LL-509IGM2E-008

5Ø Bi-color (Red & Green) , 3 pin, Common Anode

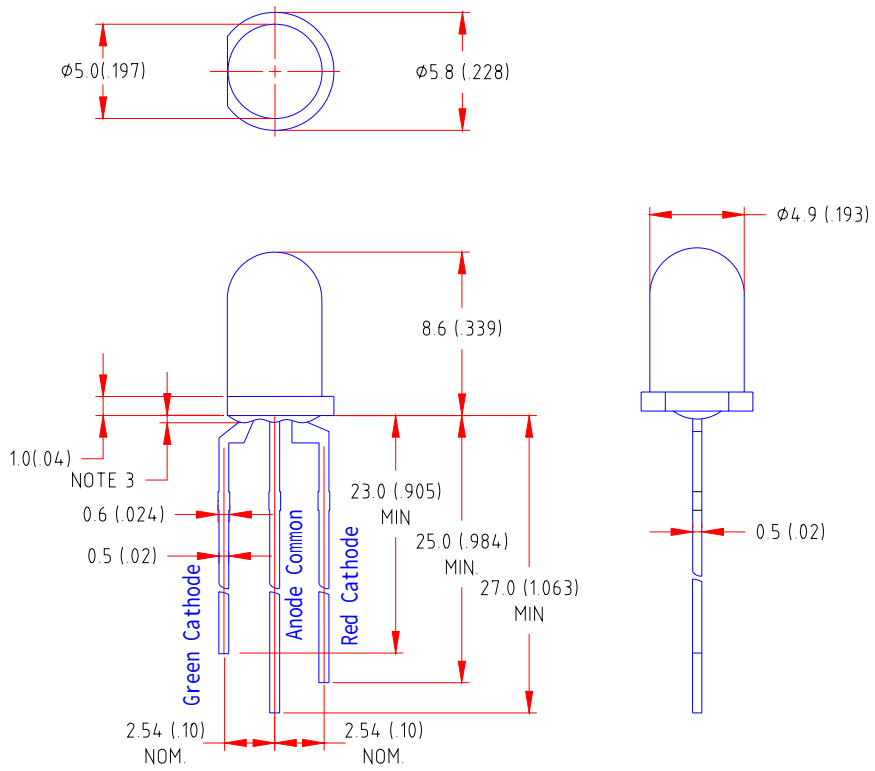
DATA SHEET

QC: ENG: Prepared By:

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-008	White Diffused	Red & Green

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±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℃

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	Iv	Red	0.8	4	8	mcd	I_f=20mA Note 1
		Green	1	6	12		
Viewing Angle	$2\theta_{1/2}$	Red	50	60	70	Deg	Note 2
		Green	50	60	70		
Peak Emission Wavelength	λp	Red	636	644	568	nm	I_F=20mA
		Green	564	568	572		
Dominant Wavelength	λd	Red	620	626	632	nm	I_F=20mA Note 3
		Green	564	571	576		
Spectral Line Half-Width	$\triangle\lambda$	Red	35	40	45	nm	I_F=20mA
		Green	25	30	35		
Forward Voltage	V_F	Red	1.6	2.0	2.5	V	I_F=20mA
		Green	1.7	2.2	2.6		
Reverse Current	I_R	Red			100	μA	V_R=5V
		Green					

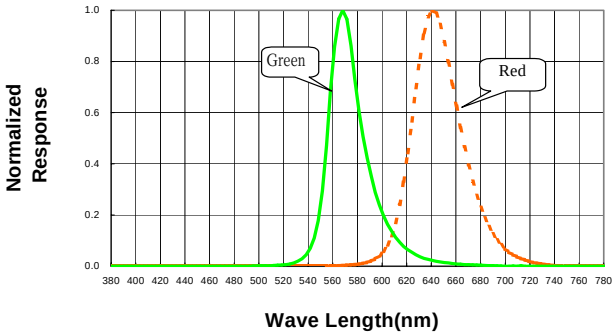
Note:

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.

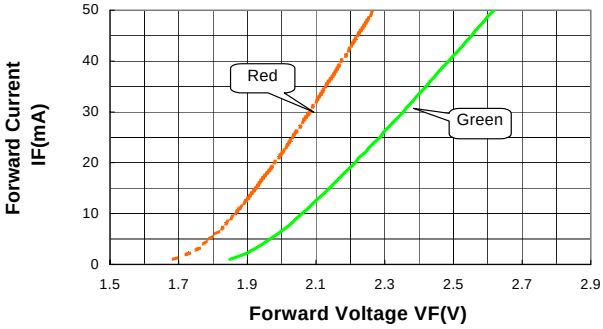
Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

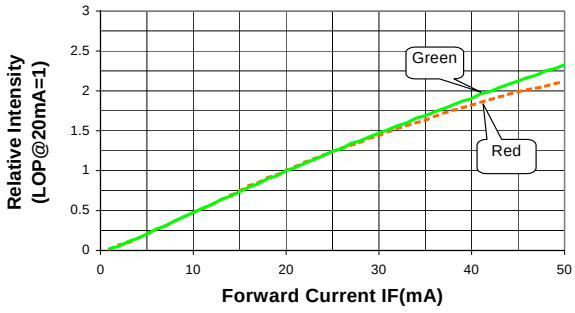
Spectral Radiance Green Peak @ 568nm
Red Peak @ 644nm



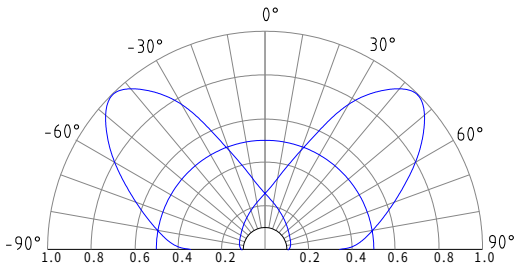
Forward Current
vs Forward Voltage



Relative Luminous Intensity
vs Forward Current



Beam Pattern



Relative Intensity (LOP @ MAX=1)