

## TYPICAL INDICATOR ORDERING EXAMPLE



\* Wire harness & cable assemblies offered only in Americas

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

**KB02KW01-12-FF**

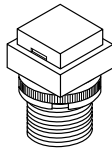


- 12-volt Incandescent Lamp Solid Cap with Green Lens and Green Filter
- Black Housing Round with Bushing Mounting
- Silver Solder Lug Terminals

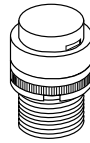
### SHAPES & MOUNTING TYPES

#### Bushing Mounting

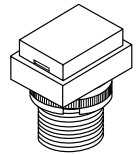
**01** .551" (14mm)  
Square



**02** .551" (14mm)  
Round

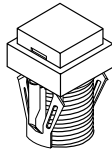


**03** .551" x .728" (14mm x 18.5mm)  
Rectangular

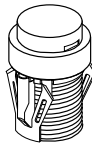


#### Snap-in Mounting

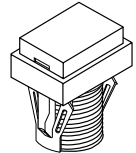
**04** .551" (14mm)  
Square



**05** .551" (14mm)  
Round



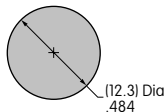
**06** .551" x .728" (14mm x 18.5mm)  
Rectangular



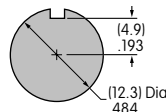
The bezel is an integral part of the indicator body.

#### Bushing Mounting

Without  
Keyway



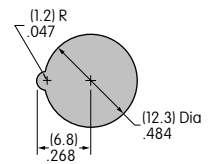
Panel Thickness:  
.020" ~ .315"  
(0.5 ~ 8mm)



With  
Keyway

#### Snap-in Mounting

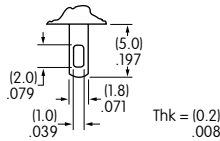
Panel Thickness:  
.039" ~ .138"  
(1.0 ~ 3.5mm)



### TERMINALS

**W01**

Silver Solder Lug



### LAMP COLORS & SPECIFICATIONS

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 ballast resistor calculation and more lamp detail are shown in the Supplement section.

#### Incandescent & Neon Lamps

AT611 Incandescent	AT615 Neon		<b>05</b>	<b>12</b>	<b>01</b>	Recommended Resistors for Neon: 33K ohms for 110V AC; 100K ohms for 220V AC
			Voltage	V	5V AC	
Current	I	115mA	60mA	1.5mA		
Endurance	Hours	7,000 average		10,000		

#### Bright LED without Resistor

AT635	Red	Amber	Green	<b>No Code</b> No Resistor		
				Red	Amber	Green
Color Codes	<b>5C</b>	<b>5D</b>	<b>5F</b>			
Forward Peak Current	$I_{FM}$			30mA	30mA	30mA
Continuous Forward Current	$I_F$			20mA	20mA	20mA
Forward Voltage	$V_F$			1.9V	2.0V	2.1V
Reverse Peak Voltage	$V_{RM}$			5V	5V	5V
Current Reduction Rate Above 25°C	$\Delta I_F$			0.42mA/°C	0.29mA/°C	0.42mA/°C
Ambient Temperature Range				-25° ~ +50°C		

**AT635**

LEDs are colored  
in OFF state.




T-1 1/2 Bi-pin

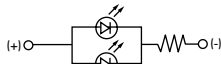
LAMP COLORS & SPECIFICATIONS

The electrical specifications shown are determined at a basic temperature of 25°C.  
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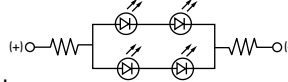
Bright LED with Resistor

<b>AT634</b>  LEDs are colored in OFF state.    T-1 1/4 Bi-pin	Color Codes:	Red <b>5C</b>	Amber <b>5D</b>	Green <b>5F</b>	Resistor Codes		
					<b>05</b>	<b>12</b>	<b>24</b>
	Forward Peak Current			$I_{FM}$	—	—	—
	Continuous Forward Current			$I_F$	25mA	20mA	10mA
	Forward Voltage			$V_F$	5V	12V	24V
	Reverse Peak Voltage			$V_{RM}$	4V	8V	16V
	Current Reduction Rate Above 25°C			$\Delta I_F$	—	—	—
Ambient Temperature Range	-25° ~ +50°C						

