

Distinctive Features

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

Specifically developed for logic-level applications.

Available in momentary and maintained circuits.

Industry's smallest alternate action (maintained) pushbutton with latchdown feature providing visible, audible, and tactile feedback.

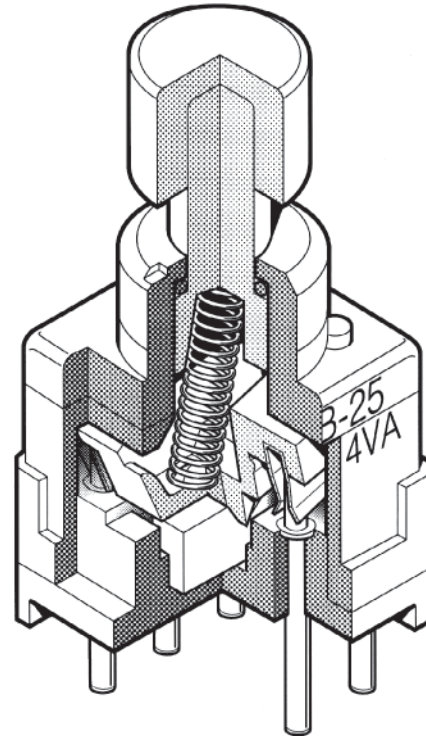
Antistatic superstructure, consisting of the carbon impregnated bushing and the support bracket, prevents static discharge to the contacts. Static electricity from an operator's touch travels from through the bushing and bracket to the PC board.

Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability, and unparalleled logic-level reliability. (Additional details in Terms & Acronyms; see page Z2.)

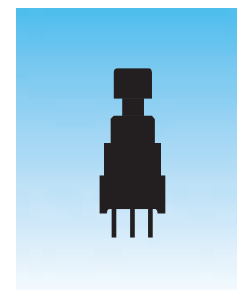
Smooth, 6mm diameter bushing simplifies panel layout.

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

.100" x .100" terminal spacing conforms to standard PC board grids.



Actual Size



General Specifications

Electrical Capacity (Resistive Load)

Logic Level: 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1 mA ~ 0.1 A @ 20mV ~ 28V)

Note: See Supplement Index (page Z2) to find explanation of operating range.

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 (momentary)
 25,000 operations minimum (alternate action)
Electrical Life: 50,000 operations minimum (momentary)
 25,000 operations minimum (alternate action)
Nominal Operating Force: 260 grams (momentary); 300 grams (alternate action)
Contact Timing: Nonshorting
Travel: Momentary: Pretravel 0.7mm (.028"); Overtravel 0.4mm (.016"); Total 1.1mm (0.43")
 Alternate: 1.0mm (.039") pretravel; 1.0mm (.039") overtravel; 2.0mm (.079") total travel

Materials & Finishes

Plunger: Polyacetal
Bushing: Carbon blended polyamide
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: Copper alloy 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)

