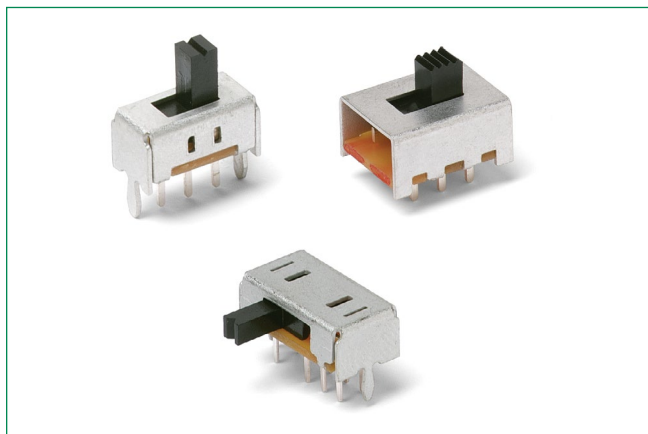


OS Series

Miniature Slide Switches



Description

The OS series miniature slide switch is made with Halogen-free materials and comes with a variety of actuators and terminations, optional PC or panel mounting, shorting or non-shorting contacts and gold or silver plating. These features make the OS series attractive to designers in the test & measurement equipment, computer peripheral & network product and consumer products industries.

Features & Benefits

- Variety of actuators & terminations
- Shorting or non-shorting contacts
- RoHS compliant
- Halogen free material
- PC and panel mounting

Applications

- Test & measurement equipment
- Computer peripherals & network products
- Consumer products

Specifications

Contact Rating	See individual parts.
Mechanical & Electrical Life	10,000 cycles
Contact Resistance	20 m Ω or less
Insulation Resistance	100 M Ω min. at 500 VDC.
Dielectric Strength	500 VAC for 1 minute.
Operating Temperature	-40°C to 85°C
Packaging	Bulk

Notes: For RoHS compatible switches contact customer service. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Materials

Base	Phenolic Resin
Actuator	Standard: POM, Black. High Temperature Option: PA46, Black
Housing	SPCC Sn plated
Movable Contact	Copper alloy, silver plated.
Stationary Contacts	
Terminals	Brass, silver plated.

OS Series

Miniature Slide Switches



Ordering Number

Part number list is shown below. For individual part details, please refer to the following pages.

Part Number (Part Description)	Product Details
OS102011MS2QN1	SPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Non shorting
OS102011MS2QN1C	SPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Non shorting, High temperature resin
OS102011MS2QS1	SPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Shorting
OS102011MS2QS1C	SPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, shorting, High temperature resin
OS103011MS8QP1	SP3T, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=3.8mm, Not specified
OS103011MS8QP1C	SP3T, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=3.8mm, Not specified, High temperature resin
OS202011MS2QS1	DPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Shorting
OS202011MS2QN1	DPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Non shorting
OS203011MS1QP1	DP3T, 2mm travel, Vertical, PC Thru-hole, Frame H=4.7mm, Tail L=3.6mm, Not specified
OS202013MT5QN1	DPDT, 3mm travel, Vertical, PC Thru-hole, Frame H=7.0mm, Tail L=2.8mm, Non shorting
OS203013MT7QN1	DP3T, 3mm travel, Vertical, PC Thru-hole, Frame H=7.5mm, Tail L=2.2mm, Non shorting
OS202013MT8QN1	DPDT, 3.2mm travel, Vertical, PC Thru-hole, Frame H=7.0mm, Tail L=2.5mm, Non shorting
OS203013MT8QN1	DP3T, 3.2mm travel, Vertical, PC Thru-hole, Frame H=7.0mm, Tail L=2.5mm, Non shorting
OS203013MT6QN1	DP3T, 3mm travel, Vertical, PC Thru-hole, Frame H=7.0mm, Tail L=2.9mm, Non shorting
OS103012MU1QP1	SP3T, 2.5mm travel, Vertical, PC Thru-hole, Frame H=5.2mm, Tail L=3.7mm, Not specified
OS103012MU2QP1	SP3T, 2.5mm travel, Vertical, PC Thru-hole, Frame H=5.2mm, Tail L=2.5mm, Not specified
OS203012MU5QP1	DP3T, 2.5mm travel, Vertical, PC Thru-hole, Frame H=5.2mm, Tail L=3.7mm, Not specified
OS202011MV4QN1	DPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=8.5mm, Tail L=4.2mm, Non shorting
OS202011MV4QS1	DPDT, 2mm travel, Vertical, PC Thru-hole, Frame H=8.5mm, Tail L=4.2mm, shorting
OS203011MV9QS1	DP3T, 2mm travel, Vertical, PC Thru-hole, Frame H=8.5mm, Tail L=4.2mm, shorting
OS203011MV9QN1	DP3T, 2mm travel, Vertical, PC Thru-hole, Frame H=8.5mm, Tail L=4.2mm, Non shorting
OS102011MA1QN1	SPDT, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Non shorting
OS102011MA1QN1C	SPDT, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Non shorting, High temperature resin
OS102011MA1QS1	SPDT, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, shorting
OS102011MA1QS1C	SPDT, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, shorting, High temperature resin
OS103011MA7QP1	SP3T, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=3.8mm, Not specified
OS103011MA7QP1C	SP3T, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=3.8mm, Not specified, High temperature resin
OS203011MA2QP1	DP3T, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=3.7mm, Not specified
OS202011MA0QN1	DPDT, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, Non shorting
OS202011MA0QS1	DPDT, 2mm travel, Right angle, PC Thru-hole, Frame H=4.7mm, Tail L=2.8mm, shorting

