

LL-509 IGM2E-007

DATA SHEET

QC :

ENG :

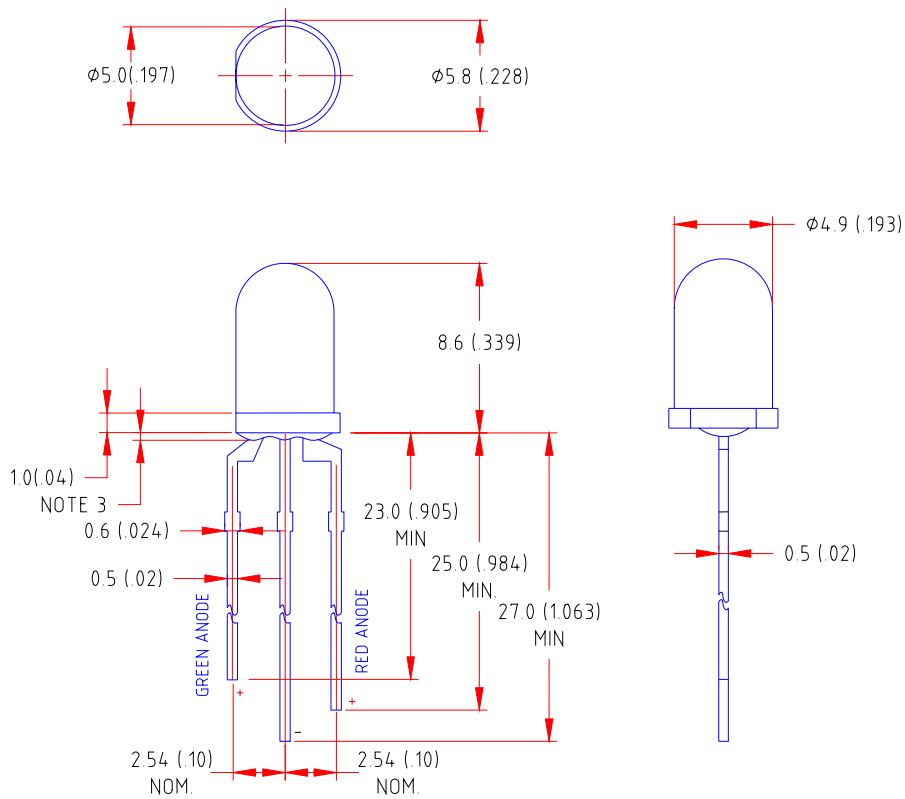
Prepared By:

Part No.	LL-509IGM2E-007	Spec No.	S/N-01060624D	Page	1 of 5
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Features

- ◆ Standard T-1 3/4 diameter package
- ◆ Wide viewing angle
- ◆ General purpose leads
- ◆ Reliable and rugged

Package Dimension:



Part NO.	Lens Color	Source Color
LL-509IGM2E-007	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 $1.0 \text{mm} (.04)$ 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

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	0.4	mA/
Reverse Voltage	5	V
Operating Temperature Range	-40 to +80	
Storage Temperature Range	-40 to +80	
Lead Soldering Temperature [4mm(.157") From Body]	260 for 5 Seconds	

Electrical Optical Characteristics at Ta=25

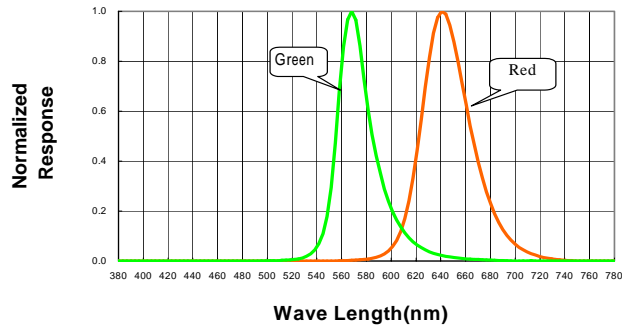
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Green	15	32	60	mcd	I _f =20mA Note 1
		Red	13	30	60		
Viewing Angle	2 _{1/2}	Green	50	60	70	Deg	Note 2
		Red	50	60	70		
Peak Emission Wavelength	p	Green	564	568	572	nm	Measurement @Peak
		Red	636	640	644		
Dominant Wavelength	d	Green	564	571	576	nm	Note 3
		Red	623	628	634		
Spectral Line Half-Width		Green	25	30	35	nm	
		Red	35	40	40		
Forward Voltage	V _F	Green	1.7	2.2	2.6	V	I _f =20mA
		Red	1.6	1.95	2.5		
Reverse Current	I _R	Green			100	μA	V _R =5V
		Red					

Note:

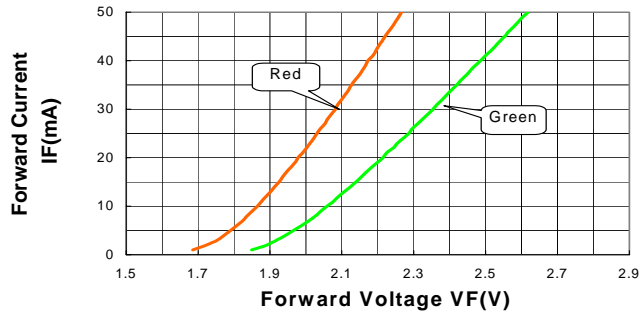
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. _{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength (d) is derived from the CIE chromaticity diagram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

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

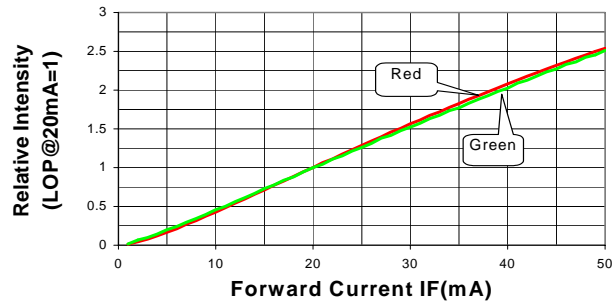
Spectral Radiance **Green Peak @ 568nm**
 Red Peak @ 640nm



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