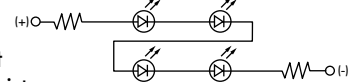
AT634  
5-volt  
2-element  
with 1 Resistor





AT634  
12-volt  
4-element  
with 2 Resistors



AT634  
24-volt  
4-element  
with 2 Resistors



Super Bright Single Element LED

<b>AT625G Blue</b>  <b>AT631B White</b>  <b>AT632F Green</b>    T-1 Bi-pin				<b>6B</b>	<b>6F</b>	<b>6G</b>	
	Color	White	Green	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	3.6V		
	Reverse Peak Voltage	$V_{RM}$	5V	5V	5V		
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.50mA/°C	0.50mA/°C	0.50mA/°C		
Ambient Temperature Range	-25° ~ +50°C						

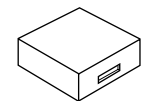
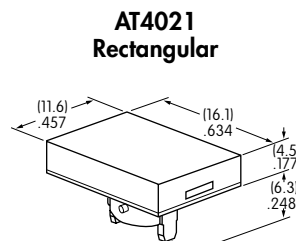
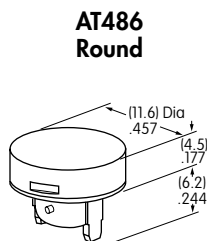
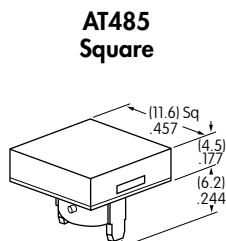
CAP TYPES & COLOR COMBINATIONS

Color Codes:    B White    C Red    E Yellow    F Green    G Blue    J Clear

Solid Cap for Incandescent Lamp

Lens/Filter Colors Available:

- BB**
- FB**
- CB**
- FF**
- CC**
- GB**
- EB**
- GG**



Translucent Colored Lens



Translucent Colored Filter



Lamp AT611

Material: Polycarbonate    Finish: Glossy

### CAP TYPES & COLOR COMBINATIONS

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

#### Insert Cap for Incandescent or Neon Lamp

Lens/Filter Colors Available:

**JB**

**AT487**  
Square

**AT488**  
Round

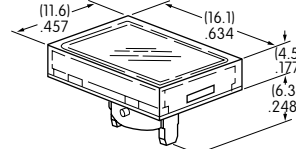
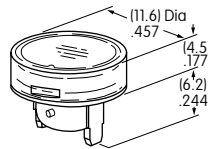
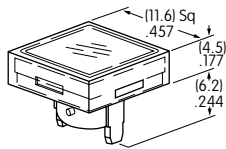
**AT4022**  
Rectangular



Transparent Clear Lens

**JC**

**JE**



Translucent Colored Filter

**JF**

**JG**



Lamp AT611 Lamp AT615

JF and JG not suitable with neon lamp.

Material: Polycarbonate Finish: Glossy

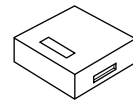
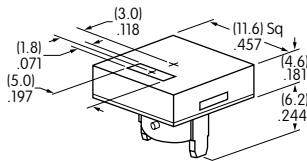
#### Spot Illuminated Cap for Bright LED without Resistor or with Resistor

Cap/Window Colors Available:

**AB**

**Opaque Black Cap with Translucent White Window for Spot Illumination**

**AT4051**  
Square



Bright LED AT635

Bright LED AT634

Material: Polycarbonate Finish: Matte

#### Cap for Bright LED without Resistor or LED with Resistor

Lens/Diffuser Colors Available: (AT4133, 4132, 4134 white diffusers; AT4158, 4160, 4159 colored diffusers)

**JB**

**AT4133**

**AT4132**

**AT4134**



Transparent Clear Lens

Square

Round

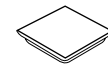
Rectangular

**JC**

**AT4158**

**AT4160**

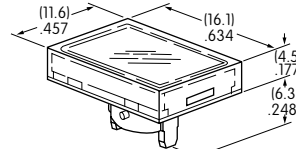
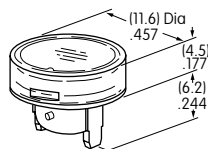
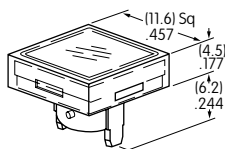
**AT4159**



