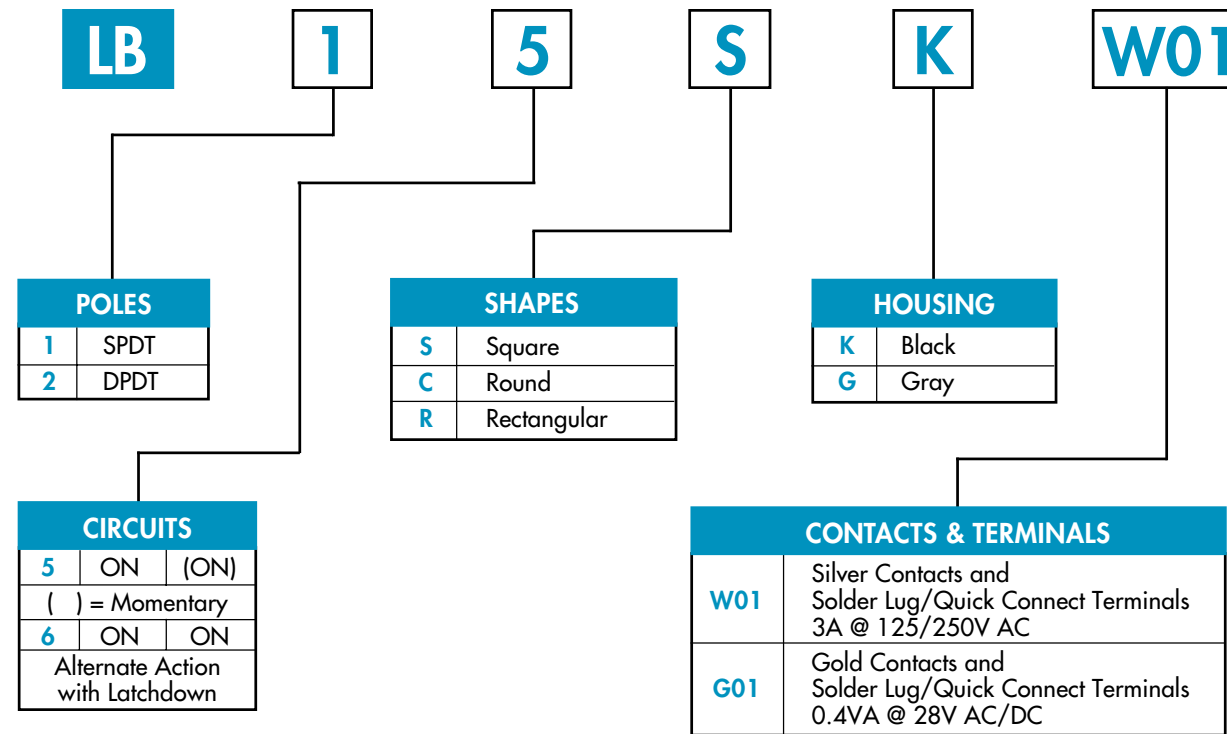
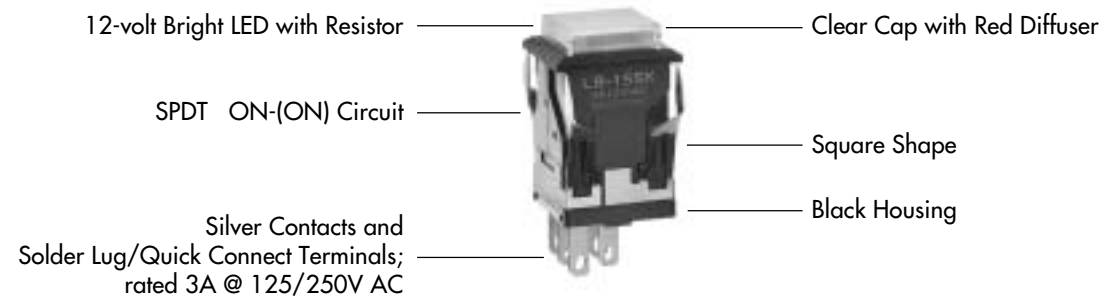


TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE  
LB15SKW01-5C12-JC



**IMPORTANT:**  
Switches are supplied without UL & CSA marking unless specified. Specific models & ratings noted on General Specifications page.

