

# Distinctive Characteristics

Unique, off-center actuator allows high density setup and easy actuation while avoiding accidental operation in compact environments.

Side-by-side, block mounting can be achieved by use of bracket AT546 on straight PC mounting types.

Off-Momentary On Circuit.

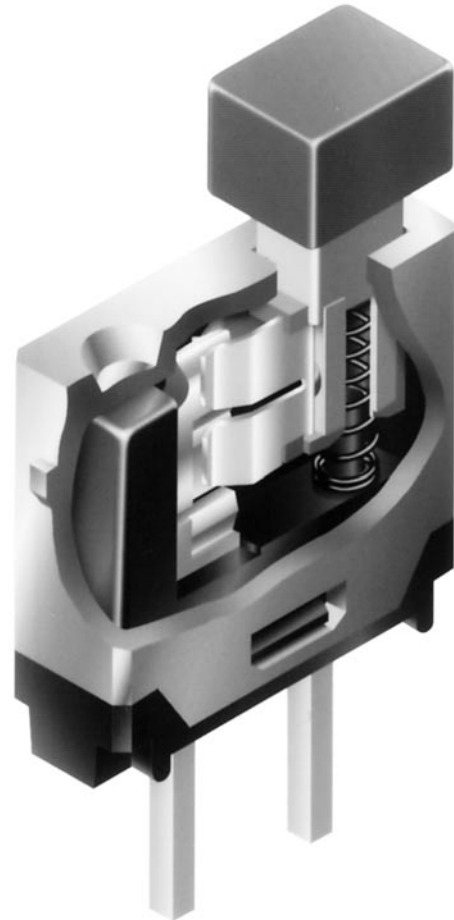
Black, white, and red snap-on caps available.

Extremely thin size allows high density PCB mounting and makes these switches ideal for handheld equipment.

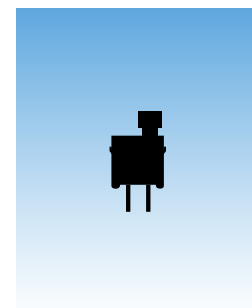
Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

Molded-in, epoxy sealed terminals lock out flux and other contaminants.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing for straight and angle mounting.



Actual Size



# General Specifications

## 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:** 80 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:** 1.0N  
**Travel:** Pretravel .020" (0.5mm); Overtravel .023 (0.6mm); Total Travel .043" (1.1mm)

## Materials & Finishes

**Actuator:** Glass fiber reinforced polyamide (UL94V-0)  
**Case:** Glass fiber reinforced polyamide (UL94V-0)  
**Movable Contacts:** Phosphor bronze with gold plating  
**Stationary Contacts:** Brass with gold plating  
**Base:** Glass fiber reinforced polyamide (UL94V-0)  
**Mounting Bracket:** Phosphor bronze with tin plating  
**Terminals:** Brass with gold plating

## Environmental Data

**Operating Temperature Range:** -25°C through +70°C (-13°F through +158°F)  
**Humidity:** 90 ~ 95% humidity for 240 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/s<sup>2</sup>) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

## PCB Processing

**Soldering:** Wave Soldering recommended. See Profile B in Supplement section.  
 Manual Soldering: 4 seconds maximum @ 390°C maximum.  
**Cleaning:** These devices are not process sealed. Hand clean locally using alcohol based solution. See Cleaning Specifications in Supplement section.

## Standards & Certifications

**Flammability Standards:** UL94V-0 actuator, case, & base  
**UL Recognition or CSA Certification:** The GB2 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

**GB2**    **1**    **5**    **A**    **B**

POLE	
1	SPST

CIRCUIT		
5	OFF	(ON)
( ) = Momentary		

PLUNGER	
A	Standard

PC TERMINALS	
P	Straight
B	Straight with Bracket
H	Right Angle 1 Switch
2H	Right Angle 2 Switches

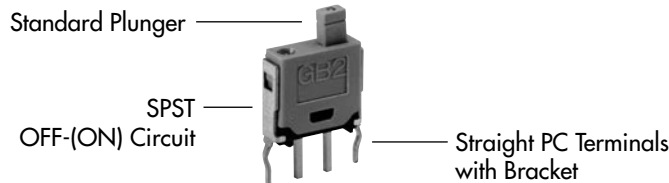
CAP COLORS	
With P, B, or H Terminals for Single Switches	
A	Black
B	White
C	Red

With Terminal Code 2H for 2 Right Angle Switches		
Upper		*Lower
A	Black	A
B	White	B
C	Red	C

\* Nearest to PC Board

#### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

**GB215AB**



### POLE & CIRCUIT

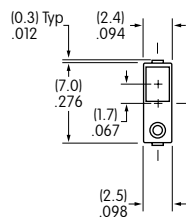
Pole	Model	Plunger Position ( ) = Momentary		Connected Terminals		Throw & Schematics
		Normal	Down	Normal	Down	
SP	<b>GB215</b>	OFF	(ON)	OPEN	1-2 1-2 3-4	Note: Terminal numbers are not actually on the switch.   

