

## 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 with 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 with 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 |
|----|-------------|

\* Wire harness & cable assemblies offered only in Americas

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## DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

KB02KW01-12-FF



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

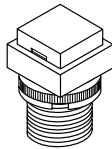
Black Housing  
Round with Bushing Mounting

Silver Solder Lug Terminals

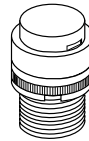
### SHAPES & MOUNTING TYPES

#### Bushing Mounting

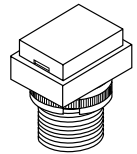
**01** .551" (14mm)  
Square



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

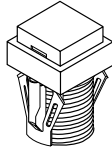


**03** .551" x .728" (14mm x 18.5mm)  
Rectangular

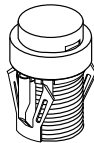


#### Snap-in Mounting

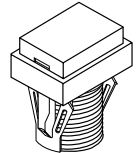
**04** .551" (14mm)  
Square



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



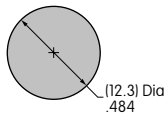
**06** .551" x .728" (14mm x 18.5mm)  
Rectangular



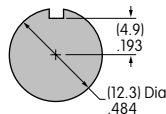
The bezel is an integral part of the indicator body.

#### Bushing Mounting

Without  
Keyway



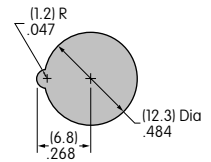
Panel Thickness:  
.020" ~ .315"  
(0.5 ~ 8mm)



With  
Keyway

#### Snap-in Mounting

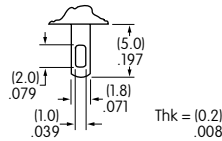
Panel Thickness:  
.039" ~ .138"  
(1.0 ~ 3.5mm)



### 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<br>Incandescent                                                               | AT615<br>Neon                                                                       |           | <b>05</b> | <b>12</b>     | <b>01</b> | Recommended Resistors<br>for Neon:<br>33K ohms for 110V AC;<br>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     | <b>No Code</b> No Resistor |           |           |
|-------------------------------------------------------------------------------------|-----------|-----------|-----------|----------------------------|-----------|-----------|
| LEDs are colored<br>in OFF state.                                                   | <b>5C</b> | <b>5D</b> | <b>5F</b> | Red                        | Amber     | Green     |
|  |           |           |           | 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

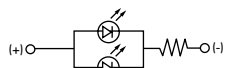
## LAMP COLORS &amp; SPECIFICATIONS

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.

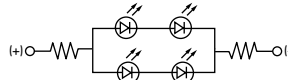
## Bright LED with Resistor

| AT634                                                                                                                                         | Color Codes:                      | Red          | Amber | Green | Resistor Codes |      |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------|-------|-------|----------------|------|------|
|                                                                                                                                               |                                   | 5C           | 5D    | 5F    | 05             | 12   | 24   |
| LEDs are colored in OFF state.<br><br><br><br>T-1 1/4 Bi-pin | 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   |      |      |

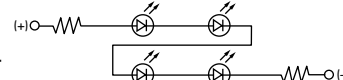
AT634  
5-volt  
2-element  
with 1 Resistor



AT634  
12-volt  
4-element  
with 2 Resistors



AT634  
24-volt  
4-element  
with 2 Resistors



## Super Bright Single Element LED

| AT625G Blue<br>AT631B White<br>AT632F Green                                                           | Color                             | 6B           | 6F    | 6G   |
|-------------------------------------------------------------------------------------------------------|-----------------------------------|--------------|-------|------|
|                                                                                                       |                                   | White        | Green | Blue |
| <br><br>T-1 Bi-pin | Forward Peak Current              | $I_{FM}$     |       |      |
|                                                                                                       | Continuous Forward Current        | $I_F$        |       |      |
|                                                                                                       | Forward Voltage                   | $V_F$        |       |      |
|                                                                                                       | Reverse Peak Voltage              | $V_{RM}$     |       |      |
|                                                                                                       | Current Reduction Rate Above 25°C | $\Delta I_F$ |       |      |
|                                                                                                       | Ambient Temperature Range         |              |       |      |



T-1 Bi-pin

## CAP TYPES &amp; COLOR COMBINATIONS

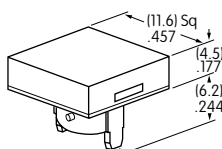
Color Codes: B White C Red E Yellow F Green G Blue J Clear

## Solid Cap for Incandescent Lamp

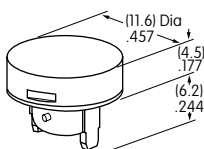
Lens/Filter Colors Available:

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

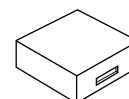
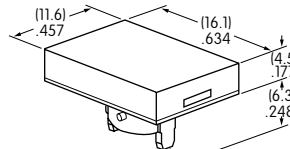
AT485  
Square



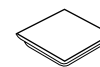
AT486  
Round



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

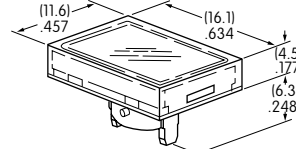
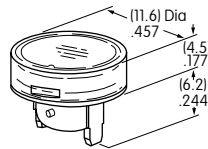
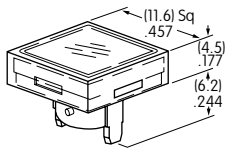
**JC**

**JE**



Translucent Colored Filter

**JF**



**JG**



JF and JG not suitable with neon lamp.

