

# Detector Switch MSS-10-1 Series

## □ Feature

- ◇ Sliding contact type
- ◇ For micro-current
- ◇ Wide actuator-variation.

## □ Applications

- ◇ FAX, Copying machine, Label printer
- ◇ CD, DVD-RAM printer
- ◇ Video camera, Game



MSS-10-1



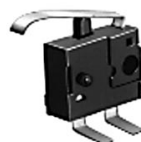
MSS-10A-1



MSS-10F-20



MSS-10L2-1



MSS-10R2-16



MSS-13S

## □ Products Line

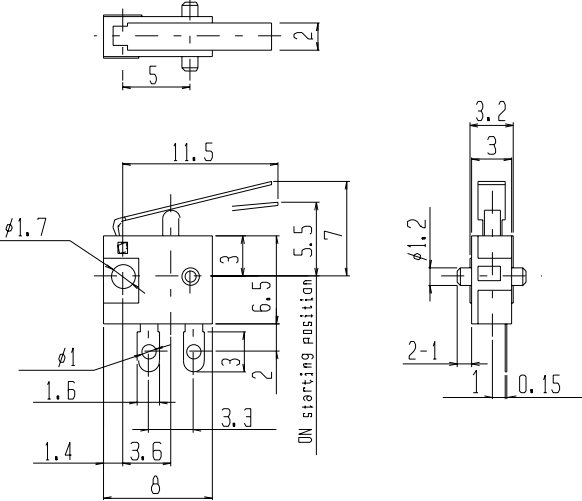
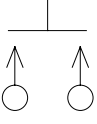
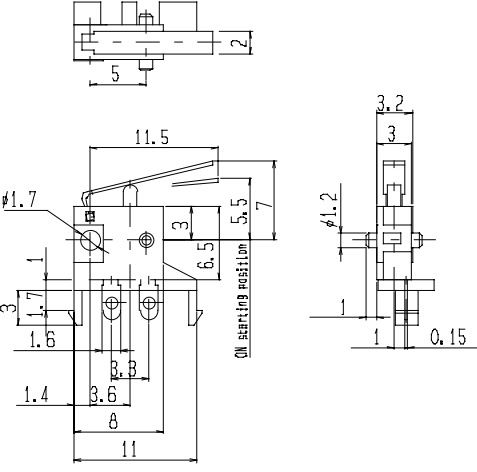
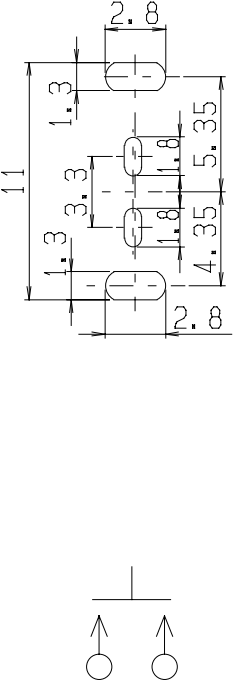
No	Products No	Poles	Positions	Operating force
1	MSS-10-1	1	1	0.19N plus or minus 0.09N
2	MSS-10A-1	1	1	0.19N plus or minus 0.09N
3	MSS-10F-20	1	1	0.25N max
4	MSS-10L2-1	1	1	0.19N plus or minus 0.09N
5	MSS-10R2-16	1	1	0.34N max
6	MSS-13S	1	1	0.39N plus or minus 0.24N

## □ Typical Specifications

Items	Specifications
<b>Ratings</b>	0.1A 16V DC (Resistive load)
<b>Contact resistance</b>	200 milliohm max
<b>Insulation resistance</b>	100 megohm min. 250V DC
<b>Withstanding voltage</b>	250V AC for 1min
<b>Operating life with load</b>	30,000 cycles

