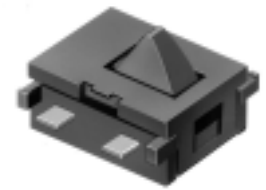


Lever-type Detector Switches

SW1AB-411 / -413 Series

Features

- ◁Miniaturized for space saving design.
- ◁Superior reliability at micro-current by employing a sliding contact.
- ◁This is a compact detector switch which can be pressed either horizontally or vertically.
- ◁Reflow soldering is possible.



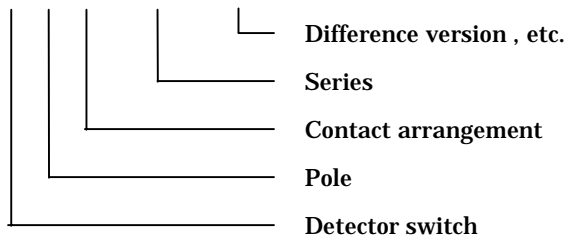
Applications

- ◁Mechatronic detection for audio and VCR Digital camera FDD units.

Zoom

Products Number System

SW [] AB - [][][] - [][]



Actual size

Products Line

No	Products No	Pole	Position	Operating force	Quantity (pcs./reel)	Notes
1	SW1AB-411-T28	1	1	0.34N max.	2,800	
2	SW1AB-413-T29	1	1	0.35N max.	2,900	
3	SW1AB-413-3T19	1	1	0.3N max.	1,900	

Typical Specifications

Item	SW1AB-411 Series	SW1AB-413 Series
Ratings (max.)	0.1 to 5mA 5V DC (Resistive load)	0.1 to 5mA 5V DC (Resistive load)
Contact resistance	500 milliohm max.	1 ohm max.
Insulation resistance	100 megohm min. 100V DC	100 megohm min. 100V DC
Withstanding voltage	100V AC for 1min.	100V AC for 1min.
Operating life with load	50,000 cycles	50,000 cycles

Dimensions

Unit : mm

No	Style	P.C.B reference Land Dimensions Circuit diagram (TOP VIEW)
1	<p>SW1AB-411-T28</p> <p>Top view dimensions: 1.2, 1.2, 0.7, 3.8, 5, 5.5, 0.35, 1.6, R0.2, 1.3, 2.3, 2.6, 0.05, 3.8.</p> <p>Side view dimensions: 1.2, (0.3), 1.2, (1.2), Total travel position, ON starting position.</p> <p>Detail view dimensions: 1.3, 0.6, 0.1.</p>	<p>Land dimensions: 1.2, 1.2, 1.2, 3.9, 4.3, 6.1, 5.1.</p> <p>Circuit diagram: 4-terminal switch with terminals 1, 2, 3, 4.</p>
2	<p>SW1AB-413-T29</p> <p>Top view dimensions: 1.2, 1.2, 0.7, 3.8, 4.7, 5, 0.35, R0.2, R2.95, 1.3, 3.5, 3.8, 2.5, 2.4, (1.5), (1.2).</p> <p>Side view dimensions: 2.4, (1.5), (1.2), 2.5, 3.5, 3.8, Total travel position, ON starting position.</p> <p>Detail view dimensions: 1.3, 0.6.</p>	<p>Land dimensions: 1.2, 1.2, 1.2, 5.1.</p> <p>Circuit diagram: 4-terminal switch with terminals 1, 2, 3, 4.</p>
3	<p>SW1AB-413-3T19</p> <p>Top view dimensions: 1.2, 1.2, 0.7, 3.8, 4.7, 5, 0.6, 1.3, R0.3, R0.5, 4.3, 5.3, 6.3, 2.4, (1.5), (1.2).</p> <p>Side view dimensions: 2.4, (1.5), (1.2), 4.3, 5.3, 6.3, Total travel position, ON starting position.</p> <p>Detail view dimensions: 1.3.</p>	<p>Land dimensions: 1.2, 1.2, 1.2, 5.1.</p> <p>Circuit diagram: 4-terminal switch with terminals 1, 2, 3, 4.</p>

□ Notes

1. The appearance and specifications of the product may be modified to improve its performance without prior notice.
2. This catalog shows only outline specifications. When using the product, please obtain formal specifications.
3. Please see appendix [Cautions in Using Switches].
4. This switch is not washable.
5. Soldering shall be done with actuator at free position and take care not to attach flux on plastic portion.
6. Note that if the stress is applied to the terminals during soldering, they might cause deformation and defects in electrical performance.
7. In manual soldering, consideration should be given to apply the soldering iron to the tip of the terminal so that unusual pressure is not applied to the terminal.
8. In case circuit and software design consideration against chattering and bouncing shall be taken as below.
 - Read a few times. (Ex. 5ms for 5 times)
 - Set delay time.
 - Set integral circuit.
9. As to threshold voltage, center setting is recommended.
10. Care shall be taken not to apply stress to the body of switch as it may affect the performance.
11. Please confirm the performance on actual operation by simulation with actual environment environments for high reliability.