LAMPS		CAP TYPES & COLORS	
<b>Incandescent Lamp used with Solid Cap</b>		<b>Solid Cap: Lens/Filter Colors</b>	
00	No Lamp	BJ	White/Clear
05	5-volt	CJ	Red/Clear
12	12-volt	EJ	Yellow/Clear
28	28-volt	FJ	Green/Clear
		GJ	Blue/Clear
<b>Incandescent or Neon used w/Insert Cap</b>		<b>Insert Cap: Lens/Filter Colors</b>	
00	No Lamp	JB	Clear/White
01	110-volt Neon	JC	Clear/Red
05	5-volt Incandescent	JE	Clear/Yellow
12	12-volt Incandescent	*JF	Clear/Green
28	28-volt Incandescent	*JG	Clear/Blue
		* JF & JG not suitable with neon.	
<b>Standard LED used w/LED Cap</b>		<b>LED Cap: Lens/Diffuser Colors</b>	
C	Red	JB	Clear/White
D	Amber	JC	Clear/Red
F	Green	JD	Clear/Amber
		JF	Clear/Green
<b>Bright LED used w/LED Cap</b>		<b>LED Cap: Lens/Diffuser Colors</b>	
Colors	Resistor	JB	Clear/White
5C	Red	JC	Clear/Red
	No Code No Resistor	JD	Clear/Amber
5D	Amber	JF	Clear/Green
	05 5-volt		
5F	Green		
	12 12-volt		
	24 24-volt		
<b>Super Bright LED used w/LED Cap</b>		<b>LED Cap: Lens/Diffuser Colors</b>	
6B	White	JB	Clear/White
6F	Green		
6G	Blue		
<b>LED used with Spot Illuminated Cap</b>		<b>Spot Illuminated Cap Colors</b>	
1C	Red Single Color	A	Black
1D	Amber Single Color	B	White
1F	Green Single Color	C	Red
CF	Red/Green Bicolor	F	Green
		Available in square and round only.	
<b>Nonilluminated</b>		<b>Nonilluminated Cap Colors</b>	
00	No Lamp	A	Black
		E	Yellow
		G	Blue
		B	White
		F	Green
		H	Gray
		C	Red

## GENERAL SPECIFICATIONS

### Electrical Capacity (Resistive Load)

- Power Level (silver):** 3A @ 125V AC or 3A @ 250V AC or 3A @ 30V DC  
**Logic Level (gold):** 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 circuit  
 200,000 operations minimum for maintained circuit  
**Electrical Life:** 100,000 operations minimum  
**Nominal Operating Force:** 450 grams  
**Contact Timing:** Nonshorting (break-before-make)  
**Travel for Momentary Circuit:** 1.9mm (.075") pretravel; 1.1mm (.043") overtravel; 3.0mm (.118") total travel  
**Travel for Maintained Circuit:** 2.2mm (.087") pretravel; 0.8mm (.031") overtravel; 3.0mm (.118") total travel

### Materials & Finishes

- Housing:** Glass fiber reinforced polyamide  
**Snap-in Frame:** Stainless steel  
**Movable Contact:** Silver alloy or copper with gold plating over nickel plating  
**Stationary Contacts:** Silver alloy or copper with gold plating over nickel plating  
**Base:** Diallyl phthalate  
**Common Terminals:** Phosphor bronze with silver or gold plating  
**End Terminals:** Phosphor bronze with silver or gold plating  
**Lamp Terminals:** Phosphor bronze with silver plating

### Environmental Data

- Operating Temp Range:** -25°C through +50°C (-13°F through +122°F) for illuminated  
 -25°C through +70°C (-13°F through +158°F) for nonilluminated  
 Note: When used with a polyvinyl chloride splash cover, the lowest limit is 0°C (32°F)  
**Humidity:** 93% 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)  
**Sealing:** Not available for snap-in; see next section for panel seal.

