

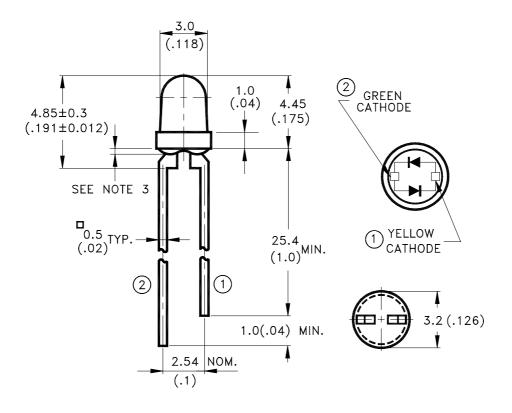
LITEON ELECTRONICS, INC.

Property of Lite-On Only

Features

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

Package Dimensions



Part No.	Lens	Source Color
LTL-14CDJ	White Diffused	Yellow / Green

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 measured where the leads emerge from the package.
- 5. Specifications are subject to change without notice.

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Absolute Maximum Ratings at TA=25°C

Parameter	Yellow	Green	Unit		
Power Dissipation	60	100	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	120	mA		
Continuous Forward Current	20	30	mA		
Derating Linear From 50°C	0.25	0.4	mA/°C		
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	Yellow	2.5	8.7			$I_F = 20 \text{mA}$
		Green	3.7	12.6		mcd	$I_F = 20 \text{mA}$
							Note 1,4
Viewing Angle	2 θ 1/2	Yellow		80		deg	N + 2 (Fi - C)
		Green		80			Note 2 (Fig.6)
Peak Emission Wavelength	λp	Yellow		585		nm	Measurement
		Green		565			@Peak (Fig.1)
Dominant Wavelength	λd	Yellow		588		nm	Note 3
		Green		569			
Spectral Line Half-Width	Δλ	Yellow		35		nm	
		Green		30			
Forward Voltage	VF	Yellow		2.1	2.6	V	$I_F = 20 \text{mA}$
		Green		2.1	2.6		
Reverse Current	I_R	Yellow			100	μ A	$V_R = 5V$
		Green			100		Note 5
Capacitance	С	Yellow		15		pF	$V_F = 0$, $f = 1MHz$
		Green		35			

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve.

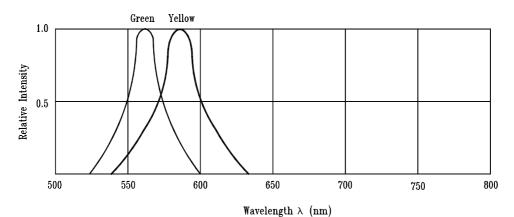
- 2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength, λ d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. The Iv guarantee should be added $\pm 15\%$.
- 5. Reverse current is controlled by dice source.

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Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Relative Intensity vs. Wavelength

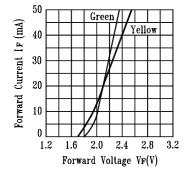


Fig.2 Forward Current vs. Forward Voltage

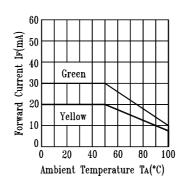


Fig.3 Forward Current Derating Curve

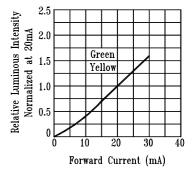


Fig.4 Relative Luminous Intensity vs. Forward Current

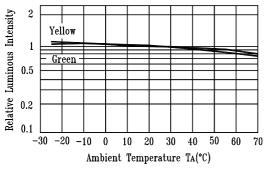


Fig.5 Luminous Intensity vs. Ambient Temperature

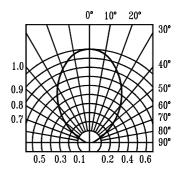


Fig.6 Spatial Distribution

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Mouser Electronics

Authorized Distributor

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Lite-On:

LTL-14CDJ LTL-14CDJN