Material: Polycarbonate    Finish: Glossy

Lamp AT611

Lamp AT615

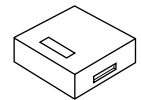
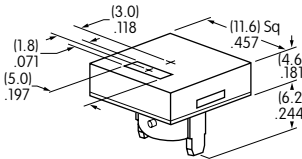
#### Spot Illuminated Cap for Bright LED without Resistor or with Resistor

**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**

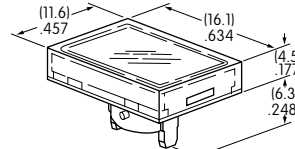
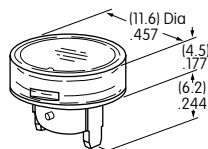
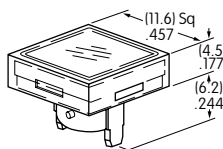
**AT4159**



Translucent Diffuser

**JD**

**JF**



Bright LED  
AT635

Bright LED  
AT634

Material: Polycarbonate    Finish: Glossy

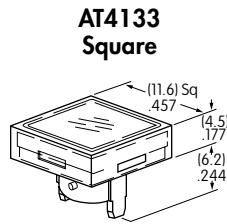
## CAP TYPES &amp; COLOR COMBINATIONS

## Cap for Super Bright LED

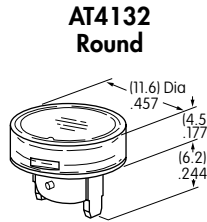
Lens/Diffuser  
Colors Available:

**JB**

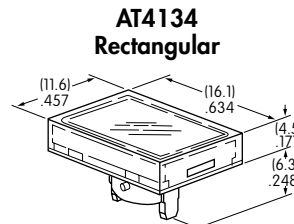
Clear Lens  
White Diffuser



**AT4133  
Square**



**AT4132  
Round**



**AT4134  
Rectangular**



Translucent Clear Lens



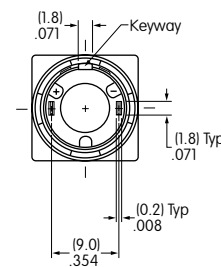
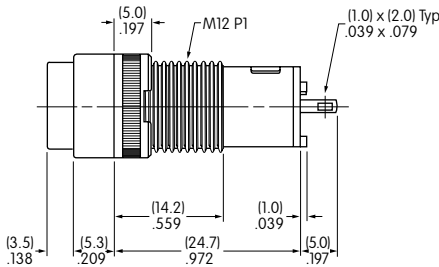
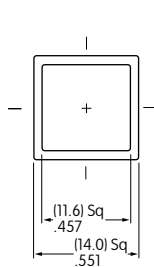
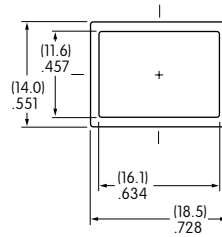
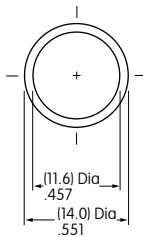
Translucent White Diffuser



Super Bright LEDs  
AT625, AT631, AT632

Material: Polycarbonate Finish: Glossy

## TYPICAL INDICATOR DIMENSIONS

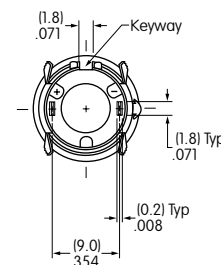
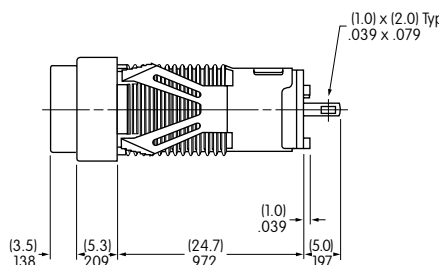
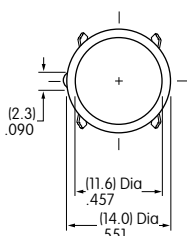
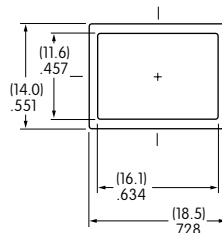
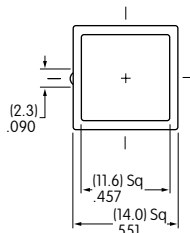


## Bushing Mount



**KB01KW01-05-GG**

## Snap-in Mount



**KB05KW01-05-FF**

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

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