### Installation

- Cap Installation Force:** 0.4 kg (.88 lb) maximum downward force on actuator  
**Quick Connect Force:** 5.4 kg (11.9 lbs) maximum downward force on connector  
**Soldering Time & Temperature:** 3 seconds @ 350°C or 5 seconds @ 270°C  
**Process Seal:** Not available

### Standards & Certifications

- Flammability Standards:** UL94V-0 base  
**UL Recognized:** All models recognized at 3A @ 125V or 250V AC or 0.4A @ 28V DC; UL File No. E44145  
**CSA Certified:** All models certified at 3A @ 125V or 250V AC or 0.4VA @ 28V maximum; CSA File Nos. LR23535

### POLES & CIRCUITS

		Plunger Position ( ) = Momentary		Connected Terminals		Throw & Power/Lamp Schematics
Pole	Model	Normal	Down	Normal	Down	
SP	LB15 *LB16	ON ON	(ON) ON	1-3	1-2	Notes: (1) Switch is marked with NC, NO, COM, L+, L-. (2) Lamp circuit is isolated & requires external power source. 
DP	LB25 *LB26	ON ON	(ON) ON	1-3 4-6	1-2 4-5	

\* When in latched position for the alternate circuit, cap position is 1.0mm (.039") above the built-in bezel.

### SHAPES & PANEL CUTOUTS

<b>S</b> .622" Square 	<b>C</b> .854" Round 	<b>R</b> .622" x .866" Rectangular 
Cutout for 1 switch: .638" x .638" Cutout for 1 switch with barriers: .638" x .815".		Cutout for 1 switch: .638" x .882" Cutout for 1 switch with barriers: .638" x 1.059".

Panel Thickness for Switches & Barriers: 1 ~ 4mm (.039" ~ .157")  
 Panel Thickness for Protective Guards & Splash Covers: 1 ~ 3.5mm (.039" ~ .138")

### HOUSING

Housing Colors Available:



### CONTACT MATERIALS, RATINGS, & TERMINALS

<b>W01</b>	Silver Contacts	<b>Power Level</b> 3A @ 125V AC & 250V AC	<b>Solder Lug/Quick Connect</b> The .047" x .079" oblong hole accommodates one solid 18-gauge wire or two solid or stranded 20-gauge wires.
<b>G01</b>	Gold Contacts	<b>Logic Level</b> 0.4VA max. @ 28V AC/DC max.	

See Supplement page Z1 for complete explanation of operating range.

### INCANDESCENT & NEON LAMP CODES & SPECIFICATIONS

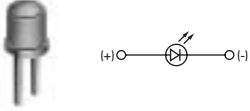
<b>AT607 &amp; AT607N</b>  T-1 Bi-pin	AT607 Incandescent 5-, 12-, 28-volt; AT607N Neon 110-volt	<b>05</b>	<b>12</b>	<b>28</b> *	<b>01</b> **	* Lamp life is significantly reduced in applications with DC current, high shock, vibration, or continuous illumination. ** Recommended Resistors: 33K ohms for 110V AC; 100K ohms for 220V AC.	
	Voltage	V	5V AC	12V AC	28V AC		110V AC
	Current	I	115mA	60mA	24mA		1.5mA
	Endurance	Avg. Hrs.	7,000				10,000

Electrical specifications are determined at a basic temperature of 25°C. Lamp circuit is independent of switch operation.

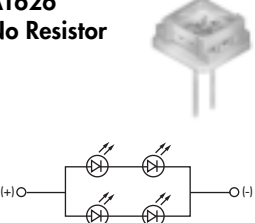
### LED CODES & SPECIFICATIONS

Electrical specifications are determined at a basic temperature of 25°C. LED circuit is independent of switch operation. LEDs are colored in OFF state. For dimension drawings of lamps see Accessories & Hardware Index (page Y1).  
 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).


#### Standard Single Element LED

<b>AT614</b>  T-1 1/2 Cylindrical	Colors:	<b>C</b> Red	<b>D</b> Amber	<b>F</b> Green	
	Forward Peak Current	$I_{FM}$	50mA	50mA	50mA
	Continuous Forward Current	$I_F$	40mA	40mA	40mA
	Forward Voltage	$V_F$	1.75V	2.35V	2.35V
	Reverse Peak Voltage	$V_{RM}$	4V	4V	4V
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.67mA/°C		

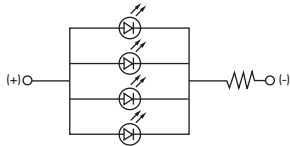
#### Bright Quad Element LED without Resistor

