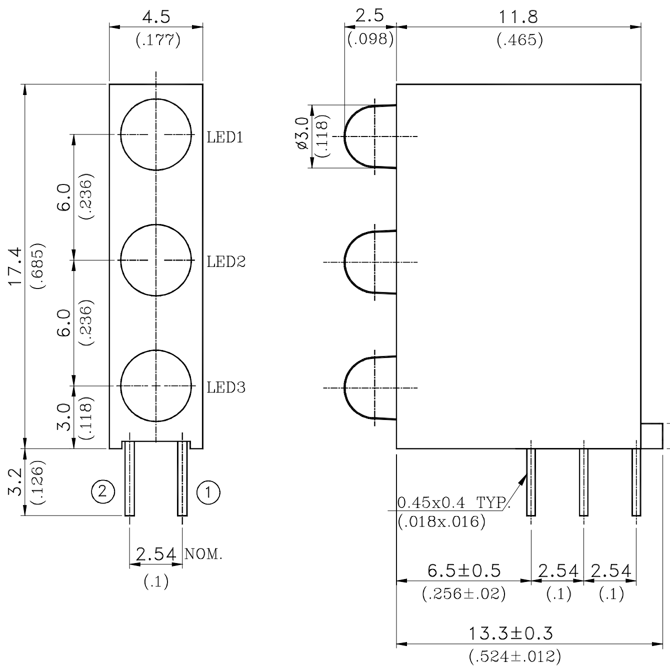
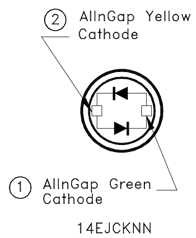
Features

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

Package Dimensions





	①	②
4236N	Green Cathode	Green Anode
14EJCKNN	AllnGap Green Cathode	AllnGap Yellow Cathode
4231N	Green Cathode	Green Anode

Lamp Part No.	Lens	Source Color
LTL-4236N	Water clear	Green
LTL14EJCKNN	Water clear	AllnGap Amber Yellow AllnGap Green
LTL-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 LED1 lamp is LTL-4236N
   The LED2 lamp is LTL14EJCKNN
   The LED3 lamp is LTL-4231N.
5. Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta=25℃

Parameter	Green (FOR 4236N,4231N)	Amber Yellow (FOR 14EJCKNN)	Green (FOR 14EJCKNN)	Unit
Power Dissipation	100	75	75	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	60	60	mA
Continuous Forward Current	30	30	30	mA
Derating Linear From 50℃	0.4	0.4	0.4	mA/℃
Reverse Voltage (Note 1)	5	5	5	V
Operating Temperature Range	-55℃ to + 100℃	-40℃ 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-4236N LTL-4231N	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_V	Green Green	19 3.7	60 12.6		mcd	I_F = 10mA Note 1,4
Viewing Angle	$2\theta_{1/2}$	Green Green		45 60		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Green Green		565 565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	Green Green		569 569		nm	Note 3
Spectral Line Half-Width	$\Delta\lambda$	Green Green		30 30		nm	
Forward Voltage	V_F	Green Green		2.1 2.1	2.6 2.6	V	I_F = 20mA
Reverse Current	I_R	Green Green			100	μA	V_R = 5V
Capacitance	C	Green Green		35 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.

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	LTL14EJCKNN	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_V	Amber Yellow Green	30 38	85 110		mcd	I_F = 20mA Note 1,4
Viewing Angle	$2\theta_{1/2}$	Amber Yellow Green		60		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	Amber Yellow Green		595 574		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	Amber Yellow Green		592 571		nm	Note 3
Spectral Line Half-Width	$\Delta\lambda$	Amber Yellow Green		15 11		nm	
Forward Voltage	V_F	Amber Yellow Green		2.05 2.1	2.4 2.4	V	I_F = 20mA
Reverse Current	I_R	Amber Yellow Green			100	μA	V_R = 5V, Note 5
Capacitance	C	Amber Yellow Green		40 40		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.

