


MS Series

Small Size Snap-acting Switches



Agency Approvals

Agency	Agency File Number
	E42363

Description

The MS series mini size snap-acting switch is perfect for use in industrial applications, appliances and consumer electronics because of its ability to withstand repeated use while continuing to respond to various levels of operating force. The MS series features detect interlock and movement as well as different lever options, giving designers the options they need to continue to innovate.

Features & Benefits

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

Applications

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

MS Series

Small Size Snap-acting Switches



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	160 ± 30 gf
Pre-Travel (PT)	0.6 mm max.
Over-Travel	0.5 mm max.
Operating Position (OP)	8.40 ± 0.40 mm

Materials

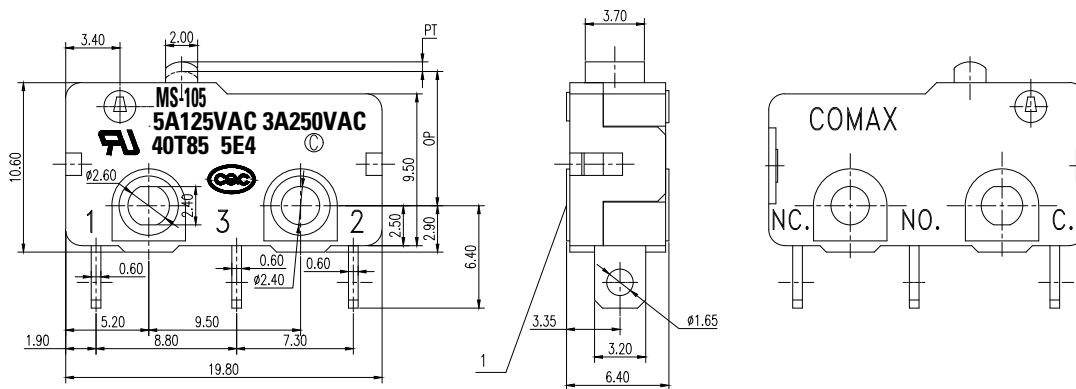
Cover	PBT (UL 94 V0)
Housing	
Knob	
Terminals	

Notes:

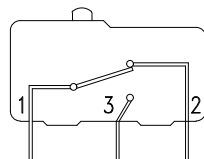
1. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Part Number - MS-105A01

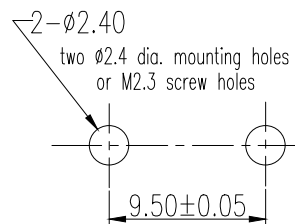
Dimensions (in mm)



Circuit Diagram



Mounting Holes



MS Series

Small Size Snap-acting Switches



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	65 ± 20 gf
Pre-Travel (PT)	3.0 mm max.
Over-Travel	1.0 mm max.
Operating Position (OP)	9.40 ± 1.0 mm

Materials

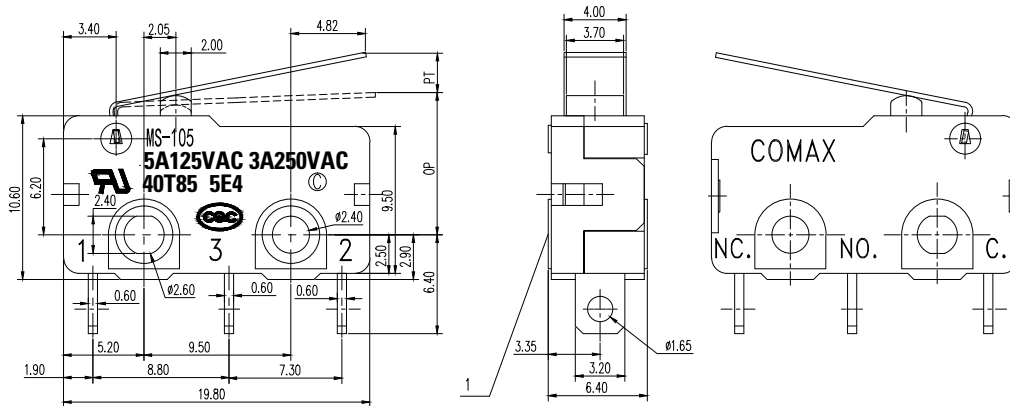
Cover	PBT (UL 94 V0)
Housing	
Knob	
Terminals	

Notes:

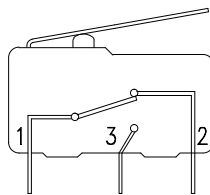
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Part Number - MS-105A01-01

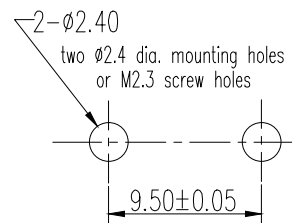
Dimensions (in mm)



Circuit Diagram



Mounting Holes



MS Series

Small Size Snap-acting Switches



Specifications

Contact Arrangement	SPST
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	65 ± 20 gf
Pre-Travel (PT)	3.0 mm max.
Over-Travel	1.0 mm max.
Operating Position (OP)	9.40 ± 1.0 mm

