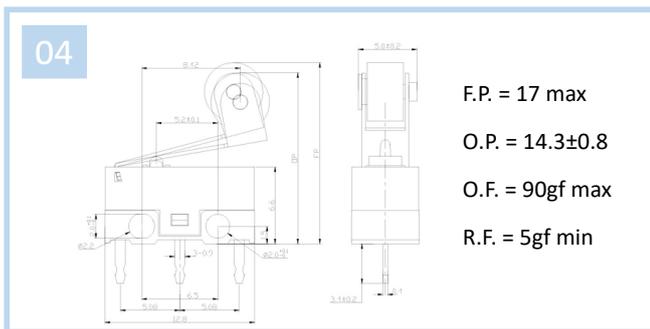
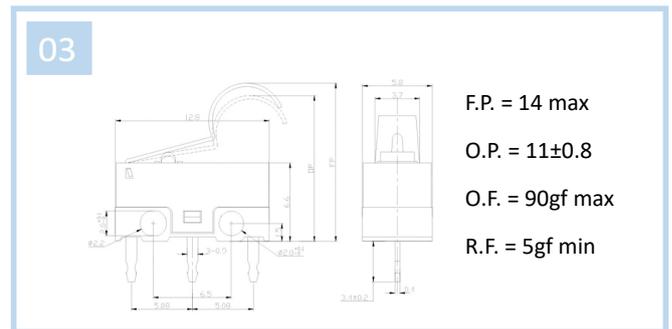
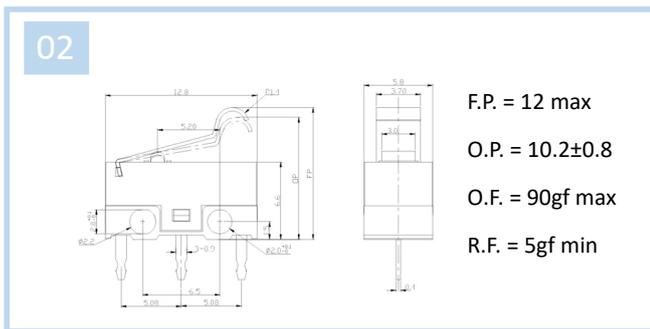
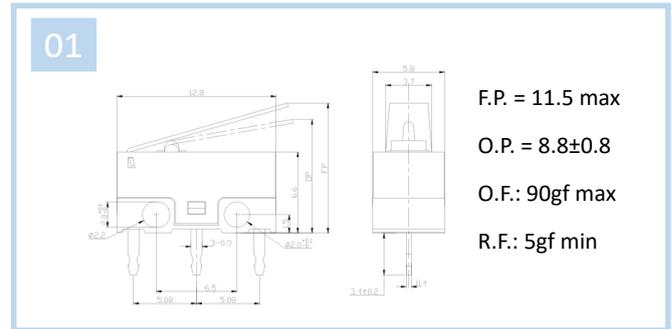
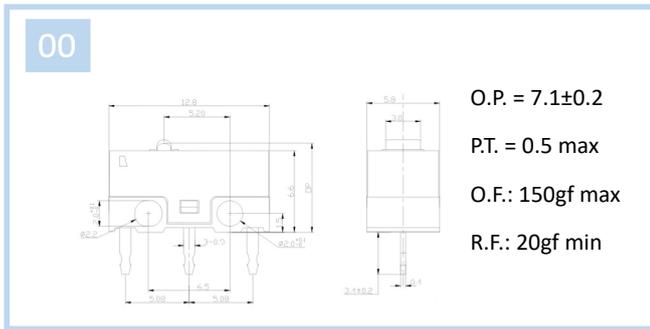
Dimensional Drawing:



Termination Options:



## Actuator Options:



### Notes:

1. All dimensions in mm.
2. P.T.=pre-travel, F.P.=free position, O.P.=operating position, O.F.=operating force, R.F.=return force
3. Do not exceed 300°C solder temperature for solder lug, 350°C solder temperature for PCB Pin. Solder within 3s to avoid damaging the components. Do not exert external force within 1 min after soldering.
4. Specifications subject to change without notice.