

# DS Series Detect Switch

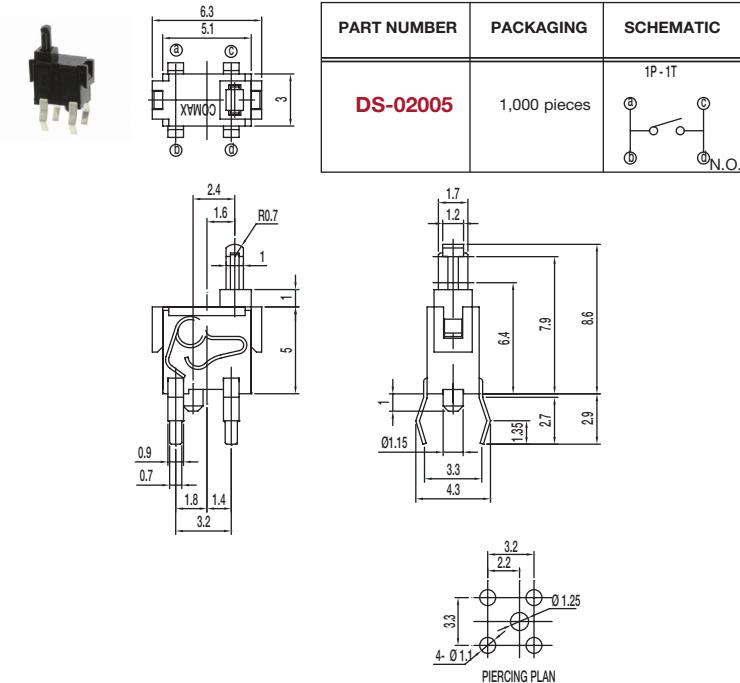


## Features/Benefits

- 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

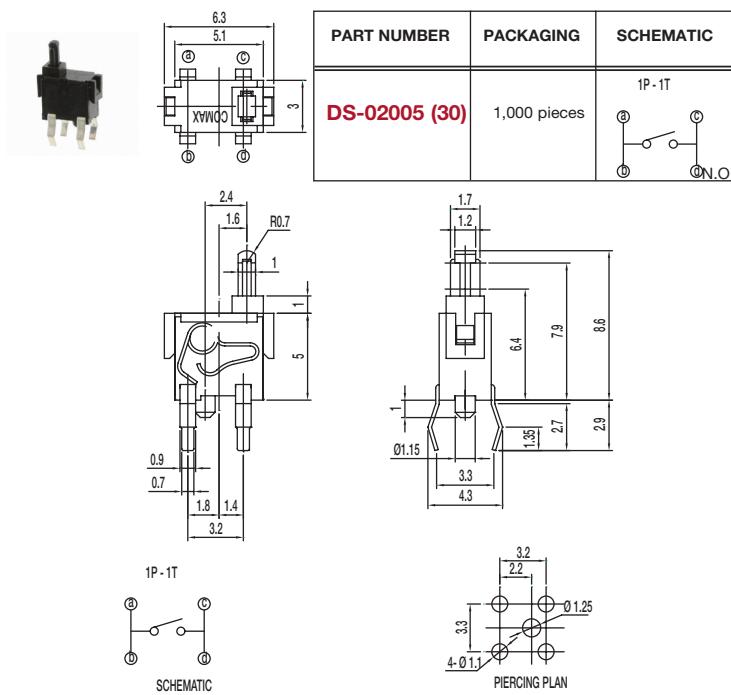


## Specifications

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



## Specifications

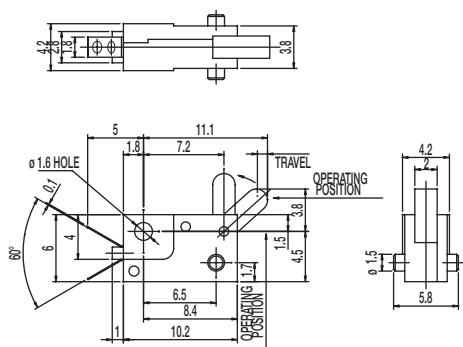
CONTACT ARRANGEMENT: SPST, NO  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 50,000 cycles  
 OPERATING FORCE: 30 gf max.  
 PRE-TRAVEL: 0.7 mm  
 TOTAL TRAVEL: 2.2 mm  
 INITIAL CONTACT RESISTANCE: 1 Ω max.  
 INSULATION RESISTANCE: 100 M Ω min. @ 100 VDC 60 sec.  
 DIELECTRIC STRENGTH: 100 V 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



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



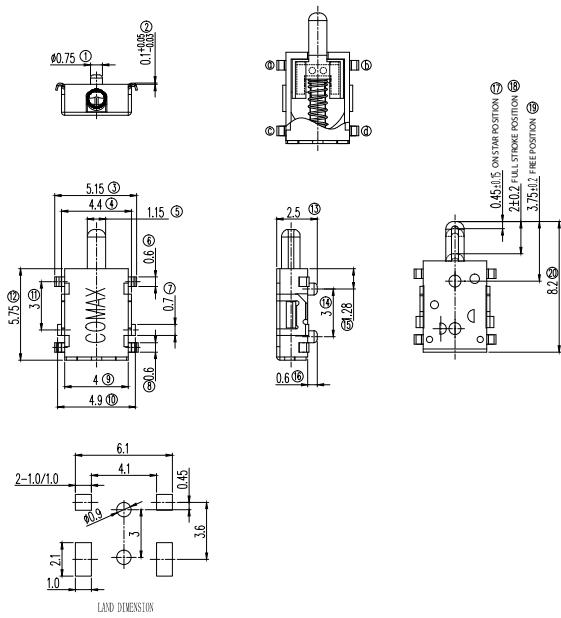
## Specifications

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:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .

