



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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General Specifications

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

Electrical Capacity (Resistive Load)

Logic Level: 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
Note: Find additional explanation of operating range in Supplement section.

Other Ratings

Contact Resistance: 50 milliohms maximum
Insulation Resistance: 500 megohms minimum @ 500V DC
Dielectric Strength: 500V AC minimum for 1 minute minimum
Mechanical Life: 50,000 operations minimum
Electrical Life: 50,000 operations minimum
Nominal Operating Force: 2.55N
Contact Timing: Nonshorting (break-before-make)
Travel: Pretravel .028" (0.7mm); Overtravel .016" (0.4mm); Total Travel .043" (1.1mm)

Materials & Finishes

Plunger: Polyacetal
Case Housing: Glass fiber reinforced polyamide
Support Bracket: Tin plated phosphor bronze
Movable Contact: Phosphor bronze with gold plating
Stationary Contacts: Brass with gold plating
Terminals: Brass with gold plating

Environmental Data

Operating Temp Range: -30°C through +85°C (-22°F through +185°F)
Humidity: 90 ~ 95% humidity for 96 hours @ 40°C (104°F)
Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 50G (490m/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

Cap Installation Force: 49.03N (11.2 lbf) maximum downward force on actuator

PCB Processing

Soldering: Wave Soldering Recommended: See Profile A in Supplement section.
Manual Soldering: See Profile B in Supplement section.
Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

The AB Series pushbuttons have not been tested for UL recognition or CSA certification. These switches are designed for use in a low-voltage, low-current, logic-level circuit. When used as intended in a logic-level circuit, the results do not produce hazardous energy.

Distinctive Characteristics

Subminiature size (1/3 size of Series M switches) saves space on PC boards.

Specifically developed for logic-level applications.

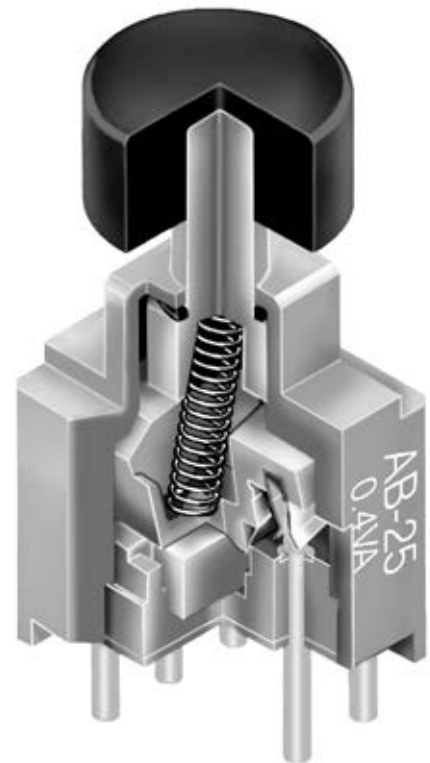
Totally sealed body construction prevents contact contamination and allows time- and money-saving automated soldering and cleaning.

Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

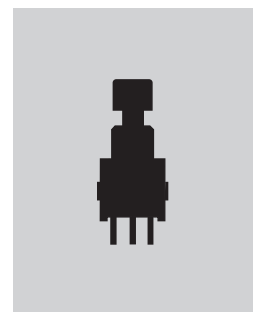
Molded-in, epoxy sealed or ultrasonically welded terminals lock out flux, solvents, and other contaminants.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing.

