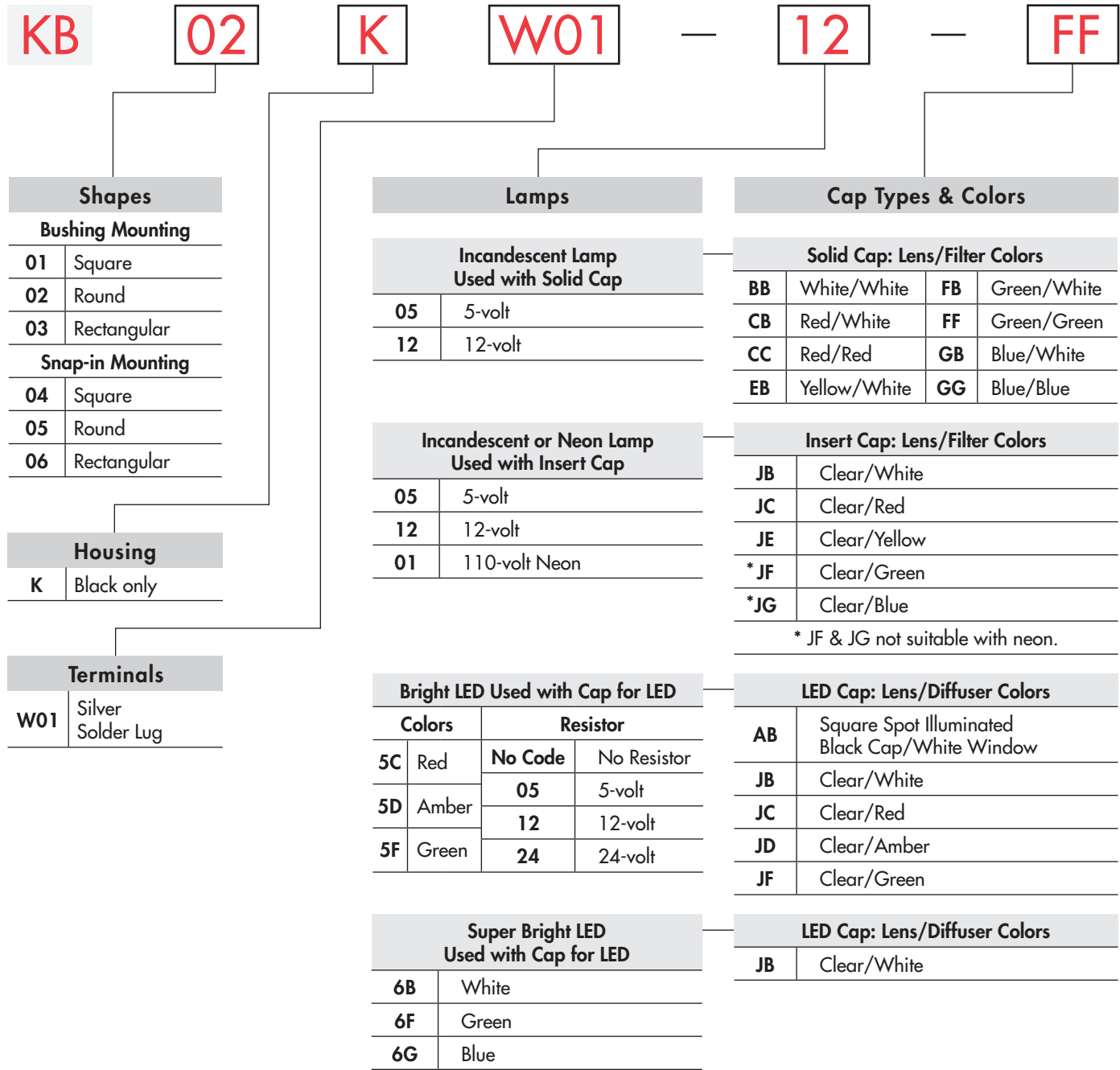


TYPICAL INDICATOR ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

KB02KW01-12-FF



12-volt Incandescent Lamp Solid Cap with Green Lens and Green Filter

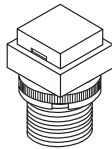
Black Housing Round with Bushing Mounting

Silver Solder Lug Terminals

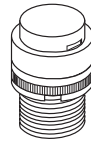
SHAPES & MOUNTING TYPES

Bushing Mounting

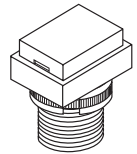
01 .551" (14mm)
Square



02 .551" (14mm)
Round

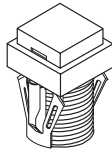


03 .551" x .728" (14mm x 18.5mm)
Rectangular

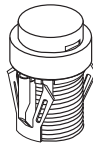


Snap-in Mounting

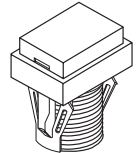
04 .551" (14mm)
Square



05 .551" (14mm)
Round



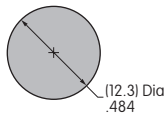
06 .551" x .728" (14mm x 18.5mm)
Rectangular



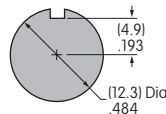
The bezel is an integral part of the indicator body.

