Discontinued as of August 31, 2012

Panasonic
ideas for life

PUSH-BUTTON SWITCHES

AB2 TYPE PUSH-BUTTON SWITCHES

6 dia.

RoHS compliant

FEATURES

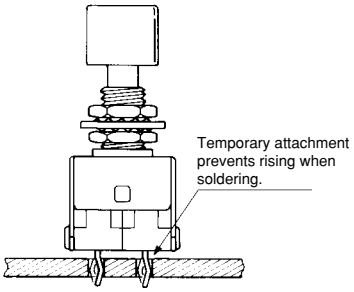
1. Identical to our AJ1 and AJ2 type switches, these push-button switches fit 6 mm installation holes.

2. Light load for a soft operation feel.
A soft operation feel is achieved by building in our AH1 snap action switch. With a light load of approx. 1.96 N, there is no difference between 1-pole and 2-pole models, so both types can be mixed without it feeling unnatural. Also, if dirt and water resistant properties are required of the internal switch, a J type turquoise switch (sealed type snap action switch) can be built in. Please inquire.

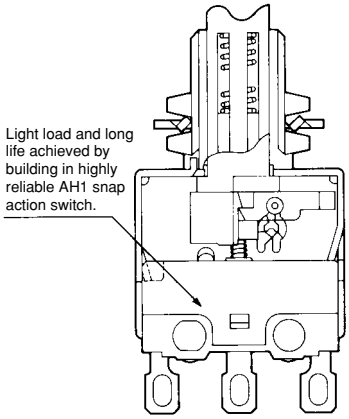
3. Operating life of over 500,000 times.
A mechanical life of 500,000 times is achieved by building in a snap action switch. Electrical life is 300,000 times or higher.

4. Au clad contact type also available for minute loads.
An Au clad contact type has been added to the series for high reliability when loads are minute, even when switching frequency is low.

5. Self-securing terminals for temporary attachment to PC boards.



CONSTRUCTION



ORDERING INFORMATION

1. Switch body

AB 2 ☐ ☐ ☐

2: AB2 type Push-button switches

Number of poles and Operation
1: 1-pole, momentary
2: 2-pole, momentary
3: 1-pole, alternate
4: 2-pole, alternate

Contact material
1: AgNi alloy contact type
2: AgNi alloy and Au clad contact type

Terminal shape
1: Solder terminal
2: PC board terminal

2. Color cap

AB28 1 ☐

Shape
1: 10 dia.

Color
W: white
B: black
R: red
Z: dark grey
H: light grey
L: blue
G: green
Y: yellow

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PRODUCT TYPES

1. Body block

1) Solder terminal

Number of poles	Kind of operation	Contact material	Part No.
1-pole	Momentary	AgNi alloy	AB2111
		AgNi alloy and Au clad	AB2121
	Alternate	AgNi alloy	AB2311
		AgNi alloy and Au clad	AB2321
2-pole	Momentary	AgNi alloy	AB2211
		AgNi alloy and Au clad	AB2221
	Alternate	AgNi alloy	AB2411
		AgNi alloy and Au clad	AB2421

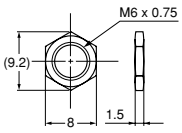
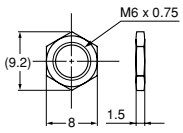
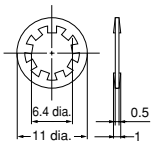
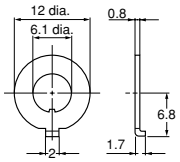
2) PC board terminal

Number of poles	Kind of operation	Contact material	Part No.
1-pole	Momentary	AgNi alloy	AB2112
		AgNi alloy and Au clad	AB2122
	Alternate	AgNi alloy	AB2312
		AgNi alloy and Au clad	AB2322
2-pole	Momentary	AgNi alloy	AB2212
		AgNi alloy and Au clad	AB2222
	Alternate	AgNi alloy	AB2412
		AgNi alloy and Au clad	AB2422

Remarks: 1. Please use body block with a color cap (sold separately).
2. Standard installation accessories are included with the product.

Body block　　Color cap　　With color cap installed

2. Accessories

Product name	Standard installation accessories			Optional installation accessories	Accessories (Option)
	Front hex nut (Nickel plated)	Back hex nut (Uni-chrome plated)	Lock washer	Keying washer	Color cap
Dimensions (mm)					
Part No.	AJ2081	AJ2082	AJ2084	AJ2083	AB281∗

Remarks: 1. Please specify the color cap color by replacing the asterisk in the part number with appropriate letter
(W: white; B: black; R: red; Z: dark gray; H: light gray; L: blue; G: green; Y: yellow).
2. A selling unit of each accessory except color cap is 10 pieces.