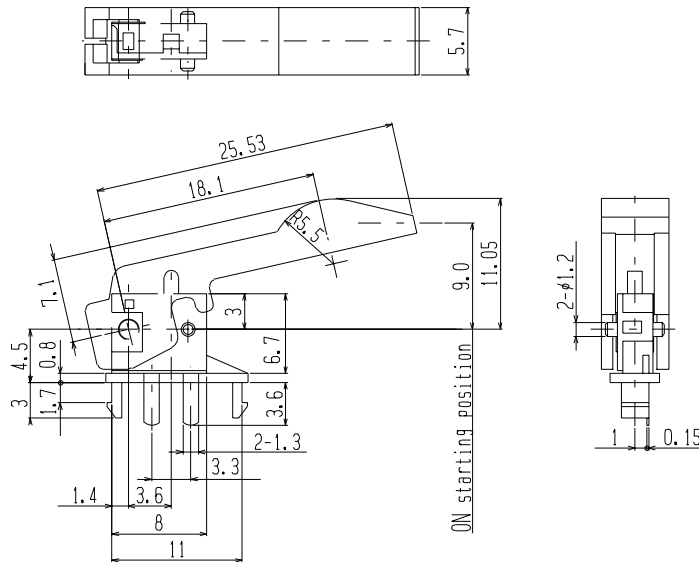
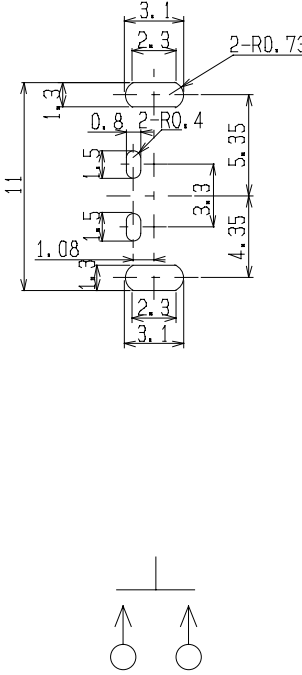
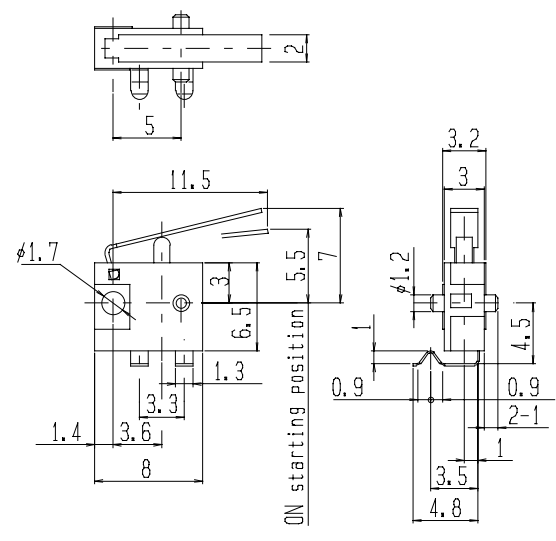
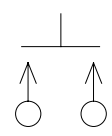
Dimensions

Unit : mm

No	Style	P.C.B reference land Dimensions Circuit Diagram (TOP VIEW)
1	<p>MSS-10-1</p>  <p>Technical drawings for MSS-10-1 showing side, top, and front views with dimensions. The top view shows a rectangular component with a width of 8 mm and a length of 11.5 mm. Key dimensions include a diameter of <math>\phi 1.7</math> for the top hole, a diameter of <math>\phi 1</math> for the bottom hole, and a distance of 1.6 mm from the left edge to the center of the bottom hole. The front view shows a height of 3 mm and a diameter of <math>\phi 1.2</math> for the top part.</p>	 <p>Circuit diagram for MSS-10-1 showing a top view with two circular terminals.</p>
2	<p>MSS-10A-1</p>  <p>Technical drawings for MSS-10A-1 showing side, top, and front views with dimensions. The top view shows a rectangular component with a width of 11 mm and a length of 11.5 mm. Key dimensions include a diameter of <math>\phi 1.7</math> for the top hole, a diameter of <math>\phi 1</math> for the bottom hole, and a distance of 1.6 mm from the left edge to the center of the bottom hole. The front view shows a height of 3 mm and a diameter of <math>\phi 1.2</math> for the top part.</p>	 <p>Circuit diagram for MSS-10A-1 showing a top view with two circular terminals and detailed dimensions. The diagram shows a rectangular component with a width of 11 mm and a length of 11.5 mm. Key dimensions include a diameter of <math>\phi 1.7</math> for the top hole, a diameter of <math>\phi 1</math> for the bottom hole, and a distance of 1.6 mm from the left edge to the center of the bottom hole. The front view shows a height of 3 mm and a diameter of <math>\phi 1.2</math> for the top part.</p>

