

UP SERIES LED ILLUMINATED MINIATURE PILOT LIGHTS

Wide Variety of Housing Styles & Low Cost.

Five Illumination Colors; Red, Green, Amber, Yellow & White.

- Five mounting hole sizes from 6 to 10 mm in diameter.
- Also available with a built-in current limiting resistor.

SPECIFICATIONS

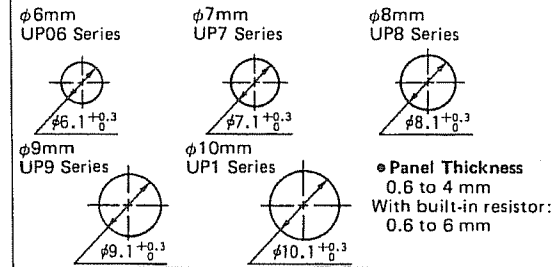
• Models Without a Built-in Current Limiting Resistor

Illumination Color (Code)	Red (R), Green (G), Amber (A), Yellow (Y), White (W)
Rated Current	15 mA
Forward Current	25 mA maximum at 25°C
Reverse Voltage	3V maximum at 25°C
Power Consumption	70 mW maximum at 25°C
Forward Voltage	Maximum value: 3V Standard value: 2V (Forward current: 15 mA)
Dielectric Strength	Between live and dead parts: 500V AC, 1 minute
Operating Temperature	-20 to +50°C
Storage Temperature	-25 to +80°C

• Models With a Built-in Current Limiting Resistor

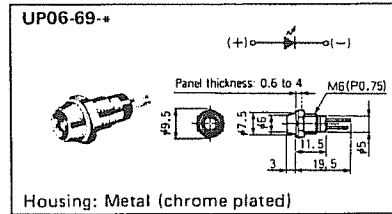
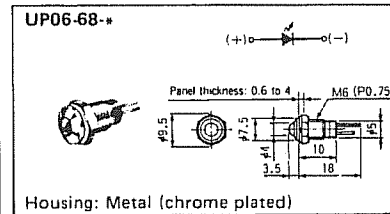
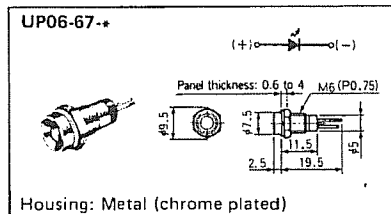
Illumination Color (Code)	Red (R), Green (G), Amber (A), Yellow (Y), White (W)		
Operational Voltage	6V DC	12V DC	24V DC
Current	10 mA (Red), 15 mA (Other colors)		
Operating Conditions	-20 to +50°C, 45 to 85% RH		
Dielectric Strength	500V AC, 1 minute		

Panel Cut-Out



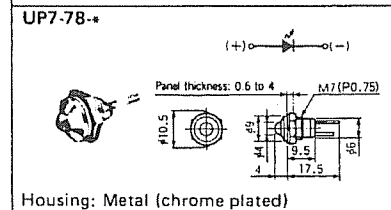
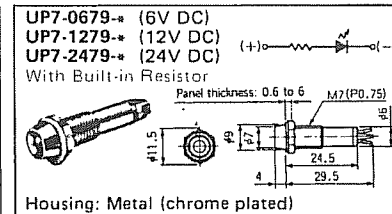
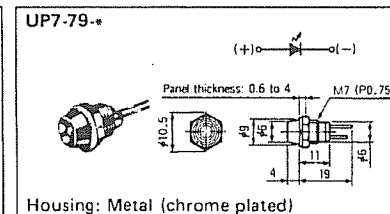
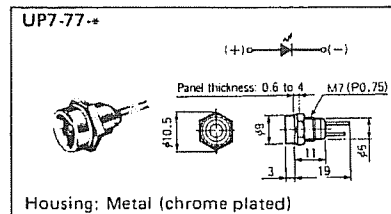
UP06 SERIES

- Specify the illumination color code in place of * in the Type No.
Illumination Color Code: R (red), G (green), A (amber), Y (yellow), W (white)



UP7 SERIES

- Specify the illumination color code in place of * in the Type No.
Illumination Color Code:
R (red), G (green), A (amber),
Y (yellow), W (white)



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All dimensions in mm.

