

# IUWC2381

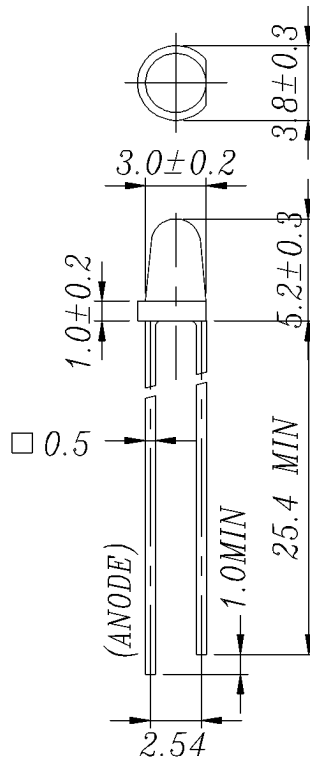
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This lamp is a T-1, 3 mm Round. It is designed for applications requiring higher brightness. This white LED is fabricated using a blue LED and a phosphor which emits a yellow fluorescence when exposed to blue light. The mixture of blue light and yellow light results in a white emission.



RoHS Compliant  
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| PART NO. | Emitted Color | Lens Color  |
|----------|---------------|-------------|
| IUWC2381 | White         | Water Clear |

\* Specifications subject to change without notice. Dimensions are in mm±0.25 unless stated otherwise.

**Absolute Maximum Ratings at  $T_a = 25\text{ }^\circ\text{C}$** 

| Parameter                                  | Symbol       | Rating      | Units            |
|--|--------------|-------------|------------------|
| Forward Current                            | $I_F$        | 30          | mA               |
| Operating Temperature                      | $T_{opr}$    | -20 to +80  | $^\circ\text{C}$ |
| Storage Temperature                        | $T_{stg}$    | -30 to +100 | $^\circ\text{C}$ |
| Soldering Temperature                      | $T_{sol}$    | $260 \pm 5$ | $^\circ\text{C}$ |
| Electrostatic Discharge                    | ESD          | 1000        | V                |
| Power Dissipation                          | $P_d$        | 120         | mW               |
| Peak Forward Current<br>(Duty 1/10 @ 1KHz) | $I_F$ (Peak) | 100         | mA               |
| Reverse Voltage                            | $V_R$        | 5           | V                |

**Electronic Optical Characteristics**

| Parameter                                | Symbol          | Min. | Typ. | Max. | Units         | Condition            |
|--|-----------------|------|------|------|---------------|----------------------|
| Luminous Intensity                       | $I_V$           | 150  | 300  | —    | mcd           | $I_F = 20\text{ mA}$ |
| Viewing Angle                            | $2\theta_{1/2}$ | —    | 25   | —    | deg           | $I_F = 20\text{ mA}$ |
| Chromaticity<br>Coordinates <sup>a</sup> | x               | —    | 0.30 | —    | —             | $I_F = 20\text{ mA}$ |
|  | y               | —    | 0.31 | —    | —             |                      |
| Forward Voltage                          | $V_F$           | —    | 3.5  | 4.0  | V             | $I_F = 20\text{ mA}$ |
| Reverse Current                          | $I_R$           | —    | —    | 10   | $\mu\text{A}$ | $V_R = 5\text{ V}$   |

a. The C.I.E. 1931 chromaticity diagram.