<b>AT626</b> <b>No Resistor</b>  T-1 Bi-pin	Color Codes:	Red <b>5C</b>	Amber <b>5D</b>	Green <b>5F</b>	<b>No Code</b> No Resistor	
	Forward Peak Current	$I_{FM}$	40mA	40mA		40mA
	Continuous Forward Current	$I_F$	26mA	26mA	26mA	
	Forward Voltage	$V_F$	3.8V	4.0V	4.4V	
	Reverse Peak Voltage	$V_{RM}$	8V	8V	8V	
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.50mA/°C			

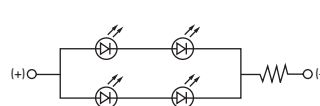
#### Bright Quad Element LED with Resistor

<b>AT627</b> <b>with Resistor</b>  T-1 Bi-pin	Color Codes:	Red <b>5C</b>	Amber <b>5D</b>	Green <b>5F</b>	Resistor Codes		
	Forward Peak Current	$I_{FM}$	—	—	<b>05</b>	<b>12</b>	<b>24</b>
	Continuous Forward Current	$I_F$	52mA	26mA	13mA		
	Forward Voltage	$V_F$	5V	12V	24V		
	Reverse Peak Voltage	$V_{RM}$	4V	8V	16V		
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.50mA/°C				

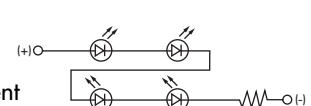
AT627  
5 volt,  
4-Element  
with Resistor



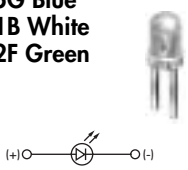
AT627  
12 volt,  
4-Element  
with Resistor



AT627  
24 volt,  
4-Element  
with Resistor



#### Super Bright Single Element LED

<b>AT625G Blue</b> <b>AT631B White</b> <b>AT632F Green</b>  T-1 Bi-pin	Colors:	<b>6B</b> White	<b>6F</b> Green	<b>6G</b> Blue	
	Forward Peak Current	$I_{FM}$	30mA	30mA	30mA
	Continuous Forward Current	$I_F$	20mA	20mA	20mA
	Forward Voltage	$V_F$	3.6V	3.5V	3.6
	Reverse Peak Voltage	$V_{RM}$	5V	5V	5V
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.50mA/°C		

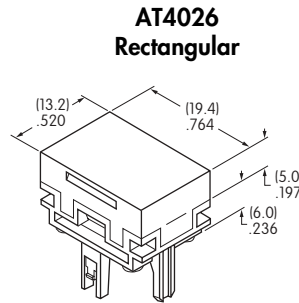
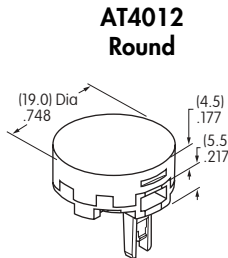
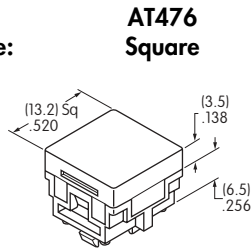
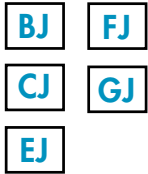
**00** **No Lamp** Code 00 indicates that no lamp is used.

## CAP TYPES & COLOR COMBINATIONS

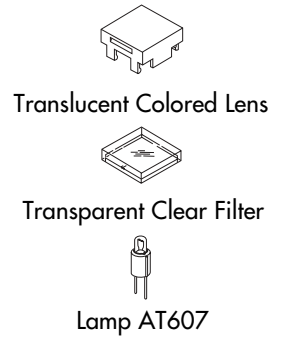
Color Codes: A Black B White C Red D Amber E Yellow F Green G Blue J Clear

### Solid Cap for Incandescent Lamp

Lens/Filter  
Colors Available:

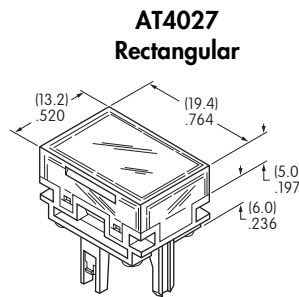
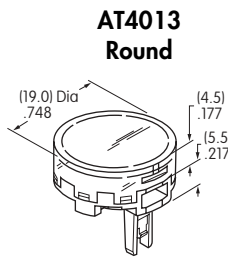
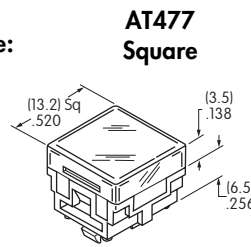
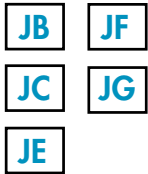


