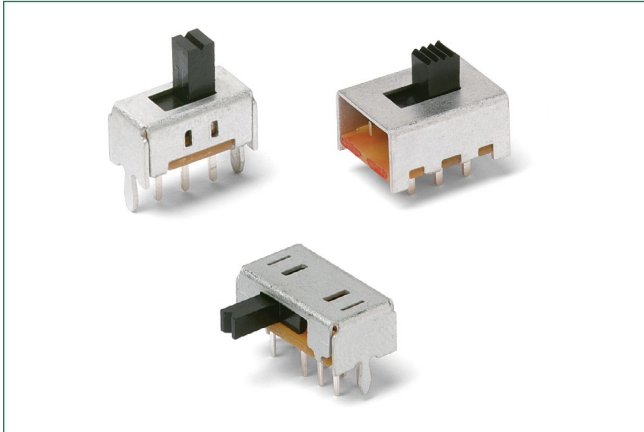


# OS Series

## 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

<b>Contact Rating</b>	See individual parts.
<b>Mechanical &amp; Electrical Life</b>	10,000 cycles
<b>Contact Resistance</b>	20 m $\Omega$ or less
<b>Insulation Resistance</b>	100 M $\Omega$ min. at 500 VDC.
<b>Dielectric Strength</b>	500 VAC for 1 minute.
<b>Operating Temperature</b>	-40°C to 85°C
<b>Packaging</b>	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

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



### OS102011MS2QN1 SPDT

#### Switch Function

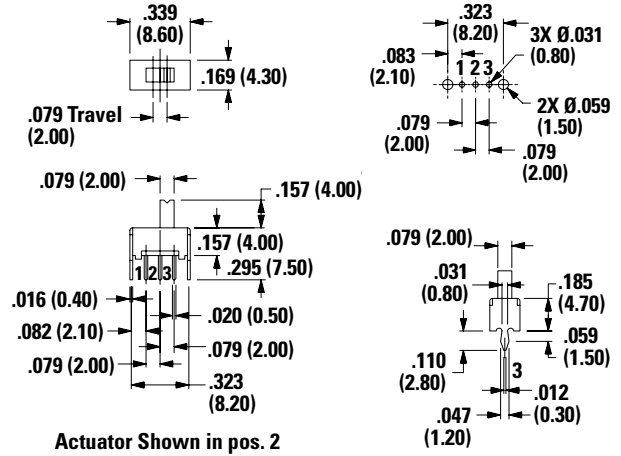
Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS102011MS2QN1 (non-shorting)	Yes	No		
OS102011MS2QN1C <sup>1</sup> (non-shorting)		Yes		
OS102011MS2QS1 (shorting)		No		
OS102011MS2QS1C <sup>1</sup> (shorting)		Yes		
Conn. Terminals	-	-	1-2	2-3

Schematic, **SPDT**

Notes: Contact Rating: 0.1A @ 12 VDC

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

#### PC Mounting



### OS103011MS8QP1 SP3T

#### Switch Function

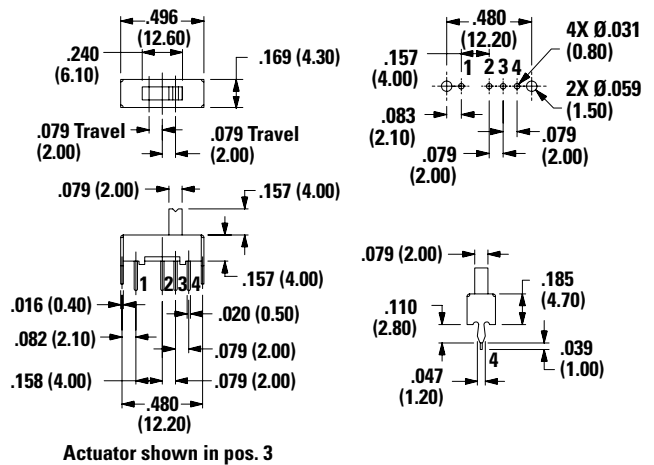
Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS103011MS8QP1 (non-specified)	Yes	No			
OS103011MS8QP1C <sup>1</sup> (non-specified)		Yes			
Conn. Terminals	-	-	1-2	2-3	2-4

