

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

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

80 milliohms maximum **Contact Resistance:**

Insulation Resistance: 500 megohms minimum @ 500V DC 500V AC minimum for 1 minute minimum **Dielectric Strength:**

Mechanical Life: 50,000 operations minimum **Electrical Life:** 50,000 operations minimum

Nominal Operating Force: 1.70N

> Travel: Pretravel .035" (0.9mm); Overtravel .008" (0.2mm); Total Travel .043" (1.1mm)

Materials & Finishes

Actuator: Polyacetal

Glass fiber reinforced polyamide Case:

Sealing Rings: Nitrile butadiene rubber Phosphor bronze with gold plating **Movable Contacts:**

Phosphor bronze with gold plating **Stationary Contacts:** Glass fiber reinforced polyamide Base:

Mounting Bracket: Phosphor bronze with tin plating Terminals: Phosphor bronze with gold plating

Environmental Data

Operating Temp Range: -30°C through +85°C (-22°F through +185°F)

90 ~ 95% humidity for 96 hours @ 40°C (104°F) **Humidity:**

10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning Vibration:

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: 39.1N (8.8 lbf) maximum downward force on actuator

PCB Processing

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

Manual Soldering: See Profile A in Supplement section.

Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

The GB 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

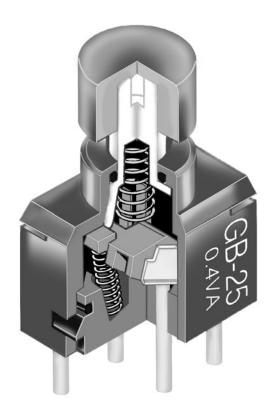
Ultra-miniature size allows high density mounting, and extremely light weight of 0.25 gram makes these switches ideal for handheld equipment.

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

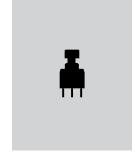
Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

 $.100'' \times .100'' (2.54 \text{mm} \times 2.54 \text{mm})$ terminal spacing conforms to standard PC board gridspacing. Round terminals facilitate easier through-hole mounting on PC boards.

Matching indicators available.



Actual Size

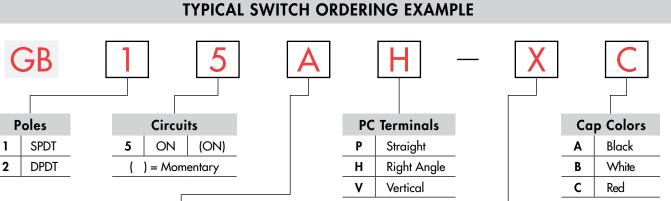




Slip-on Cap

.157" (4.0mm) Diameter

X



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

GB15AH-XC



POLES & CIRCUITS							
		Plunger Position () = Momentary		Connected Terminals		Throw & Schematics	
Pole	Model	Normal Slot	Down	Normal Slot	Down	Note:	Terminal numbers are not actually on the switch.
SP	GB15	ON	(ON)	5-6	5-4	SPDT	5 (COM) 4• 6
DP	GB25	ON	(ON)	5-6 2-3	5-4 2-1	DPDT	4• 5 (COM) 2 • 3

PLUNGER

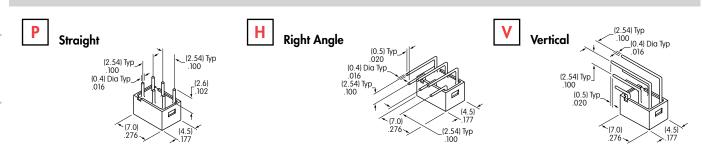


Plunger

.130" (3.3mm) Long



PC TERMINALS





C47

SLIP-ON CAP & COLORS



AT4063

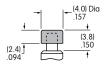
.157" (4.0mm) Diameter Slip-on Cap

Material: Polyamide

Finish: Glossy



Actual Size



Cap Colors Available:



Black



White

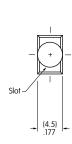


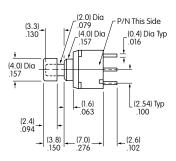
(0.6) Dia Typ./ .024

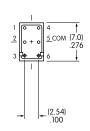
Red

TYPICAL SWITCH DIMENSIONS

Single & Double Pole



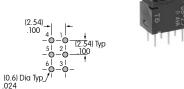




On single pole switches terminals 1 & 3 are support pins.

Straight PC

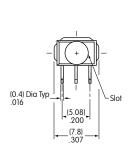


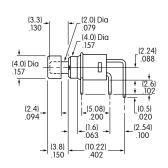


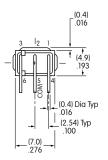
GB25AP-XC

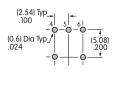
Right Angle PC

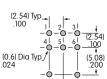
Single & Double Pole







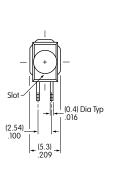


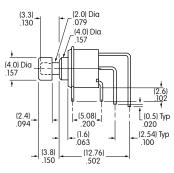


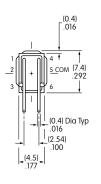


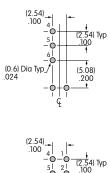
GB25AH-XC

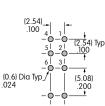
Single & Double Pole











Vertical PC



GB25AV-XC



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