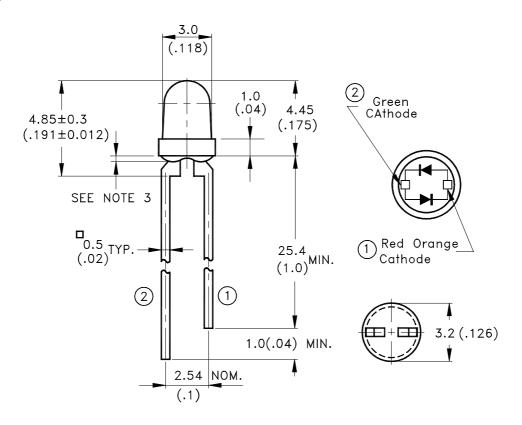
# LITEON ELECTRONICS, INC.

### Property of Lite-On Only

### **Features**

- \* Red Orange 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-14CHJ	White Diffused	Red Orange / Green

#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25$ 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	Red Orange	Green	Unit		
Power Dissipation	100	100	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	120	mA		
Continuous Forward Current	30	30	mA		
Derating Linear From 50°C	0.4	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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# LITEON ELECTRONICS, INC.

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# Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Color	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Red Orange Green	2.2 2.2	4.8 4.8		mcd	I <sub>F</sub> = 20mA Note 1,4
Viewing Angle	2 0 1/2	Red Orange Green		200		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Red Orange Green		630 565		nm	Measurement  @Peak (Fig.1)
Dominant Wavelength	λd	Red Orange Green		621 569		nm	Note 3
Spectral Line Half-Width	Δλ	Red Orange Green		40 30		nm	
Forward Voltage	VF	Red Orange Green		2.0 2.1	2.6 2.6	V	$I_F = 20 \text{mA}$
Reverse Current	$I_R$	Red Orange Green			100	μΑ	$V_R = 5V$
Capacitance	С	Red Orange Green		20 35		pF	$V_F = 0$ , $f = 1MHz$

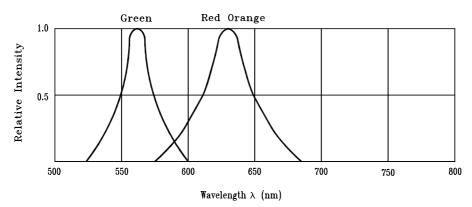
Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve.

- 2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength,  $\lambda_d$  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.

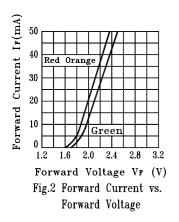
Part No.: LTL-14CHJ	Page:	3	of	4		
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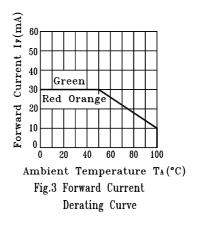
## Typical Electrical / Optical Characteristics Curves

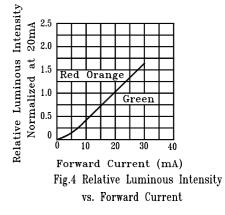
(25°C Ambient Temperature Unless Otherwise Noted)

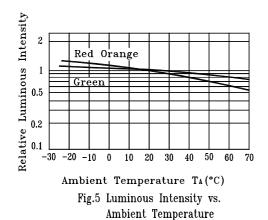


Relative Intensity vs. Wavelength









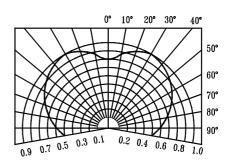


Fig.6 Spatial Distribution

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