Schematic, **SP3T**

Notes: Contact Rating: 0.1A @ 12 VDC

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

#### PC Mounting



# OS Series

## Miniature Slide Switches



### OS202011MS2QS1 DPDT

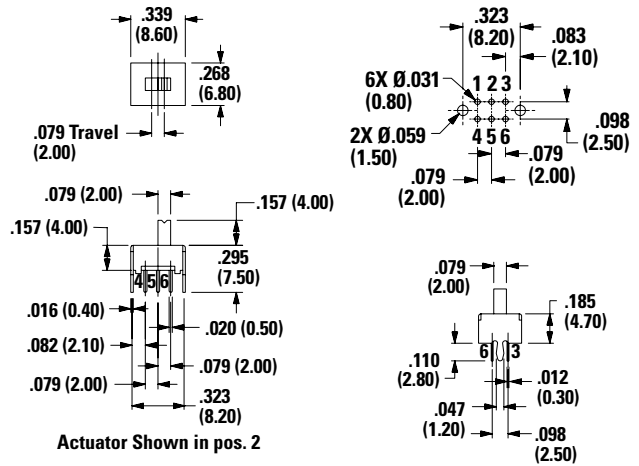
#### Switch Function

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

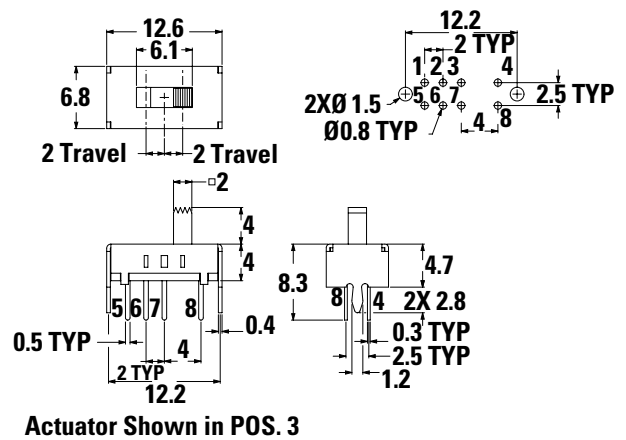
#### Switch Function

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

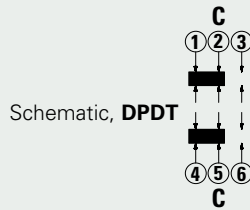
## Miniature Slide Switches



### OS202013MT5QN1 DPDT

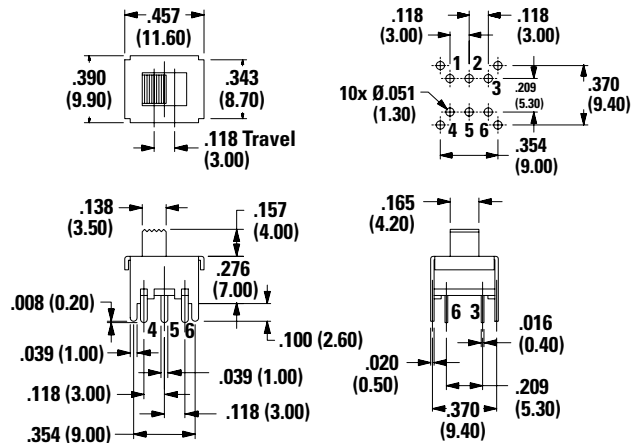
#### Switch Function

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



Notes: Contact Rating: 0.3A @ 30 VDC

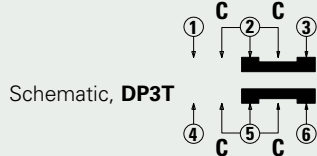
#### PC Mounting



### OS203013MT7QN1 DP3T

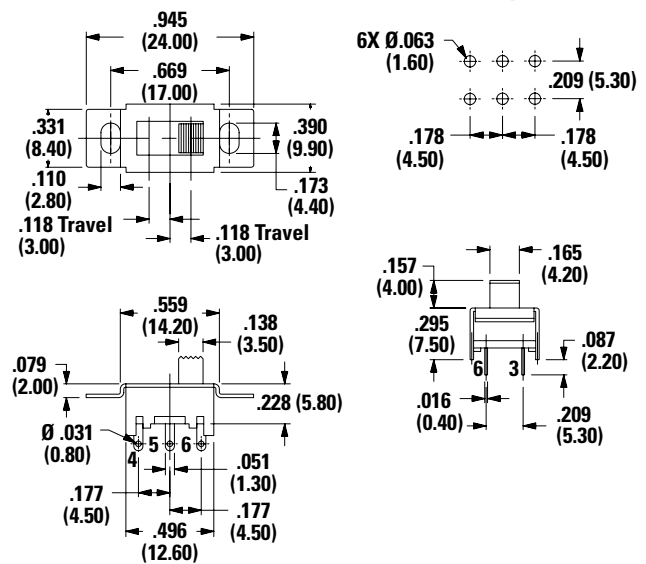
#### Switch Function

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



