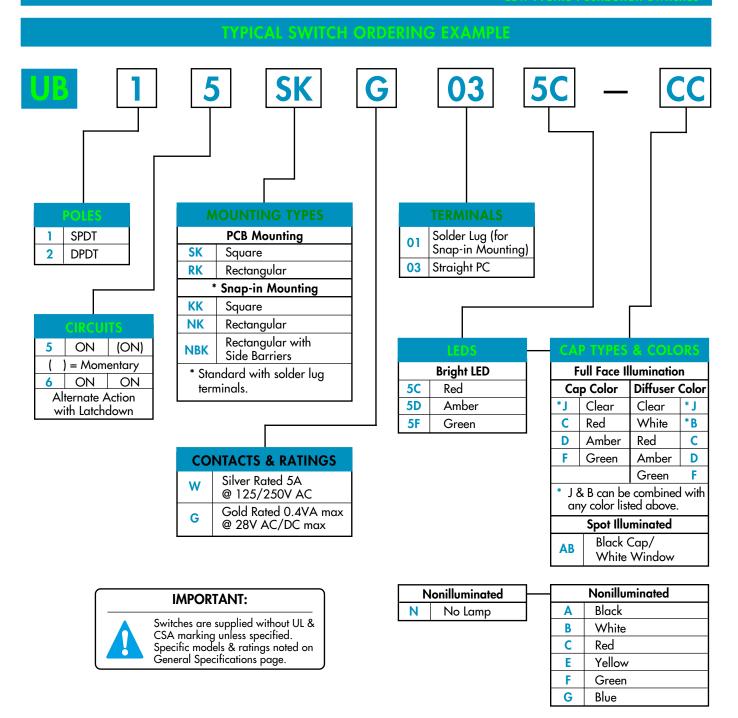


ow Profile Pushbutton Switches



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

UB15SKG035C-CC





Low Profile Pushbutton Switches

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 (page Z1) 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 Phosphor bronze with silver or gold plating

Lamp Terminals: Brass with silver plating

Base: Glass fiber reinforced liquid crystal polymer

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 liquid crystal polymer

UL Recognized: All single & double pole models recognized at 5A @ 125/250V AC or

0.014A @ 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



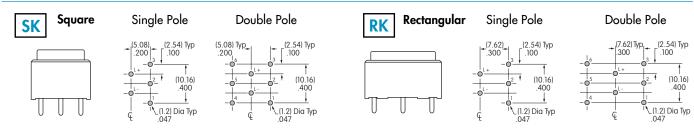
Low Profile Pushbutton Switches

POLES & CIRCUITS										
	Plunger I () = Mo	Position omentary	Connected Terminals		Throw & Power/Lamp Schematics					
	Normal	Down	Normal	Down	Notes: Switch is marked with NC, NO, COM, L+ & L					
Model					Lamp circuit is isolated and requires external power source.					
UB15 UB16*	0 2 2	(ON) ON	1-3	1-2	SPDT 1 COM L(+)					
UB25 UB26*	ON ON	(ON) ON	1-3 4-6	1-2 4-5	DPDT 1 COM 4 COM 1					
	UB15 UB16* UB25	Model UB15 ON UB16* ON UB25 ON	Model	Plunger Position () = Momentary Connected	Plunger Position () = Momentary Connected Terminals Normal Down Normal Down					

^{*} When in latchdown position for the alternate circuit, cap position is 1.0mm (.039") above the housing.

SHAPES & MOUNTING TYPES

PCB Mounting



Nonilluminated models have no lamp terminals.

Snap-In Mounting



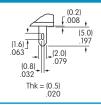
Snap-in Mounting with Solder Lug terminals is the standard combination. Panel Thickness: 1.0 ~ 3.2mm (.039 ~ .126")



TERMINALS



The .032" x .063" oblong hole accommodates two solid or stranded 24-gauge wires.





Straight PC



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 (page Z1).

Bright LED

LEDs are an integral part of the switch and not available separately.

