

# MS Series Small Size Snap-acting Switches

## Features/Benefits

- Detect interlock and movement
- Different lever options
- Various operating forces
- Extended mechanical life
- UL approval on some designs
- Customization available
- RoHS compatible and compliant

## Typical Applications

- Office equipment
- Consumer electronics
- Appliances
- Audio & visual equipment
- Medical
- Industrial meters



## Specifications

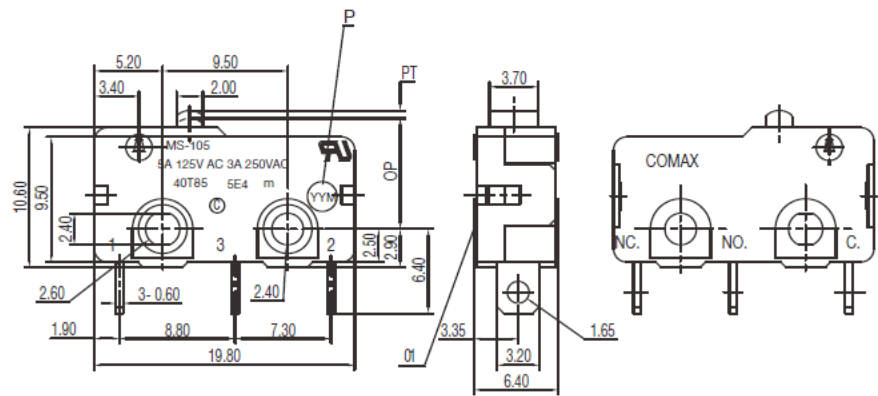
CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 5 A @ 125 VAC / 3 A @ 250 VAC  
 OPERATING LIFE: 1,000,000 cycles without load  
 6,000 cycles with load UL  
 INITIAL CONTACT RESISTANCE: 100 mΩ max.  
 INSULATION RESISTANCE: 100 MΩ min. @ 500 VDC  
 DIELECTRIC STRENGTH: 1000 VAC (50-60 Hz)  
 OPERATING TEMPERATURE: -40°C to + 85°C  
 OPERATING FORCE: 130 ± 30 gf  
 PRE-TRAVEL (PT): 0.6 mm max.  
 OVERTRAVEL: 0.5 mm max.  
 OPERATING POSITION (OP): 8.40 ± 0.40 mm

## Materials

COVER: PBT (UL94V-0)  
 HOUSING: PBT (UL94V-0)  
 KNOB: PBT (UL94V-0)  
 TERMINALS: Silver plated

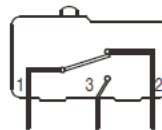
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