Translucent Diffuser

**JD**

**JF**



Bright LED AT635

Bright LED AT634

Material: Polycarbonate Finish: Glossy

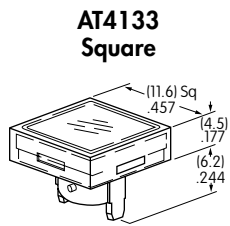
**CAP TYPES & COLOR COMBINATIONS**

Cap for Super Bright LED

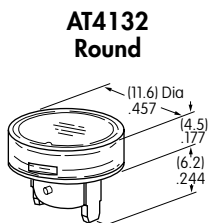
Lens/Diffuser  
Colors Available:



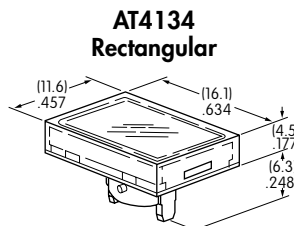
Clear Lens  
White Diffuser



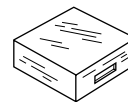
**AT4133 Square**



**AT4132 Round**



**AT4134 Rectangular**



Translucent Clear Lens



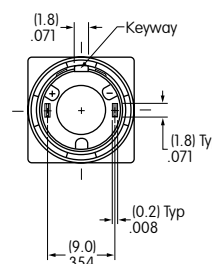
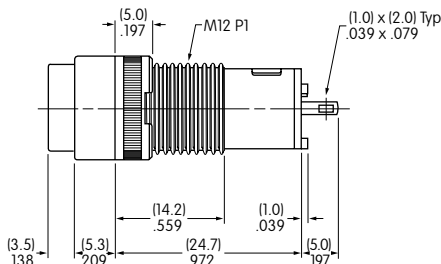
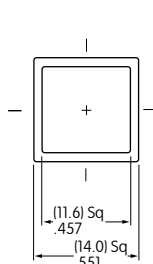
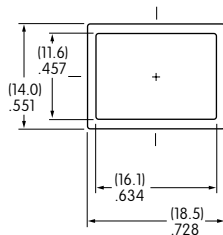
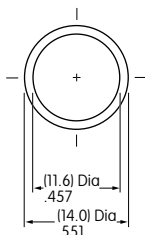
Translucent White Diffuser



Super Bright LEDs  
AT625, AT631, AT632

Material: Polycarbonate Finish: Glossy

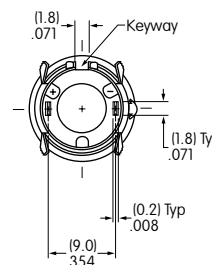
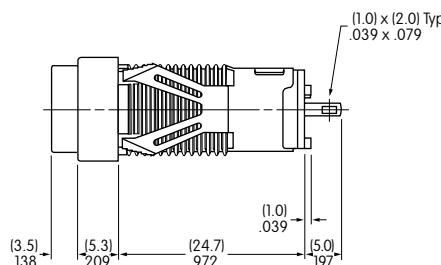
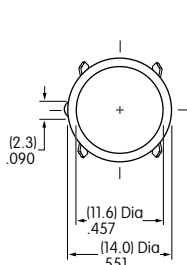
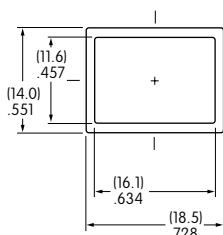
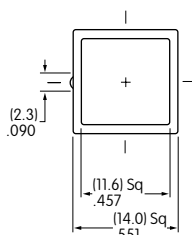
**TYPICAL INDICATOR DIMENSIONS**



**Bushing Mount**



**KB01KW01-05-GG**



**Snap-in Mount**



**KB05KW01-05-FF**

Toggle  
Rockers  
Pushbuttons  
Illuminated PB  
Programmable  
Keylocks  
Rotaries  
Slides  
Tactiles  
Tilt  
Touch  
Accessories  
Supplement