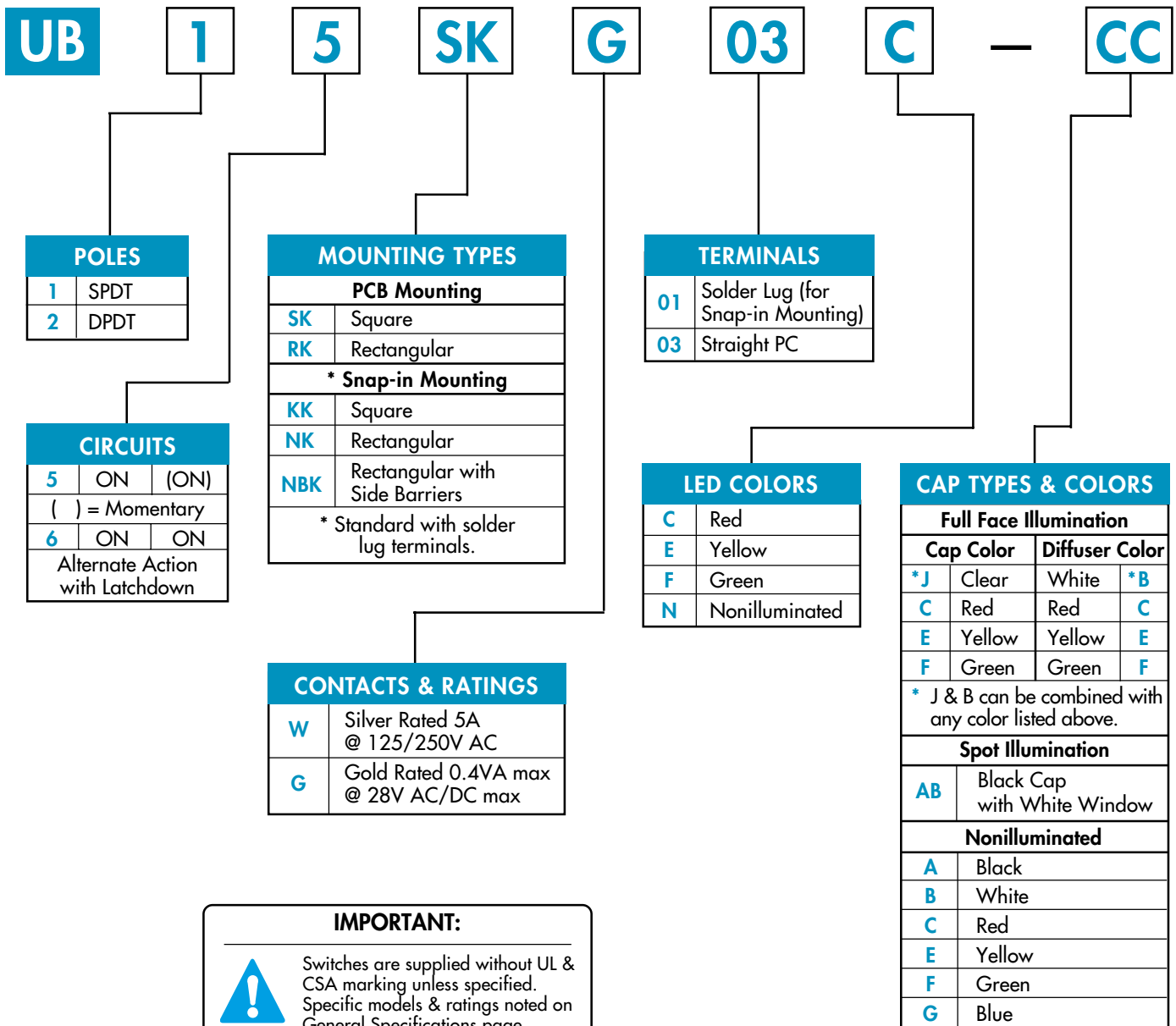




# Series UB

Low Profile Pushbutton Switches

## TYPICAL SWITCH ORDERING EXAMPLE



### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

**UB15SKG03C-CC**





### GENERAL SPECIFICATIONS

#### Electrical Capacity (Resistive Load)

**Power Level (code W):** 5A @ 125/250V AC or 5A @ 30V DC  
**Logic Level (code G):** 0.4VA maximum @ 28V AC/DC maximum  
Note: See [Supplement Index](#) to find explanation of operating range.

