

TYPICAL INDICATOR ORDERING EXAMPLE

KB **02** **K** **W01** — **12** — **FF**

SHAPES

| Bushing Mounting | |
|------------------|-------------|
| 01 | Square |
| 02 | Round |
| 03 | Rectangular |
| Snap-in Mounting | |
| 04 | Square |
| 05 | Round |
| 06 | Rectangular |

HOUSING

| | |
|---|------------|
| K | Black only |
|---|------------|

TERMINALS

| | |
|-----|-------------------|
| W01 | Silver Solder Lug |
|-----|-------------------|

LAMPS

| Incandescent Lamp used w/Solid Cap | |
|------------------------------------|---------|
| 05 | 5-volt |
| 12 | 12-volt |

| Incandescent or Neon Lamp used with Insert Cap | |
|--|---------------|
| 05 | 5-volt |
| 12 | 12-volt |
| 01 | 110-volt Neon |

| Bright LED used with Cap for LED | | | |
|----------------------------------|-------|----------|-------------|
| Colors | | Resistor | |
| 5C | Red | No Code | No Resistor |
| 5D | Amber | 05 | 5-volt |
| | | 12 | 12-volt |
| 5F | Green | 24 | 24-volt |

| Super Bright LED used w/Cap for LED | |
|-------------------------------------|-------|
| 6B | White |
| 6F | Green |
| 6G | Blue |

CAP TYPES & COLORS

| Solid Cap: Lens/Filter Colors | | | |
|-------------------------------|--------------|----|-------------|
| BB | White/White | FB | Green/White |
| CB | Red/White | FF | Green/Green |
| CC | Red/Red | GB | Blue/White |
| EB | Yellow/White | GG | Blue/Blue |

| Insert Cap: Lens/Filter Colors | |
|--------------------------------|--------------|
| JB | Clear/White |
| JC | Clear/Red |
| JE | Clear/Yellow |
| *JF | Clear/Green |
| *JG | Clear/Blue |

* JF & JG not suitable with neon.

| LED Cap: Lens/Diffuser Colors | |
|-------------------------------|--|
| AB | Square Spot Illuminated Black Cap/White Window |
| JB | Clear/White |
| JC | Clear/Red |
| JD | Clear/Amber |
| JF | Clear/Green |

| LED Cap: Lens/Diffuser Colors | |
|-------------------------------|-------------|
| JB | Clear/White |

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

KB02KW01-12-FF

Black Housing
Round with Bushing Mounting

Silver Solder Lug Terminals

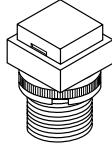


12-volt Incandescent Lamp
Solid Cap with Green Lens
and Green Filter

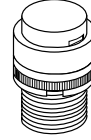
SHAPES & MOUNTING TYPES

Bushing Mounting

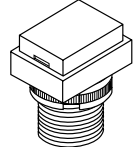
01 .551" (14mm)
Square



02 .551" (14mm)
Round

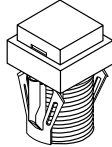


03 .551" x .728" (14mm x 18.5mm)
Rectangular

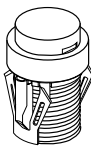


Snap-in Mounting

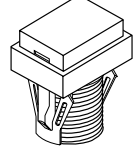
04 .551" (14mm)
Square



05 .551" (14mm)
Round



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

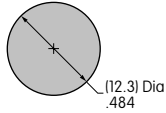


The bezel is an integral part of the indicator body.

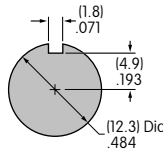
Panel Cutouts

Bushing Mounting

Without
Keyway



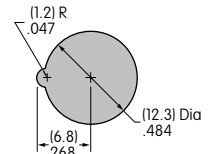
Panel Thickness:
.020" ~ .315"
(0.5 ~ 8mm)



With
Keyway

Snap-in Mounting

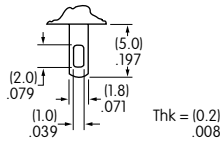
Panel Thickness:
.039" ~ .138"
(1.0 ~ 3.5mm)



TERMINALS

W01

Silver Solder Lug





LAMP COLORS & SPECIFICATIONS

The electrical specifications shown are determined at a basic temperature of 25°C.


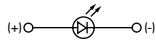
If the source voltage exceeds the rated voltage, a ballast resistor is required.

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 | 5V AC | 12V AC | 110V AC | | |
| | | Current | 115mA | 60mA | 1.5mA | | |
| | | Endurance | 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.   | Color Codes | 5C | 5D | 5F | | | |
| | 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 | ΔI_F | | | 0.42mA/°C | 0.29mA/°C | 0.42mA/°C |
| | Ambient Temperature Range | | | | -25° ~ +50°C | | |

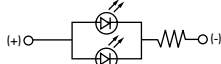
LAMP COLORS & SPECIFICATIONS

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 | | Red | Amber | Green | Resistor Codes | | | |
| | Color Codes: | 5C | 5D | 5F | 05 | 12 | 24 | |
| | 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 | | | | ΔI_F | — | — | — |
| Ambient Temperature Range | | | | -25° ~ +50°C | | | | |

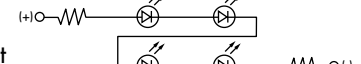
AT634
5-volt
2-element
with 1 Resistor





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 | | |
| | 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 | | | | ΔI_F | 0.50mA/°C | 0.50mA/°C | 0.50mA/°C |
| Ambient Temperature Range | | | | -25° ~ +50°C | | | | |

CAP TYPES & COLOR COMBINATIONS

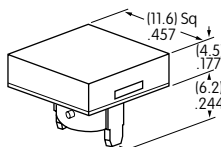
Color Codes: **B** White **C** Red **E** Yellow **F** Green **G** Blue **J** Clear

