

Distinctive Characteristics

DSA

Environmentally friendly, contains no mercury.

High contact reliability due to sealed body.

The switch is triggered when tilted beyond $\pm 10^\circ$ of the horizontal.

PCB adaptor available as an accessory.



DSB

Photo interrupter, rather than contacts, ensures high reliability. 1 million operations minimum.

Sealed construction for protection from environmental elements, including hydrogen sulfide, sulfur dioxide, and nitrogen hydroxide. Terminals are made of ammonia-resistant materials.

Totally sealed body allows process compatibility for time- and money-saving automatic soldering and cleaning.

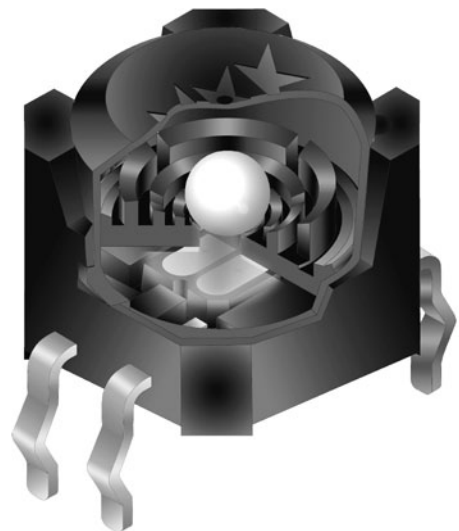
Space-saving compact dimensions allow high density mounting.

Internal steel ball movement allows functionality of 360° circumference rotation.

The DSB series switch is well-suited to meet product safety concerns due to normally closed (on) status.

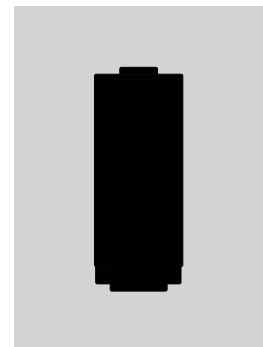
Crimped terminals ensure secure mounting and prevent dislodging during wave soldering.

The switch is triggered when tilted beyond $\pm 30^\circ$ of the horizontal.

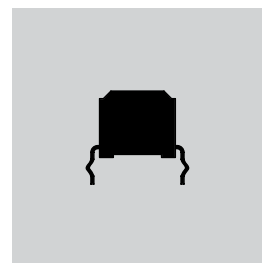


Actual Sizes

DSA



DSB



DSA SWITCH PART NUMBER & DESCRIPTION



DSA SWITCH SPECIFICATIONS

Mechanical & Electrical Specifications

| | |
|-------------------------------|--|
| Poles and Circuits: | Single Pole Single Throw ON - OFF |
| Operating Range: | ON Angle = 10° ~ 170°; OFF Angle = 190° ~ 350° |
| Resistive Load: | 0.1A @ 12V DC |
| Contact Resistance: | 100 milliohms maximum |
| Insulation Resistance: | 50 megohms minimum @ 250V DC |
| Dielectric Strength: | 250V AC for 1 minute minimum between terminals |
| Mechanical Life: | 100,000 operations minimum |
| Electrical Life: | 100,000 operations minimum |

Materials & Finishes

| | |
|-----------------------|---------------------------|
| Housing: | PBT |
| Rubber Rings: | Nitrile Butadiene Rubber |
| Contact Balls: | Brass with Silver Plating |
| Terminals: | Brass with Silver Plating |

Environmental Specifications

| | |
|--|--|
| Operating Temperature Range: | -10°C ~ +70°C (+14°F ~ +158°F) |
| Storage Temperature Range: | -25°C ~ +85°C (-13°F ~ +185°F) |
| Contact Bounce (for reference): | 500ms maximum |
| Humidity: | 90% humidity for 96 hours @ 40°C (104°F) |
| Vibration (for reference): | Frequency range 10Hz ~ 500Hz for 2 hours; 2 directions; Acceleration: 0.2G |
| Notes: | 1. Do not install switch near vibration source. 2. Terminals should not be exposed to liquid. |

Processing for AT094 PCB Adaptor

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|---|--|
| Soldering (with PCB Mount Holder): | Wave Soldering: See Profile A in Supplement section. Manual Soldering: See Profile B in Supplement section. |
| Automated Cleaning: | Hand clean locally using alcohol based solution. |