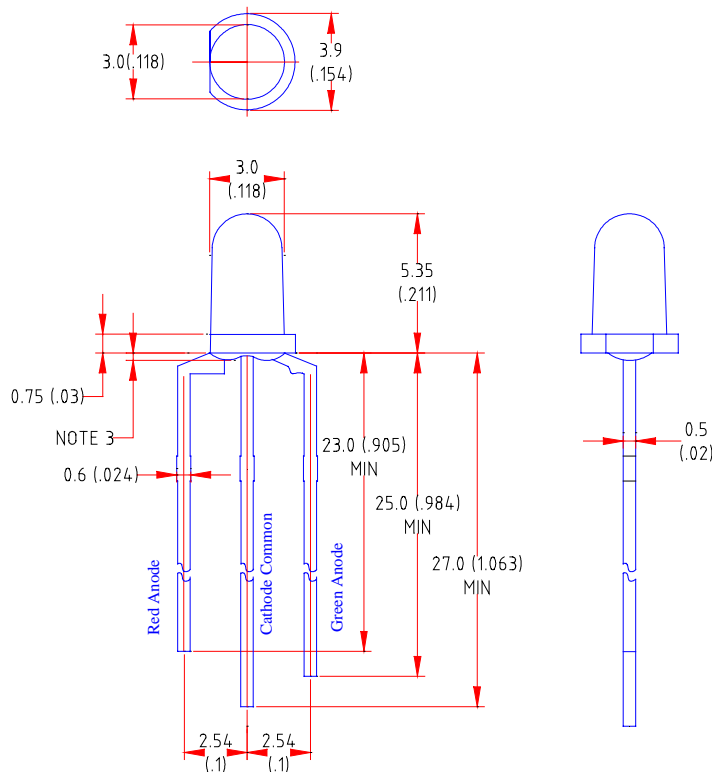




### Features

- ◆ Standard T-1 diameter package
- ◆ Wide viewing angle
- ◆ General purpose leads
- ◆ Reliable and rugged

### Package Dimension:



Part NO.	Lens Color	Source Color
LL-309IGM2A-005	White Diffused	Red & Green

### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(.010)$ mm unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04”) max
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice



**Absolute Maximum Ratings at Ta=25°C**

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	50	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +80°C	
Storage Temperature Range	-40°C to +80°C	
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds	

**Electrical Optical Characteristics at Ta=25°C**

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	Green		30		mcd	I <sub>f</sub> =20mA Note 1
		Red		20			
Viewing Angle	2θ <sub>1/2</sub>	Green		90		Deg	Note 2
		Red		90			
Peak Emission Wavelength	λ <sub>p</sub>	Green		568		nm	Measurement @Peak
		Red		640			
Dominant Wavelength	λ <sub>d</sub>	Green		572		nm	Note 3
		Red		628			
Spectral Line Half-Width	Δλ	Green		30		nm	
		Red		42			
Forward Voltage	V <sub>F</sub>	Green	1.7	2.2	2.6	V	I <sub>f</sub> =20mA
		Red	1.6	1.95	2.5		
Reverse Current	I <sub>R</sub>	Green			100	μA	V <sub>R</sub> =5V
		Red					

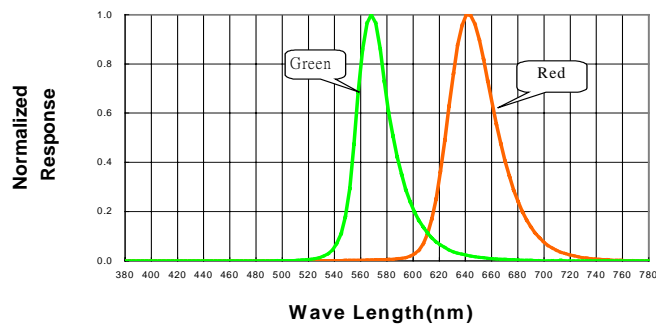
Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength (λ<sub>d</sub>) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

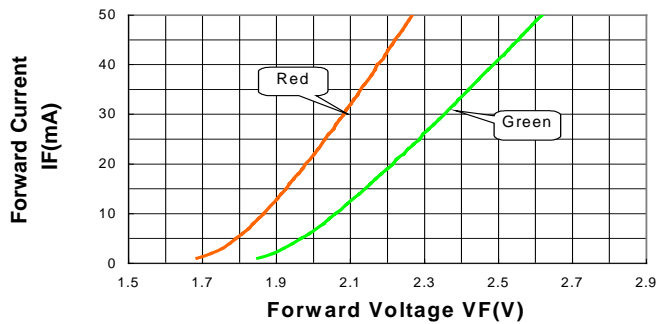


Typical Electrical / Optical Characteristics Curves  
(25°C Ambient Temperature Unless Otherwise Noted)

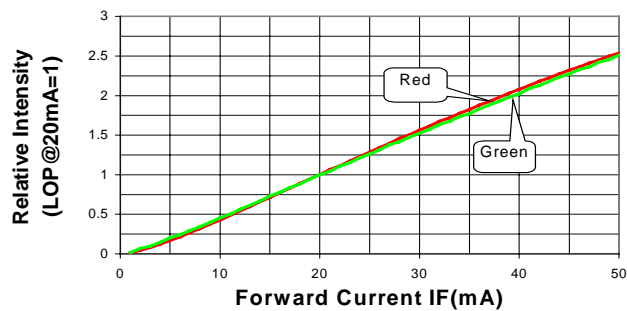
Spectral Radiance Green Peak @ 568nm  
Red Peak @ 640nm



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