#### Other Ratings

**Contact Resistance:** 50 milliohms maximum for silver; 100 milliohms maximum for gold  
**Insulation Resistance:** 200 megohms minimum @ 500V DC  
**Dielectric Strength:** 1,000V AC minimum between contacts;  
1,500V AC minimum between contacts & case  
**Mechanical Life:** 1,000,000 operations minimum for momentary;  
200,000 operations minimum for alternate action  
**Electrical Life:** 10,000 operations minimum for silver;  
100,000 operations minimum for silver with resistive load of 3A @ 125V AC  
200,000 operations minimum for gold  
**Nominal Operating Force:** Single Pole: 160 grams for Square & 194 grams for Rectangular  
Double Pole: 260 grams for Square & 316 grams for Rectangular  
**Contact Timing:** Break before make  
**Travel:** Square: 1.7mm (.067") pretravel; 0.6mm (.024") overtravel; 2.3mm (.091") total  
Rectangular: 1.7mm (.067") pretravel; 0.7mm (.028") overtravel; 2.4mm (.095") total

#### Materials & Finishes

**Housing/Bezel:** Glass fiber reinforced polyamide  
**Snap-in Frame:** Stainless steel  
**Movable Contactor:** Phosphor bronze  
**Movable Contacts:** Silver alloy or copper with gold plating over nickel  
**Stationary Contacts:** Silver alloy or copper with gold plating over nickel  
**Switch Terminals:** Phosphor bronze with silver or gold plating  
**Lamp Terminals:** Brass with tin-lead plating  
**Base:** Glass fiber reinforced diallyl phthalate

#### Environmental Data

**Operating Temp Range:** Illuminated: -25°C through +50°C (-13°F through +122°F)  
Nonilluminated: -20°C through +70°C (-4°F through +158°F)  
**Humidity:** 90 ~ 95% humidity for 96 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 acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

#### Installation

**Cap Installation Force:** .77 kg (1.69 lb)  
**Soldering Time & Temperature:** 3 seconds @ 350°C or 5 seconds @ 270°C  
**Process Seal:** Not available

#### Standards & Certifications

**Flammability Standards:** UL94V-0 housing/bezel of GFR polyamide & base of GFR diallyl phthalate  
**UL Recognized:** All single & double pole models recognized at 5A @ 125/250V AC or 0.014A maximum @ 28V DC; UL File No. E44145  
**CSA Certified:** All single & double pole models certified at 5A @ 125/250V AC or 5A @ 30V DC or 0.4VA maximum @ 28V AC/DC maximum; CSA File Nos. LR23535



# Series UB

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## POLES & CIRCUITS

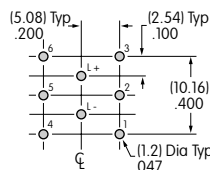
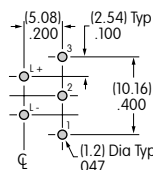
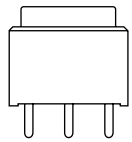
		Plunger Position ( ) = Momentary		Connected Terminals		Throw & Power/Lamp Schematics
Pole	Model	Normal	Down	Normal	Down	
SP	UB15 UB16	ON ON	(ON) ON	1-3	1-2	Notes: Switch is marked with NC, NO, COM, L+ & L-. Lamp circuit is isolated and requires external power source. SPDT
DP	UB25 UB26	ON ON	(ON) ON	1-3 4-6	1-2 4-5	DPDT

## SHAPES & MOUNTING TYPES

### PCB Mounting

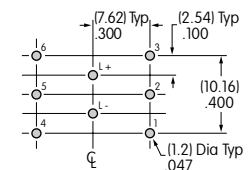
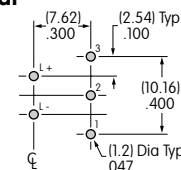
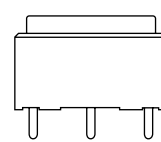
**SK**