Material: Polycarbonate Finish: Glossy

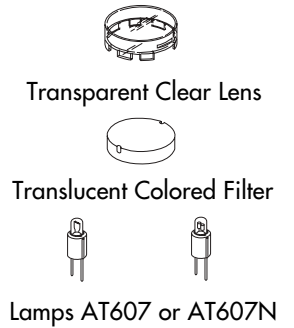


### Insert Cap for Incandescent or Neon Lamp

Lens/Filter  
Colors Available:



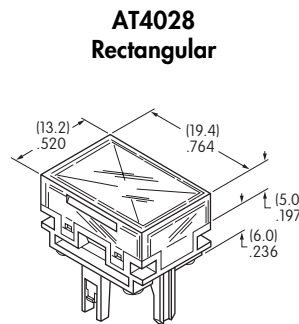
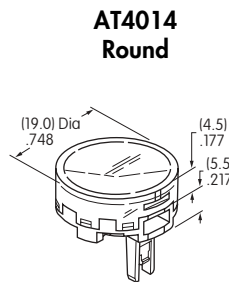
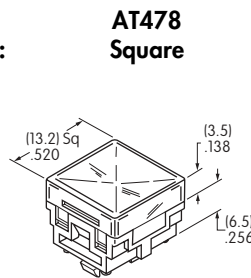
Material: Polycarbonate Finish: Glossy



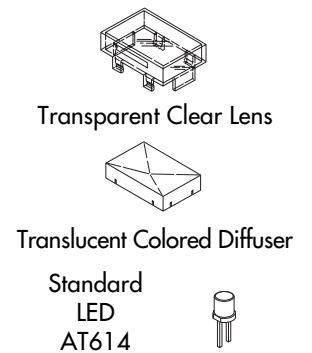
JF & JG not suitable with neon.

### Cap for Standard LED

Lens/Diffuser  
Colors Available:

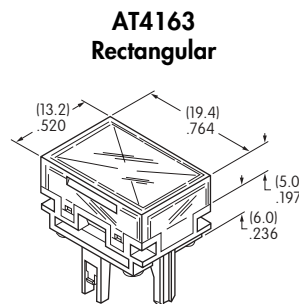
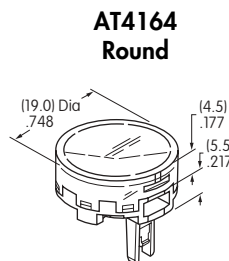
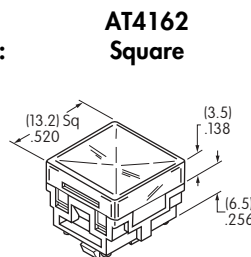


Material: Polycarbonate Finish: Glossy

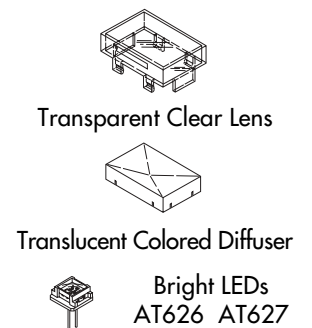


### Cap for Bright LEDs

Lens/Diffuser  
Colors Available:



Material: Polycarbonate Finish: Glossy



### CAP TYPES & COLOR COMBINATIONS

**Color Codes:** A Black B White C Red D Amber E Yellow F Green G Blue H Gray J Clear

#### Cap for Super Bright LEDs

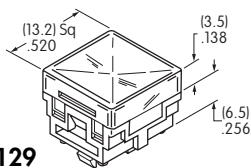
**Lens/Diffuser**

**Colors Available:**

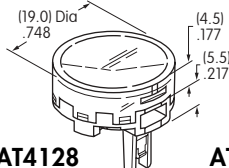
**JB**

Material: Polycarbonate  
Finish: Glossy

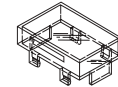
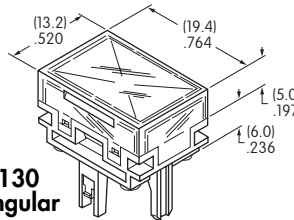
**AT4129**  
Square