Bushing Mounting

Without
Keyway



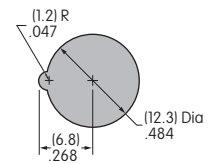
Panel Thickness:
.020" ~ .315"
(0.5 ~ 8mm)



With
Keyway

Snap-in Mounting

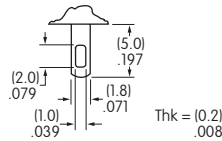
Panel Thickness:
.039" ~ .138"
(1.0 ~ 3.5mm)



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 | | 05 | 12 | 01 | Recommended Resistors for Neon: 33K ohms for 110V AC; 100K ohms for 220V AC | |
|---|---|-----------|-----------|---------------|-----------|--|---------|
|  |  | Voltage | V | 5V AC | 12V AC | | 110V AC |
| | | Current | I | 115mA | 60mA | | 1.5mA |
| | | Endurance | Hours | 7,000 average | | | 10,000 |

Bright LED without Resistor

| AT635 | Red | Amber | Green | No Code No Resistor | | |
|---|-----------|-----------|-----------|----------------------------|-----------|-----------|
| | | | | Red | Amber | Green |
| LEDs are colored in OFF state. | 5C | 5D | 5F | | | |
|  | | | | 30mA | 30mA | 30mA |
| | | | | 20mA | 20mA | 20mA |
| | | | | 1.9V | 2.0V | 2.1V |
| | | | | 5V | 5V | 5V |
| | | | | 0.42mA/°C | 0.29mA/°C | 0.42mA/°C |
| | | | | -25° ~ +50°C | | |




T-1 1/2 Bi-pin

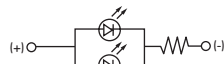
LAMP COLORS & SPECIFICATIONS

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.

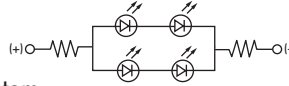
Bright LED with Resistor

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

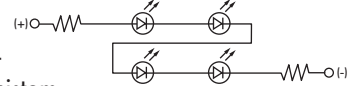
AT634
5-volt
2-element
with 1 Resistor





AT634
12-volt
4-element
with 2 Resistors



AT634
24-volt
4-element
with 2 Resistors



Super Bright Single Element LED

| | | | | | | | |
|---|--|--------------|--------------|-----------|-----------|-----------|--|
| AT625G Blue AT631B White AT632F Green  T-1 Bi-pin |  | | | 6B | 6F | 6G | |
| | Color | White | Green | Blue | | | |
| | Maximum Forward Current | I_{FM} | 30mA | 30mA | 30mA | | |
| | Typical Forward Current | I_F | 20mA | 20mA | 20mA | | |
| | Forward Voltage | V_F | 3.3V | 3.3V | 3.3V | | |
| | Maximum Reverse Voltage | V_{RM} | 7V | 7V | 7V | | |
| | Current Reduction Rate Above 25°C | ΔI_F | 0.40mA/°C | 0.40mA/°C | 0.40mA/°C | | |
| | Ambient Temperature Range | | -25° ~ +50°C | | | | |

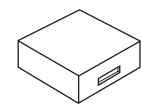
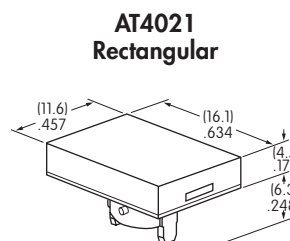
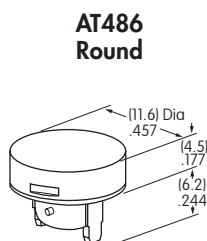
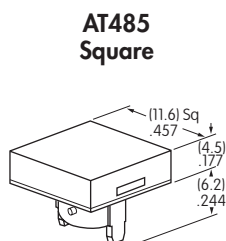
CAP TYPES & COLOR COMBINATIONS

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

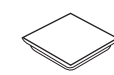
Solid Cap for Incandescent Lamp

Lens/Filter Colors Available:

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



Translucent Colored Lens



Translucent Colored Filter



Lamp AT611

Material: Polycarbonate Finish: Glossy

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

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

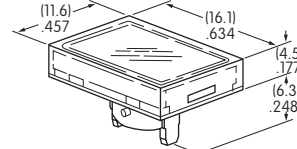
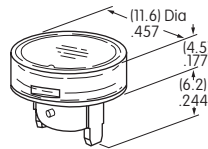
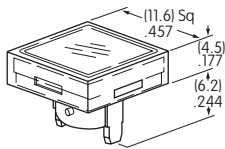
AT4022
Rectangular



Transparent Clear Lens

JC

JE



Translucent Colored Filter

JF

JG



JF and JG not suitable with neon lamp.