Square



**RK**

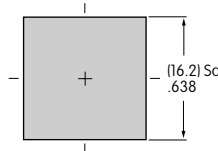
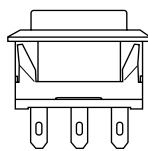
Rectangular



### Snap-In Mounting

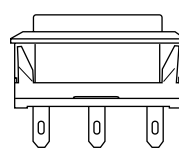
**KK**

Square with Bezel



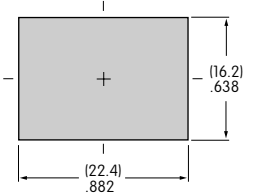
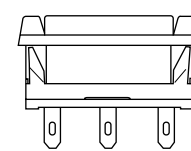
**NK**

Rectangular with Bezel



**NBK**

Rectangular with Side Barriers



Snap-in Mounting with Solder Lug terminals is the standard combination.

Panel Thickness: 1.0 ~ 3.2mm (.039 ~ .126")

## CONTACT MATERIALS & RATINGS

**W**

Silver Contacts

Power Level

5A @ 125V AC & 250V AC

**G**

Gold Contacts

Logic Level

0.4VA maximum @ 28V AC/DC maximum

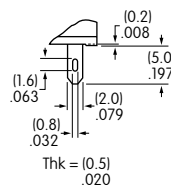
See [Supplement Index](#) for complete explanation of operating range.

## TERMINALS

**01**

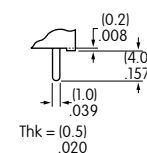
Solder Lug

The 0.8mm x 1.6mm oblong hole accommodates one solid 20-gauge wire or two solid or stranded 22-gauge wires.



**03**

Straight PC





### LED COLORS & SPECIFICATIONS

Electrical specifications are determined at a basic temperature of 25°C.

LED circuit is independent of switch operation.

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

The ballast resistor calculation and more lamp detail are shown in the Supplement; see [Supplement Index](#).

#### Single Element LED

<p>LEDs are an integral part of the switch and not available separately (1 LED in square model, 2 LEDs in rectangular model).</p> <p>* The 2 LEDs in the rectangular model are wired in parallel; all current values are doubled for this model.</p>	Color	<b>C</b> Red	<b>E</b> Yellow	<b>F</b> Green	
	* Forward Peak Current	$I_{FM}$	30mA	20mA	20mA
	* Continuous Forward Current	$I_F$	20mA	15mA	15mA
	Forward Voltage	$V_F$	2.0V	1.9V	1.95V
	Reverse Peak Voltage	$V_{RM}$	5V	5V	5V
	* Current Reduction Rate Above 25°C	$\Delta I_F$	0.40mA/°C	0.27mA/°C	0.27mA/°C

### CAP TYPES & COLOR COMBINATIONS

#### Transparent Cap with Diffuser for Full Face Illuminated

Caps		Diffusers	
<b>J</b> Clear	<b>AT4074 Square</b>	<b>B</b> White	<b>AT4075 Diffuser for AT4074 Square Cap</b>
<b>C</b> Red		<b>C</b> Red	
<b>E</b> Yellow	<b>AT4117 Rectangular</b>	<b>E</b> Yellow	<b>AT4118 Diffuser for AT4117 Rectangular Cap</b>
<b>F</b> Green		<b>F</b> Green	

Cap & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured  
 Note: Both cap & diffuser colors must be selected. J & B can be combined with any color.

#### Spot Illuminated Cap

<b>AB</b>	<b>AT4119 Square</b>	<b>AT4120 Rectangular</b>
<b>Black Cap with Translucent White Window for LED Display</b>		
Material: Polycarbonate	Finish: Matte	

#### Opaque Cap for Nonilluminated

**Colors Available:**

<b>A</b> Black	<b>E</b> Yellow	<b>AT4073 Square</b>	<b>AT4116 Rectangular</b>
<b>B</b> White	<b>F</b> Green		
<b>C</b> Red	<b>G</b> Blue		