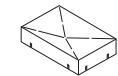
**AT4128**  
Round



**AT4130**  
Rectangular



Transparent  
Clear Lens



Translucent  
White Diffuser



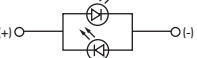


LEDs AT625  
AT631 AT632

#### Spot Illuminated Cap with LED

Electrical specifications are determined at a basic temperature of 25°C. LED circuit is independent of switch operation. Single color LEDs are colored in OFF state & bicolor translucent white in OFF state. For dimension drawings of lamps see Accessories & Hardware Index (page Y1). 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).

#### LED Specifications

	Single Color LED with 1 Element	Bicolor LED with 2 Elements	Single Color			Bicolor
			<b>1C</b> Red	<b>1D</b> Amber	<b>1F</b> Green	<b>CF</b> Red/Green
						
LED factory assembled in Spot Illuminated Caps	Forward Peak Current	$I_{FM}$	10mA	30mA	30mA	30mA
	Continuous Forward Current	$I_F$	8mA	24mA	24mA	25mA
	Forward Voltage	$V_F$	1.9V	2.0V	2.1V	2.1V
<b>Not Available Separately</b>	Reverse Peak Voltage	$V_{RM}$	5V	5V	5V	—
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.13mA/°C	0.40mA/°C	0.40mA/°C	0.33mA/°C

**Cap Colors Available:**

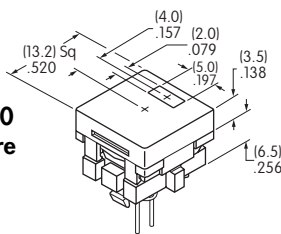
**A**

**B**

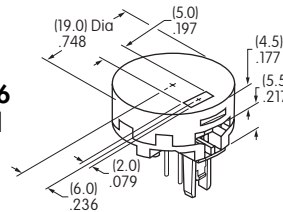
**C**

**F**

**AT480**  
Square



**AT4016**  
Round



Cap with Window

Factory Assembled LED

Material: Polycarbonate Finish: Glossy

When ordering spot illuminated cap separately, LED color must be specified.

Examples: AT480CA (red LED, black cap); AT4016CFB (red/green bicolored LED, white cap)

#### Nonilluminated Cap

**Cap Colors Available:**

**A**

**F**

**B**

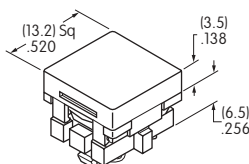
**G**

**C**

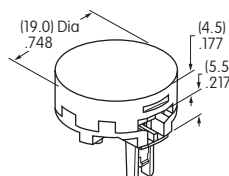
**H**

**E**

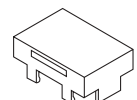
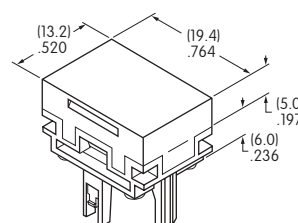
**AT484**  
Square



