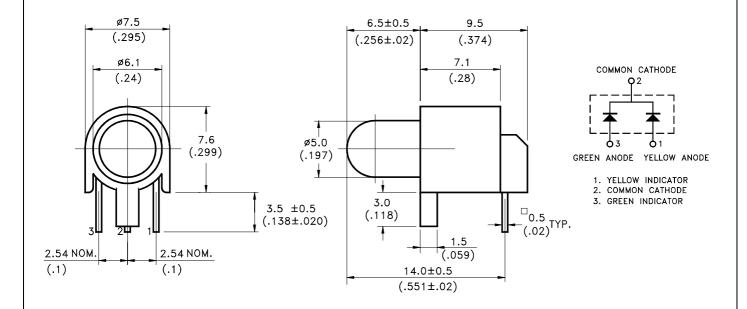
# LITEON ELECTRONICS, INC.

Property of Lite-On Only

### **Features**

- \* Designed for ease circuit board assembly.
- \* Black case enhance contrast ratio.
- \* Designed to allow for high density packaging.
- \* Solid state light source.
- \* Reliable and rugged.

## **Package Dimensions**



Part No.	<b>T</b>	Source
LTL-	Lens	Color
30EDK	Water Clear	Green/Yellow

### NOTES:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25$ mm(.010") unless otherwise noted.
- 3. The holder color is black.
- 4. The holder raw material is PC.
- 5. The LED lamp is LTL-30EDK.

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## Absolute Maximum Ratings At Ta=25℃

Parameter	Green	Yellow	Unit		
Power Dissipation	100	60	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	80	mA		
Continuous Forward Current	30	20	mA		
Derating Linear From 50°C	0.4	0.25	mA/°C		
Reverse Voltage	5	5	V		
Operating Temperature Range	-55°C to + 100°C				
Storage Temperature Range	-55°C to + 100°C				
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds				

Part No.: LTL-30EDKPHA Page: 2 of 4

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## Electrical Optical Characteristics At Ta=25°C

Parameter	Symbol	LTL- 30EDKPHA	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Green Yellow	29 19	90 60		mcd	$I_F = 20 \text{ mA}$ Note 1,4
Viewing Angle	2 θ 1/2	Green Yellow		20 20		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Green Yellow		565 585		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	Green Yellow		569 588		nm	Note 3
Spectral Line Half-Width	Δλ	Green Yellow		30 35		nm	
Forward Voltage	V <sub>F</sub>	Green Yellow		2.1 2.1	2.6 2.6	V	$I_F = 20 \text{ mA}$
Reverse Current	IR	Green Yellow			100 100	μΑ	$V_R = 5V$
Capacitance	С	Green Yellow		35 15		рF	$V_F = 0$ , $f = 1MHz$

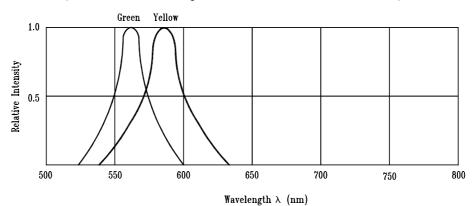
NOTE: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

- 2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength,  $\lambda$  d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. Iv needs  $\pm 15\%$  additionary for guaranteed limits.

Part No · LTL-30EDKPHA	Page ·	3	of		_
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## Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Relative Intensity vs. Wavelength

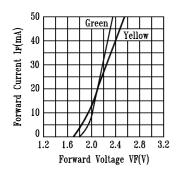


Fig.2 Forward Current vs. Forward Voltage

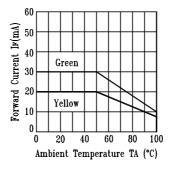


Fig.3 Forward Current Derating Curve

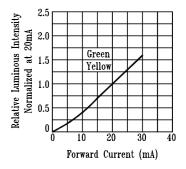


Fig.4 Relative Luminous Intensity vs. Forward Current

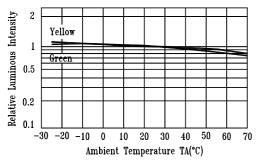


Fig.5 Luminous Intensity vs. Ambient Temperature

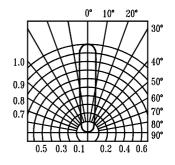


Fig.6 Spatial Distribution

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