

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:	2.0N
Travel:	Pretravel: .024" (0.6mm); Overtravel: .019" (0.5mm); Total Travel: .043" (1.1mm)

Materials & Finishes

Actuator:	Polyphenylene sulfide (UL94V-0)
Case:	Polyphenylene sulfide (UL94V-0)
Sealing Rings:	Nitrile butadiene rubber
Movable Contacts:	Phosphor bronze with gold plating
Stationary Contacts:	Phosphor bronze with gold plating
Base:	Polyphenylene sulfide (UL94V-0)
Terminals:	Phosphor bronze with gold plating

Environmental Data

Operating Temperature Range:	-30°C through +85°C (-22°F through +185°F)
Humidity:	90 ~ 95% humidity for 96 hours @ 40°C (104°F)
Vibration:	10 ~ 500Hz 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 ²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

Mounting:	It is recommended that the body of models for upright mounting without bracket be fastened to a panel or similar support for protection of solder joints from mechanical stress.
Coplanarity:	See specifications in Terms & Acronyms in Supplement section.

Processing

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

Standards & Certifications

Flammability Standard:	UL94V-0 actuator, case & base The G3B 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.
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Distinctive Characteristics

Ultra-miniature size allows high density mounting, and extremely light weight of 0.6 gram makes these switches ideal for handheld equipment.

Tape-reel and stick-tube packaging allow rapid automated placement of surface mount devices. Tape-reel packaging meets EIA-481-D Standard.

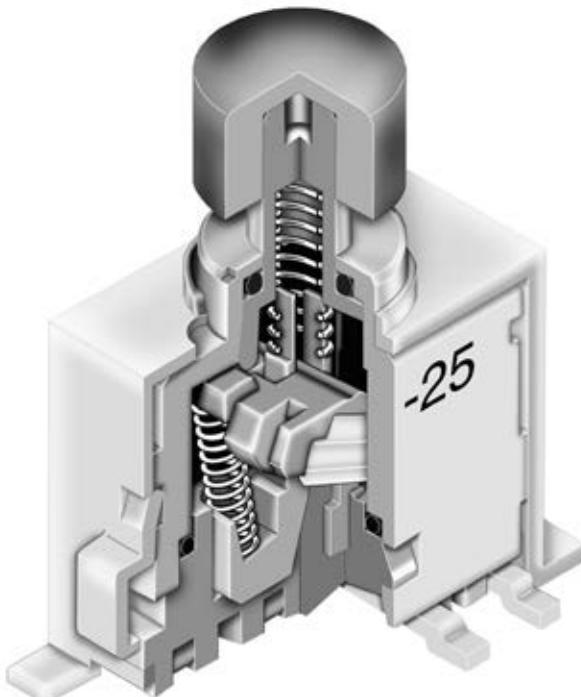
Heat resistant resin used for housing, base, and plunger allows vapor phase and infrared convection reflow soldering.

Combination of design features achieves total seal and allows automated processing techniques, including flux cleaning procedures: one-piece bushing and housing, rubber seals surrounding actuator and base, epoxy at joint of case and base, and molded-in, epoxy-sealed terminals.

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.)

Gull-wing terminals provide mechanical stability during soldering and simplified solder joint inspection.

Coplanarity: all considered surfaces must lie between two parallel planes that are a maximum distance apart of .0059" (0.15mm). (Additional coplanarity details in Terms and Acronyms in the Supplement section.)