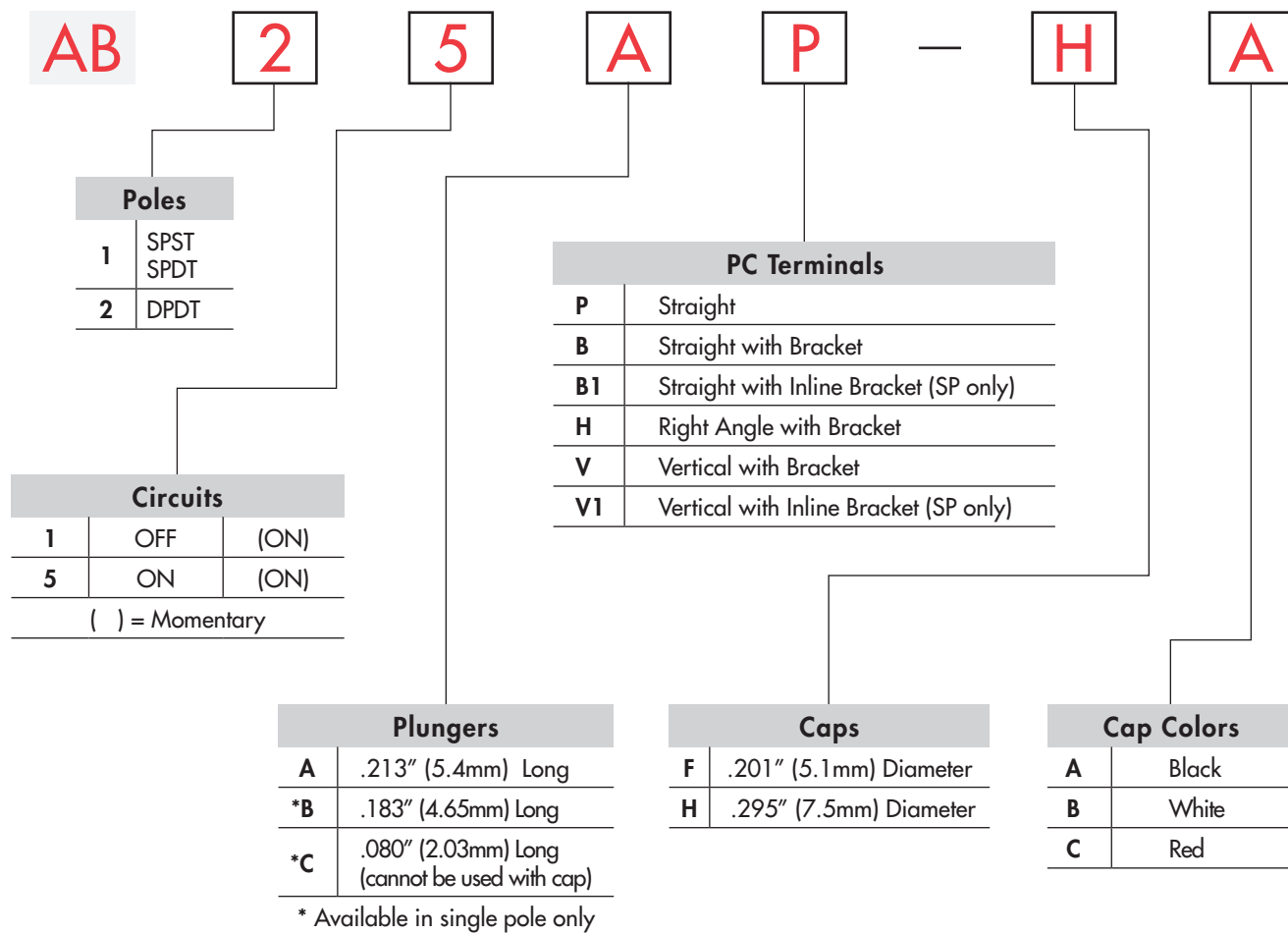
Matching indicators available.



Actual Size

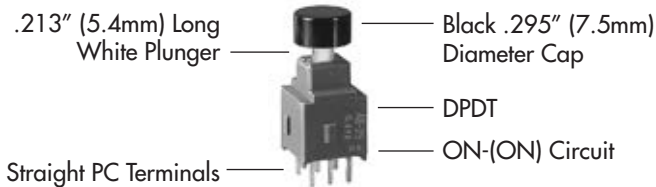


TYPICAL SWITCH ORDERING EXAMPLE







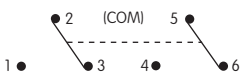


DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

AB25AP-HA

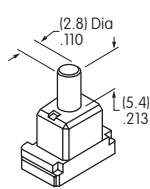


POLES & CIRCUITS

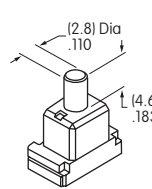
Pole	Model	Plunger Position () = Momentary		Connected Terminals		Throw & Schematics
		Normal	Down	Normal	Down	
						Note: Terminal numbers are not actually on the switch.
SP	AB11	OFF	(ON)	OPEN	3-1	SPST 
SP	AB15	ON	(ON)	2-3	2-1	SPDT 
DP	AB25	ON	(ON)	2-3 5-6	2-1 5-4	DPDT 

PLUNGERS

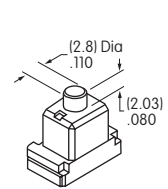
A .213" (5.4mm)
Long



B .183" (4.6mm)
Long
(on SP only)



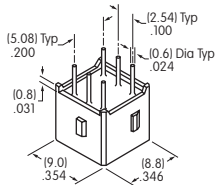
C .080" (2.03mm)
Long
(on SP only)



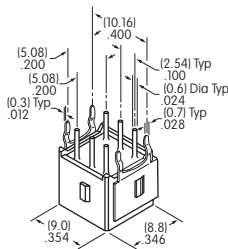
Standard Plunger Color: White Contact factory for red or black options.