**AT4017**  
Round



**AT4030**  
Rectangular



Cap

No Lamp

Material: Polycarbonate Finish: Glossy

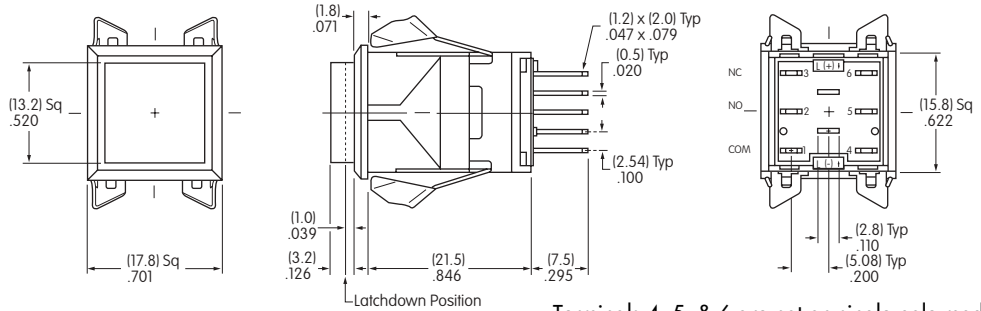
## TYPICAL SWITCH DIMENSIONS

### Square



LB15KW01-12-CJ

### Single & Double Pole



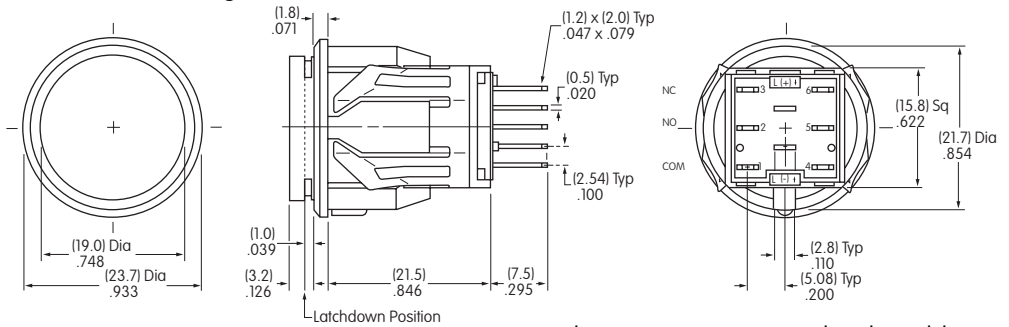
Terminals 4, 5, & 6 are not on single pole models.

### Round



LB16CKW01-12-CJ

### Single & Double Pole



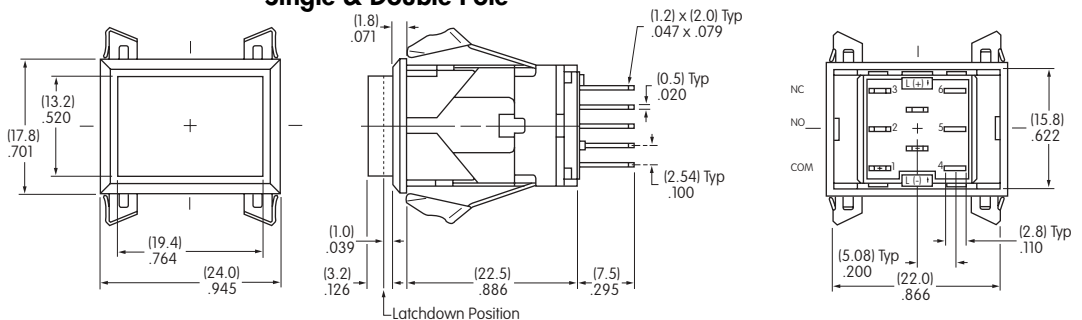
Terminals 4, 5, & 6 are not on single pole models.

### Rectangular



LB26RGW01-12-CJ

### Single & Double Pole

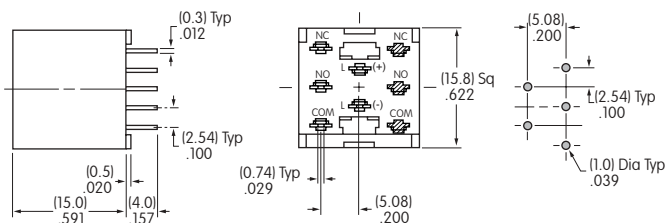


Terminals 4, 5, & 6 are not on single pole models.

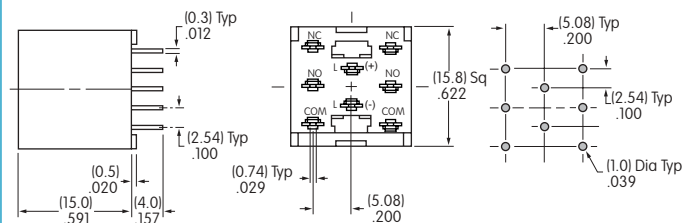
## OPTIONAL ACCESSORIES

### PCB Adaptors

#### AT711 Single Pole • Straight PC Terminals



#### AT712 Double Pole • Straight PC Terminals

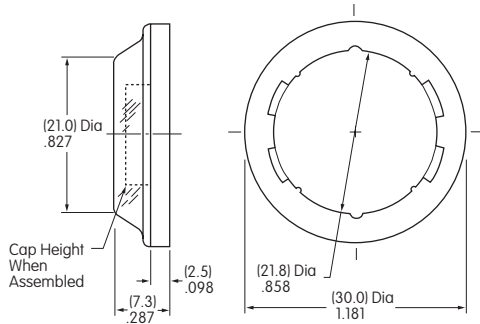


Note: Order adaptors separately.