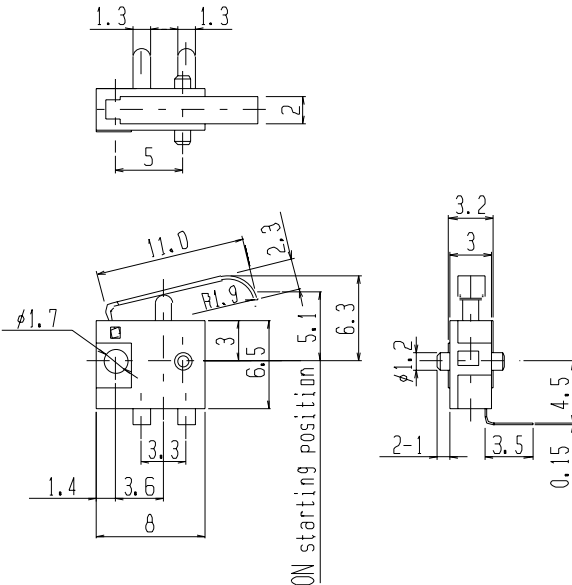
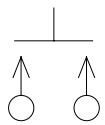
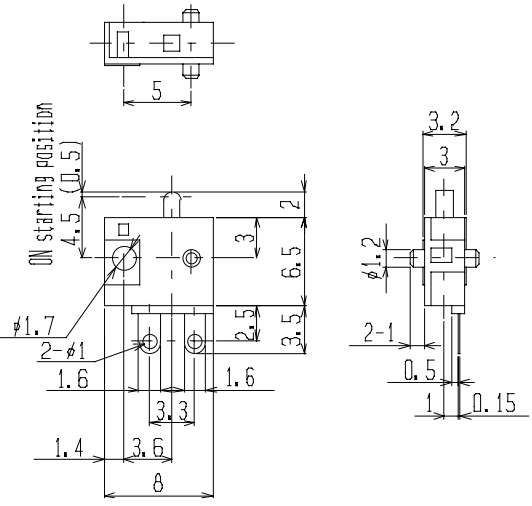
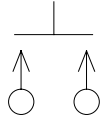
Dimensions

Unit : mm

No	Style	P.C.B reference land Dimensions Circuit Diagram (TOP VIEW)
3	<p>MSS-10F-20</p>  <p>Technical drawings for MSS-10F-20. The side view shows a length of 5.7 mm. The perspective view shows a length of 25.53 mm, a width of 18.1 mm, and a height of 11.05 mm. The cross-sectional view shows a diameter of 2-φ1.2 mm and a length of 0.15 mm. Other dimensions include 7.1, 3, 4.5, 1.7, 0.8, 1.4, 3.6, 8, 11, 3.3, 2-1.3, 3.6, 6.7, 3, 9.0, and 11.05 mm. The label 'ON starting position' is present.</p>	 <p>P.C.B reference land dimensions and circuit diagram for MSS-10F-20. The top view shows a total width of 11 mm and a total height of 5.35 mm. Individual terminal widths are 3.1 mm. Spacing between terminals is 1.08 mm. Dimensions include 1.3, 0.8, 2-R0.4, 3.3, 4.35, 3.1, and 2-R0.73. The circuit diagram shows two terminals with arrows pointing up.</p>
4	<p>MSS-10L2-1</p>  <p>Technical drawings for MSS-10L2-1. The side view shows a length of 2 mm and a width of 5 mm. The perspective view shows a length of 11.5 mm, a width of 8 mm, and a height of 7 mm. The cross-sectional view shows a diameter of φ1.2 mm and a length of 0.9 mm. Other dimensions include φ1.7, 1.4, 3.6, 8, 3.3, 1.3, 6.5, 3, 5.5, 7, 0.9, 1, 4.5, 2-1, 1, 3.5, 4.8, 3.2, 3, and 0.9 mm. The label 'ON starting position' is present.</p>	 <p>P.C.B reference land dimensions and circuit diagram for MSS-10L2-1. The circuit diagram shows two terminals with arrows pointing up.</p>

Dimensions

Unit : mm

No	Style	P.C.B reference land Dimensions Circuit Diagram (TOP VIEW)
5	<p>MSS-10R2-16</p> 	
6	<p>MSS-13S</p> 	

**□ Notes**

1. The appearance and specifications of the product may be modified without prior notice to improve its performance.
2. This catalog shows only outline specifications. When using the product, please obtain formal specifications supply.
3. Please see appendix [Cautions in Using Switches ].
4. For high safety applications, please confirm with protection and redundant circuit.
5. This detector switch is not a washable type.
6. In manual soldering, consideration should be given to apply the soldering iron to the tip of the terminal so that unusual pressure is not applied to the terminal.
7. Please do not apply pressure for 1 minute after soldering.
8. Since soldering quality may deteriorate due to sulfuration and oxidation of terminals, please use as soon as possible within maximum 6 months after delivery and use within a after opening the package condition and the one within 1 week after you unpack it again.
9. Please confirm the performance on actual operation by simulation with actual environment environments for high reliability.