Materials

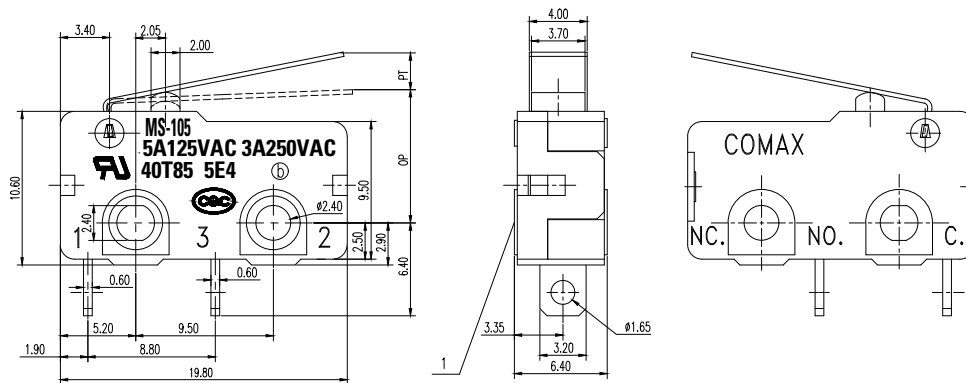
Cover	PBT (UL 94 V0)
Housing	
Knob	
Terminals	

Notes:

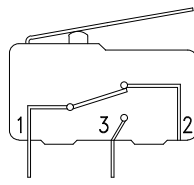
1. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Part Number - MS-105B01

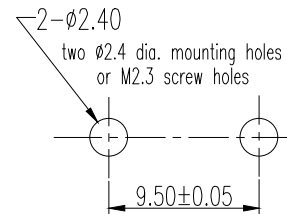
Dimensions (in mm)



Circuit Diagram



Mounting Holes



MS Series

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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 mΩ min
Dielectric Strength	1000 VAC (50-60 Hz)
Operating Temperature	-20°C to 70°C
Operating Force	25 ± 15 gf
Pre-Travel (PT)	3.3mm max
Over-Travel	0.5mm max
Operating Position (OP)	6.0 ± 0.8 mm

Materials

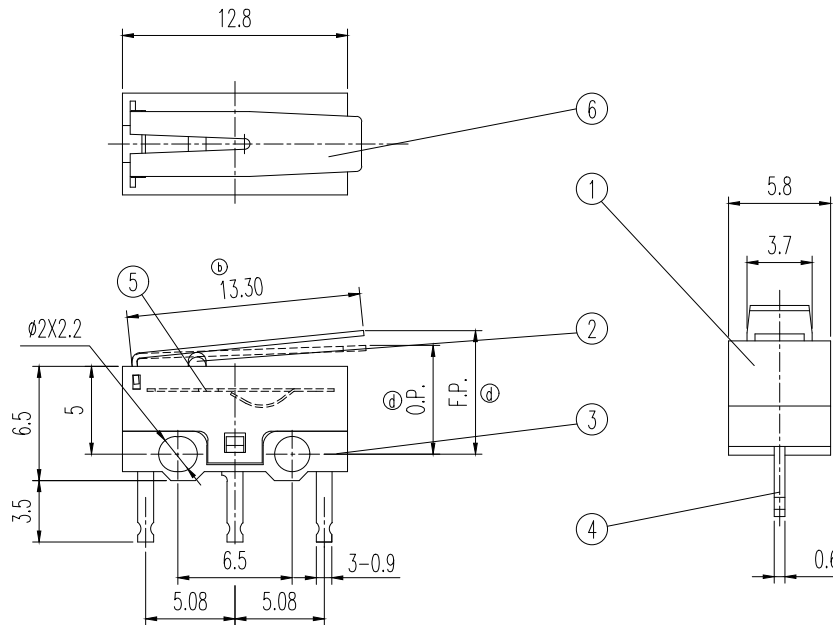
Cover	PBT (UL 94 V0)
Housing	
Knob	Silver plated
Terminals	

Notes:

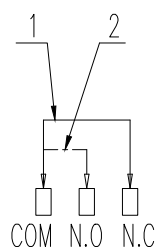
1. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Part Number - MS-118305-A

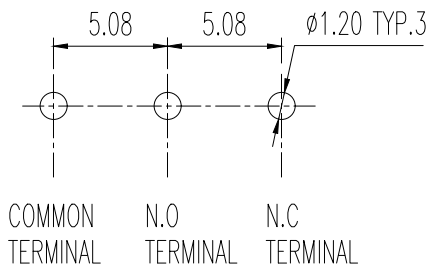
Dimensions (in mm)



1 P - 2 T



SCHEMATIC



PIERCING PLAN

MS Series

Small Size Snap-acting Switches



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
Over-Travel	0.5 mm max
Operating Position (OP)	8.5 ± 0.80 mm
Free Position	9.5 mm max