Notes: Contact Rating: 0.3A @ 30 VDC

#### Pin Layout



# OS Series

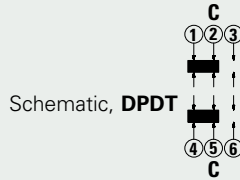
## Miniature Slide Switches



### OS202013MT8QN1 DPDT

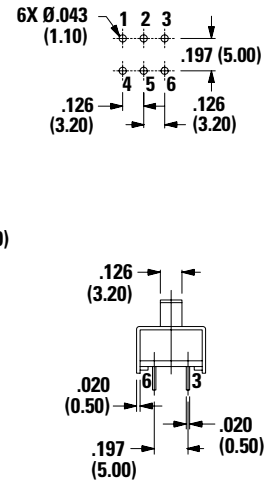
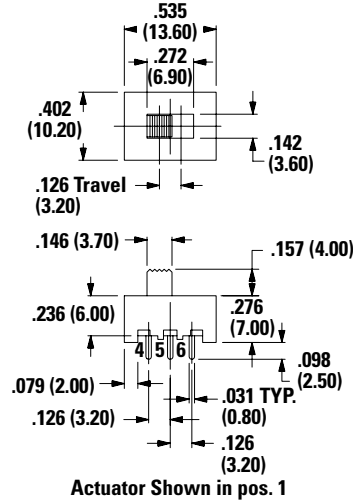
#### Switch Function

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

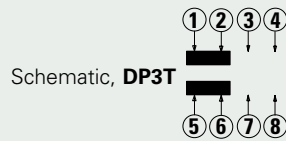
#### PC Mounting



### OS203013MT8QN1 DP3T

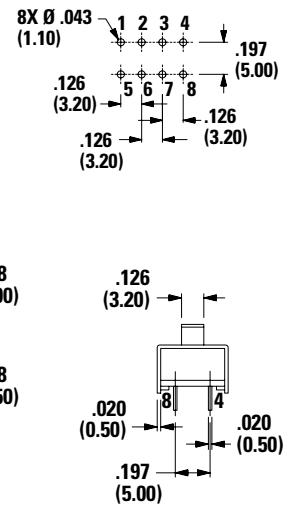
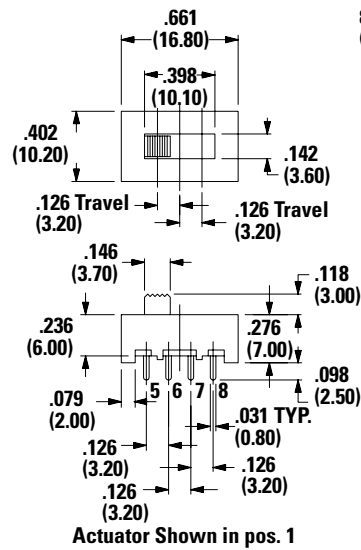
#### Switch Function

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



# OS Series

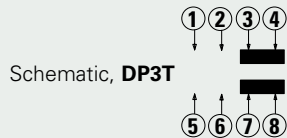
## Miniature Slide Switches



### OS203013MT6QN1 DP3T

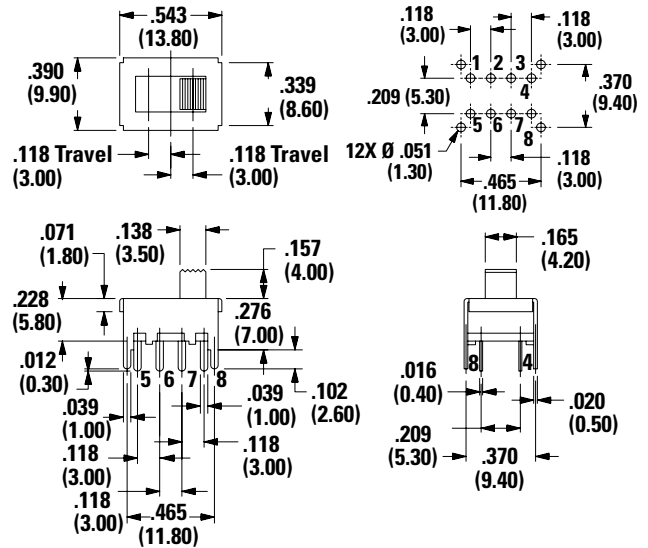
#### Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS203013MT6QN1 (Non-shorting)	Yes	No		On	
Conn. Terminals			1-2/ 5-6	2-3/ 6-7	3-4/ 7-8