Material: Polycarbonate Finish: Glossy

Lamp AT611 Lamp AT615

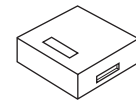
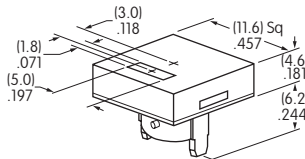
Spot Illuminated Cap for Bright LED without Resistor or with Resistor

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

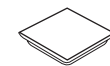
Rectangular

JC

AT4158

AT4160

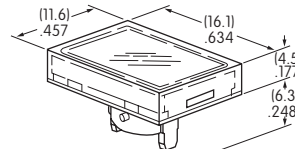
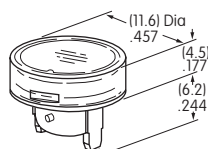
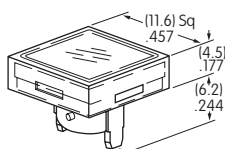
AT4159



Translucent Diffuser

JD

JF



Bright LED AT635

Bright LED AT634

Material: Polycarbonate Finish: Glossy

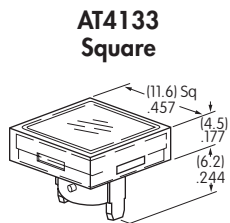
CAP TYPES & COLOR COMBINATIONS

Cap for Super Bright LED

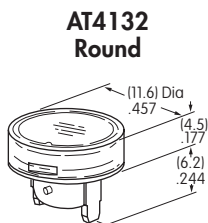
Lens/Diffuser
Colors Available:



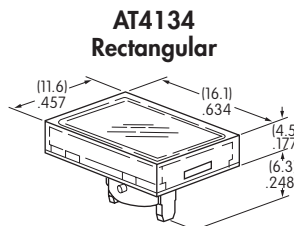
Clear Lens
White Diffuser



AT4133 Square



AT4132 Round



AT4134 Rectangular



Translucent Clear Lens



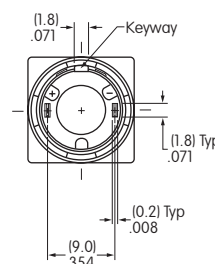
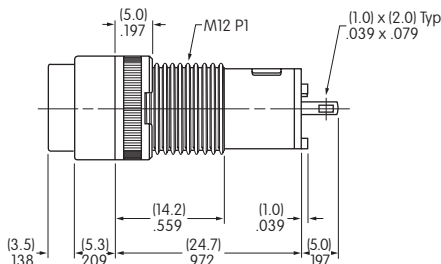
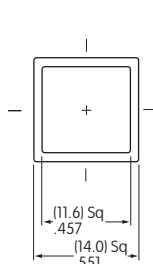
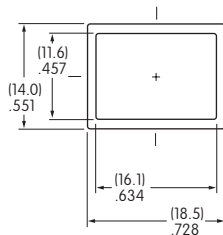
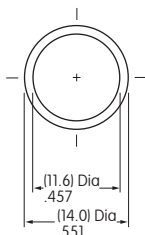
Translucent White Diffuser



Super Bright LEDs
AT625, AT631, AT632

Material: Polycarbonate Finish: Glossy

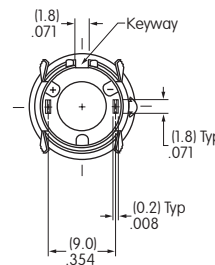
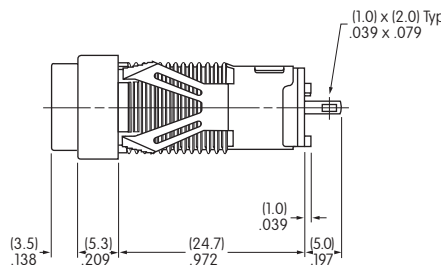
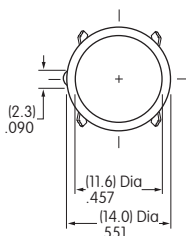
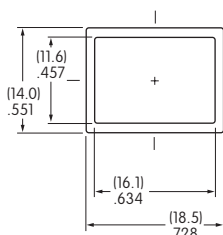
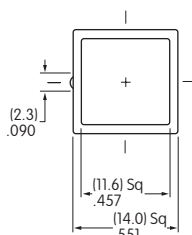
TYPICAL INDICATOR DIMENSIONS



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