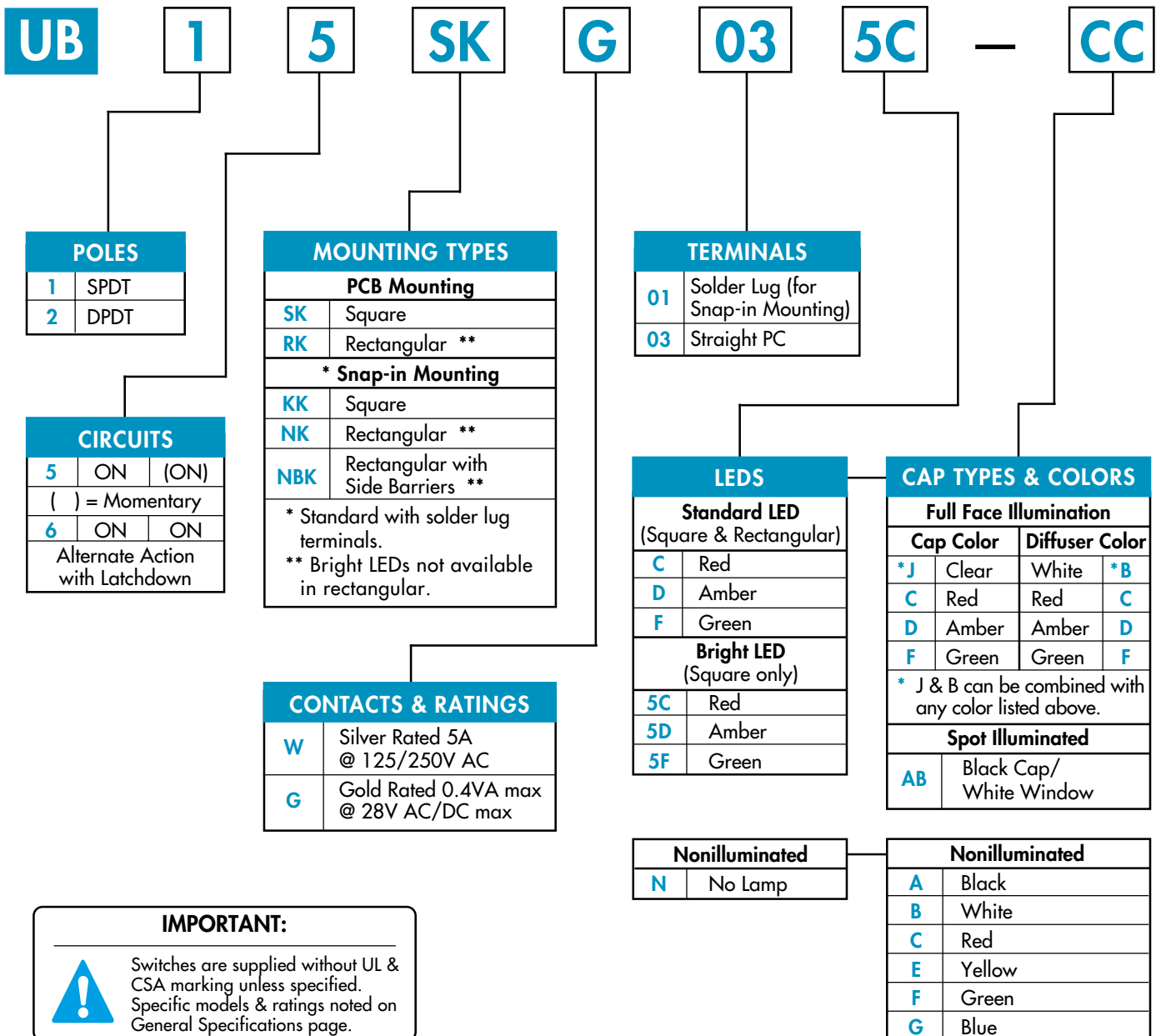


TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

UB15SKG035C-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

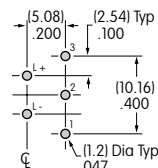
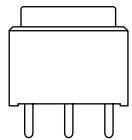
POLES & CIRCUITS