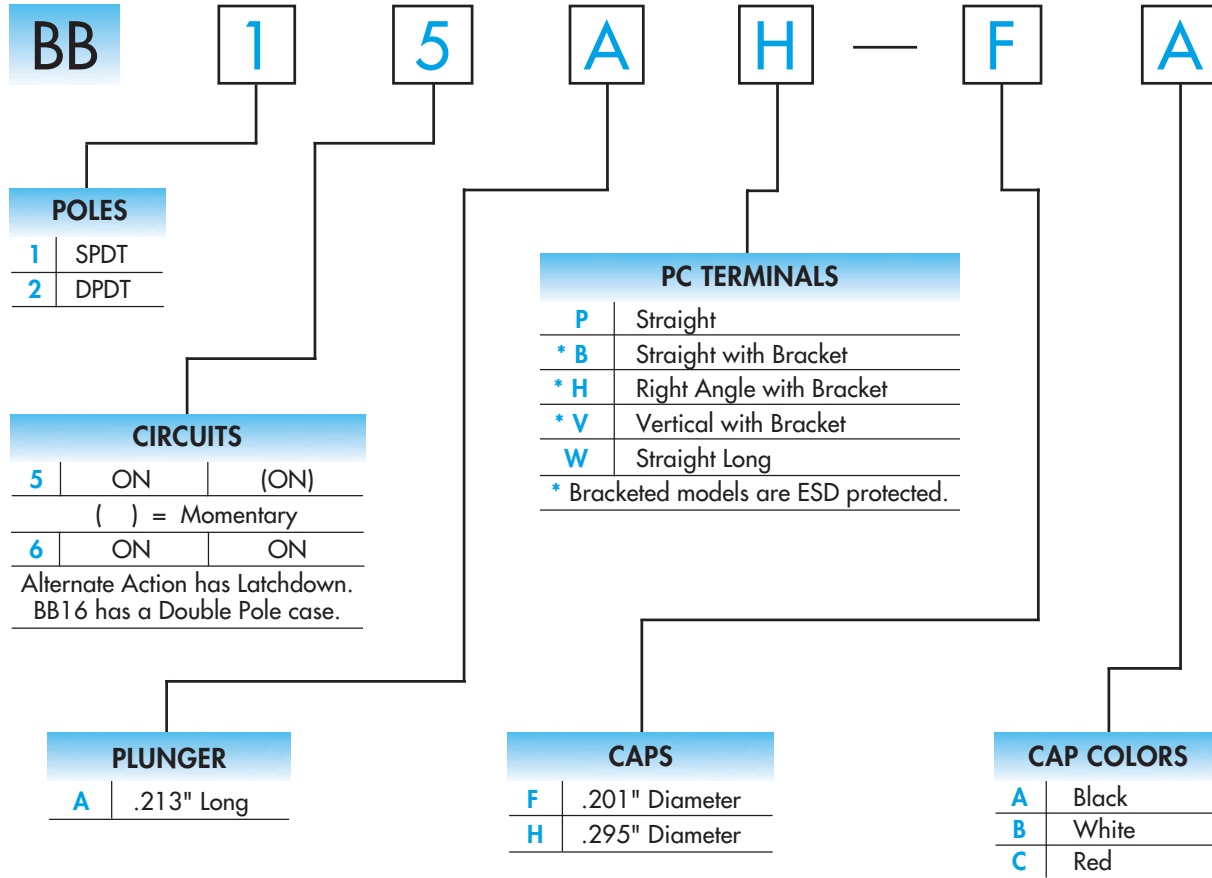
Installation

Cap Installation Force: 49.03N (11.2 lbf) maximum downward force on actuator;
 actuator must be in UP position to remove cap from alternate action models.
Soldering Time & Temperature: 3 seconds @ 350°C or 5 seconds @ 270°C
Process Seal: See Supplement Index (page Z2) for specific processing data.
 Actuator must be in UP position to process alternate action models.

Standards & Certifications

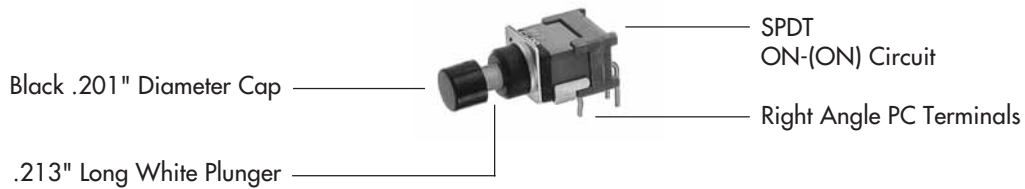
Flammability Standards: UL94V-0 available
UL Recognition or CSA Certification: The BB Series pushbuttons have not been tested for UL recognition or CSA certification. These switches are designed for use in a low-voltage, low-current, logic-level circuit. When used as intended in a logic-level circuit, the results do not produce hazardous energy.

TYPICAL SWITCH ORDERING EXAMPLE






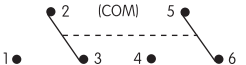


DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

BB15AH-FA



POLES & CIRCUITS

Pole	Model	Plunger Position () = Momentary		Connected Terminals		Throw & Schematics
		Normal 	Down 	Normal 	Down 	
SP	BB15 BB16	ON ON	(ON) ON	2-3	2-1	SPDT 
DP	BB25 BB26	ON ON	(ON) ON	2-3 5-6	2-1 5-4	DPDT 

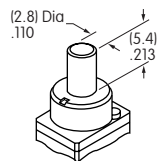
Note: Terminal numbers are not actually on the switch.

PLUNGER

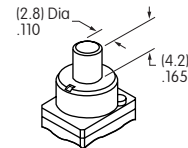
A .213" Long

Standard Plunger Color: White

Contact factory for other colors and lengths.



