

DS Series Detect Switch



Features/Benefits

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

Typical Applications

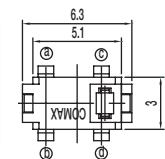
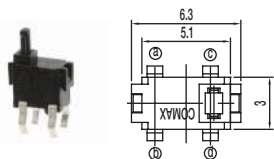
- Computer peripherals
- Office equipment
- Consumer electronics
- Appliances
- Audio and visual equipment

How To Order

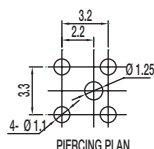
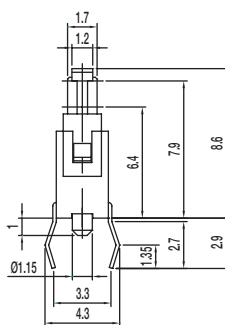
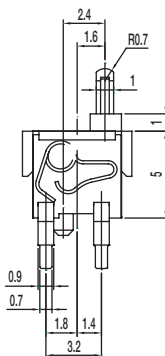
Part number list is shown below. For individual part details, please refer to the following pages.

Part Number (Part Description)	Product Details
DS-02005	Detect switch normally open top actuated
DS-02005 (30)	Detect switch normally open top actuated
DS-040-02	Detect switch normally open SPST
DS-080	Detect switch normally open SPDT
DS-080-C PA	Detect switch normally open SPDT
DS-09005-02 RP	Detect switch normally open SPST
DS-180 RT	Detect switch normally open side actuated

Complete part numbers for DS Series are shown below.



PART NUMBER	PACKAGING	SCHEMATIC
DS-02005	1,000 pieces	1P-1T



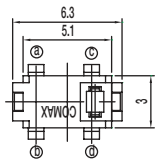
Specifications

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.

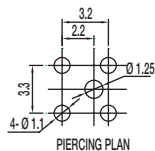
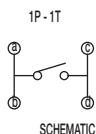
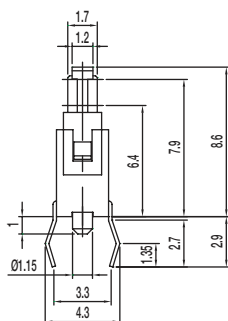
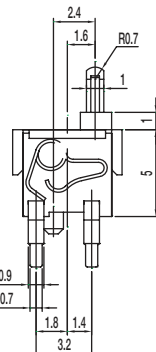
Materials

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

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



Specifications

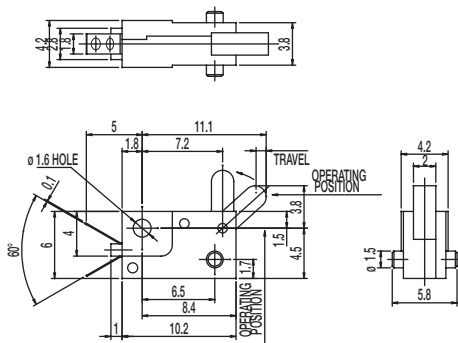
CONTACT ARRANGEMENT: SPST, NO
 CONTACT RATING: 100mA @ 30 VDC
 OPERATING LIFE: 50,000 cycles
 OPERATING FORCE: 30 gf max.
 PRE-TRAVEL: 0.7 mm
 TOTAL TRAVEL: 2.2 mm
 INITIAL CONTACT RESISTANCE: 1 Ω max.
 INSULATION RESISTANCE: 100 M Ω min. @ 100 VDC 60 sec.
 DIELECTRIC STRENGTH: 100 V AC (50-60Hz) 60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



PART NUMBER	PACKAGING	SCHEMATIC
DS-040-02	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 ± 15 gf
 TRAVEL: 0.90 ± 0.20 mm
 INITIAL CONTACT RESISTANCE: 40 m Ω max.
 INSULATION RESISTANCE: 100 M Ω 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

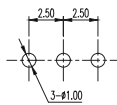
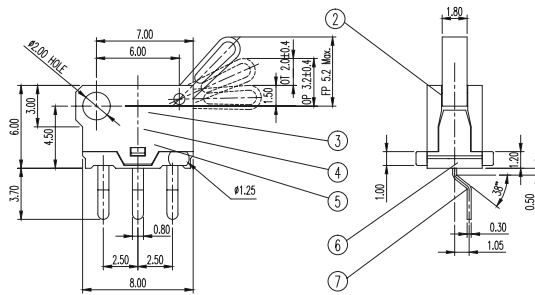
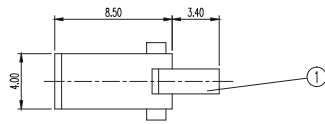


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DS Series Detect Switch



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



PIERCING PLAN

Specifications

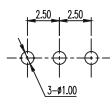
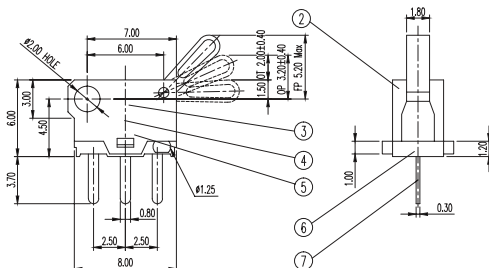
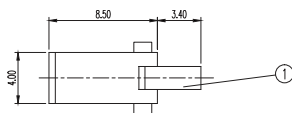
CONTACT ARRANGEMENT: SPDT
 CONTACT RATING: 100mA @ 30 VDC
 OPERATING LIFE: 20,000 cycles
 OPERATING FORCE: 30 ± 20 gf
 OVER TRAVEL: 2.0 ± 0.40 mm
 INITIAL CONTACT RESISTANCE: 200 m Ω max.
 INSULATION RESISTANCE: 10 M Ω min. @ 250 VDC 60 sec.
 DIELECTRIC STRENGTH: 250 V AC (50-60Hz) 60 sec.
 OPERATING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

Materials

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



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



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

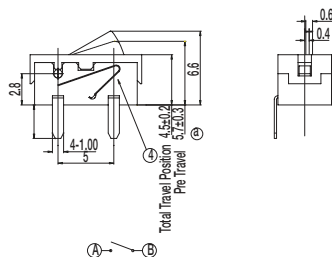
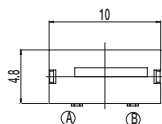


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PART NUMBER	PACKAGING	SCHEMATIC
DS-09005-02 RP	500 pieces	 N.O.



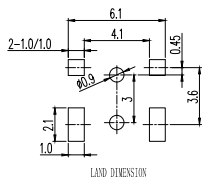
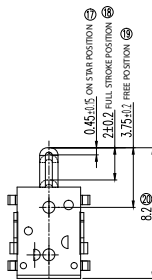
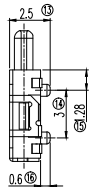
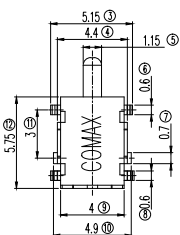
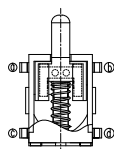
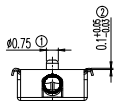
Specifications

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

Materials

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

PART NUMBER	PACKAGING	SCHEMATIC
DS-180 RT	3000 pieces	 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±0.2 mm
 INITIAL CONTACT RESISTANCE: 5Ω 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: SPTE
 SPRING: SUS
 HOUSING: LCP
 TERMINAL: Silver plated



Detect