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

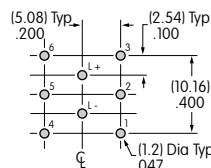
SHAPES & MOUNTING TYPES

PCB Mounting

SK Square

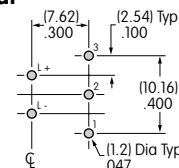
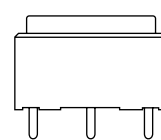


Single Pole

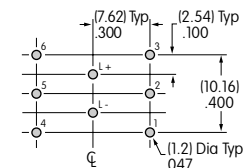


Double Pole

RK Rectangular



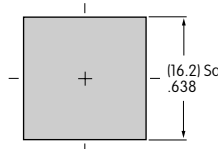
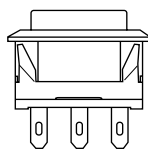
Single Pole



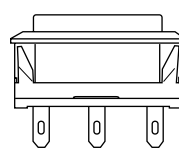
Double Pole

Snap-In Mounting

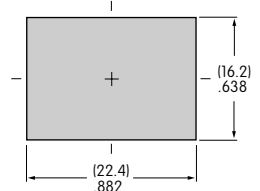
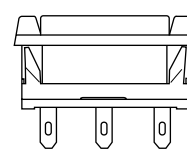
KK Square with Bezel



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



Silver Contacts

Power Level

5A @ 125V AC & 250V AC



Gold Contacts

Logic Level

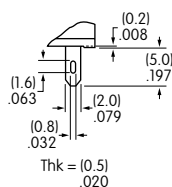
0.4VA maximum @ 28V AC/DC maximum

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

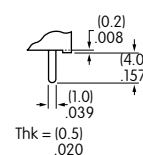
TERMINALS

01 Solder Lug

The .032" x .063" oblong hole accommodates two solid or stranded 24-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](#).

		Standard LED			Bright LED			Unit
		C	D	F	5C	5D	5F	
LEDs are an integral part of the switch and not available separately (1 LED in square model, 2 LEDs in rectangular model). * The 2 LEDs in the rectangular model are wired in parallel; all current values are doubled for this model.	 Color	Red	Amber	Green	Red	Amber	Green	
	Forward Peak Current I_{FM}	30	20	20	30	30	25	mA
	* Continuous Forward Current I_F	20	15	15	20	20	20	mA
	Forward Voltage V_F	2.0	1.9	1.95	1.85	2.0	2.25	V
	Reverse Peak Voltage V_{RM}	5	5	5	5	5	5	V
	* Current Reduction Rate Above 25°C ΔI_F	0.40	0.27	0.27	0.40	0.42	0.46	mA/°C
N Code N indicates that no lamp is used.								

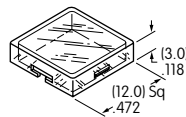
CAP TYPES & COLOR COMBINATIONS

Transparent Cap with Diffuser for Full Face Illuminated

J

Clear

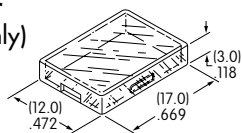
Caps

AT4074 Square
(for Standard or Bright LED)

C

Red

D

Amber

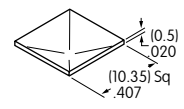
AT4117 Rectangular
(for Standard LED only)

F

Green

B

White

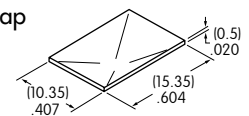
Diffusers

AT4075 Diffuser
for AT4074 Square Cap
(for Standard or Bright LED)

C

Red

D

Amber

AT4118 Diffuser
for AT4117 Rectangular Cap
(for Standard LED only)

F

Green

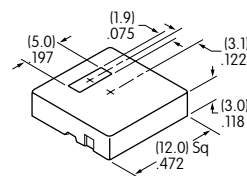
Cap & Diffuser Material: Polycarbonate Lens Finish: Glossy Diffuser Finish: Textured

Note: Both cap & diffuser colors must be selected. J & B can be combined with any color.

