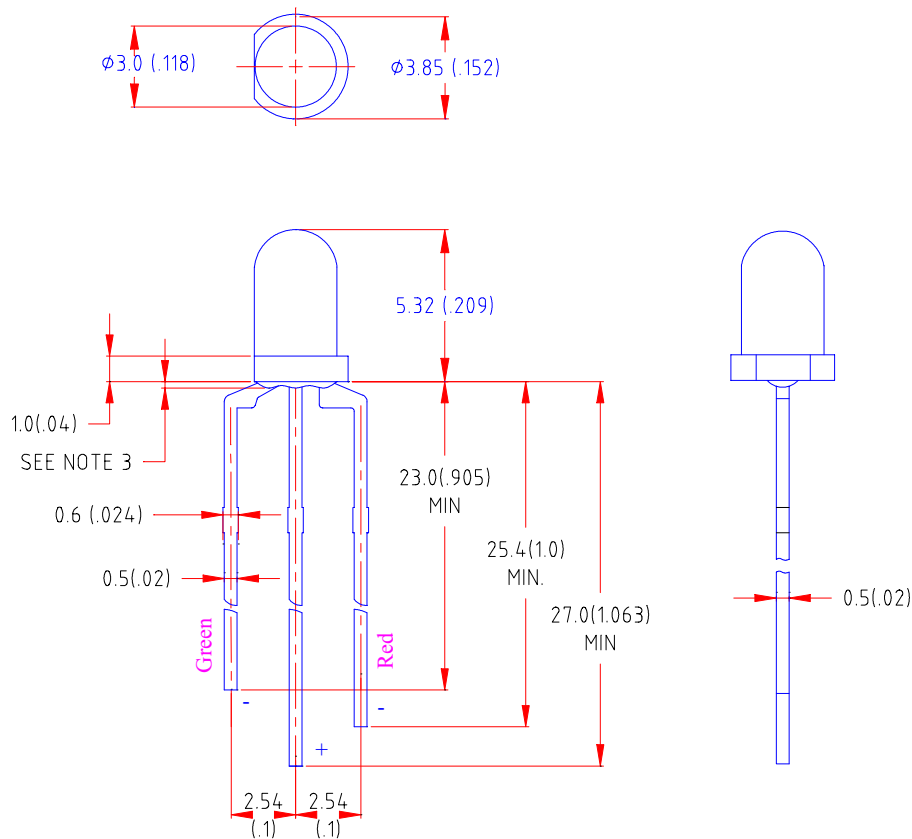


LUCKY LIGHT

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

Package Dimension:



Part NO.	Lens Color	Source Color
LL-309IGM2E-001	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



LUCKY LIGHT

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	20	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 _v	Green		6		mcd	I _f =20mA Note 1
		Red		4			
Viewing Angle	2θ _{1/2}	Green		38		Deg	Note 2
		Red		38			
Peak Emission Wavelength	λ _p	Green		568		nm	Measurement @Peak
		Red		640			
Dominant Wavelength	λ _d	Green		573		nm	Note 3
		Red		623			
Spectral Line Half-Width	△λ	Green		30		nm	
		Red		43			
Forward Voltage	V _F	Green		2.2	2.6	V	I _F =20mA
		Red		2.0	2.5		
Reverse Current	I _R	Green			100	μA	V _R =5V
		Red					

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.



LUCKY LIGHT

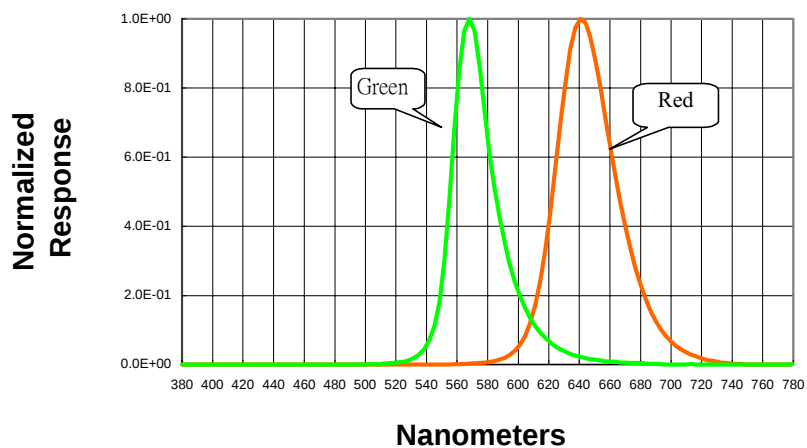
Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

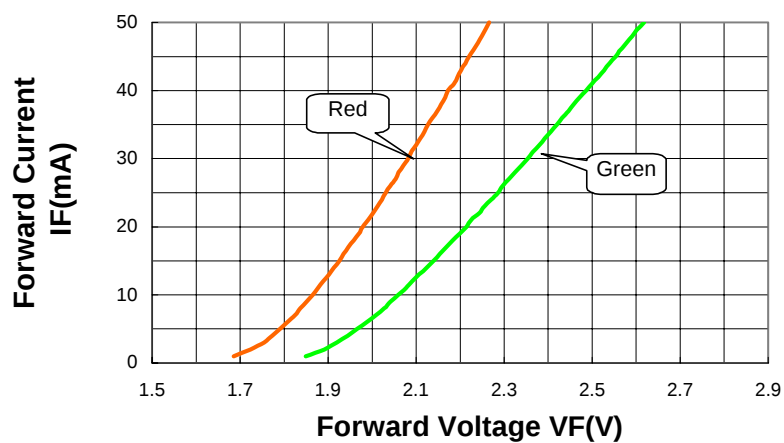
Spectral Radiance

Green Peak @ 568nm

Red Peak @ 640nm



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current