5. Reverse current is controlled by dice source.

Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

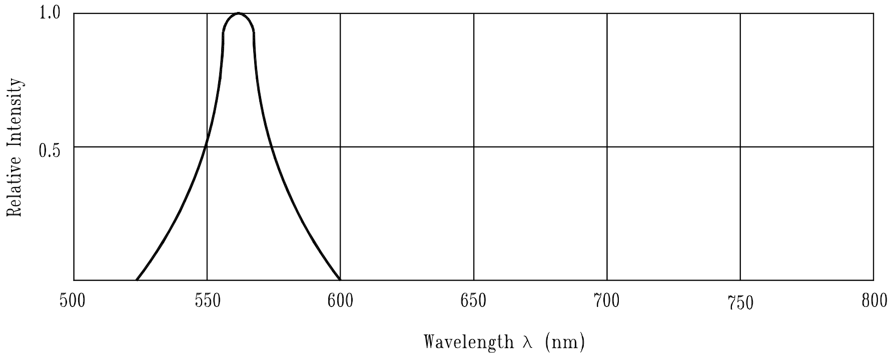


Fig.1 Relative Intensity vs. Wavelength

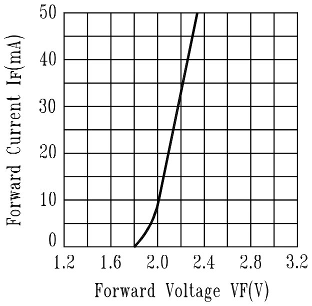


Fig.2 Forward Current vs. Forward Voltage

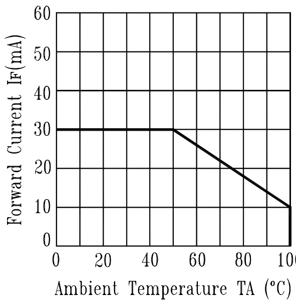


Fig.3 Forward Current Derating Curve

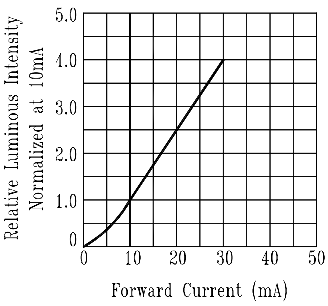


Fig.4 Relative Luminous Intensity vs. Forward Current

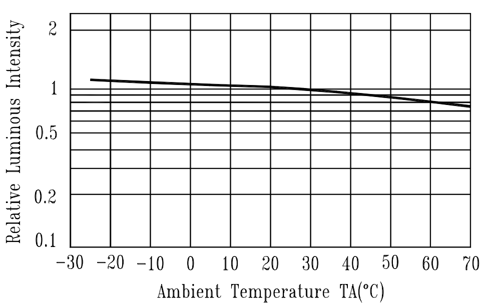


Fig.5 Luminous Intensity vs. Ambient Temperature

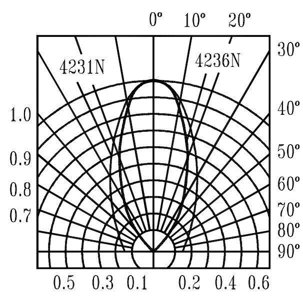


Fig.6 Spatial Distribution

Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

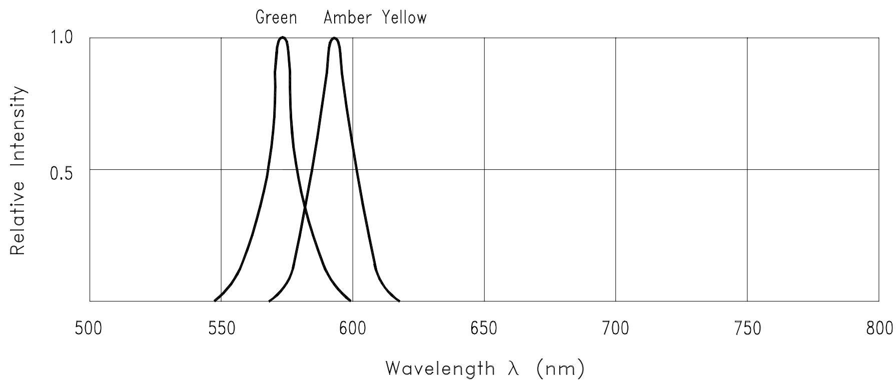


Fig.1 Relative Intensity vs. Wavelength

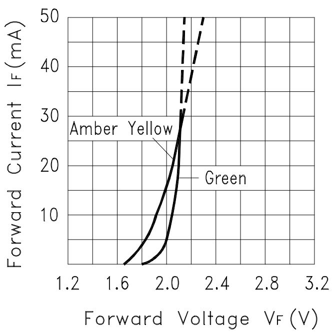


Fig.2 Forward Current vs. Forward Voltage

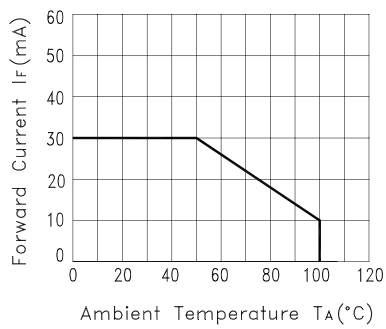


Fig.3 Forward Current Derating Curve

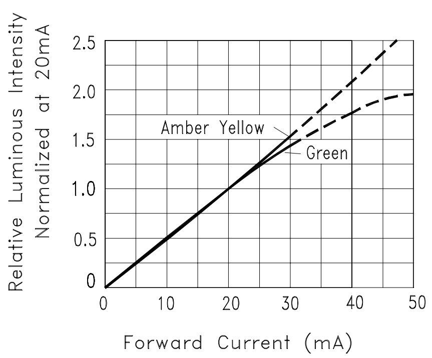


Fig.4 Relative Luminous Intensity vs. Forward Current

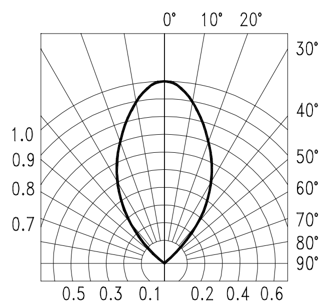


Fig.5 Spatial Distribution