

General

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.

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: 1.70N
 Travel: Pretravel .035 (0.9mm); Overtravel .008 (0.2mm); Total Travel .043 (1.1mm)

Plunger: Polyamide
 Case: Glass fiber reinforced polyamide
 Sealing Rings: Nitrile butadiene rubber
 Movable Contact: Phosphor bronze with gold plating
 Stationary Contacts: Phosphor bronze with gold plating
 Base: Glass fiber reinforced polyamide
 Switch Terminals: Phosphor bronze with gold plating
 Lamp Terminals: Phosphor bronze with gold plating

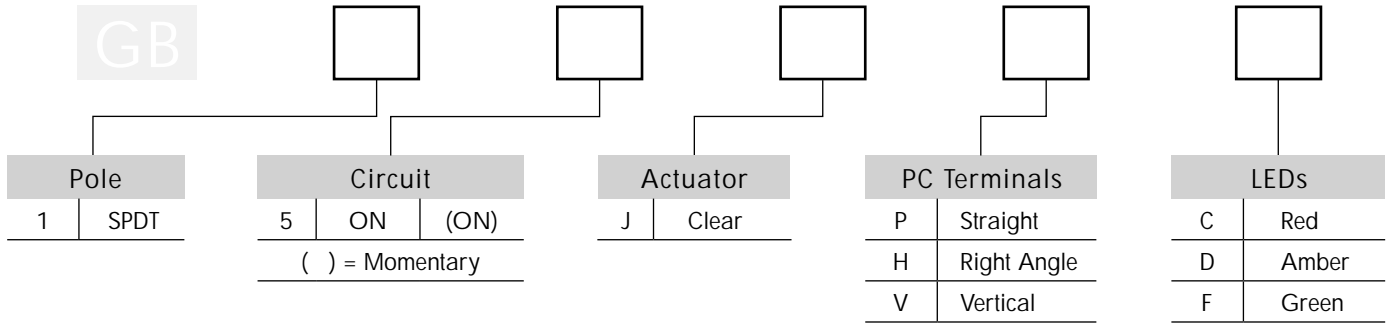
Operating Temperature Range: 25°C through +55°C (77°F through +131°F)
 Humidity: 90 ~ 95% humidity for 240 hours @ 40°C (104°F)
 Vibration: 10 ~ 500Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 15 minutes; 3 right angled directions for 2 hours
 Shock: 50G (490m/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Soldering: Wave Soldering recommended. See Profile A in Supplement section.
 Manual Soldering: See Profile A in Supplement section.
 Cleaning: Automated alcohol based cleaning recommended, 5 minutes maximum. Do not use high-purity alcohol (50% alcohol or more) or organic solvent. High alcohol solution can damage clear plastic. See Cleaning specifications in Supplement section.

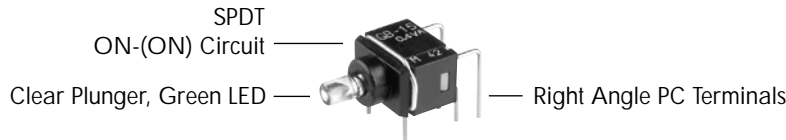
The GB Series illuminated pushbuttons have not been tested for UL recognition or CSA certification. These switches are designed for use in a low-voltage, low-current, logic-level circuit. When used as intended in a logic-level circuit, the results do not produce hazardous energy.

Ultra-Miniature Fully Illuminated Plungers

TYPICAL SWITCH ORDERING EXAMPLE



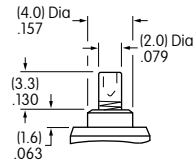
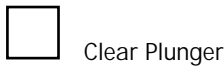
DESCRIPTION FOR TYPICAL ORDERING EXAMPLE



POLE & CIRCUIT

Pole	Model	Plunger Position () = Momentary		Connected Terminals		Throw & Switch/Lamp Schematics
		Normal	Down	Normal	Down	
SP	GB15	ON	(ON)	5-6	5-4	Note: Terminal numbers are not actually on the switch. LED circuit is isolated and requires an external power source.