SPECIFICATIONS

1. Contact rating

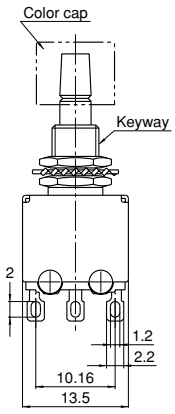
Contact material	AgNi alloy contact type		AgNi alloy and Au clad contact type	
Kind of load	Rating	Electrical life	Rating	Electrical life
Resistive load	3A 125V AC	Min. 3×10^4	0.1A 125V AC	Min. 3×10^4
Low-level load	—	—	1mA 24V DC 2mA 12V DC 5mA 6V DC	Min. 3×10^4

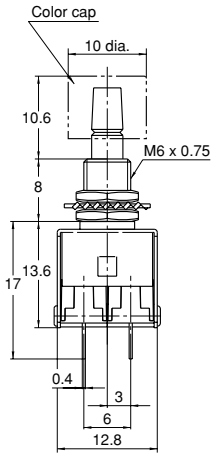
2. Characteristics

Expected life	Mechanical	Momentary: Min. 50×10^4, Alternate: Min. 10×10^4 (60 cpm)
	Electrical	Min. 3×10^4 (20 cpm)
Insulation resistance		Min. 100 MΩ (at 500 V DC measured by insulation resistive meter)
Breakdown voltage	Between terminals	600 Vrms (at detection current: 10mA)
	Between terminal and ground	1500 Vrms (at detection current: 10mA)
Contact resistance		Max. 100 mΩ (AgNi alloy contact type: by voltage drop at 1 A, 2 to 4 V DC, AgNi alloy and Au clad contact type: by voltage drop at 0.1 A, 2 to 4 V DC)
Vibration resistance		10 to 55 Hz at double amplitude of 1.5 mm (contact opening: Max. 10 μs)
Shock resistance		Min. 196 m/s² (contact opening: Max. 10 μs)
Ambient temperature		–25°C to +85 °C (Not freezing below 0 °C)
Operating force (reference value)		Momentary: Approx. 1.96N, Alternate: Approx. 2.45N
Operating stroke (reference value)		Approx. 2.5 mm

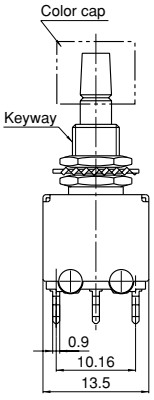
DIMENSIONS (mm) (General tolerance: ±0.5)

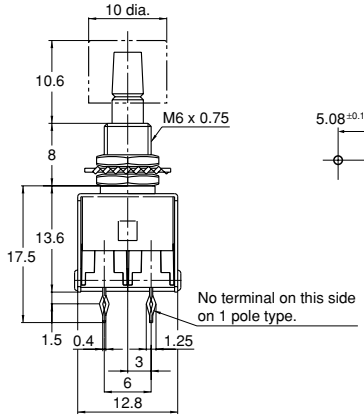
1. Solder terminal





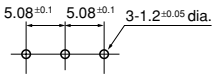
2. PC board terminal



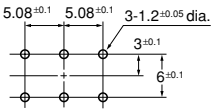


PC board pattern (Bottom view)

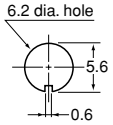
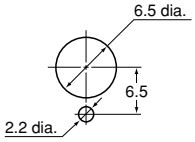
1-pole



2-pole



MOUNTING DIMENSIONS

Panel cutout (mm)	Panel thickness
	Max. 3.2 mm
	Max. 4.7 mm (without back hex nut)
	Max. 3.2 mm
	Max. 4.7 mm (without back hex nut)
	Max. 2.4 mm (using keying washer)
	Max. 3.9 mm (without back hex nut and using keying washer)

NOTES

1. Panel installation

For panel installation, please use the included nut and tighten with a torque of no more than 0.98 N·m.

Do not hold the switch body when tightening the nut.

2. Soldering

For hand soldering, a 320°C soldering iron tip should be used with the soldering completed within three seconds.

Do not apply force to the terminals when working. Also, after soldering, sufficient care should be taken not to apply tensile load to the terminal section through the lead wires.

3. Miscellaneous

For alternative types, verify that there is a free position when removing the cap.