PART NUMBER
<b>MS-105A01</b>



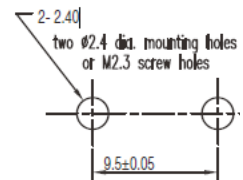
Standard Size

Circuit Diagram



SCHEMATIC

Mounting Holes

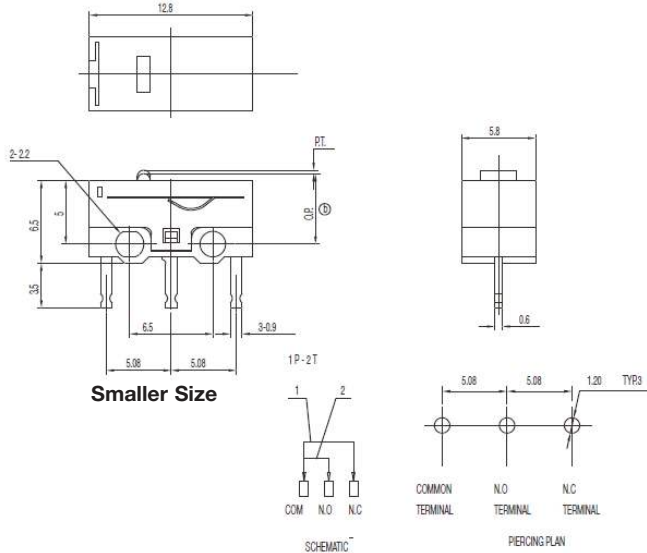


PIERCING PLAN



# MS Series Small Size Snap-acting Switches

<b>PART NUMBER</b>
<b>MS-118305</b>



## Specifications

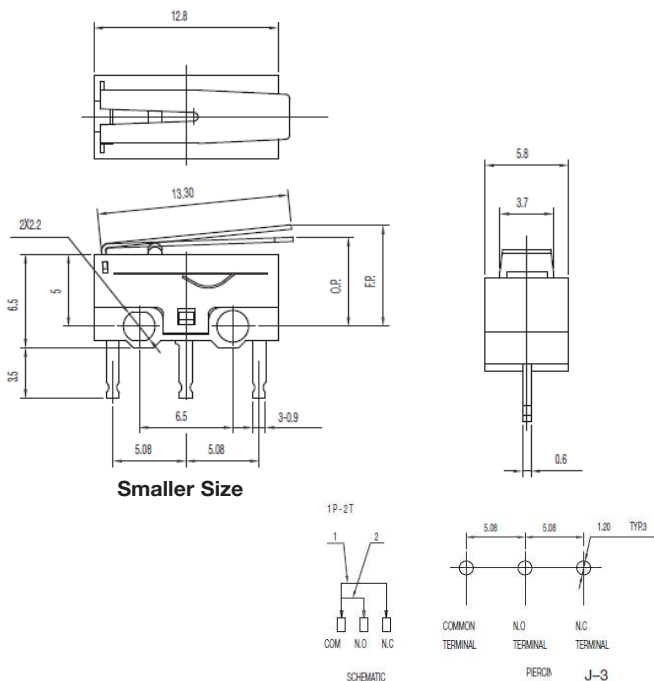
CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 0.1 A @ 30 VDC  
 OPERATING LIFE: 500,000 cycles without load  
 50,000 cycles with load  
 INITIAL CONTACT RESISTANCE: 50 mΩ max.  
 INSULATION RESISTANCE: 100 MΩ min. @ 500 VDC  
 DIELECTRIC STRENGTH: 1000 VAC (50-60 Hz)  
 OPERATING TEMPERATURE: -20°C to + 70°C  
 OPERATING FORCE: 70 ± 40 gf  
 PRE-TRAVEL (PT): 0.50 mm max.  
 OVERTRAVEL: 0.5 mm min.  
 OPERATING POSITION (OP): 5.50 ± 0.30 mm

## Materials

COVER: PBT (UL94V-0)  
 HOUSING: PBT (UL94V-0)  
 KNOB: PBT (UL94V-0)  
 TERMINALS: Silver plated

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

<b>PART NUMBER</b>
<b>MS-118305-A</b>



## Specifications

CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 0.1 A @ 30 VDC  
 OPERATING LIFE: 500,000 cycles without load  
 50,000 cycles with load  
 INITIAL CONTACT RESISTANCE: 50 mΩ max.  
 INSULATION RESISTANCE: 100 MΩ min. @ 500 VDC  
 DIELECTRIC STRENGTH: 1000 VAC (50-60 Hz)  
 OPERATING TEMPERATURE: -20°C to + 70°C  
 OPERATING FORCE: 25 ± 15 gf  
 OVERTRAVEL: 0.5 mm min.  
 OPERATING POSITION (OP): 6.0 ± 0.80 mm  
 FREE POSITION (FP): 8.5mm max.

## Materials

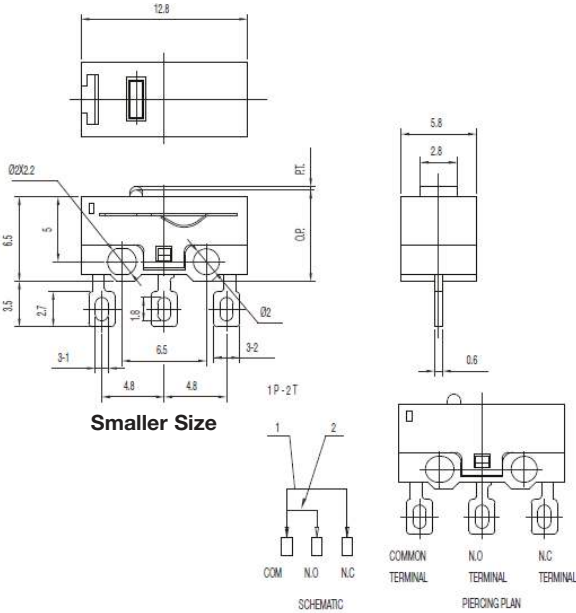
COVER: PBT (UL94V-0)  
 HOUSING: PBT (UL94V-0)  
 KNOB: PBT (UL94V-0)  
 TERMINALS: Silver plated

