Complement to YB Pushbuttons

YB Indicators

TYPICAL INDICATOR ORDERING EXAMPLE

Shapes

Bushing Mounting

- 01 Square
- 02 Round
- 03 Rectangular

Snap-in Mounting

- 04 Square
- 05 Round
- 06 Rectangular

Housing

- K Black only

Panel Seal

- No Code Without Panel Seal
- W With Panel Seal (Bushing Mount only)

Terminals

- W01 Silver Solder Lug/ .110" (2.8mm) Quick Connect

Lamps

Incandescent Lamp

- 05 5-volt
- 12 12-volt

Bright LED

<table>
<thead>
<tr>
<th>LED Colors</th>
<th>Resistor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5C Red</td>
<td>No Code</td>
</tr>
<tr>
<td>5D Amber</td>
<td>05 5-volt</td>
</tr>
<tr>
<td>5F Green</td>
<td>24 24-volt</td>
</tr>
</tbody>
</table>

Super Bright LED

- 6B White
- 6F Green
- 6G Blue

Bicolor LED

<table>
<thead>
<tr>
<th>LED Colors</th>
<th>Forward Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2CF Red/Green</td>
<td>02 2-volt (no resistor)</td>
</tr>
<tr>
<td></td>
<td>05 5-volt</td>
</tr>
<tr>
<td></td>
<td>12 12-volt</td>
</tr>
<tr>
<td></td>
<td>24 24-volt</td>
</tr>
</tbody>
</table>

Cap Types & Colors

Solid Cap: Lens/Insert Colors

- BB White/White
- CB Red/White
- EB Yellow/White
- FB Green/White
- GB Blue/White

LED Cap: Lens/Insert Colors

- JB Clear/White
- JC Clear/Red
- JD Clear/Amber
- JF Clear/Green

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

YB04KW01-12-FB

Square with Snap-in Mounting

Green Solid Cap 12-volt Incandescent Lamp

Black Housing

Silver Solder Lug/ .110" (2.8mm) Quick Connect Terminals
YB Indicators

Complement to YB Pushbuttons

SHAPES & MOUNTING TYPES

<table>
<thead>
<tr>
<th>Bushing Mounting</th>
<th>Snap-in Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Square</td>
<td>04 Square</td>
</tr>
<tr>
<td>02 Round</td>
<td>05 Round</td>
</tr>
<tr>
<td>03 Rectangular</td>
<td>06 Rectangular</td>
</tr>
</tbody>
</table>

Bezel-barrier is an integral part of the indicator body.

PANEL SEAL

<table>
<thead>
<tr>
<th>No Code</th>
<th>Without Panel Seal</th>
<th>W With Panel Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bushing Mounting</td>
<td>Supplied with mounting nut.</td>
<td>Bushing Mounting only</td>
</tr>
<tr>
<td>Snap-in Mounting</td>
<td></td>
<td>Supplied with mounting nut and o-ring AT089.</td>
</tr>
</tbody>
</table>

INCANDESCENT LAMP & SOLID CAP

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 resistor value can be calculated by using the formula in the Supplement section.

<table>
<thead>
<tr>
<th>AT611</th>
<th>05</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage V</td>
<td>5V AC</td>
<td>12V AC</td>
</tr>
<tr>
<td>Current I</td>
<td>115mA</td>
<td>60mA</td>
</tr>
<tr>
<td>MSCP</td>
<td>.150</td>
<td>.150</td>
</tr>
<tr>
<td>Endurance Hours</td>
<td>7,000 average</td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td>−25°C ~ +50°C</td>
<td></td>
</tr>
</tbody>
</table>

Solid Cap for Incandescent Lamp

- Translucent Colored Lens
- Translucent White Insert
- Translucent White Seal/Filter

Lens/Insert Colors Available:
- BB White/White
- CB Red/White
- EB Yellow/White
- FB Green/White
- GB Blue/White

Materials: Polycarbonate (Lens & Insert) Thermoplastic Elastomer (Seal/Filter)
Finish: Glossy

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M28  www.nkk.com
**BRIGHT LEDS & LED CAPS**

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 resistor value can be calculated by using the formula in the Supplement section.

### Electrical Specifications for Bright LED without Resistor

<table>
<thead>
<tr>
<th>Bright AT628</th>
<th>Colors Available: 5C Red 5D Amber 5F Green</th>
<th>No Code</th>
<th>No Resistor</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Forward Current</td>
<td>$I_{FM}$</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Typical Forward Current</td>
<td>$I_t$</td>
<td>26</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Forward Voltage</td>
<td>$V_F$</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Maximum Reverse Voltage</td>
<td>$V_{RM}$</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Current Reduction Rate Above 25°C</td>
<td>$\Delta I_p$</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electrical Specifications for Bright LED with Resistor