Notes: Contact Rating: 0.2A @ 30 VDC

#### PC Mounting

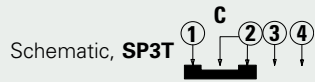


Actuator Shown in pos. 3

### OS103012MU1QP1 SP3T

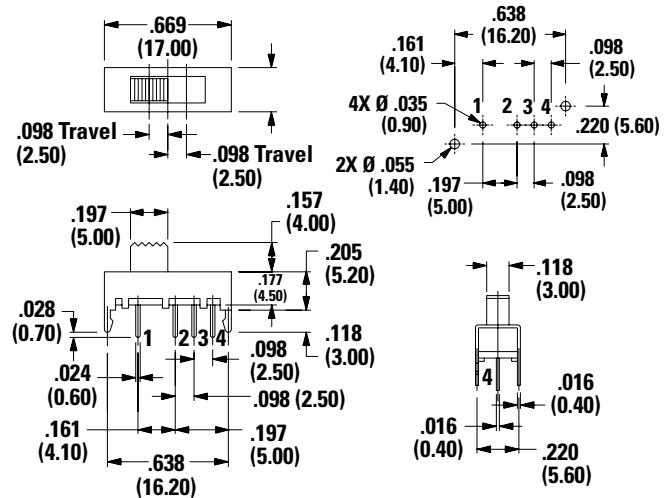
#### Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS103012MU1QP1 (Non-shorting)	Yes	No		On	
Conn. Terminals			1-2/ 5-6	2-3/ 6-7	2-4/ 6-8



Notes: Contact Rating: 0.2A @ 30 VDC

#### PC Mounting



# OS Series

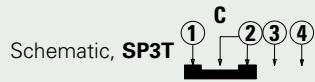
## Miniature Slide Switches



### OS103012MU2QP1 SP3T

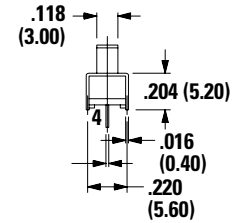
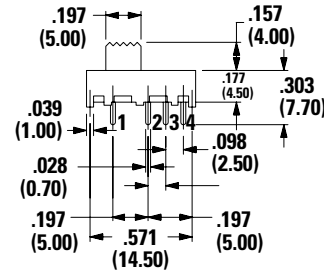
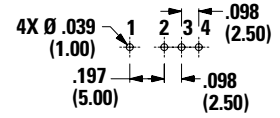
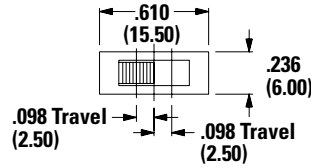
#### Switch Function

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



Notes: Contact Rating: 0.2A @ 30 VDC

#### PC Mounting

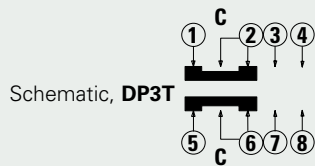


Actuator Shown in pos. 1

### OS203012MU5QP1 DP3T

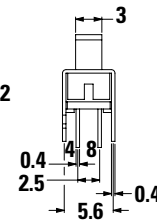
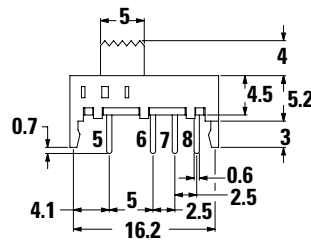
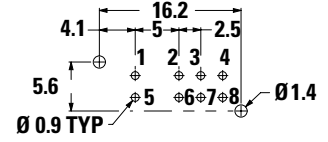
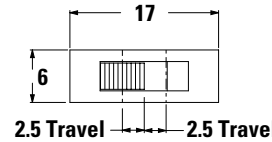
#### Switch Function