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

# MS Series Small Size Snap-acting Switches

Snap-acting

PART NUMBER
<b>MS-118405</b>



## Specifications

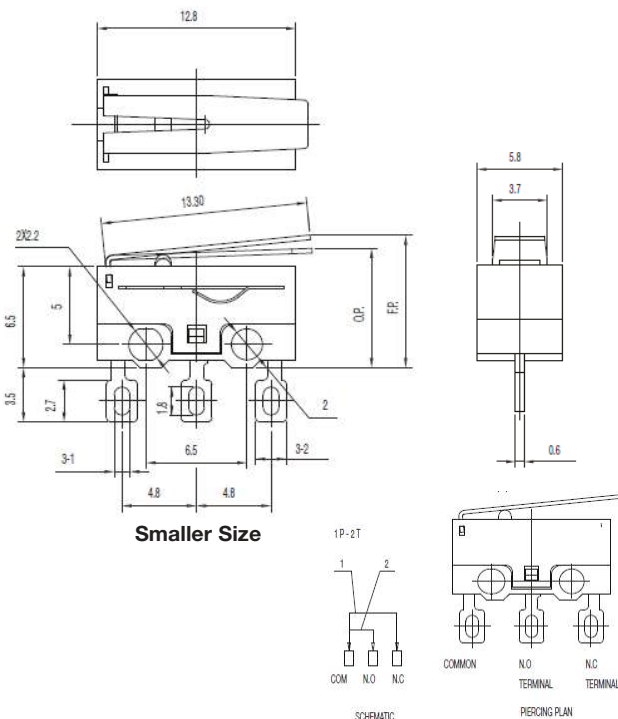
CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 0.1 A @ 30 VDC  
 OPERATING LIFE: 500,000 cycles without load  
 50,000 cycles with load  
 INITIAL CONTACT RESISTANCE: 50 m $\Omega$  max.  
 INSULATION RESISTANCE: 100 M  $\Omega$  min. @ 500 VDC  
 DIELECTRIC STRENGTH: 1000 VAC (50-60 Hz)  
 OPERATING TEMPERATURE: -20°C to + 70°C  
 OPERATING FORCE: 70  $\pm$  40 gf  
 PRE-TRAVEL (PT): 0.50 mm max.  
 OVERTRAVEL: 0.5 mm min.  
 OPERATING POSITION (OP): 7.0  $\pm$  0.30 mm

## Materials

COVER: PBT (UL94V-0)  
 HOUSING: PBT (UL94V-0)  
 KNOB: PBT (UL94V-0)  
 TERMINALS: Silver plated

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

PART NUMBER
<b>MS-118405-A</b>



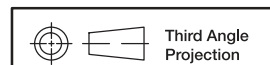
## Specifications

CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 0.1 A @ 30 VDC  
 OPERATING LIFE: 500,000 cycles without load  
 50,000 cycles with load  
 INITIAL CONTACT RESISTANCE: 50 m $\Omega$  max.  
 INSULATION RESISTANCE: 100 M  $\Omega$  min. @ 500 VDC  
 DIELECTRIC STRENGTH: 1000 VAC (50-60 Hz)  
 OPERATING TEMPERATURE: -20°C to + 70°C  
 OPERATING FORCE: 25  $\pm$  15 gf  
 OVERTRAVEL: 0.5 mm min.  
 OPERATING POSITION (OP): 7.5  $\pm$  0.80 mm  
 FREE POSITION (FP): 10 mm max.

## Materials

COVER: PBT (UL94V-0)  
 HOUSING: PBT (UL94V-0)  
 KNOB: PBT (UL94V-0)  
 TERMINALS: Silver plated

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.



Dimensions are shown: Inch (mm)  
 Specifications and dimensions subject to change