<table>
<thead>
<tr>
<th>Bright AT634</th>
<th>Colors Available: 5C Red 5D Amber 5F Green</th>
<th>05</th>
<th>12</th>
<th>24</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Forward Current</td>
<td>$I_{FM}$</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mA</td>
</tr>
<tr>
<td>Typical Forward Current</td>
<td>$I_t$</td>
<td>25</td>
<td>20</td>
<td>10</td>
<td>mA</td>
</tr>
<tr>
<td>Forward Voltage</td>
<td>$V_F$</td>
<td>5</td>
<td>12</td>
<td>24</td>
<td>V</td>
</tr>
<tr>
<td>Maximum Reverse Voltage</td>
<td>$V_{RM}$</td>
<td>4</td>
<td>8</td>
<td>16</td>
<td>V</td>
</tr>
<tr>
<td>Current Reduction Rate Above 25°C</td>
<td>$\Delta I_p$</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>mA/°C</td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>−25 ~ +50 °C</td>
</tr>
</tbody>
</table>

### Cap for Bright LED

**Lens/Insert**
Colors Available:
- JB Clear/White
- JC Clear/Red
- JD Clear/Ammber
- JF Clear/Green

**Materials:** Polycarbonate (Lens & Insert)
Thermoplastic Elastomer (Seal/Diffuser)
**Finish:** Glossy

**AT3004 Square**

**AT3005 Round**

**AT3006 Rectangular**

- Transparent Clear Lens
- Translucent Colored Insert
- Translucent White Seal/Diffuser
- Bright LEDs AT628 AT634
YB Indicators

Complement to YB Pushbuttons

SUPER BRIGHT LEDS & LED CAPS

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 resistor value can be calculated by using the formula in the Supplement section.

<table>
<thead>
<tr>
<th>Super Bright</th>
<th>AT625G Blue</th>
<th>AT631B White</th>
<th>AT632F Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colors:</td>
<td>6B</td>
<td>6F</td>
<td>6G</td>
</tr>
<tr>
<td>Maximum Forward Current</td>
<td>$I_{FM}$</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Typical Forward Current</td>
<td>$I_{T}$</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Forward Voltage</td>
<td>$V_{F}$</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Maximum Reverse Voltage</td>
<td>$V_{Rm}$</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Current Reduction Rate Above 25°C</td>
<td>$\Delta I$</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td></td>
<td>-25 ~ +50</td>
<td>°C</td>
</tr>
</tbody>
</table>

Cap for Super Bright LED

AT3014 Square

AT3015 Round

AT3016 Rectangular

Lens/Insert Colors Available:

<table>
<thead>
<tr>
<th>JB</th>
<th>Clear/White</th>
</tr>
</thead>
</table>

Materials: Polycarbonate (Lens & Insert)
Thermoplastic Elastomer (Seal/Diffuser)
BICOLOR LED & LED CAPS

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 resistor value can be calculated by using the formula in the Supplement section.

<table>
<thead>
<tr>
<th>Bicolor AT621</th>
<th>Bicolor LED is translucent white in OFF state.</th>
<th>02</th>
<th>05</th>
<th>12</th>
<th>24</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum Forward Current ( I_{FM} )</td>
<td>60</td>
<td>60</td>
<td>20</td>
<td>12</td>
<td>mA</td>
</tr>
<tr>
<td></td>
<td>Typical Forward Current ( I_r )</td>
<td>45</td>
<td>45</td>
<td>15</td>
<td>10</td>
<td>mA</td>
</tr>
<tr>
<td></td>
<td>Forward Voltage (Red/Green) ( V_f )</td>
<td>1.9 / 2.1</td>
<td>5</td>
<td>12</td>
<td>24</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>Current Reduction Rate Above 25°C ( \Delta I_f )</td>
<td>0.80</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>mA/°C</td>
</tr>
<tr>
<td></td>
<td>Ambient Temperature Range</td>
<td>-25 ~ +50</td>
<td></td>
<td></td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

AT621 Bicolor LED
2-volt
6-element
w/o Resistor

AT621 Bicolor LED
5-volt
6-element
with Resistor

AT621 Bicolor LED
12 & 24-volt
6-element
with Resistor

As shown for Red; Reverse polarity for Green

LED Caps

AT3004
Square

AT3005
Round

AT3006
Rectangular

Lens/Insert
Colors Available:

JB Clear/White

Materials: Polycarbonate (Lens & Insert)
Thermoplastic Elastomer (Seal/Diffuser)
TYPICAL INDICATOR DIMENSIONS

Square • Bushing Mounting

YB01KW01-12-CB

Panel Thickness
.020” ~ .197” (0.5mm ~ 5.0mm)

Round • Panel Seal

YB02WKW01-12-CB

Panel Thickness
.020” ~ .197” (0.5mm ~ 5.0mm)

Rectangular • Snap-in Mounting

YB06KW01-12-CB

Panel Thickness
.039” ~ .138” (1.0mm ~ 3.5mm)