Materials

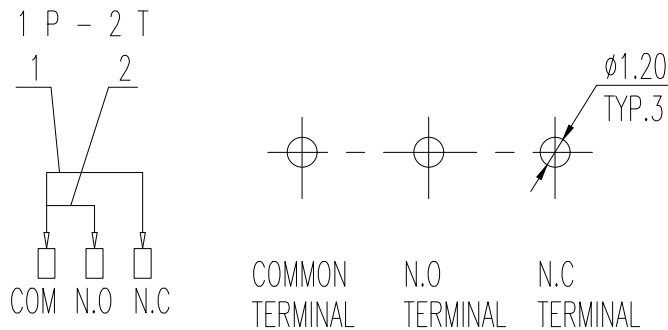
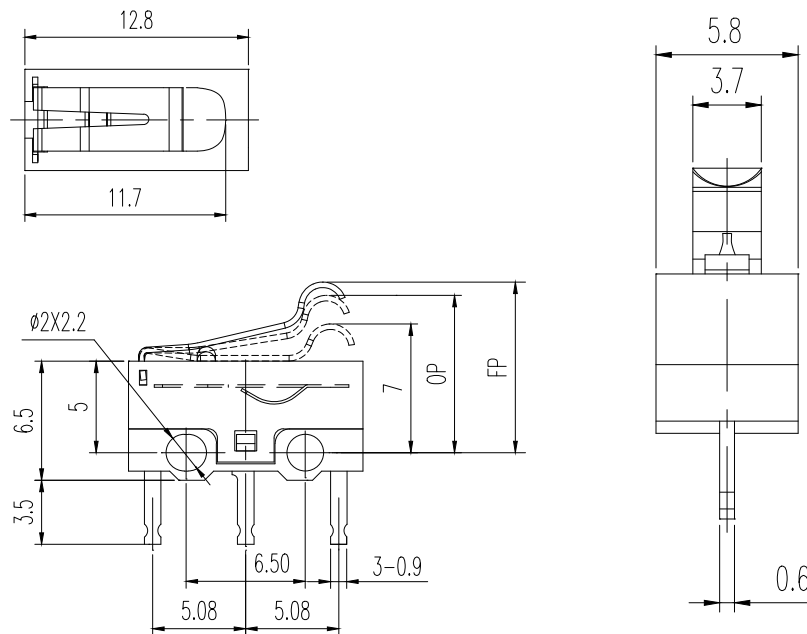
Cover	PBT (UL 94 V0)
Housing	
Knob	Silver plated
Terminals	

Notes:

1. 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

Dimensions (in mm)



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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
Pre-Travel (PT)	0.50 mm max.
Over-Travel	0.5 mm max.
Operating Position (OP)	8.5 ± 0.80 mm

Materials

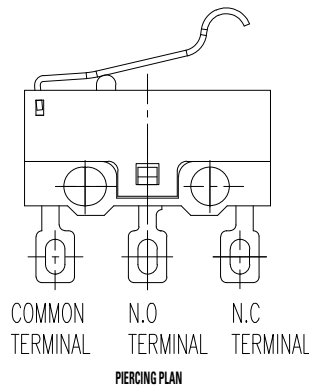
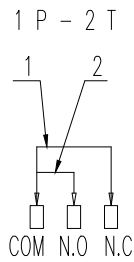
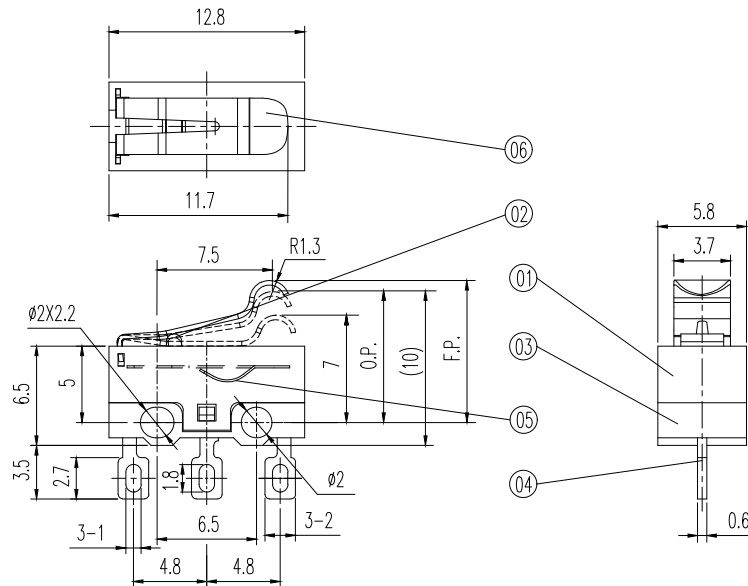
Cover	PBT (UL 94 V0)
Housing	
Knob	
Terminals	

Notes:

1. 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-118405

Dimensions (in mm)



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