## Materials

LEVER: POM  
CASE: PBT  
COVER: PC

PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-180 RT</b>	3000 pieces	1P - 1T N.O. 



## Specifications

CONTACT ARRANGEMENT: SPST NO  
CONTACT RATING: 1mA @ 5 VDC  
OPERATING LIFE: 50,000 cycles  
OPERATING FORCE: 60 gf max.  
TOTAL TRAVEL:  $2.0 \pm 0.2$  mm  
INITIAL CONTACT RESISTANCE: 5 $\Omega$  max.  
INSULATION RESISTANCE: 100 M $\Omega$  min. @ 100 VDC 60 sec.  
DIELECTRIC STRENGTH: 100 V AC (50-60Hz) 60 sec.  
OPERATING TEMPERATURE:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

## Materials

KNOB: PA  
COVER: SPTE  
SPRING: SUS  
HOUSING: LCP  
TERMINAL: Silver plated



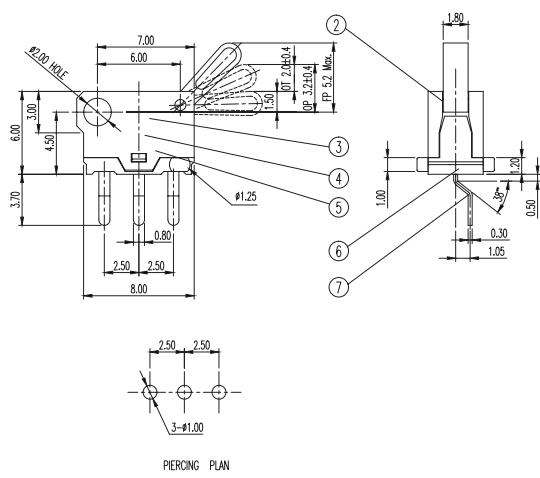
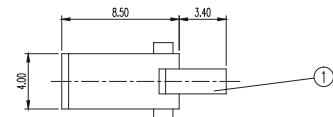
E

Detect

# DS Series Detect Switch



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-080</b>	1,000 pieces	1P - 2T 2 1 N.O.



## Specifications

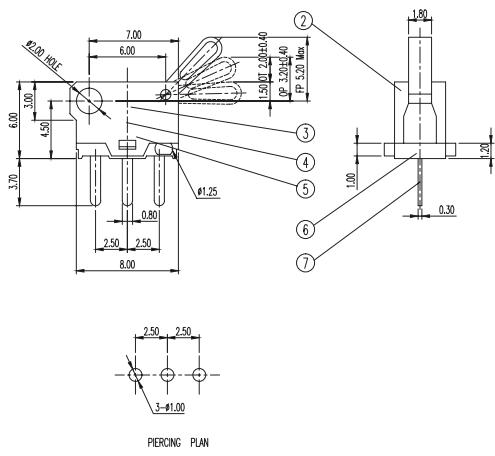
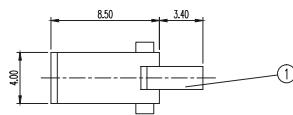
CONTACT ARRANGEMENT: SPDT  
 CONTACT RATING: 100mA @ 30 VDC  
 OPERATING LIFE: 20,000 cycles  
 OPERATING FORCE: 30 ± 20 gf  
 OVER TRAVEL: 2.0 ± 0.40 mm  
 INITIAL CONTACT RESISTANCE: 200 mΩ max.  
 INSULATION RESISTANCE: 10 MΩ min. @ 250 VDC 60 sec.  
 DIELECTRIC STRENGTH: 250 V AC (50-60Hz) 60 sec.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

## Materials

KNOB: POM  
 COVER: PA46  
 SLIDER: PBT  
 HOUSING: PA66  
 TERMINAL: Silver plated



PART NUMBER	PACKAGING	SCHEMATIC
<b>DS-080-C PA</b>	1,000 pieces	1P - 2T 2 1 N.O.



## 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 mΩ max.  
 INSULATION RESISTANCE: 10 MΩ 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: PA66  
 TERMINAL: Silver plated

**DETECT**

**C&K**

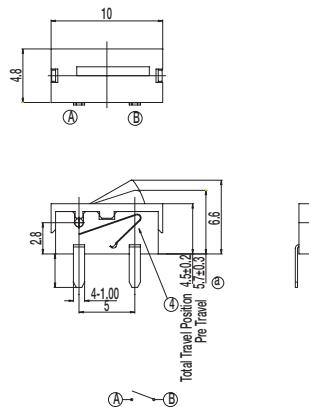
9 Feb 21

Dimensions are shown: mm  
 Specifications and dimensions subject to change

[www.ckswitches.com](http://www.ckswitches.com)



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



## 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:  $500 \text{ m } \Omega$  max.

INSULATION RESISTANCE:  $100 \text{ M } \Omega$  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