OS Series

Miniature Slide Switches

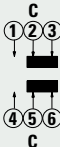


OS202011MS2QS1 DPDT

Switch Function

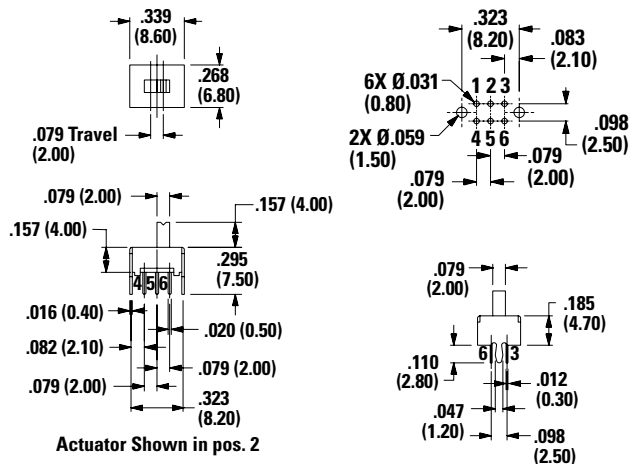
Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS202011MS2QS1 (Shorting)	Yes	No		
OS202011MS2QN1 (non-specified)				
Conn. Terminals	-		1-2, 4-5	2-3, 5-6

Schematic, **DPDT**



Notes: Contact Rating: 0.1A @ 12 VDC

PC Mounting



OS203011MS1QP1 DP3T

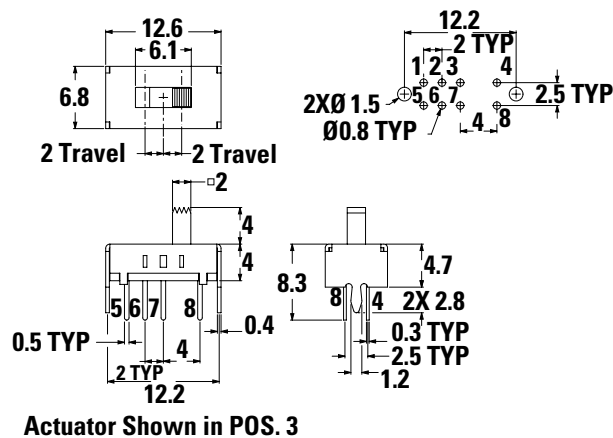
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS103011MS8QP1 (non-specified)	Yes	No			
Conn. Terminals	-		1-3, 5-7	2-3, 6-7	3-4, 7-8

