



## Features/Benefits

- Compact design
- Low actuation force
- Detect mechanical movement
- Left and right options
- Right angle options

## Typical Applications

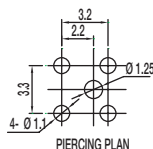
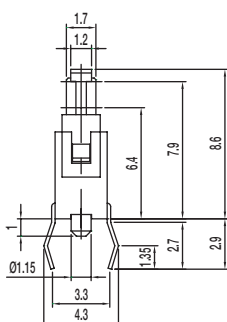
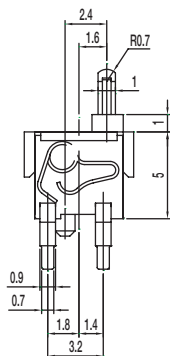
- Computer peripherals
- Office equipment
- Consumer electronics
- Appliances
- Audio and visual equipment



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-02005</b>	1,000 pieces	1P-1T

## Specifications

CONTACT ARRANGEMENT: SPST, NO  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 50,000 cycles  
 OPERATING FORCE: 50 gf max.  
 PRE-TRAVEL: 0.7 mm  
 TOTAL TRAVEL: 2.6 mm  
 INITIAL CONTACT RESISTANCE: 1 Ω max.  
 INSULATION RESISTANCE: 100 M Ω min. @ 100 VDC 60 sec.  
 DIELECTRIC STRENGTH: 100 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -40°C to +85°C.



## Materials

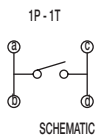
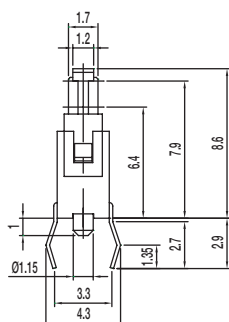
KNOB: PA  
 COVER: PA  
 SPRING: Gold plated, copper alloy  
 HOUSING: PA  
 TERMINAL: Silver plated, copper alloy



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-02005 (30)</b>	1,000 pieces	1P-1T

## Specifications

CONTACT ARRANGEMENT: SPST, NO  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 50,000 cycles  
 OPERATING FORCE: 30 gf max.  
 PRE-TRAVEL: 0.7 mm  
 TOTAL TRAVEL: 2.2 mm  
 INITIAL CONTACT RESISTANCE: 1 Ω max.  
 INSULATION RESISTANCE: 100 M Ω min. @ 100 VDC 60 sec.  
 DIELECTRIC STRENGTH: 100 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -40°C to +85°C.



## Materials

KNOB: PA  
 COVER: PA  
 SPRING: Gold plated, copper alloy  
 HOUSING: PA  
 TERMINAL: Silver plated, copper alloy

# DS Series Detect Switch



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-02005-A</b>	1,000 pieces	1P-1T  N.O.

## Specifications

CONTACT ARRANGEMENT: SPST, NO  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 50,000 cycles  
 OPERATING FORCE: 50 gf max.  
 PRE-TRAVEL: 0.7 mm  
 TOTAL TRAVEL: 2.6 mm  
 INITIAL CONTACT RESISTANCE: 1 Ω max.  
 INSULATION RESISTANCE: 100 M Ω min. @ 100 VDC 60 sec.  
 DIELECTRIC STRENGTH: 100 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -40°C to +85°C.

## Materials

KNOB: PA  
 COVER: PA  
 SPRING: Gold plated, copper alloy  
 HOUSING: PA  
 TERMINAL: Silver plated, copper alloy



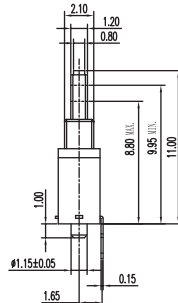
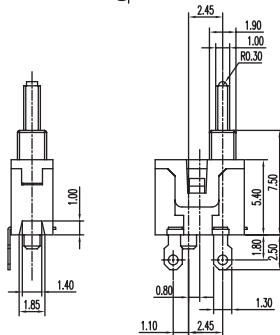
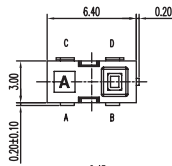
PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-21805</b>	2,500 pieces	 N.O.

## Specifications

CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 5mA @ 5 VDC  
 OPERATING LIFE: 100,000 cycles  
 OPERATING FORCE: 36 gf  
 TOTAL TRAVEL: 2.20 mm  
 INITIAL CONTACT RESISTANCE: 1 Ω max.  
 INSULATION RESISTANCE: 100 M Ω min. @ 100 VDC 60 sec.  
 DIELECTRIC STRENGTH: 100 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -20°C to +70°C.

## Materials

KNOB: POM  
 COVER: PA46  
 SPRING: Silver plated  
 HOUSING: PPS  
 TERMINAL: Silver plated

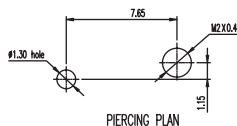
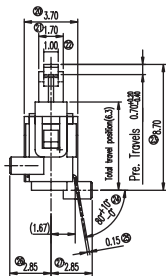
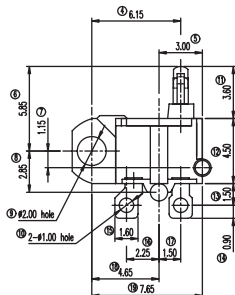
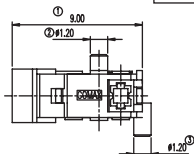


D

Detect



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-203-A</b>	2,500 pieces	 N.O.