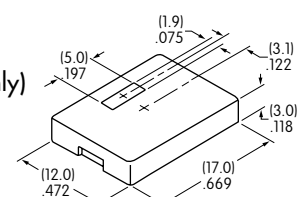
Spot Illuminated Cap

AB
Black Cap with Translucent White Window for LED Display

AT4119

Square
(for Standard or Bright LED)


AT4120

Rectangular
(for Standard LED only)


Material: Polycarbonate Finish: Matte

Opaque Cap for Nonilluminated

Colors Available:

A

Black

E

Yellow

B

White

F

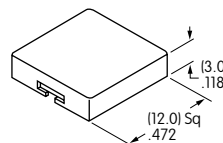
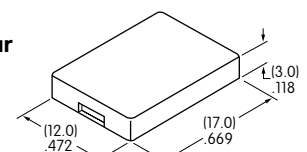
Green

C

Red

G

Blue

AT4073 Square

AT4116 Rectangular


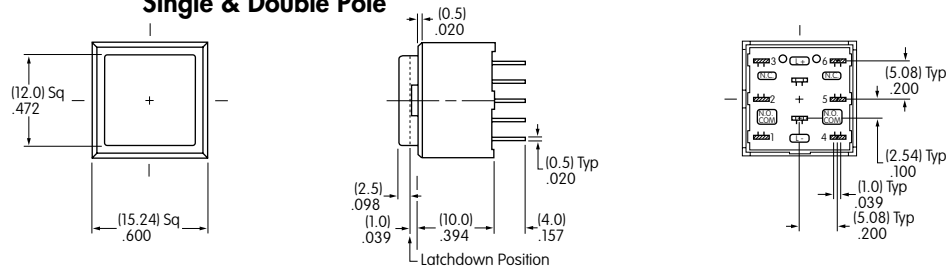
Material: Polycarbonate Finish: Glossy

TYPICAL SWITCH DIMENSIONS

Square • PCB Mount



Single & Double Pole



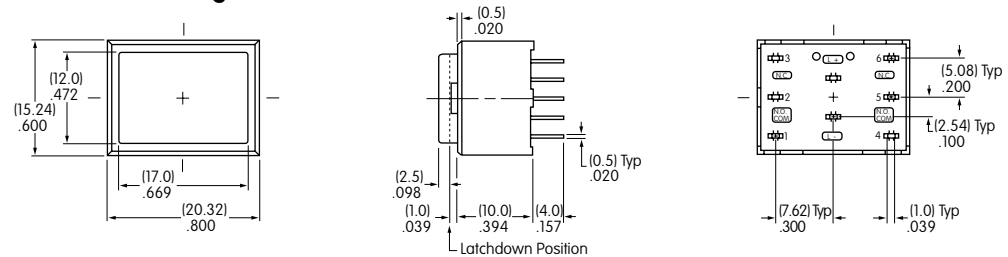
UB15SKG035C-CB

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

Rectangular • PCB Mount



Single & Double Pole



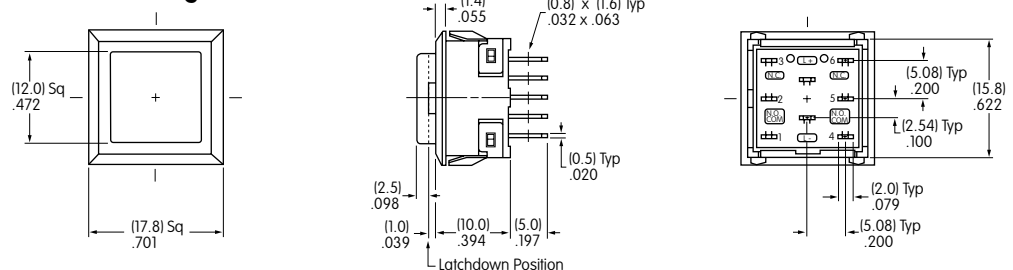