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



Notes: Contact Rating: 0.1A @ 30 VDC

#### PC Mounting



Actuator Shown in POS. 1



# OS Series

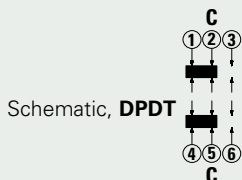
## Miniature Slide Switches



### OS202011MV4QN1 DPDT

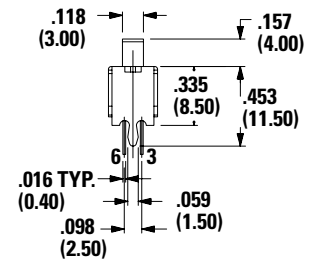
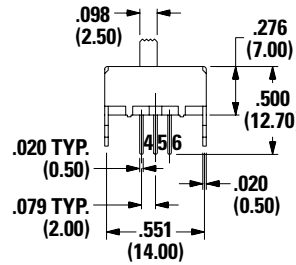
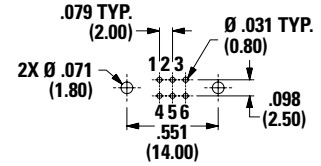
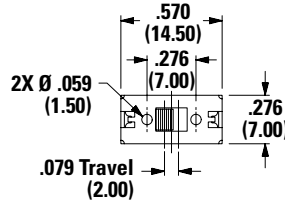
#### Switch Function

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



Notes: Contact Rating: 0.1A @ 30 VDC

#### PC Mounting

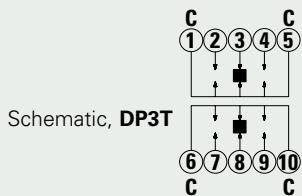


Actuator Shown in pos. 1

### OS203011MV9QS1 DP3T

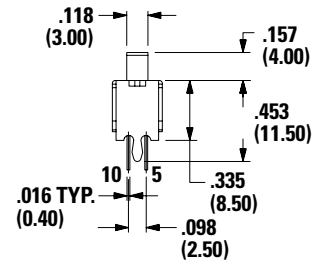
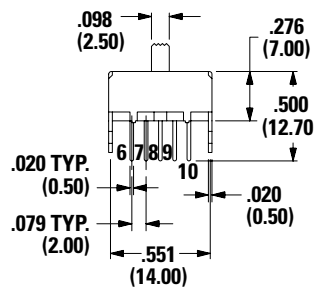
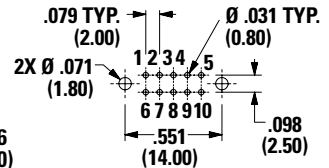
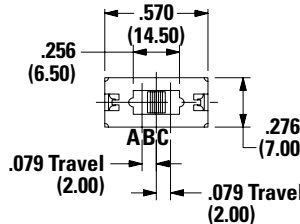
#### Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS203011MV9QS1 (Shorting)	Yes	No	On	On	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



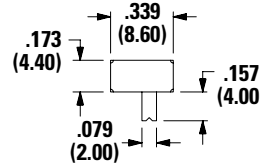
### OS102011MA1QN1 SPDT

#### Switch Function

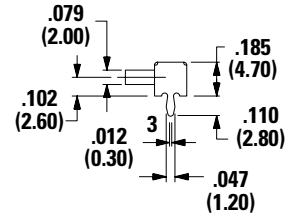
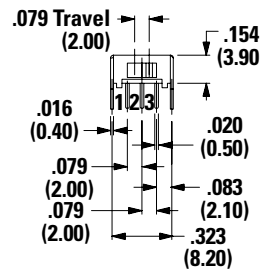
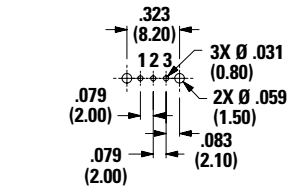
Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS102011MA1QN1 (Non-shorting)	Yes	No	On	On
OS102011MA1QN1C <sup>1</sup> (Non-shorting)		Yes		
OS102011MA1QS1 (Shorting)		No		
OS102011MA1QS1C <sup>1</sup> (Shorting)		Yes		
Conn. Terminals	-	-	1-2	2-3



Notes: Contact Rating: 0.1A @ 12 VDC  
 1. "C" option at the end of part number designates high temperature actuators