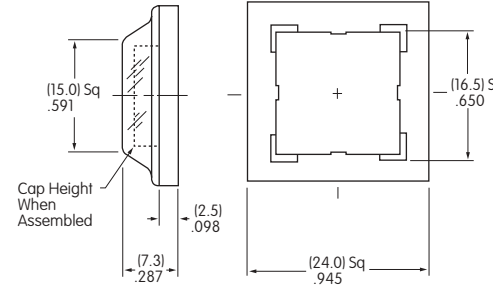
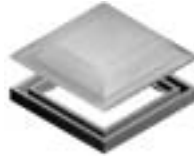
## OPTIONAL ACCESSORIES

### Splash Covers

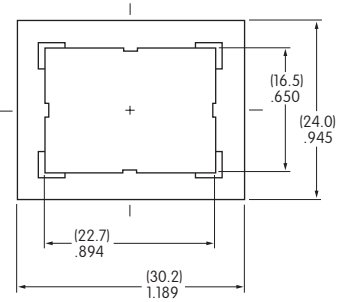
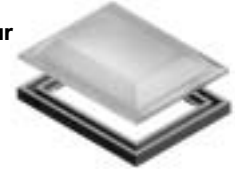
**AT4002 Round**



**AT4001 Square**



**AT4011 Rectangular**

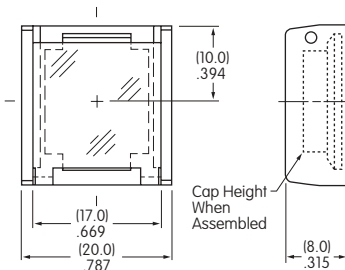


Materials: PVC with polyethylene gasket  
PVC loses pliability below 0°C (32°F).

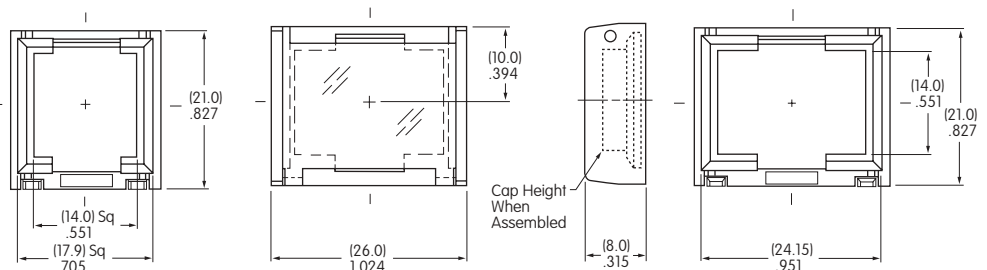
Splash Covers reduce depth of switch behind panel by .020".

### Protective Guards

**AT499 Square**



**AT4057 Rectangular**



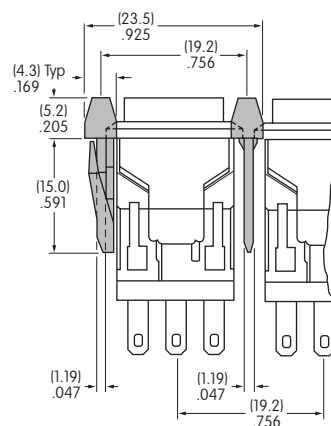
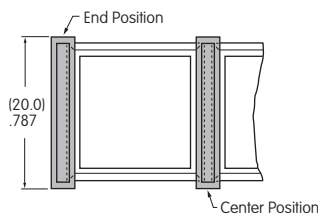
Material: Polyamide

Protective Guards reduce depth of switch behind panel by .020".

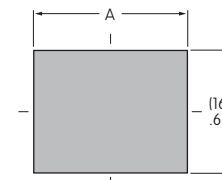
### Barriers

**AT497 End**

**AT498 Center**



Cutouts for More Than 1 Switch



Square

$$A = .752" \times \text{Number of Switches} + .051"$$

Rectangular

$$A = .996" \times \text{Number of Switches} + .051"$$

Material: Polyamide