Schematic, DP3T

Notes: Contact Rating: 0.3A @ 30 VDC

PC Mounting



OS Series

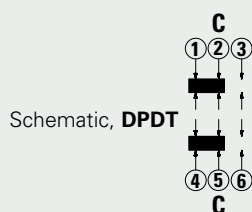
Miniature Slide Switches



OS202013MT5QN1 DPDT

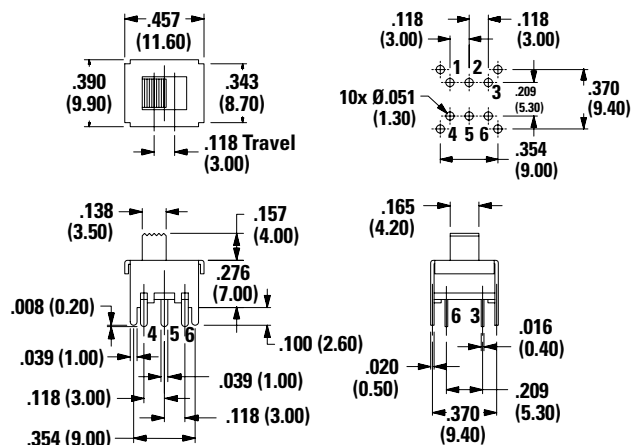
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS202013MT5QN1 (Non-shorting)	Yes	No	On	On
Conn. Terminals	-	-	1-2, 4-5	2-3, 5-6



Notes: Contact Rating: 0.3A @ 30 VDC

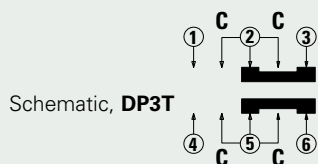
PC Mounting



OS203013MT7QN1 DP3T

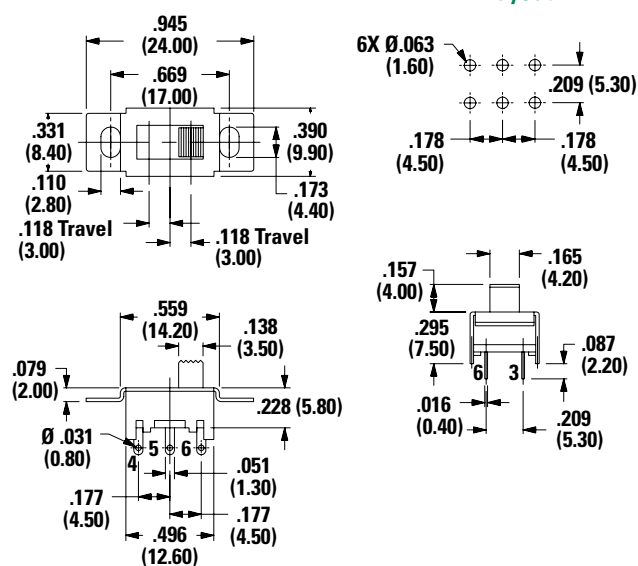
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	Switch Function		
			POS.1	POS.2	POS.3
OS203013MT7QN1 (Non-shorting)	Yes	No	On	Off	On
Conn. Terminals	-	-	1-2/ 4-5		2-3/ 5-6



Notes: Contact Rating: 0.3A @ 30 VDC

Pin Layout



OS Series

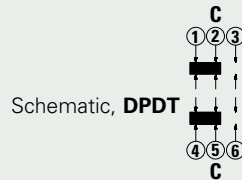
Miniature Slide Switches



OS202013MT8QN1 DPDT

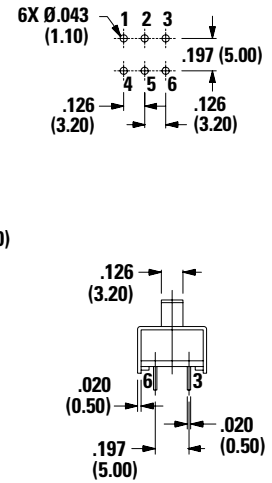
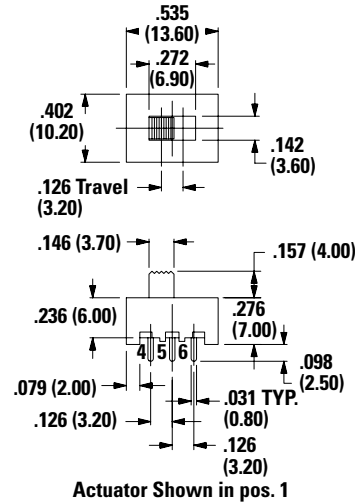
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS202013MT8QN1 (Non-shorting)	Yes	No	On	On
Conn. Terminals	-	-	1-2, 4-5	2-3, 5-6



