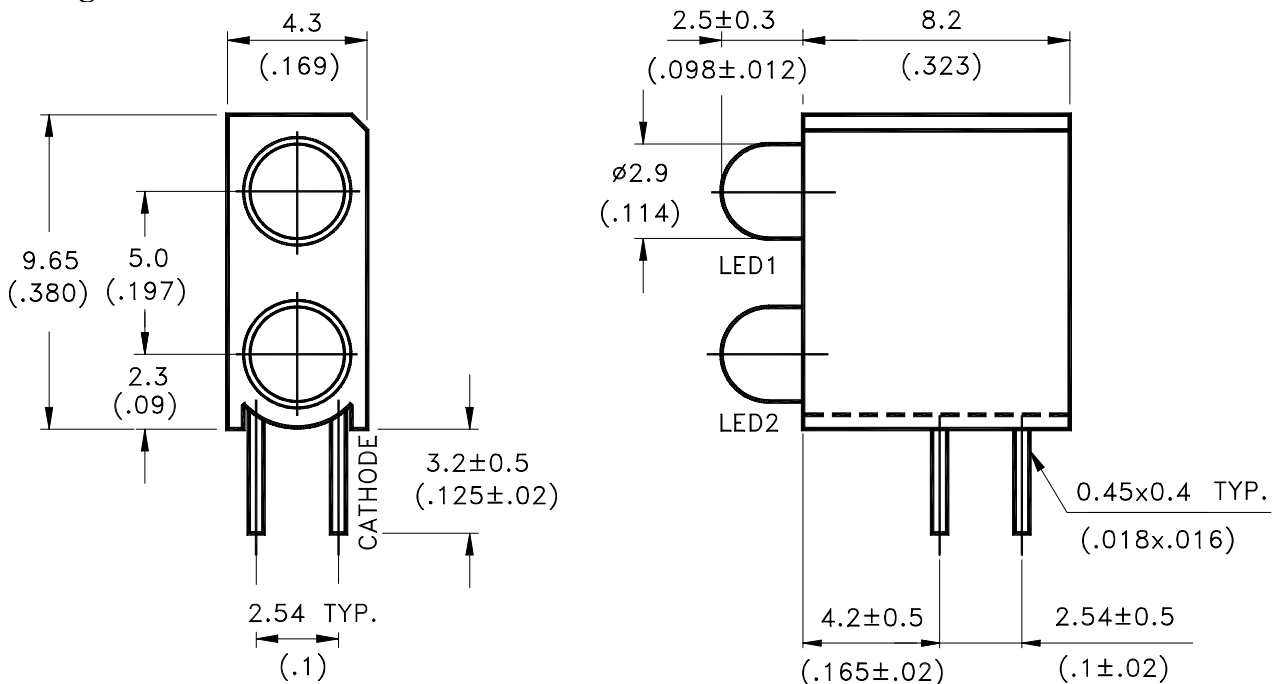


Features

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

Package Dimensions



Part No.	Lens	Source Color
LTL-4231N	Green Diffused	Green
LTL-4281N	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.
4. The holder raw material is PC & the holder is 46L025.
5. The LED1 lamp is LTL-4281N
The LED2 lamp is LTL-4231N.



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 Ta=25°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/°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		

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	LTL-42M3NMHCP	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Green Amber	3.7 5.6	12.6 19		mcd	I _F = 10mA Note 1,4
Viewing Angle	2θ _{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	Δλ	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. θ_{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 ±15% additionary for guaranteed limits.

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

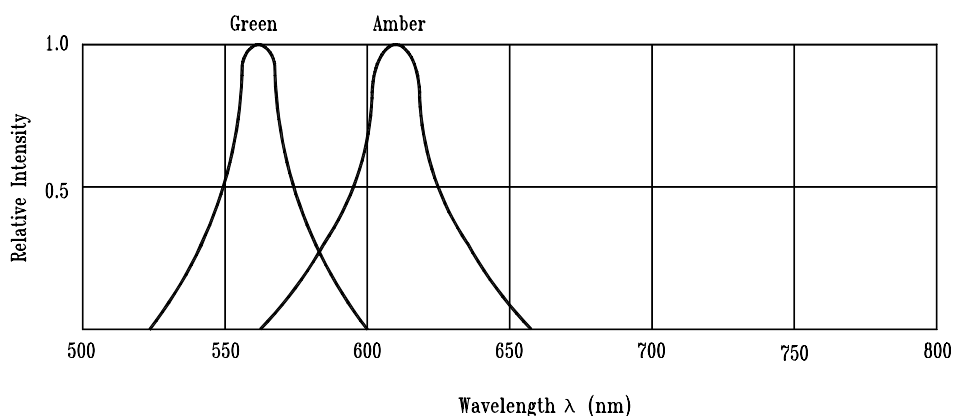


Fig.1 Relative Intensity vs. Wavelength

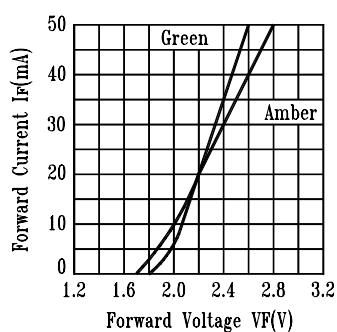


Fig.2 Forward Current vs. Forward Voltage

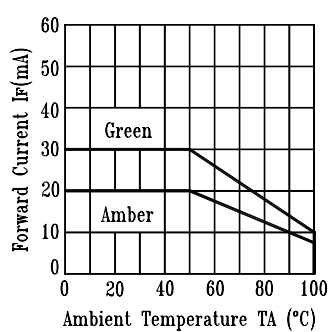


Fig.3 Forward Current Derating Curve

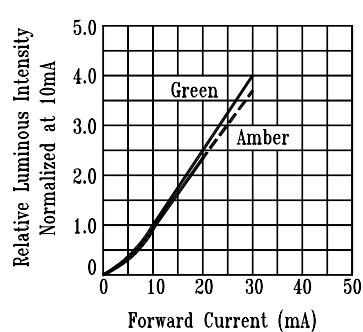


Fig.4 Relative Luminous Intensity vs. Forward Current

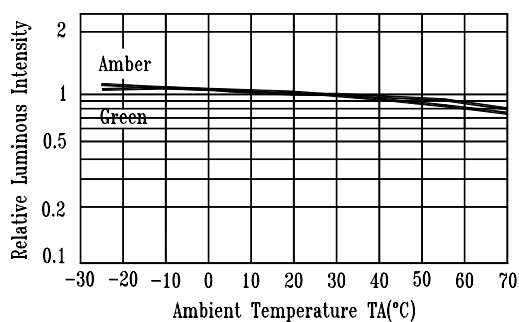


Fig.5 Luminous Intensity vs. Ambient Temperature

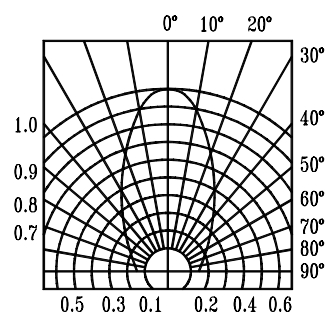


Fig.6 Spatial Distribution