PC TERMINALS

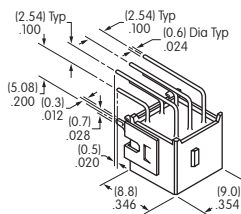
P Straight



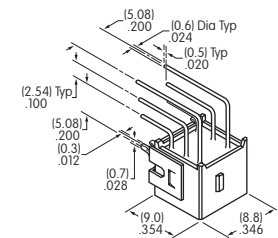
B Straight
with Bracket



H Right Angle
with Bracket



V Vertical
with Bracket

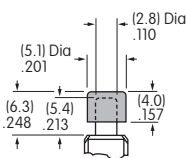


Use of a support bracket is recommended to increase PCB mounting strength and stability.
B1 & V1 terminal dimensions appear on the pushbutton drawings which follow.

SLIP-ON CAPS

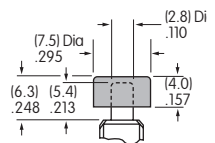
F AT475
.201" (5.1mm) Diameter Cap

Material: Polyamide
For use with
plungers A & B only.



H AT496
.295" (7.5mm) Diameter Cap

Material: Polyamide
For use with
plungers A & B only.



Colors Available:

A Black

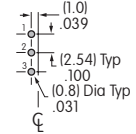
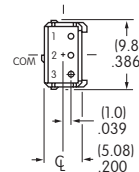
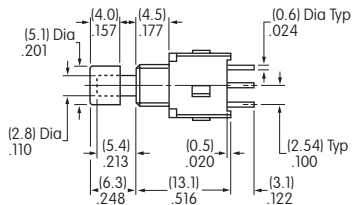
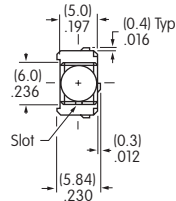
B White

C Red

TYPICAL SWITCH DIMENSIONS

Straight PC

Single Pole

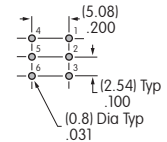
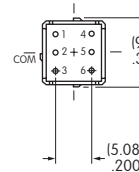
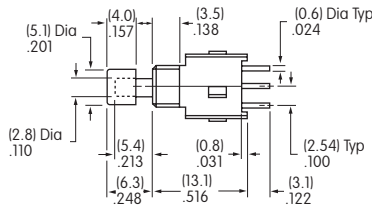
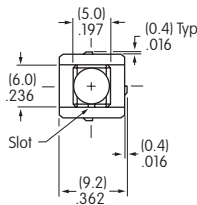


AB15AP-FA

AB11 model does not have terminal 2.

Straight PC

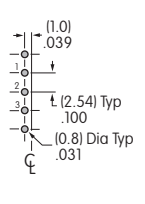
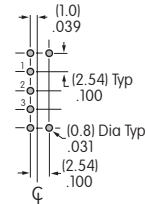
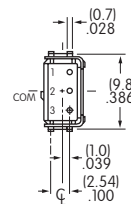
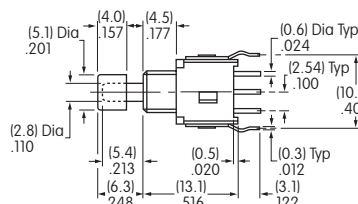
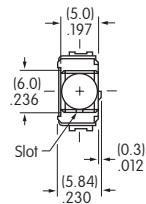
Double Pole



AB25AP-FA

Straight PC • Bracket

Single Pole



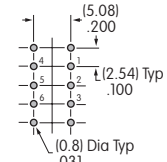
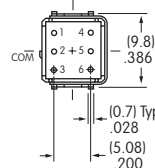
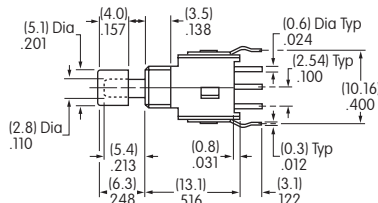
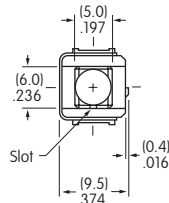
AB15AB-FA

B Terminals

B1 Terminals

Straight PC • Bracket

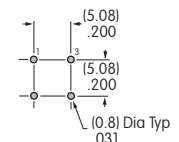
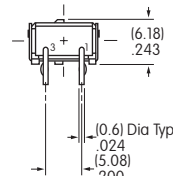
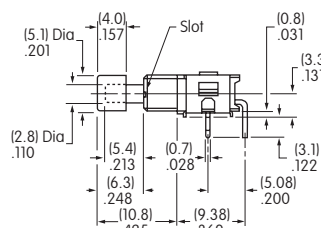
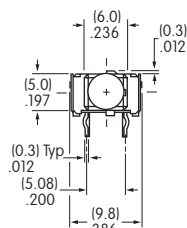
Double Pole