Notes: Contact Rating: 0.3A @ 30 VDC

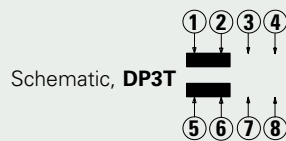
PC Mounting



OS203013MT8QN1 DP3T

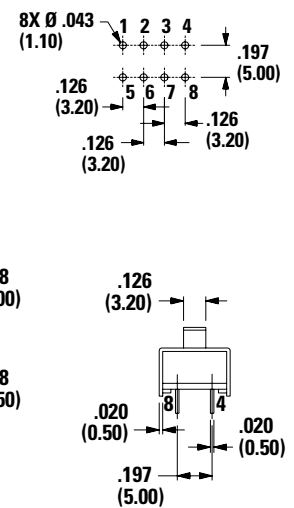
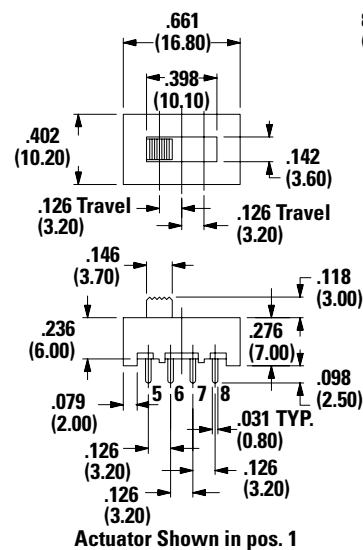
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS203013MT8QN1 (Non-shorting)	Yes	No	On	On	On
Conn. Terminals	-	-	1-2/ 5-6	3-4, 7-8	



Notes: Contact Rating: 0.3A @ 30 VDC

PC Mounting



OS203013MT6QN1 DP3T

PC Mounting

Schematic, **DP3T**

The schematic shows two rows of four numbered circles. The top row contains circles 1, 2, 3, and 4. The bottom row contains circles 5, 6, 7, and 8. Arrows point from circles 1 and 2 downwards, and from circles 5 and 6 upwards. Arrows also point from circles 3 and 4 downwards, and from circles 7 and 8 upwards. The circles 3 and 4 are connected by a thick black horizontal bar, and the circles 7 and 8 are connected by a thick black horizontal bar.

Figure 1 shows four views of a mechanical test specimen with the following dimensions:

- Top View:** Overall width is .543 (13.80). The central rectangular feature has a width of .390 (9.90) and a height of .339 (8.60). There are two .118 (3.00) travel dimensions on the sides.
- Front View:** Shows a central feature with a width of .157 (4.00) and a height of .276 (7.00). The overall height is .228 (5.80). The base has a width of .465 (11.80) and a height of .118 (3.00). There are two .039 (1.00) dimensions for the base features.
- Side View:** Shows a central feature with a width of .138 (3.50) and a height of .071 (1.80). The overall height is .228 (5.80). The base has a width of .465 (11.80) and a height of .118 (3.00). There are two .039 (1.00) dimensions for the base features.
- Bottom View:** Shows a central feature with a width of .165 (4.20) and a height of .020 (0.50). The overall height is .209 (5.30). The base has a width of .465 (11.80) and a height of .118 (3.00). There are two .039 (1.00) dimensions for the base features.