Actual Size



Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

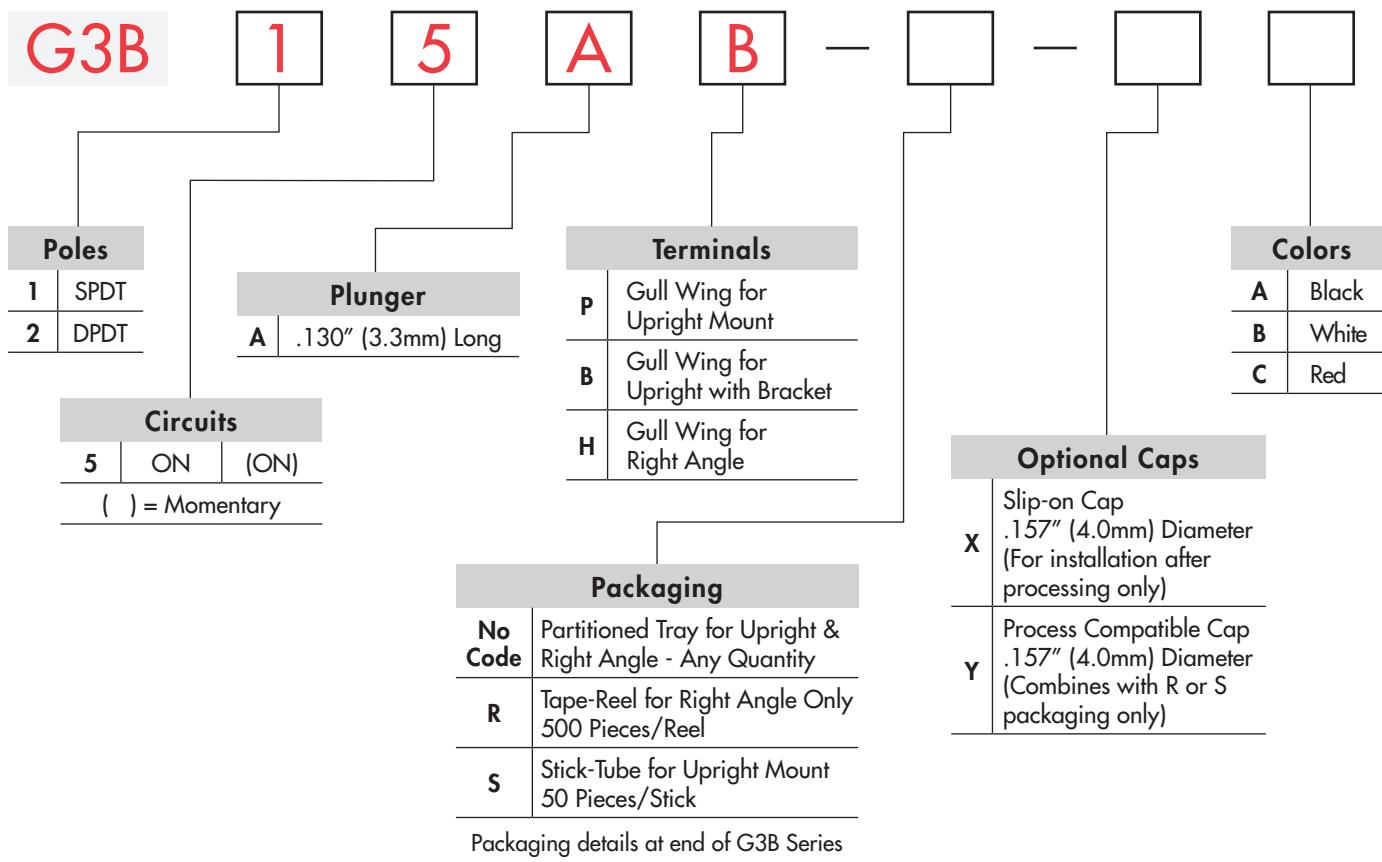
Touch

Indicators

Accessories

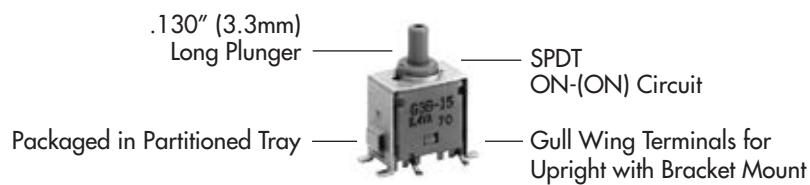
Supplement

TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

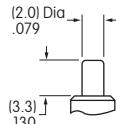
G3B15AB



POLES & CIRCUITS

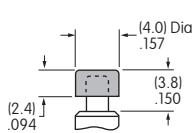
		Plunger Position () = Momentary		Connected Terminals		Throw & Schematics	
Pole	Model	Normal	Down	Normal	Down	Note: Terminal numbers are not actually on the switch.	
SP	G3B15	ON	(ON)	5-6	5-4	SPDT	
DP	G3B25	ON	(ON)	5-6 2-3	5-4 2-1	DPDT	

PLUNGER & OPTIONAL CAPS

A .130" (3.3mm) Long Plunger**X** AT4063 Slip-on Cap .157" (4.0mm) Diameter

Available with bulk packaging only. Cap must be installed after processing.
Material: Polyamide
Finish: Glossy

Actual Size

**Y** Process Compatible Cap .157" (4.0mm) Diameter

Factory assembled. Available with tape-reel or stick-tube packaging only.