Normal Position



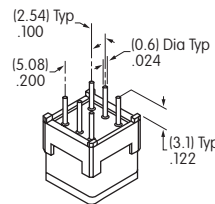
Latchdown Position

PC TERMINALS

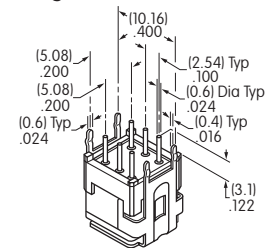
Both single pole and double pole alternate action models have double pole bases.

See Typical Switch Dimensions for details.

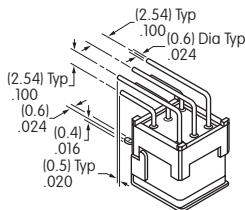
P Straight



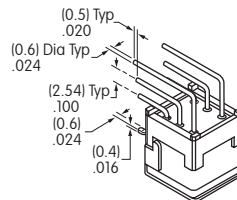
B Straight with Bracket



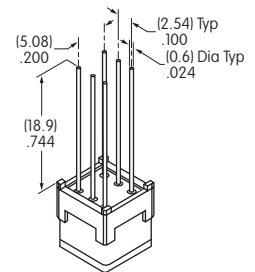
H Right Angle with Bracket



V Vertical with Bracket

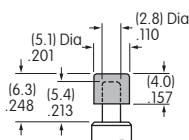


W Straight Long



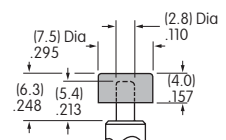
OPTIONAL SLIP-ON CAPS

F AT475
.201" Diameter Cap



Material: Polyamide

H AT496
.295" Diameter Cap

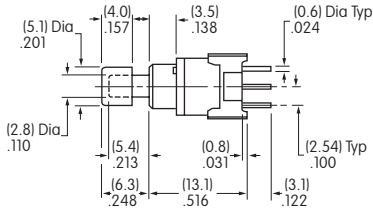
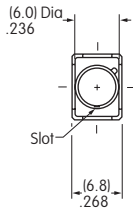


Material: Polyamide

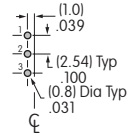
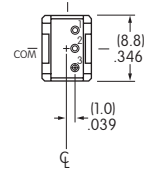
Colors Available: **A** Black **B** White **C** Red

TYPICAL SWITCH DIMENSIONS

Straight PC



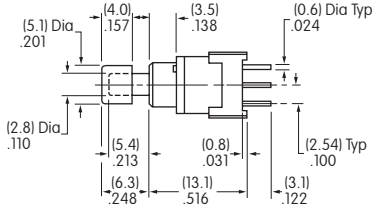
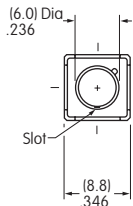
Single Pole



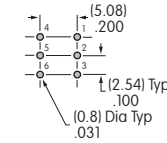
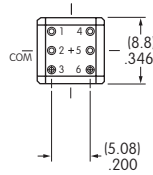
BB15AP-FA

Momentary

Straight PC

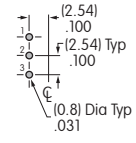
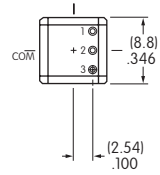


Double Pole



Momentary & Alternate

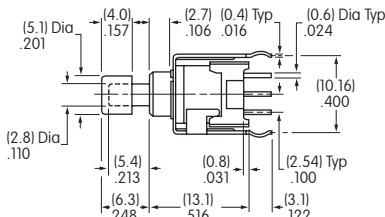
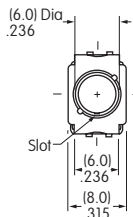
BB16AP



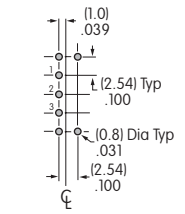
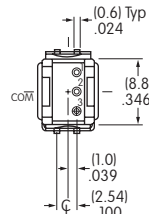
Alternate

BB25AP-FA

Straight PC • Bracket



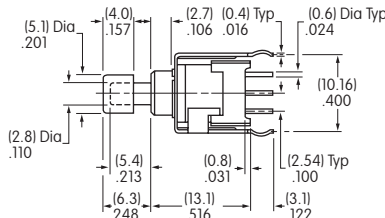
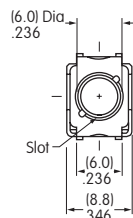
Single Pole



