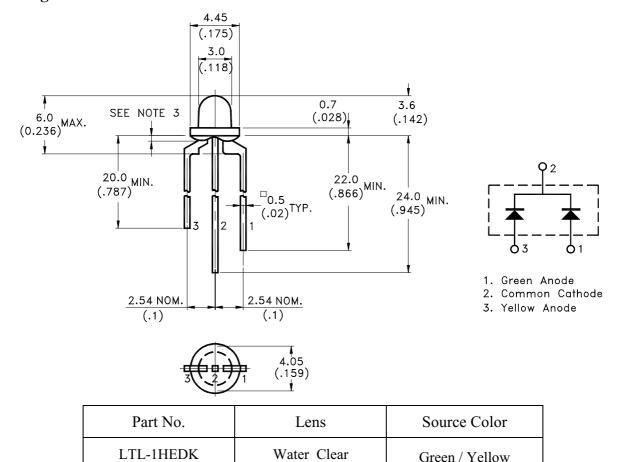
LITEON ELECTRONICS, INC.

Property of Lite-On Only

Features

- * Green and Yellow chips are matched for uniform light output.
- * T-1 type package.
- * Long life solid state reliability.
- * Low power consumption.
- * I.C. compatible.

Package Dimensions



Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25 mm(.010") unless otherwise noted.
- 3. Protruded resin under flange is 1.0mm(.04") max.
- 4. Lead spacing is measuGREEN where the leads emerge from the package.
- 5. Specifications are subject to change without notice.

Part No.: LTL-1HEDK	Page:	1	of	4	
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Absolute Maximum Ratings at TA=25°C

Parameter	Green Yellow		Unit			
Power Dissipation	100	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					

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Electrical / Optical Characteristics at TA=25°C

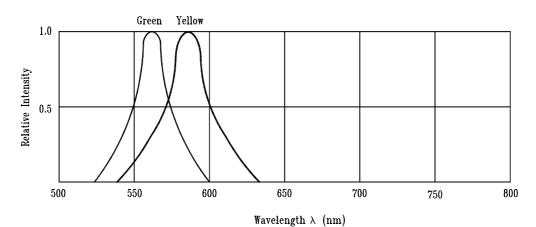
Parameter	Symbol	Color	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Green Yellow	5.6 5.6	19 19		mcd	$I_F = 20mA$ $I_F = 20mA$ Note 1,4
Viewing Angle	2 θ 1/2	Green Yellow		70 70		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Green Yellow		565 585		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	Green Yellow		569 588		nm	Note 3
Spectral Line Half-Width	Δλ	Green Yellow		30 35		nm	
Forward Voltage	VF	Green Yellow		2.1 2.1	2.6 2.6	V	$I_{F} = 20mA$ $I_{F} = 20mA$
Reverse Current	I_R	Green Yellow			100	μΑ	$V_R = 5V$
Capacitance	С	Green Yellow		35 15		pF	$V_F = 0$, $f = 1MHz$

- Note: 1. Luminous intensity is measuGREEN with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) 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, λ d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
 - 4. The Iv guarantee should be added $\pm 15\%$.

Part No.: LTL-1HEDK	Page:	3	of	4		
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Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Relative Intensity vs. Wavelength

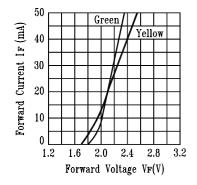


Fig.2 Forward Current vs. Forward Voltage

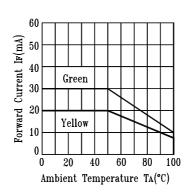


Fig.3 Forward Current **Derating Curve**

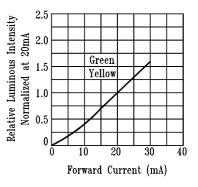


Fig.4 Relative Luminous Intensity vs. Forward Current

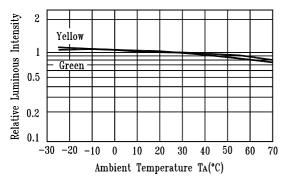


Fig.5 Luminous Intensity vs. Ambient Temperature

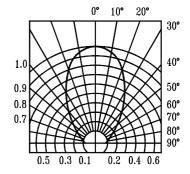


Fig.6 Spatial Distribution

Part No.: LTL-1HEDK

BNS-OD-C131/A4