PC Mounting

Schematic, **SP3T**

[illegible]

OS Series

Miniature Slide Switches



OS103012MU2QP1 SP3T

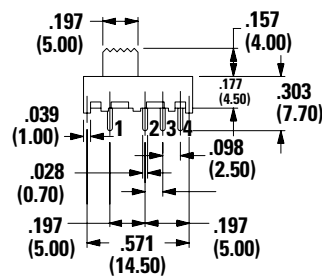
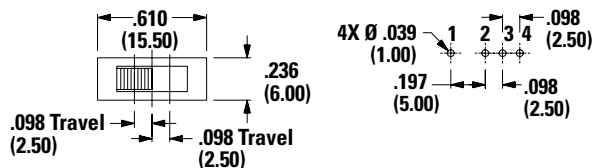
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS103012MU2QP1 (Non-shorting)	Yes	No			
Conn. Terminals	-	-	1-2	2-3	2-4

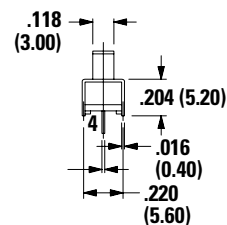
Schematic, **SP3T**

Notes: Contact Rating: 0.2A @ 30 VDC

PC Mounting



Actuator Shown in pos. 1



OS203012MU5QP1 DP3T

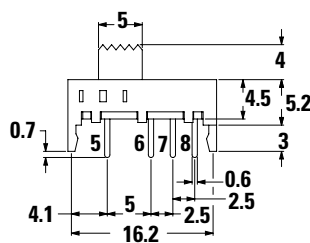
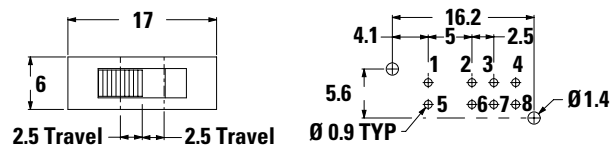
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS203012MU5QP1 (Non-specified)	Yes	No			
Conn. Terminals	-	-	1-2	2-3	2-4

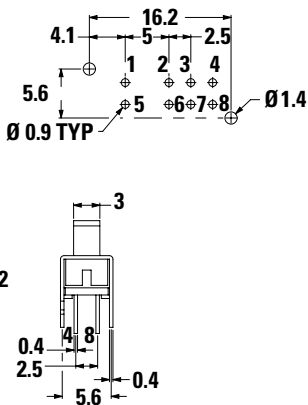
Schematic, **DP3T**

Notes: Contact Rating: 0.1A @ 30 VDC

PC Mounting



Actuator Shown in POS. 1



OS Series

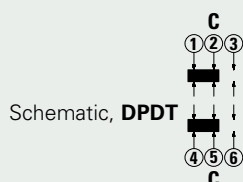
Miniature Slide Switches



OS202011MV4QN1 DPDT

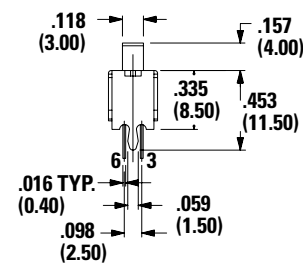
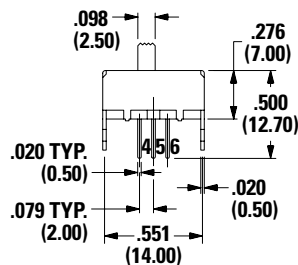
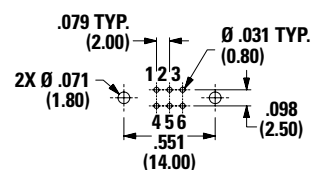
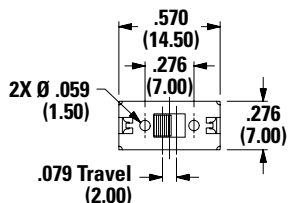
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS202011MV4QN1 (Non-shorting)	Yes	No	On	
OS202011MV4QS1 (Shorting)				
Conn. Terminals	-		1-2, 4-5	2-3, 5-6