UB26RKG03E-EE

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

Square • Snap-in Mount • Bezel



Single & Double Pole

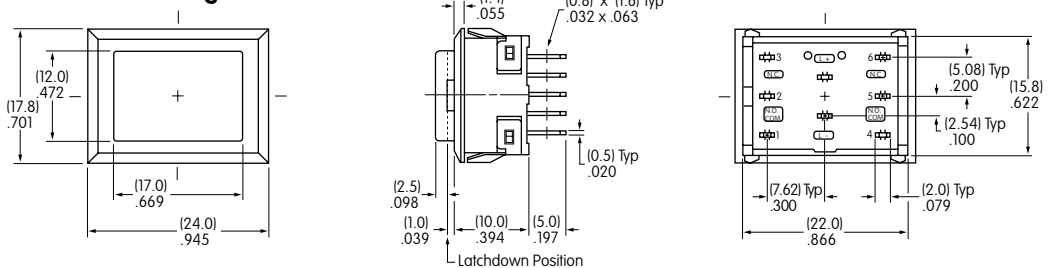


UB25KKW015C-CB

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

Rectangular • Snap-in Mount • Bezel

Single & Double Pole

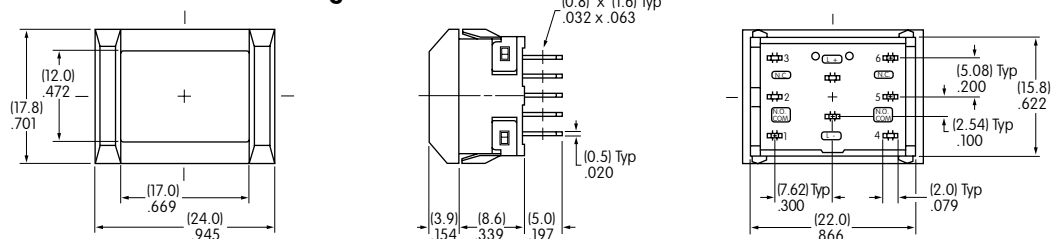


UB26NKKW01F-FF

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

Rectangular • Snap-in Mount • Side Barriers

Single & Double Pole



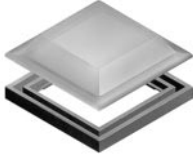
UB25NBKKW01F-FB

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

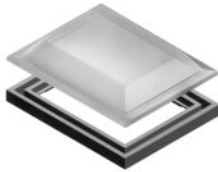
OPTIONAL ACCESSORIES

Splash Covers

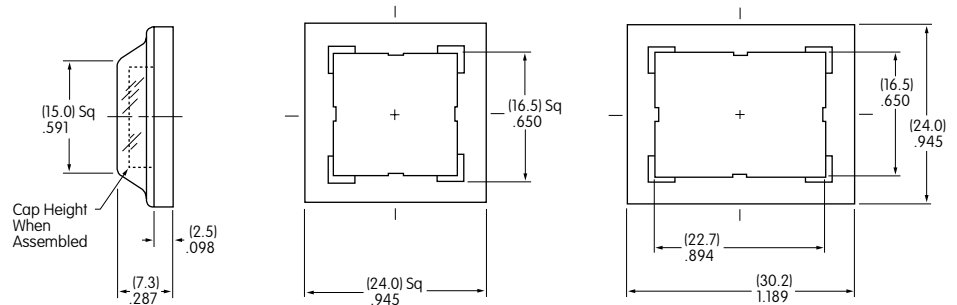
AT4001
Square



AT4011 Rectangular



Not for use with barrier type models.



Materials:

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

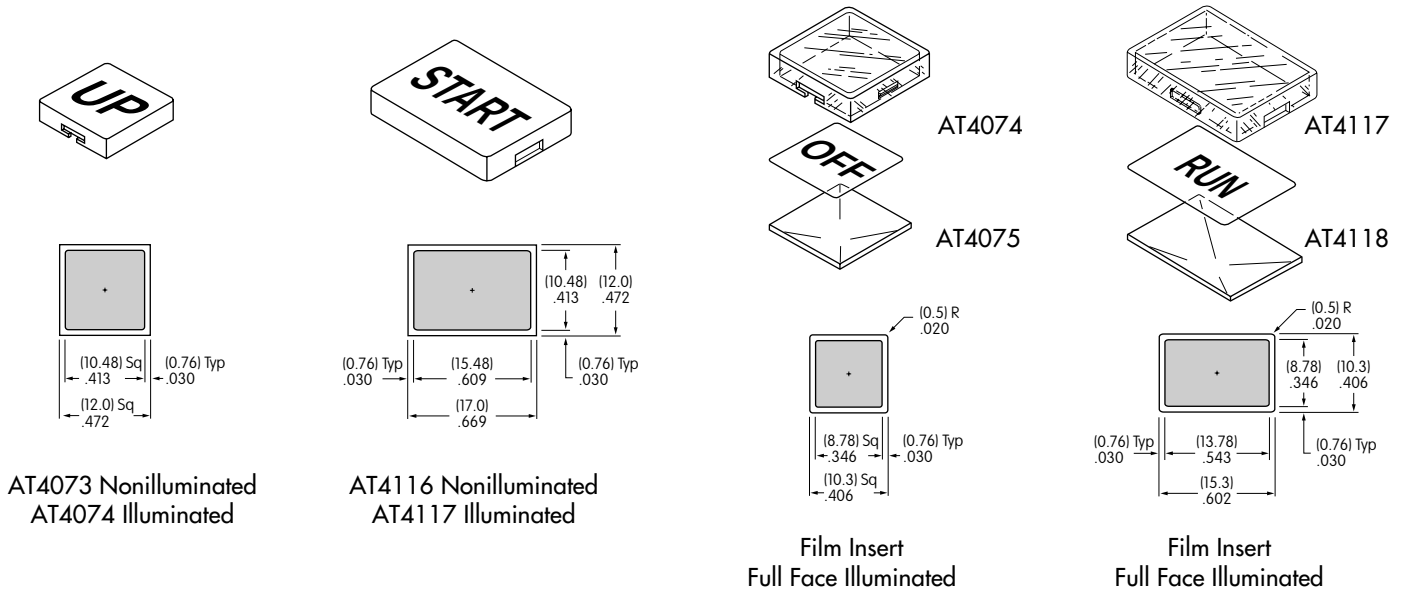
Base: Polyamide

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

LEGENDS

General information and basic specifications are presented here for customers who want to do their own legends.

Suggested Printable Area for UB Lens & Film Insert



Recommended Print Method:

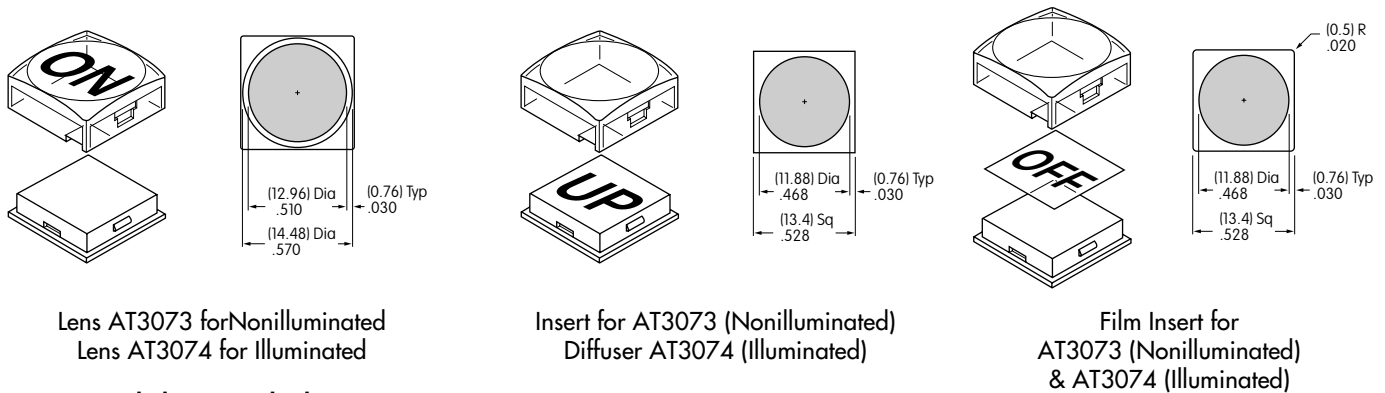
Screen Print or Pad Print (not on Film)
 Epoxy based ink is recommended.

Shaded areas are printable areas.

Film Material and Thickness:

Clear Polyester, 4 mil max.

Suggested Printable Area for UB2 Lens, Insert, Diffuser, & Film Insert



Recommended Print Method:

Screen Print or Pad Print (not on Film)
 Epoxy based ink is recommended.

Shaded areas are printable areas.

Film Material and Thickness:

Clear Polyester, 4 mil max.

LEGEND PACKET FOR ORDERING CAPS WITH LEGENDS



1. To order caps with legends contact the factory and request the UB/UB2 Legend Packet.
2. Once you determine your desired legend, fill out the ordering work sheet included in the packet.
3. Return the completed work sheet to receive a quotation.