Material: Polycarbonate Finish: Glossy

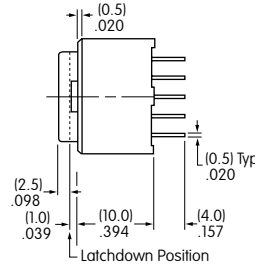
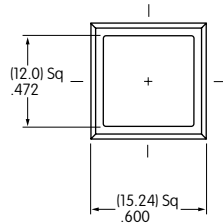


# Series UB

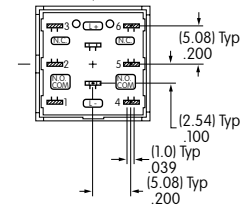
Low Profile Pushbutton Switches

## TYPICAL SWITCH DIMENSIONS

### Square • PCB Mount



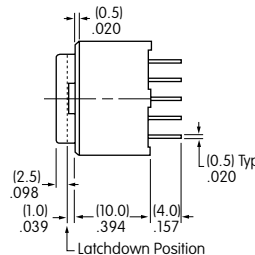
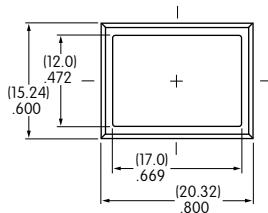
### Single & Double Pole



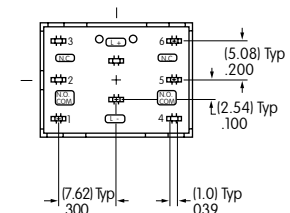
UB15SKG03C-CBq

Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

### Rectangular • PCB Mount



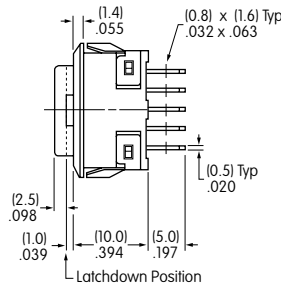
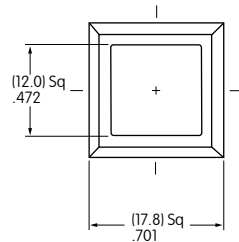
### Single & Double Pole



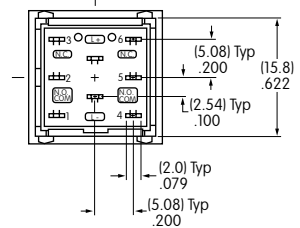
UB26RKG03E-EE

Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

### Square • Snap-in Mount • Beze



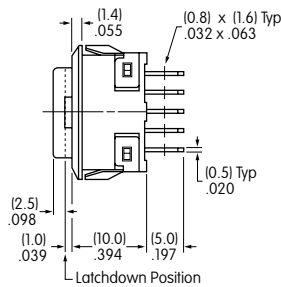
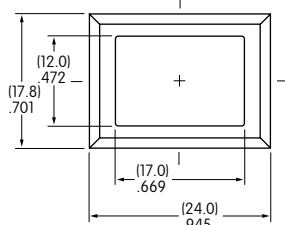
### Single & Double Pole



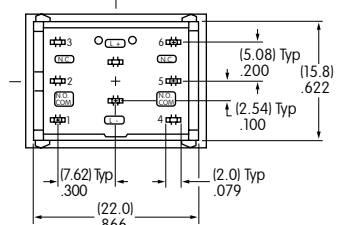
UB25KKW01C-CB

Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

### Rectangular • Snap-in Mount • Beze



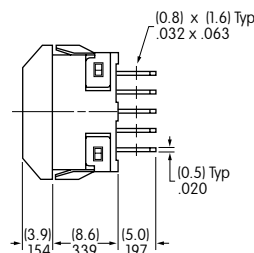
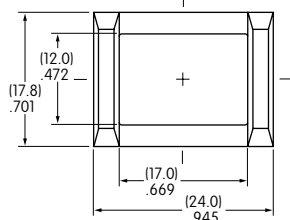
### Single & Double Pole



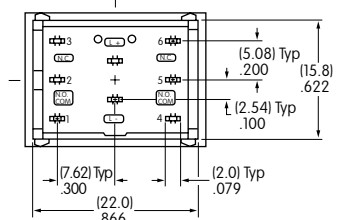
UB26NKW01F-FF

Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

### Rectangular • Snap-in Mount • Side Barrier



### Single & Double Pole



UB25NBKW01F-FB

Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.