Caution: Pulling force specification for this cap is not warranted after reflow processing.

Material: Polyamide
Finish: Glossy

Cap Colors Available:

A

Black

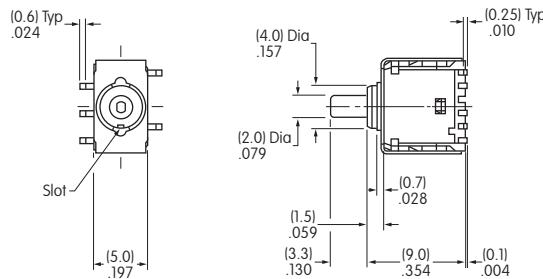
B

White

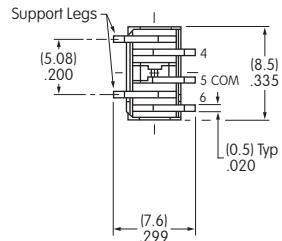
C

Red

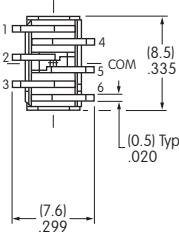
TYPICAL SWITCH DIMENSIONS



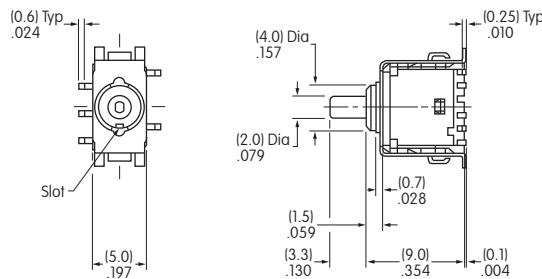
Single & Double Pole



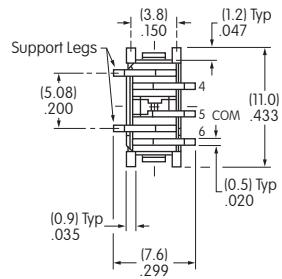
Upright Mounting



G3B25AP



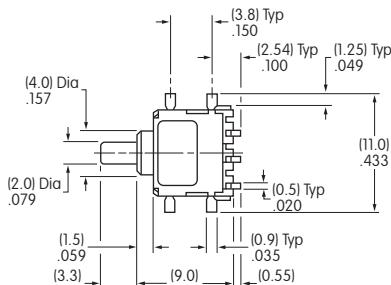
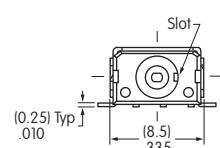
Single & Double Pole



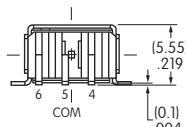
Upright Mounting with Bracket



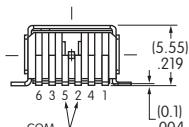
G3B15AB



Single Pole



Double Pole



G3B15AH

Right Angle Mounting

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Touch

Indicators

Accessories

Supplement