ACTUATOR



LED COLORS & SPECIFICATIONS

LEDs are an integral part of the switch and not available separately. The electrical specifications shown are determined at a basic temperature of 25°C.

If the source voltage exceeds the rated voltage, a ballast resistor is required.

The resistor value can be calculated by using the formula in the Supplement section.

	Colors			
Forward Peak Current	I_{FM}	30mA	30mA	25mA
Continuous Forward Current	I_F	20mA	20mA	20mA
Forward Voltage	V_F	1.9V	1.9V	2.1V
Reverse Peak Voltage	V_{RM}	5V	5V	5V
Current Reduction Rate Above 25°C	I_F	0.43mA/°C	0.43mA/°C	0.36mA/°C
Ambient Temperature Range		25° ~ +55°C		

Ultra-Miniature Fully Illuminated Plungers

PC TERMINALS



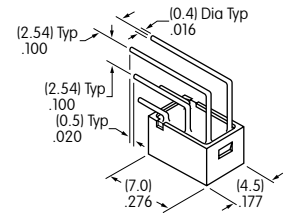
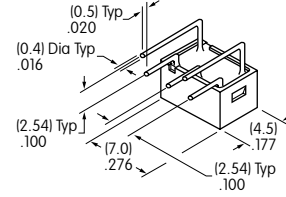
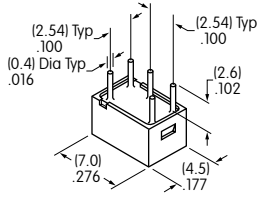
Straight



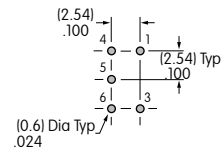
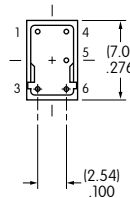
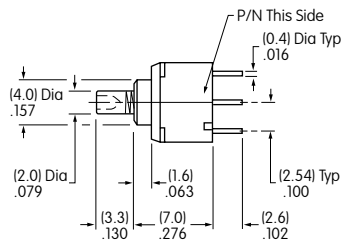
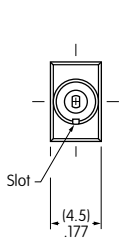
Right Angle



Vertical



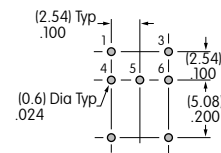
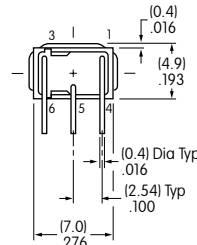
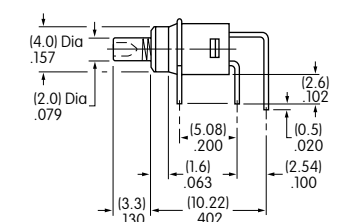
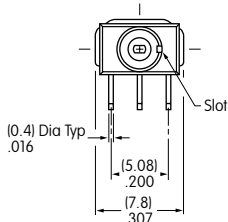
TYPICAL SWITCH DIMENSIONS



Straight PC



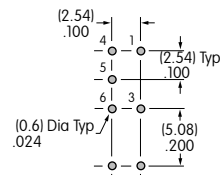
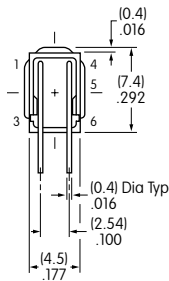
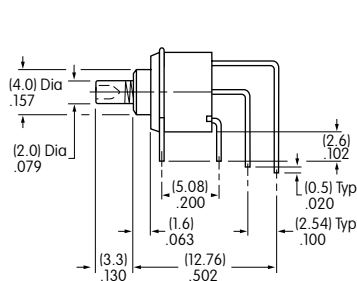
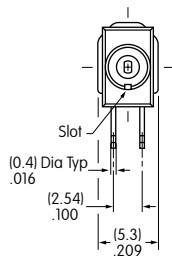
Terminals 1 & 3 are lamp terminals.



Right Angle PC



Terminals 1 & 3 are lamp terminals.



Vertical PC



Terminals 1 & 3 are lamp terminals.