### TYPICAL SWITCH DIMENSIONS

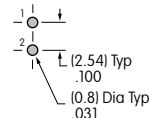
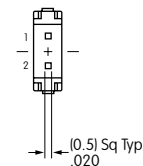
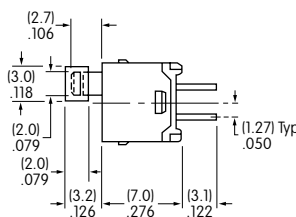
#### Straight PC



**GB215AP**

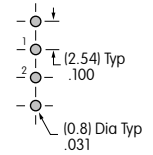
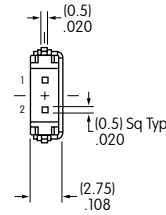
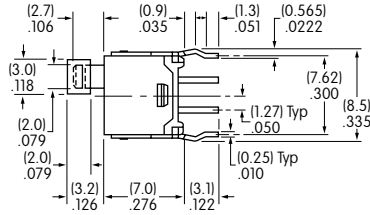
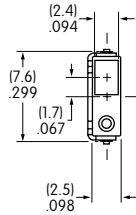


#### Single Pole



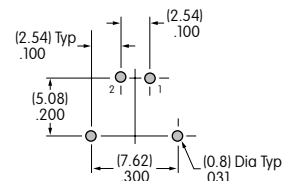
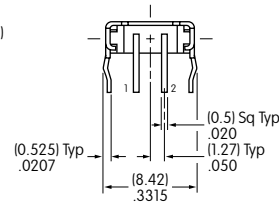
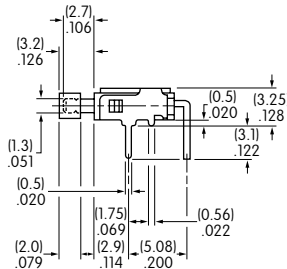
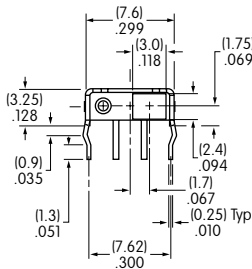
### TYPICAL SWITCH DIMENSIONS

#### Straight PC with Bracket



GB215AB

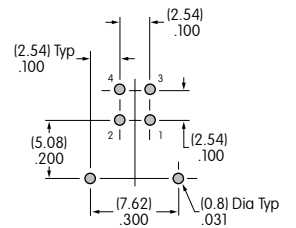
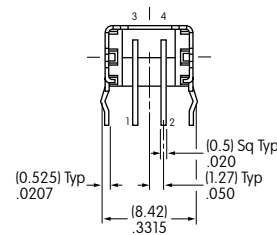
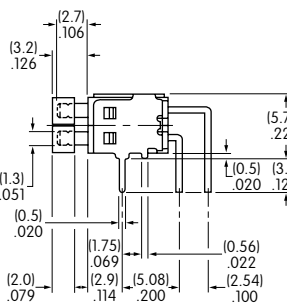
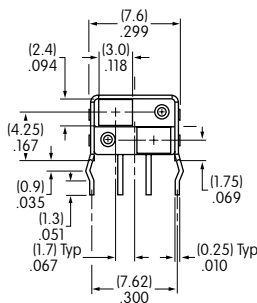
#### Right Angle PC



GB215AH

#### Single Pole with 1 Switch

#### Right Angle PC



GB215A2H

#### Single Pole with 2 Switches

### SNAP-ON CAP & MOUNTING BRACKET

**A** AT4137 Rectangular Snap-on Cap  
Black

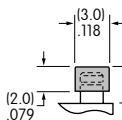
**B** AT4137 Rectangular Snap-on Cap  
White

**C** AT4137 Rectangular Snap-on Cap  
Red

Material: PBT  
Finish: Glossy



Actual Size



**AT546**  
Mounting Bracket  
for Block Mounting

Material:  
Phosphor Bronze  
with Tin Plating