AB25AB-FA

Right Angle PC

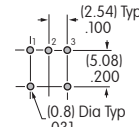
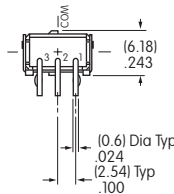
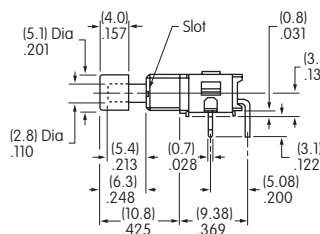
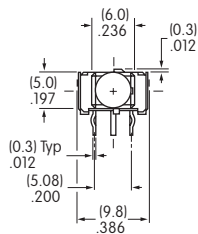
Single Pole (Single Throw)



AB11AH-FA

TYPICAL SWITCH DIMENSIONS

Single Pole (Double Throw)

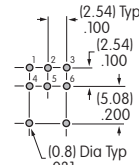
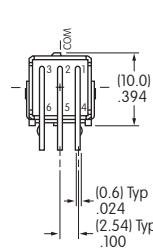
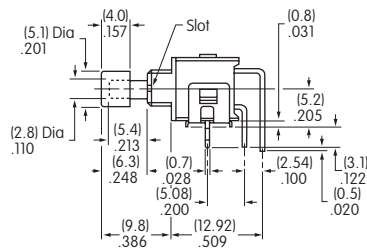
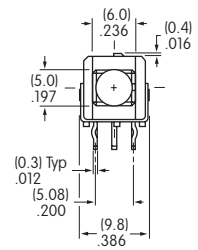


Right Angle PC



AB15AH-FA

Double Pole



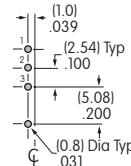
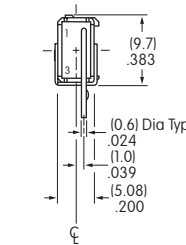
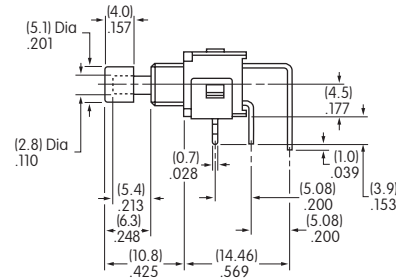
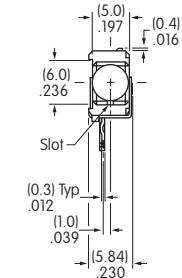
Right Angle PC



AB25AH-FA

Single Pole

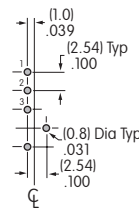
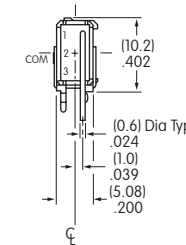
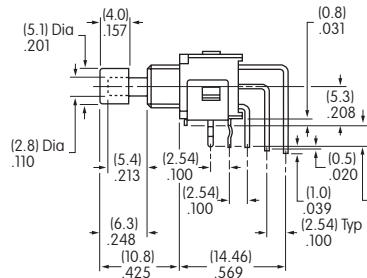
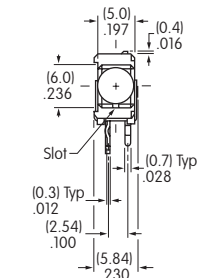
Vertical PC • Inline Bracket



AB11 model does not have terminal 2. **AB11AV1-FA**

Single Pole

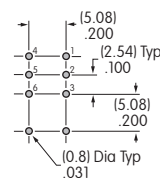
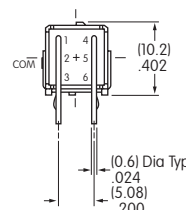
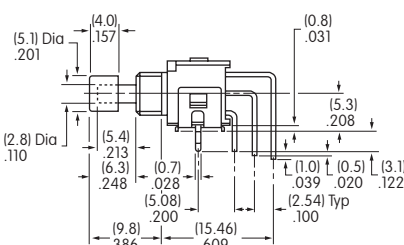
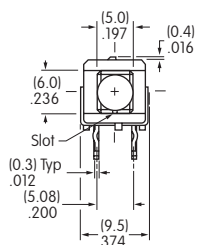
Vertical PC



AB11 model does not have terminal 2. **AB15AV-FA**

Double Pole

Vertical PC



AB25AV-FA