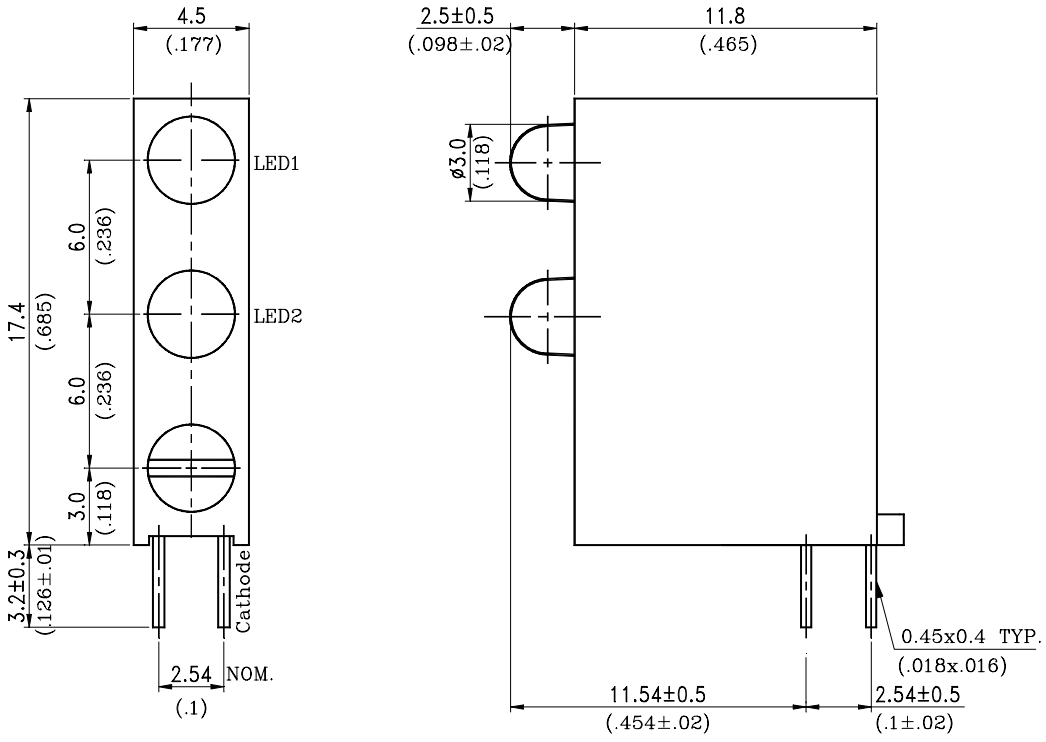
Features

* 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
4231N	Green Diffused	Green
4251N	Yellow Diffused	Yellow

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 holders raw material is nylon.
5. The LED1 lamp is LTL-4231N
   The LED2 lamp is LTL-4251N.

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 T_a=25℃

Parameter	Symbol	LTL-42M2NH59P	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_V	Green	3.7	12.6		mcd	I_F = 10mA Note 1,4
		Yellow	1.7	5.6			
Viewing Angle	$2\theta_{1/2}$	Green		60		deg	Note 2 (Fig.6)
		Yellow					
Peak Emission Wavelength	λp	Green		565		nm	Measurement @Peak (Fig.1)
		Yellow		585			
Dominant Wavelength	λd	Green		569		nm	Note 3
		Yellow		588			
Spectral Line Half-Width	$\Delta\lambda$	Green		30		nm	
		Yellow		35			
Forward Voltage	V_F	Green		2.1	2.6	V	I_F = 20mA
		Yellow		2.1	2.6		
Reverse Current	I_R	Green			100	μA	V_R = 5V
		Yellow					
Capacitance	C	Green		35		pF	V_F = 0 , f = 1MHz
		Yellow		15			

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)

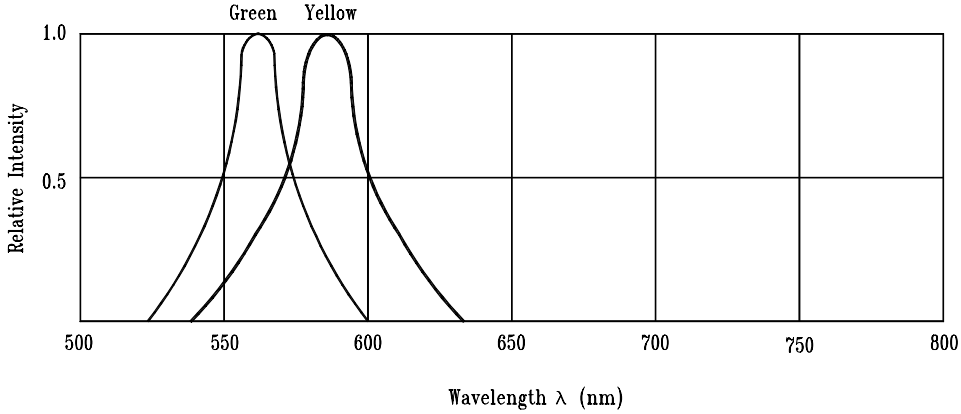


Fig.1 Relative Intensity vs. Wavelength

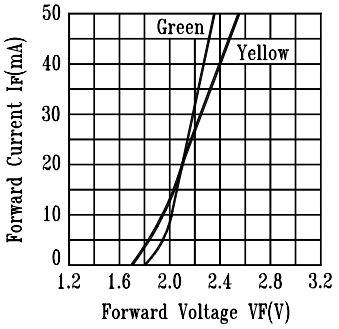


Fig.2 Forward Current vs. Forward Voltage

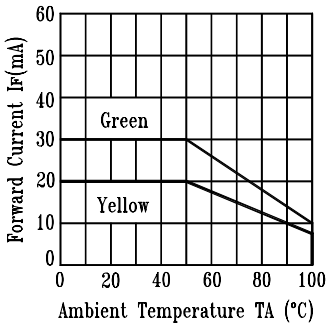


Fig.3 Forward Current Derating Curve

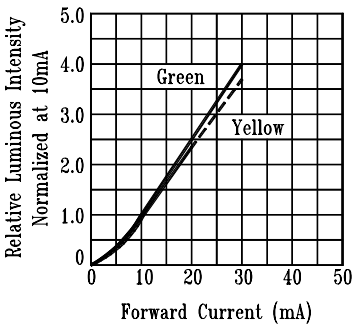


Fig.4 Relative Luminous Intensity vs. Forward Current

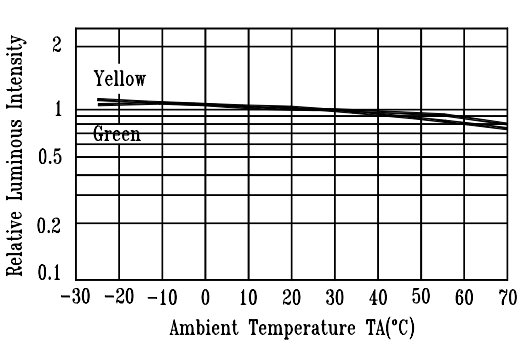


Fig.5 Luminous Intensity vs. Ambient Temperature

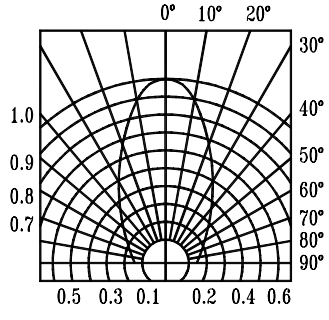


Fig.6 Spatial Distribution