Solid Cap for Incandescent Lamp

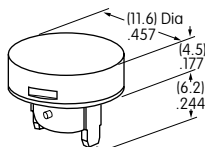
Lens/Filter Colors Available:

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

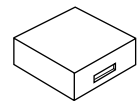
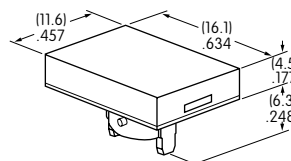
AT485
Square



AT486
Round



AT4021
Rectangular



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

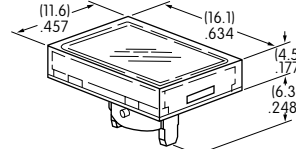
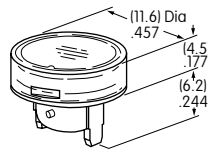
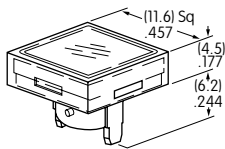
AT4022
Rectangular



Transparent Clear Lens

JC

JE



Translucent Colored Filter

JF

JG



JF and JG not suitable with neon lamp.

Material: Polycarbonate Finish: Glossy

Lamp AT611 Lamp AT615

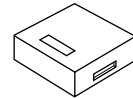
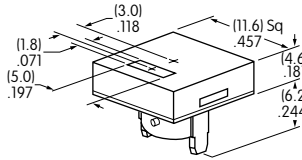
Spot Illuminated Cap for Bright LED without Resistor or with Resistor

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

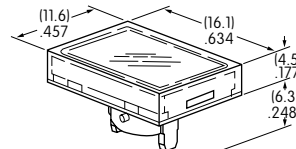
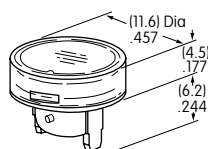
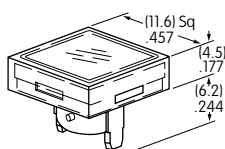
AT4159



Translucent Diffuser

JD

JF



Bright LED
AT635

Bright LED
AT634

Material: Polycarbonate Finish: Glossy

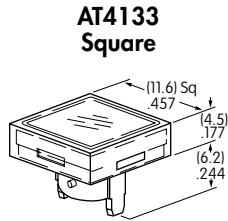
CAP TYPES & COLOR COMBINATIONS

Cap for Super Bright LED

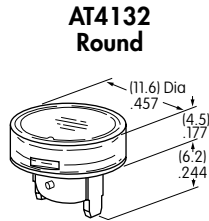
Lens/Diffuser
Colors Available:

JB

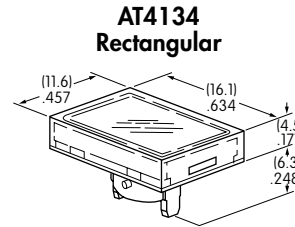
Clear Lens
White Diffuser



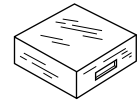
AT4133
Square



AT4132
Round



AT4134
Rectangular



Translucent Clear Lens



Translucent White Diffuser

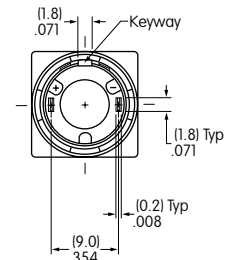
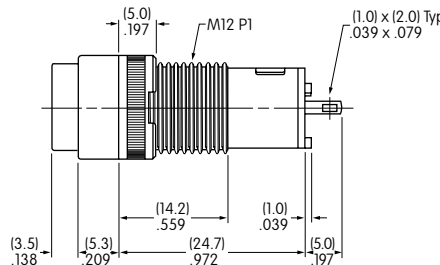
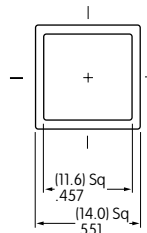
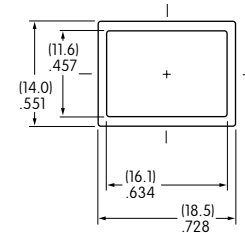
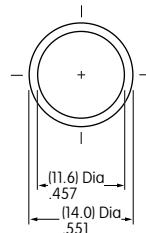


Super Bright LEDs
AT625, AT631, AT632

Material: Polycarbonate Finish: Glossy

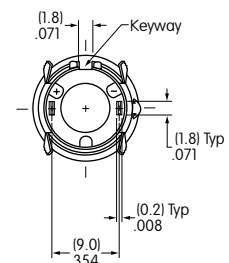
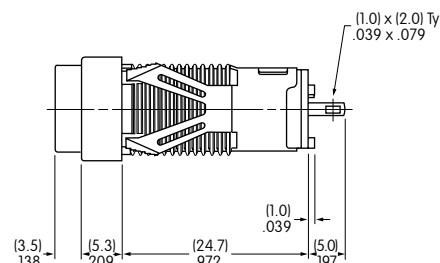
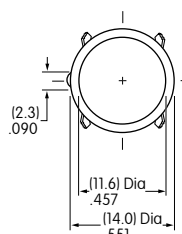
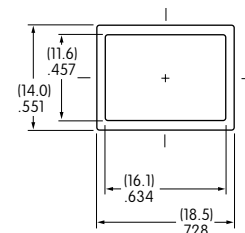
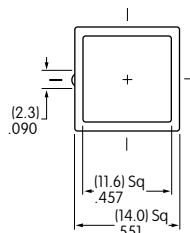
TYPICAL SWITCH DIMENSIONS

Bushing Mount



KB01KW01-05-GG

Snap-in Mount



KB05KW01-05-FF