UP SERIES

UP8 SERIES

- Specify the illumination color code in place of * in the Type No.
- Illumination Color Code:
R (red), G (green), A (amber),
Y (yellow), W (white)

UP8-87**

Panel thickness 0.6 to 4 MB (P0.75)

Housing: Metal (chrome plated)

UP8-88**

Panel thickness 0.6 to 4 MB (P0.75)

Housing: Metal (chrome plated)

UP8-89**

Panel thickness 0.6 to 4 MB (P0.75)

Housing: Metal (chrome plated)

UP8-0681 (6V DC)**
UP8-1281 (12V DC)**
UP8-2481 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 MB (P0.75)

Housing: Plastic (illumination color)

UP8-0683 (6V DC)**
UP8-1283 (12V DC)**
UP8-2483 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 MB (P0.75)

Housing: Plastic (illumination color)

UP8-0684 (6V DC)**
UP8-1284 (12V DC)**
UP8-2484 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 MB (P0.75)

Housing: Plastic (illumination color)

UP8-0689 (6V DC)**
UP8-1289 (12V DC)**
UP8-2489 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 MB (P0.75)

Housing: Metal (chrome plated)

UP9 SERIES

- Specify the illumination color code in place of * in the Type No.
- Illumination Color Code:
R (red), G (green), A (amber),
Y (yellow), W (white)

UP9-97**

Panel thickness 0.6 to 4 MB (P0.75)

Housing: Metal (chrome plated)

UP9-98**

Panel thickness 0.6 to 4 MB (P0.75)

Housing: Metal (chrome plated)

UP9-99**

Panel thickness 0.6 to 4 MB (P0.75)

Housing: Metal (chrome plated)

UP9-0696 (6V DC)**
UP9-1296 (12V DC)**
UP9-2496 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 MB (P0.75)

Housing: Metal (chrome plated)

UP9-0699 (6V DC)**
UP9-1299 (12V DC)**
UP9-2499 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 MB (P0.75)

Housing: Metal (chrome plated)

UP1 SERIES

- Specify the illumination color code in place of * in the Type No.
- Illumination Color Code: R (red), G (green), A (amber), Y (yellow), W (white)

UP1-18**

Panel thickness 0.6 to 4 M10 (P1.0)

Housing: Metal (chrome plated)

UP1-19**

Panel thickness 0.6 to 4 M10 (P1.0)

Housing: Metal (chrome plated)

UP1-0606 (6V DC)**
UP1-1206 (12V DC)**
UP1-2406 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 M10 (P1.0)

Housing: Plastic (illumination color)

UP1-0619 (6V DC)**
UP1-1219 (12V DC)**
UP1-2419 (24V DC)**
With Built-in Resistor

Panel thickness 0.6 to 6 M10 (P1.0)

Housing: Metal (chrome plated)

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All dimensions in mm.

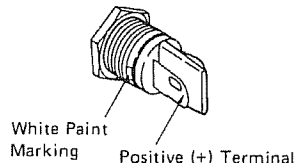
UP SERIES

INSTRUCTIONS

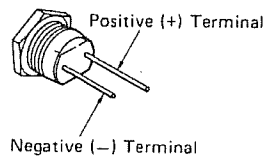
●Polarity

Since none of UP series units contains a diode for protection against reverse polarity, special care must be paid to the power supply polarity. On solder terminal models, the terminal with a white paint marking is positive. On wire-wrap terminal models, the longer terminal is positive and the shorter terminal is negative.

Solder Terminal



Wire-Wrap Terminal

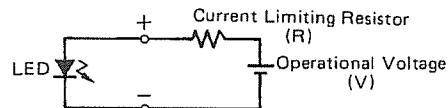


●Operational Voltage

The rated operational voltage represents a complete DC value. When using a pulsating voltage such as a full-wave rectification voltage, keep peak currents within the forward current I_f . Peak currents exceeding the I_f may shorten the LED lamp life.

●Current Limiting Resistor

When using a UP series unit without a built-in current limiting resistor, connect an external current limiting resistor. Calculate the resistance using the following formula.



$$\bullet \text{ Resistance (R)} = \frac{\text{Operational Voltage (V)} - 2}{\text{Rated Current (I)}}$$

Rated Current (I) = 15 mA, except red color at 10 mA

Use a resistor of higher resistance than the calculated value (R).

$$\left(\begin{array}{l} \text{Rated Wattage} \\ \text{of Resistor} \\ \text{(W)} \end{array} \right) = \left(\begin{array}{l} \text{Rated} \\ \text{Current} \\ \text{(I)} \end{array} \right) \times \left(\begin{array}{l} \text{Operational} \\ \text{Voltage} \\ \text{(V)} \end{array} \right) \times 2$$

where, 2 is a safety factor.

●Others

Complete soldering to terminals at 260°C maximum within 3 seconds.

Specifications and other descriptions in this catalog are subject to change without notice.

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idec

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