

# MS Series Subminiature 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

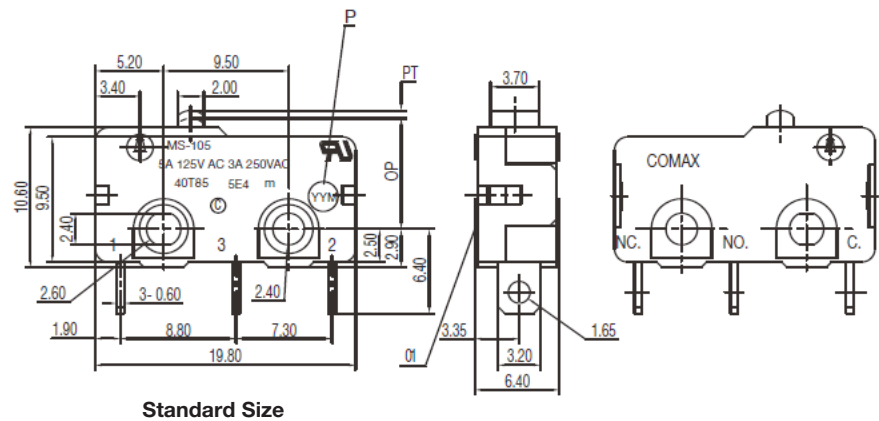
CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 5 A @ 125 VAC / 3 A @ 250 VAC  
 OPERATING LIFE: 1,000,000 cycles without load  
 6,000 cycles with load UL  
 INITIAL CONTACT RESISTANCE: 100 mΩ max.  
 INSULATION RESISTANCE: 100 MΩ min. @ 500 VDC  
 DIELECTRIC STRENGTH: 1000 VAC (50-60 Hz)  
 OPERATING 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

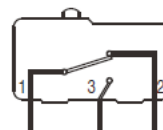
COVER: PBT (UL94V-0)  
 HOUSING: PBT (UL94V-0)  
 KNOB: PBT (UL94V-0)  
 TERMINALS: Silver plated

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> |

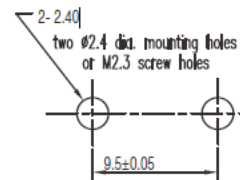


Circuit Diagram



SCHEMATIC

Mounting Holes



PIERCING PLAN

## Snap-acting


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## Snap-acting



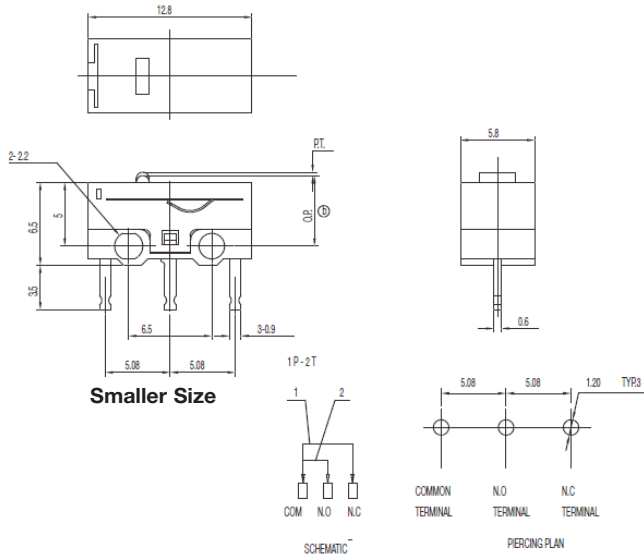
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.



# MS Series Subminiature Snap-acting Switches

## PART NUMBER

**MS-118305**



## 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): 5.50  $\pm$  0.30 mm

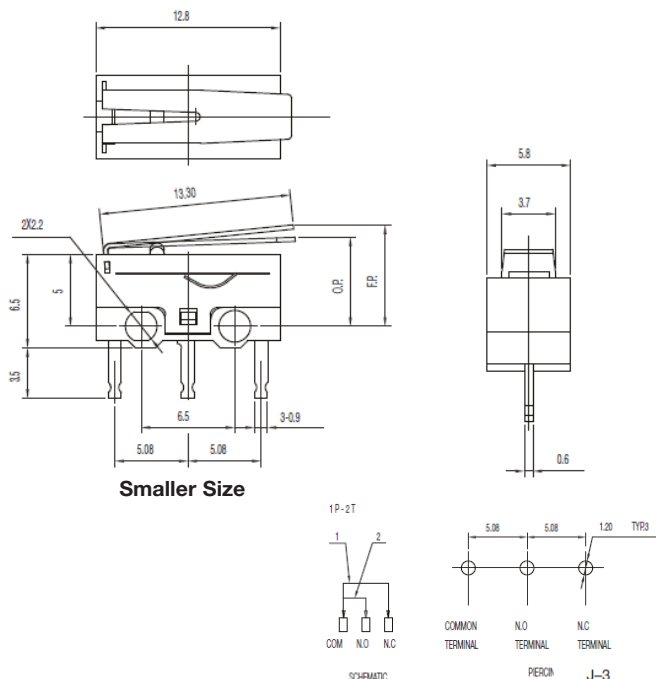
## Materials

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

**MS-118305-A**



## 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): 6.0  $\pm$  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.

## Snap-acting

The technical drawings of the 1P-2T relay include:

- Top View:** Shows a rectangular footprint with a width of 12.8. It features a central rectangular cutout and a smaller rectangular feature on the left side.
- Side View:** Shows the relay's profile with a total height of 6.5. It includes a mounting tab on the left with a width of 3.5 and a central pin with a diameter of 0.6. The top surface has a width of 5.8 and a central feature with a width of 2.8.
- Front View:** Shows the relay's front with a total width of 12.8. It features three circular terminals at the bottom, each with a diameter of 0.2. The central terminal is labeled "1P-2T". The terminals are spaced 4.8 apart. The top surface has a width of 6.5 and a central feature with a width of 2.8. The bottom surface has a width of 3.5 and a central pin with a diameter of 0.6.
- Schematic Diagram:** Shows the electrical connections. It includes a common terminal (COM) and two normally open (N.O.) and normally closed (N.C.) terminals. The terminals are labeled "COMMON TERMINAL", "N.O. TERMINAL", and "N.C. TERMINAL".

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Technical drawings of the 1P-2T relay, showing dimensions and electrical connections.

**Dimensions:**

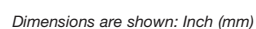
- Top view: 12.8 (width), 13.30 (diagonal length), 0.6 (base width).
- Side view: 6.5 (height), 5 (height), 3.5 (height), 2.7 (height), 3-1 (height), 6.5 (width), 3-2 (height), 4.8 (width), 4.8 (width).
- Pierce view: 5.8 (height), 3.7 (height), 0.6 (base width).

**Electrical Connections:**

- 1P-2T:** 1P (Common), 2T (NO, NC).
- Terminal Plan:** COMMON, NO, NC.

**Schematic:** Shows the internal wiring of the relay, with terminals 1, 2, and 3 connected to the common, NO, and NC contacts respectively.

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## Данный компонент на территории Российской Федерации

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<http://moschip.ru/get-element>

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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