(+)O (-)		5C	5D	5F	
	Color	Red	Amber	Green	Unit
Forward Peak Current	I _{FM}	30	30	25	mA
Continuous Forward Current	I _F	20	20	20	mA
Forward Voltage	V _F	1.85	2.0	2.25	٧
Reverse Peak Voltage	$V_{_{RM}}$	5	5	5	٧
Current Reduction Rate Above 25°C	$\Delta l_{_{\mathrm{F}}}$	0.40	0.42	0.46	mA/°C

Code N indicates that no lamp is used.

Transparent Cap with Diffuser for Full Face Illuminated

Caps Clear

AT4074 Square



Amber AT4117 Rectangular

Green

Red





Clear (for square only)

Green

Diffusers

AT4075 Diffuser for AT4074 Square Cap

White

AT4118 Diffuser

for AT4117 Rectangular Cap

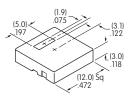


Cap & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured Note: Both cap & diffuser colors must be selected. J & B can be combined with any color.

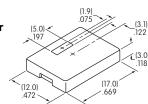
Spot Illuminated Cap

AB

AT4119 Square



AT4120 Rectangular



Material: Polycarbonate Finish: Matte

Opaque Cap for Nonilluminated

Colors Available:

Black

White

Yellow

Green

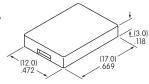
Red

Blue

AT4073 Square



AT4116 Rectangular



Material: Polycarbonate

Finish: Glossy

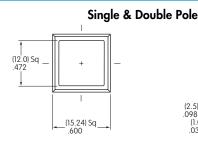


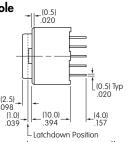
Low Profile Pushbutton Switches

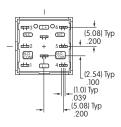
TYPICAL SWITCH DIMENSIONS

Square • PCB Mount







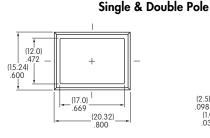


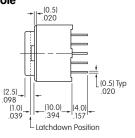
UB15SKG035C-CB

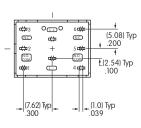
Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

Rectangular • PCB Mount







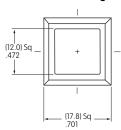


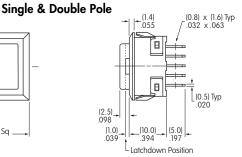
UB26RKG035D-DD

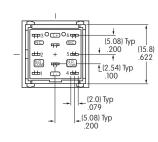
Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

Square • Snap-in Mount • Built-in Bezel







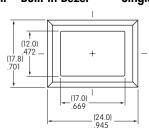


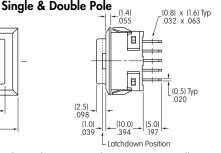
UB25KKW015C-CB

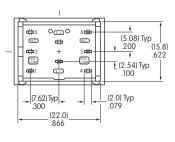
Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

Rectangular • Snap-in Mount • Built-in Bezel







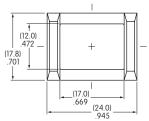


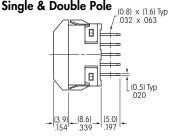
UB26NKW015F-FF

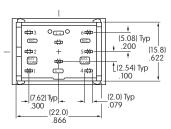
Single pole models do not have terminals 4, 5, & 6. Nonilluminated models do not have lamp terminals.

Rectangular • Snap-in Mount • Built-in Side Barriers









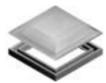
UB25NBKW015F-FB

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

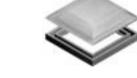


Splash Covers

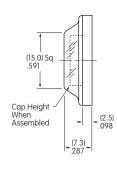
AT4001 Square

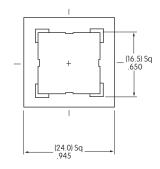


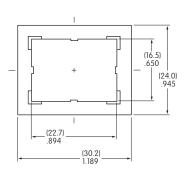
Not for use with barrier type models.











Materials:

PVC with polyethylene gasket (PVC loses pliability below 0°C (32°F).)

Panel Thickness 1.0mm ~ 2.5mm (.039" ~ .098")