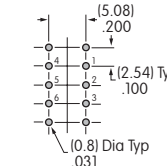
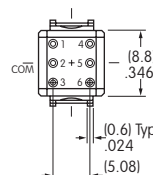
Momentary

BB15AB-FA

Straight PC • Bracket

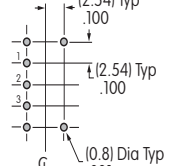
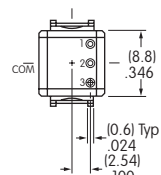


Double Pole



Momentary & Alternate

BB16AB



Alternate

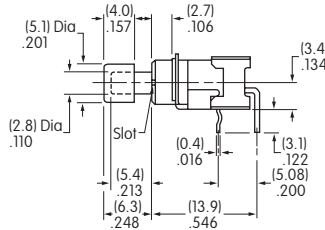
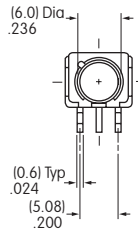
BB25AB-FA

TYPICAL SWITCH DIMENSIONS

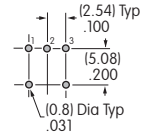
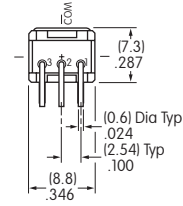
Right Angle PC



BB15AH-FA



Single Pole

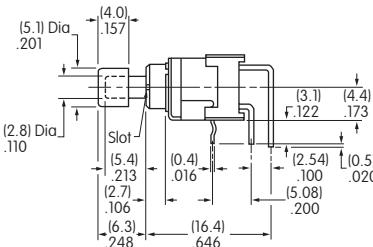
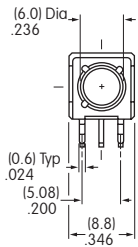


Momentary

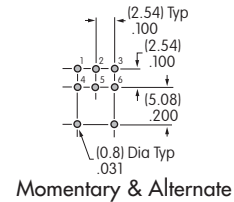
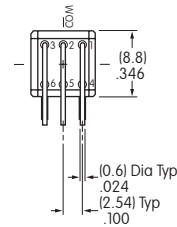
Right Angle PC



BB25AH-FA

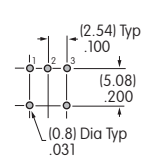
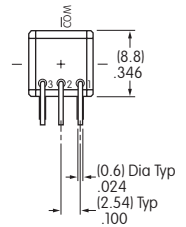


Double Pole



Momentary & Alternate

BB16AH

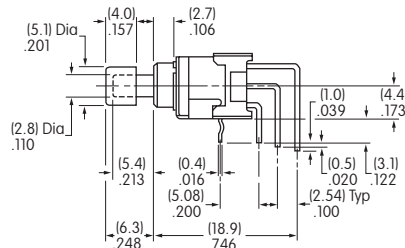
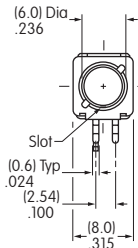


Alternate

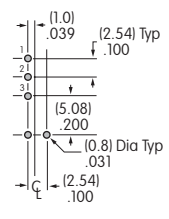
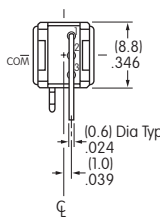
Vertical PC



BB15AV-FA



Single Pole

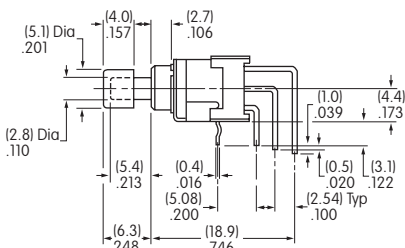
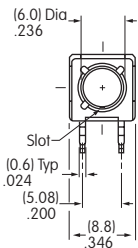


Momentary

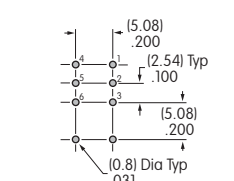
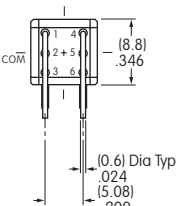
Vertical PC



BB25AV-FA

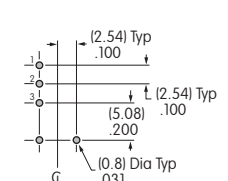
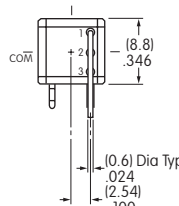


Double Pole



Momentary & Alternate

BB16AV



Alternate