#### PC Mounting



Actuator Shown in pos. 2

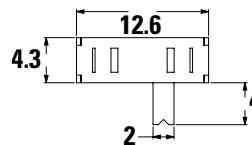
### OS103011MA7QP1 SP3T

#### Switch Function

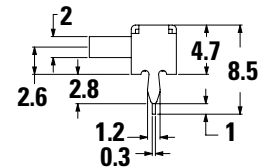
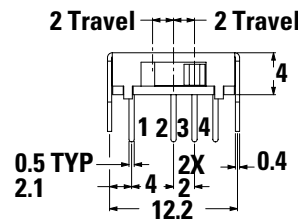
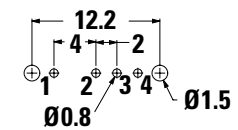
Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS103011MA7QP1 (Non-specified)	Yes	No	On	On	On
OS103011MA7QP1C <sup>1</sup> (Non-specified)					
Conn. Terminals	-	-	1-2	2-3	2-4



Notes: Contact Rating: 0.1A @ 12 VDC  
 1. "C" option at the end of part number designates high temperature actuators



#### PC Mounting



# OS Series

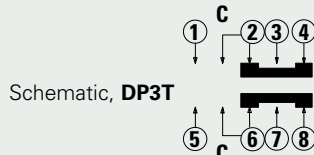
## Miniature Slide Switches



### OS203011MA2QP1 DP3T

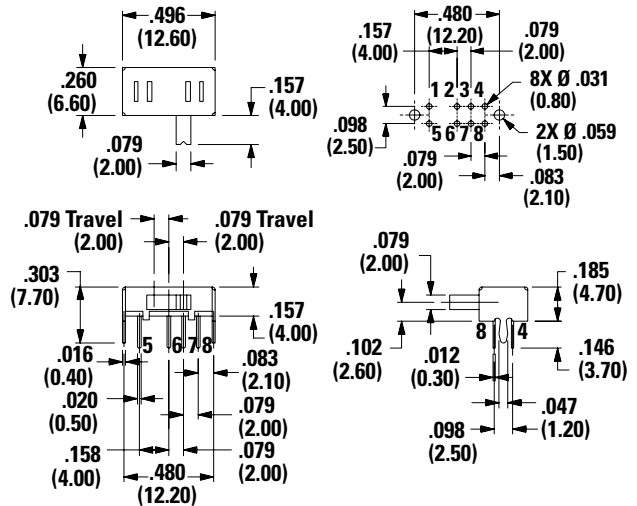
#### Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2	POS.3
OS203011MA2QP1 (Non-specified)	Yes	No		On	
Conn. Terminals		-	1-2, 5-6	2-3, 6-7	2-4, 6-8



Notes: Contact Rating: 0.1A @ 12 VDC

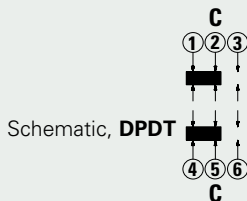
#### PC Mounting



### OS202011MA0QN1 DPDT

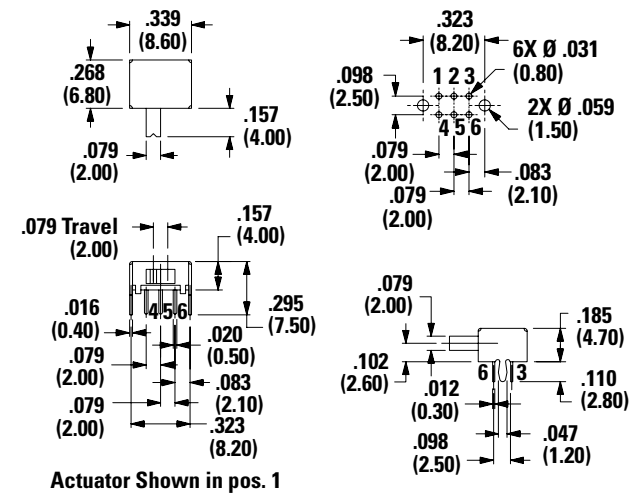
#### Switch Function

Part Number	ROHS Compliant	ROHS Compatible	POS.1	POS.2
OS202011MA0QN1 (Non-shorting)	Yes	No		On
OS202011MA0QS1 (Shorting)				
Conn. Terminals		-	1-2, 4-5	2-3, 5-6



Notes: Contact Rating: 0.1A @ 12 VDC

#### PC Mounting



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