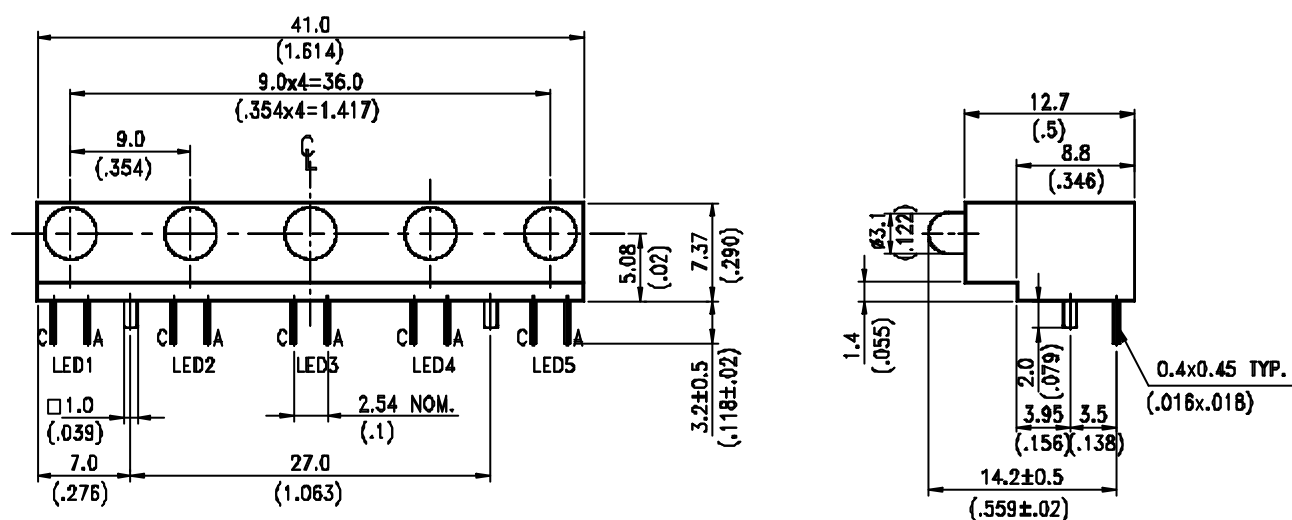


Features

- * Designed for ease in circuit board assembly.
- * Black case enhance contrast ratio.
- * Solid state light source.
- * Reliable and rugged.

Package Dimensions



Lamp Part No.	Lens	Source Color
LTL-1CHG	Green Diffused	Green
LTL-1CHA	Amber Diffused	Amber

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (.010") unless otherwise noted.
3. The holder color is black; the holder P/N is 46L115.
4. The LED1~LED4 lamps are LTL-1CHG.
The LED5 lamp is LTL-1CHA.
5. Specifications are subject to change without notice.



L I T E - O N E L E C T R O N I C S , I N C .

Property of Lite-On Only

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

Parameter	Green	Amber	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/ $^{\circ}\text{C}$
Reverse Voltage	5	5	V
Operating Temperature Range	-55°C to $+100^{\circ}\text{C}$		
Storage Temperature Range	-55°C to $+100^{\circ}\text{C}$		
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds		

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	LTL-1CHM6H115R	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Green Amber	3.7 3.7	12.6 12.6		mcd	I _F = 10mA Note 1,4
Viewing Angle	2 $\theta_{1/2}$	Green Amber		60		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λ_p	Green Amber		565 610		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ_d	Green Amber		569 602		nm	Note 3
Spectral Line Half-Width	$\Delta \lambda$	Green Amber		30 35		nm	
Forward Voltage	V _F	Green Amber		2.1 2.1	2.6 2.6	V	I _F = 20mA
Reverse Current	I _R	Green Amber			100	μA	V _R = 5V
Capacitance	C	Green Amber		35 15		pF	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, λ_d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4. I_v needs $\pm 15\%$ additional for guaranteed limits.

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

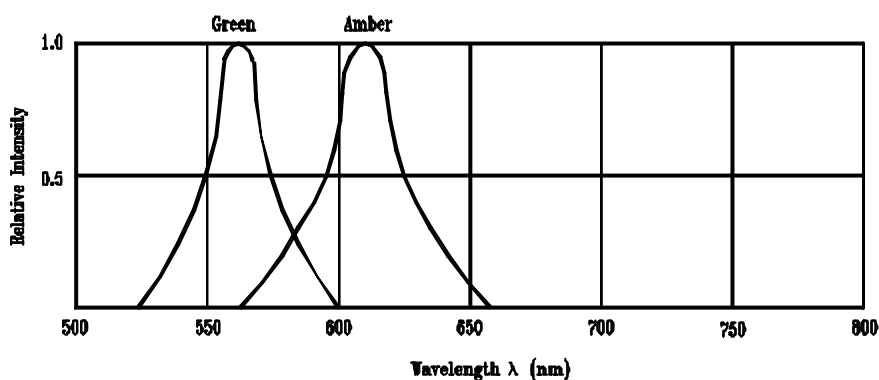


Fig.1 Relative Intensity vs. Wavelength

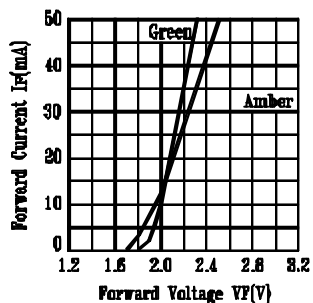


Fig.2 Forward Current vs. Forward Voltage

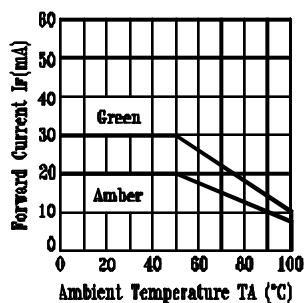


Fig.3 Forward Current Derating Curve

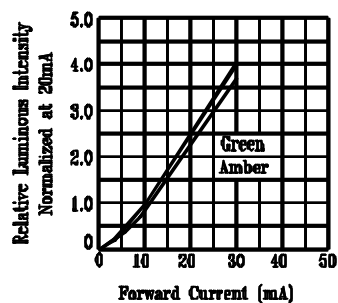


Fig.4 Relative Luminous Intensity vs. Forward Current

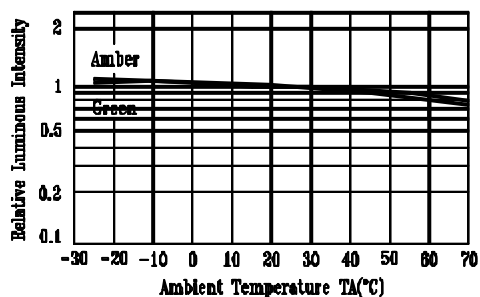


Fig.5 Luminous Intensity vs. Ambient Temperature

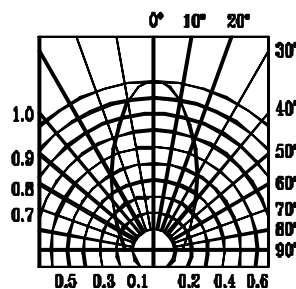


Fig.6 Spatial Distribution