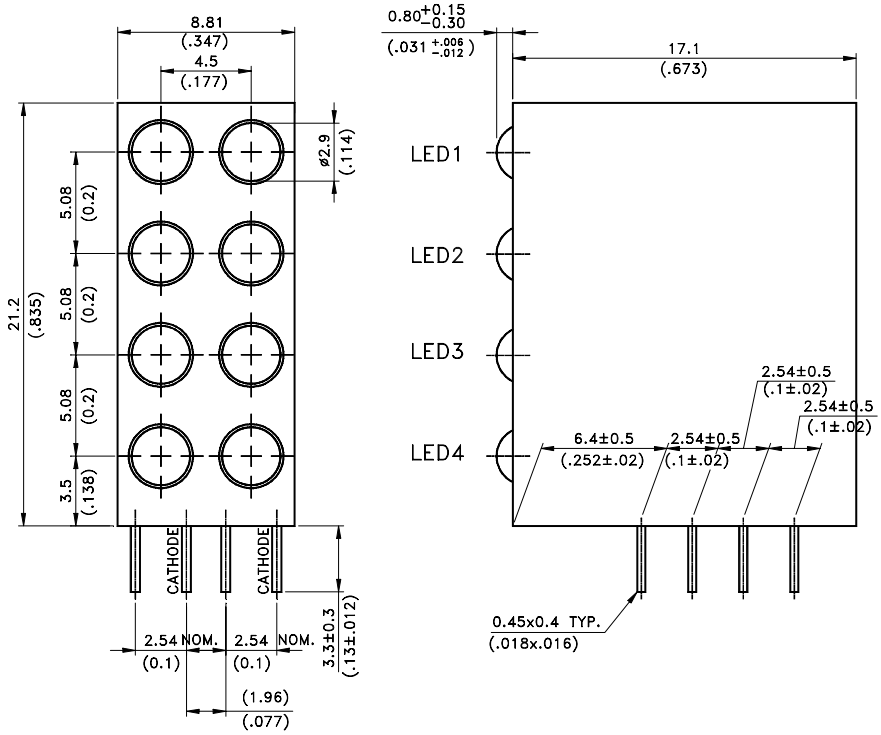
Features

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

Package Dimensions



Part No. LTL-	Lens	Source Color
4251NL	Yellow Diffused	Yellow
4231N	Green Diffused	Green

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm(.010") unless otherwise noted.
3. The holder color is black.
4. The holder raw material is nylon.
5. The LED1 & LED3 lamp are LTL-4251NL
   The LED2 & LED4 lamp are LTL-4231N.

Absolute Maximum Ratings at T_a=25℃

Parameter	Green	Yellow	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℃	0.4	0.25	mA/℃
Reverse Voltage	5	5	V
Operating Temperature Range	-55℃ to + 100℃		
Storage Temperature Range	-55℃ to + 100℃		
Lead Soldering Temperature [1.6mm(.063") From Body]	260℃ for 5 Seconds		

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	LTL-42D1NMHLP	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_V	Yellow Green	1.7 3.7	5.6 12.6		mcd	I_F = 10mA Note 1,4
Viewing Angle	$2\theta_{1/2}$	Yellow Green		60		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Yellow Green		585 565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	Yellow Green		588 569		nm	Note 3
Spectral Line Half-Width	$\Delta\lambda$	Yellow Green		35 30		nm	
Forward Voltage	V_F	Yellow Green		2.1 2.1	2.6 2.6	V	I_F = 20mA
Reverse Current	I_R	Yellow Green			100	μA	V_R = 5V
Capacitance	C	Yellow Green		15 35		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, λd is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4. Iv needs ±15% additionary for guaranteed limits.

Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

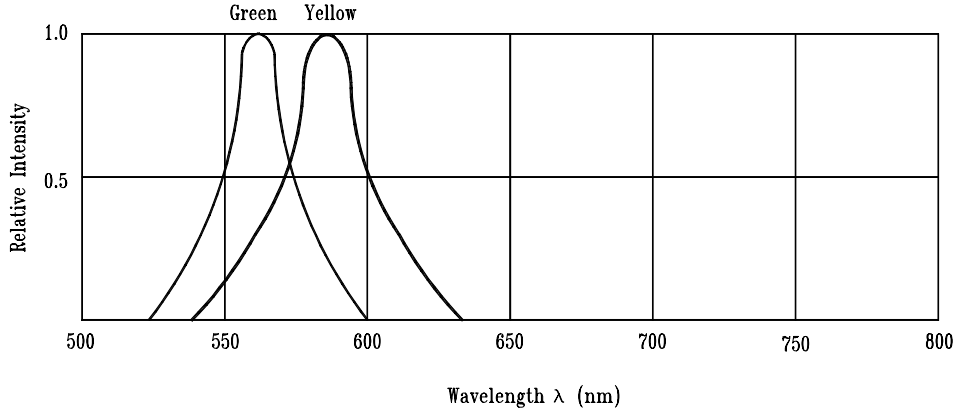


Fig.1 Relative Intensity vs. Wavelength

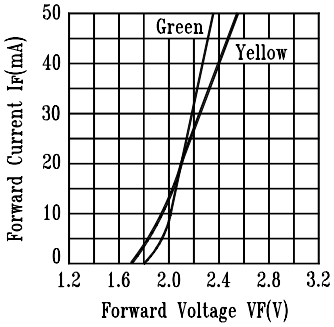


Fig.2 Forward Current vs. Forward Voltage

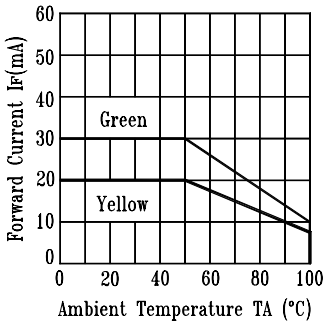


Fig.3 Forward Current Derating Curve

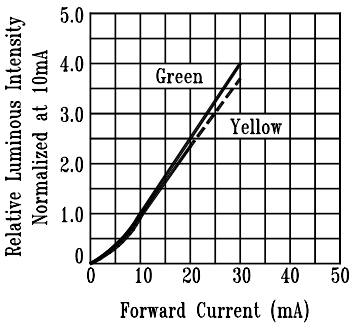


Fig.4 Relative Luminous Intensity vs. Forward Current

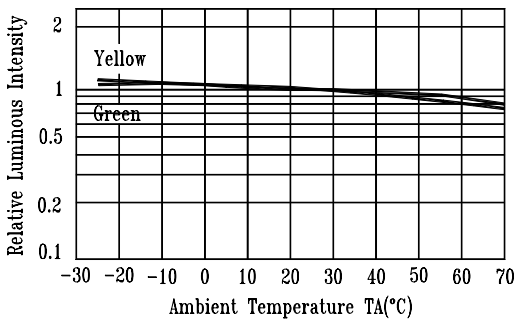


Fig.5 Luminous Intensity vs. Ambient Temperature

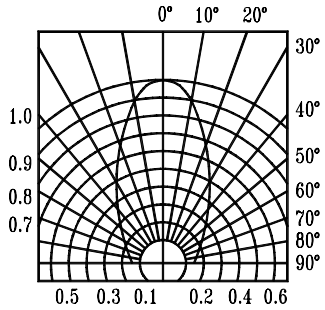


Fig.6 Spatial Distribution