## Specifications

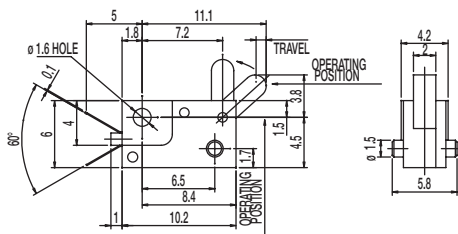
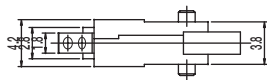
CONTACT ARRANGEMENT: SPST  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 50,000 cycles  
 OPERATING FORCE: 36 gf  
 PRE TRAVEL: 0.70 +0.20/-0.40 mm  
 INITIAL CONTACT RESISTANCE: 1  $\Omega$  max.  
 INSULATION RESISTANCE: 50 M  $\Omega$  min. @ 250 VDC 60 sec.  
 DIELECTRIC STRENGTH: 250 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -20°C to +70°C.

## Materials

KNOB: POM  
 COVER: PA  
 SPRING: Gold plated  
 HOUSING: PA  
 TERMINAL: Silver plated



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-040-02</b>	1,000 pieces	 N.O.



## Specifications

CONTACT ARRANGEMENT: SPST, NO  
 CONTACT RATING: 0.1A @ 16 VDC  
 OPERATING LIFE: 20,000 cycles  
 OPERATING FORCE: 30  $\pm$  15 gf  
 TRAVEL: 0.90  $\pm$  0.20 mm  
 INITIAL CONTACT RESISTANCE: 40 m  $\Omega$  max.  
 INSULATION RESISTANCE: 100 M  $\Omega$  min. @ 250 VDC 60 sec.  
 DIELECTRIC STRENGTH: 250 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -20°C to +70°C.

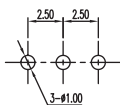
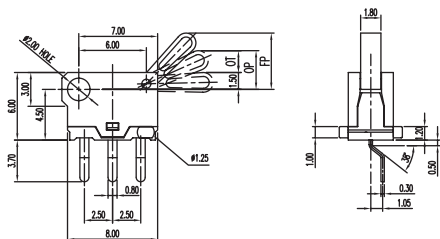
## Materials

LEVER: POM  
 CASE: PBT  
 COVER: PC

# DS Series Detect Switch



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-080</b>	1,000 pieces	



PIERCING PLAN

## Specifications

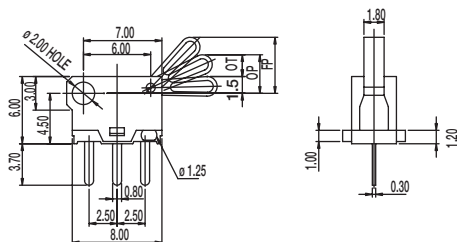
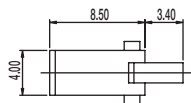
CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 20,000 cycles  
 OPERATING FORCE: 30 ± 20 gf  
 OVER TRAVEL: 2.0 ± 0.40 mm  
 INITIAL CONTACT RESISTANCE: 200 m Ω max.  
 INSULATION RESISTANCE: 10 M Ω min. @ 250 VDC 60 sec.  
 DIELECTRIC STRENGTH: 250 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -20°C to +70°C.

## Materials

KNOB: POM  
 COVER: PA46  
 SLIDER: PBT  
 HOUSING: PA46  
 TERMINAL: Silver plated



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-080-C PA</b>	1,000 pieces	



PIERCING PLAN

## Specifications

CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 20,000 cycles  
 OPERATING FORCE: 30 ± 20 gf  
 OVER TRAVEL: 2.0 ± 0.40 mm  
 INITIAL CONTACT RESISTANCE: 200 m Ω max.  
 INSULATION RESISTANCE: 10 M Ω min. @ 250 VDC 60 sec.  
 DIELECTRIC STRENGTH: 250 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE: -20°C to +70°C.

## Materials

KNOB: POM  
 COVER: PA46  
 SLIDER: PBT  
 HOUSING: PA46  
 TERMINAL: Silver plated



D

Detect



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-09005-02 BK</b>	500 pieces	 N.O.



## Specifications

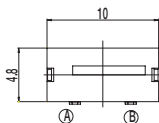
CONTACT ARRANGEMENT: SPST  
 CONTACT RATING: 1mA @ 5 VDC  
 OPERATING LIFE: 100,000 cycles  
 OPERATING FORCE: 50 gf max.  
 TOTAL TRAVEL:  $4.5 \pm 0.2$  mm  
 INITIAL CONTACT RESISTANCE: 500 m  $\Omega$  max.  
 INSULATION RESISTANCE: 100 M  $\Omega$  min. @ 500 VDC 60 sec.  
 DIELECTRIC STRENGTH: 500 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .

## Materials

LEVER: POM  
 COVER: PA  
 HOUSING: PA  
 TERMINAL: Silver plated



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-09005-02 RP</b>	500 pieces	 N.O.



## Specifications

CONTACT ARRANGEMENT: SPST  
 CONTACT RATING: 1mA @ 5 VDC  
 OPERATING LIFE: 100,000 cycles  
 OPERATING FORCE: 50 gf max.  
 TOTAL TRAVEL:  $4.5 \pm 0.2$  mm  
 INITIAL CONTACT RESISTANCE: 500 m  $\Omega$  max.  
 INSULATION RESISTANCE: 100 M  $\Omega$  min. @ 500 VDC 60 sec.  
 DIELECTRIC STRENGTH: 500 V AC (50-60Hz) 60 sec.  
 OPERATING TEMPERATURE:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .

## Materials

LEVER: POM  
 COVER: PA  
 HOUSING: PA  
 TERMINAL: Silver plated



Detect