Notes: Contact Rating: 0.1A @ 30 VDC

PC Mounting

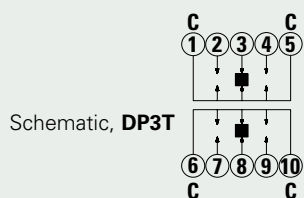


Actuator Shown in pos. 1

OS203011MV9QS1 DP3T

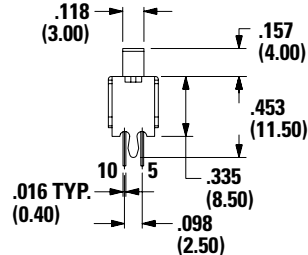
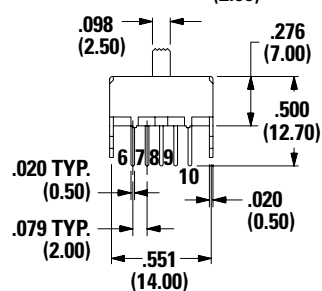
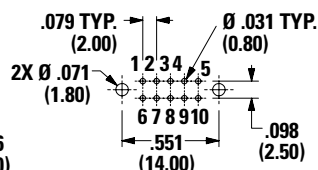
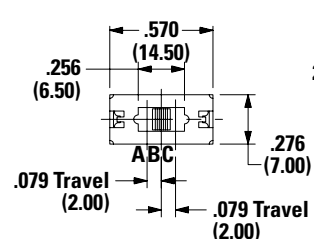
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1 	POS.2 	POS.3 
OS203011MV9QS1 (Shorting)	Yes	No	On		
OS203011MV9QN1 (Non-shorting)					
Conn. Terminals	-		1-2-5 6-7-10	1-3-5 6-8-10	1-4-5 6-9-10



Notes: Contact Rating: 0.1A @ 30 VDC

PC Mounting



Actuator Shown in pos. 2(A)

OS Series

Miniature Slide Switches



OS102011MA1QN1 SPDT

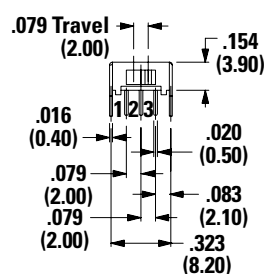
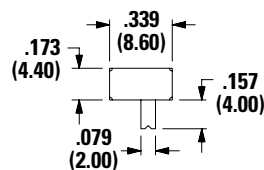
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS102011MA1QN1 (Non-shorting)	Yes	No	On	On
OS102011MA1QN1C ¹ (Non-shorting)		Yes		
OS102011MA1QS1 (Shorting)		No		
OS102011MA1QS1C ¹ (Shorting)		Yes		
Conn. Terminals	-		1-2	2-3

Schematic, **SPDT**

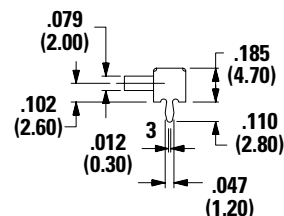
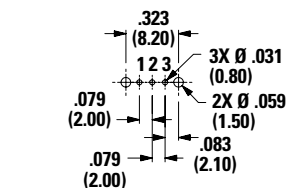
Notes: Contact Rating: 0.1A @ 12 VDC

1. "C" option at the end of part number designates high temperature actuators



Actuator Shown in pos. 2

PC Mounting



OS103011MA7QP1 SP3T

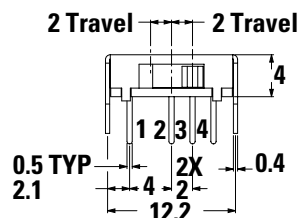
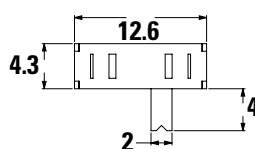
Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS103011MA7QP1 (Non-specified)	Yes	No	On		
OS103011MA7QP1C ¹ (Non-specified)					

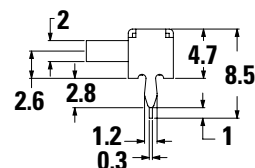
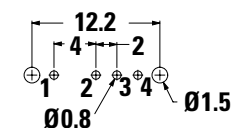
Schematic, **SP3T**

Notes: Contact Rating: 0.1A @ 12 VDC

1. "C" option at the end of part number designates high temperature actuators



PC Mounting



OS203011MA2QP1 DP3T