Rotaries

General Specifications

Electrical Capacity (Resistive Load)

0.4VA maximum @ 28V AC/DC maximum Logic Level:

(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

Pretravel .020" (0.5mm); Overtravel .023 (0.6mm); Total Travel .043" (1.1mm)

Materials & Finishes

Glass fiber reinforced polyamide (UL94V-0) Actuator:

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

> Brass with gold plating Terminals:

Environmental Data

-25°C through +70°C (-13°F through +158°F) **Operating Temperature Range:**

> **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

50G (490m/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

PCB Processing

Wave Soldering Recommended: See Profile A in Supplement section. Soldering:

Manual Soldering: See Profile A in Supplement section.

These devices are not process sealed. Hand clean locally using alcohol based solution. Cleaning:

Standards & Certifications

Flammability Standards: UL94V-0 actuator, case, & base

> 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.



Keylocks Programmable Illuminated PB Pushbuttons

Rotaries

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.

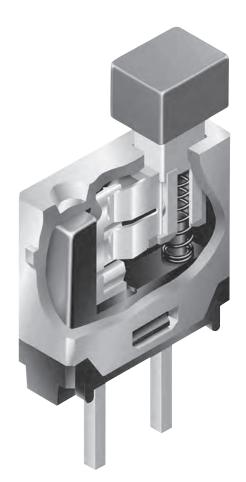
Black, white, and red snap-on caps available.

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

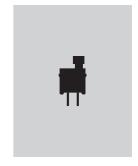
Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

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.



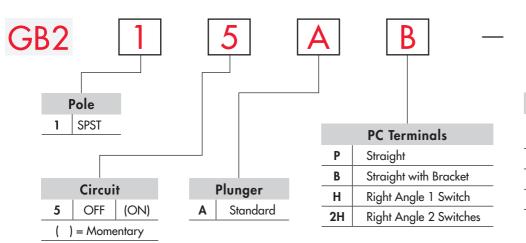
Actual Size





Slides

TYPICAL SWITCH ORDERING EXAMPLE



Cap Colors

With P, B, or H Terminals for Single Switches

| Α | Black | | | | |
|---|-------|--|--|--|--|
| В | White | | | | |
| С | Red | | | | |

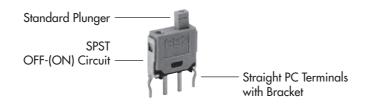
With Terminal Code 2H for 2 Right Angle Switches

| Upper | | *Lower |
|-------|-------|--------|
| Α | Black | Α |
| В | White | В |
| С | Red | С |

^{*} Nearest to PC Board

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

GB215AB



POLE & CIRCUIT

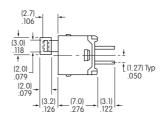
| | | Plunger Position () = Momentary | | Connected Terminals | | Throw & Schematics | |
|------|-------|----------------------------------|------|---------------------|----------------|--|---|
| Pole | Model | Normal | Down | Normal L | Down | Note: Terminal numbers are not actually on the switch. | |
| SP | GB215 | OFF | (ON) | OPEN | 1-2 1-2 3-4 | SPST SPST with 2 switches | $ \begin{array}{c c} & \downarrow \\ \hline 1 & 2 \\ \hline & 2 \\ \hline 3 & 4 \end{array} $ |

TYPICAL SWITCH DIMENSIONS

Single Pole

Straight PC

(0.3) Typ_ .012







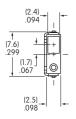
GB215AP

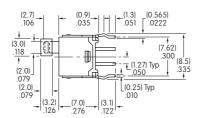


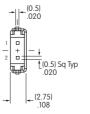
TYPICAL SWITCH DIMENSIONS

Single Pole

Straight PC with Bracket







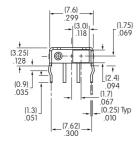


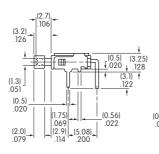


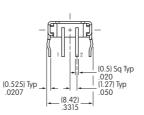
GB215AB

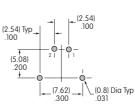
Single Pole with 1 Switch

Right Angle PC







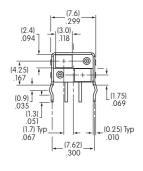


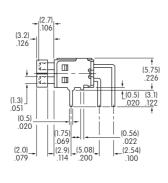


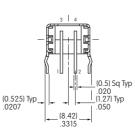
GB215AH

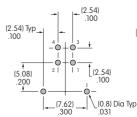
Single Pole with 2 Switches

Right Angle PC











GB215A2H

SNAP-ON CAP & MOUNTING BRACKET



AT4137 Rectangular Snap-on Cap



AT4137 Rectangular Snap-on Cap White



AT4137 Rectangular Snap-on Cap

Material: PBT Finish: Glossy



Actual Size



AT546 **Mounting Bracket** for Block Mounting

Material: Phosphor Bronze with Tin Plating

