

LL-509BGC2E-001

DATA SHEET

QC :

ENG :

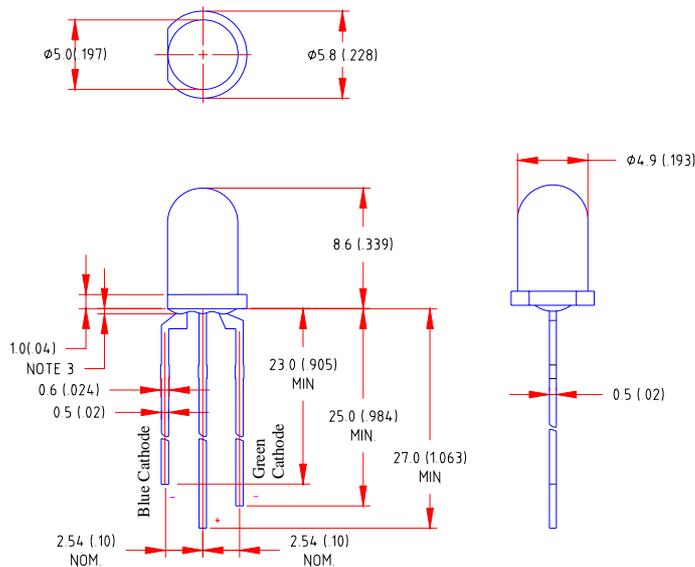
Prepared By:

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Features

- ◆ High intensity
- ◆ 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-509BGC2E-001	Water Clear	Blue & 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
6. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

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	35	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

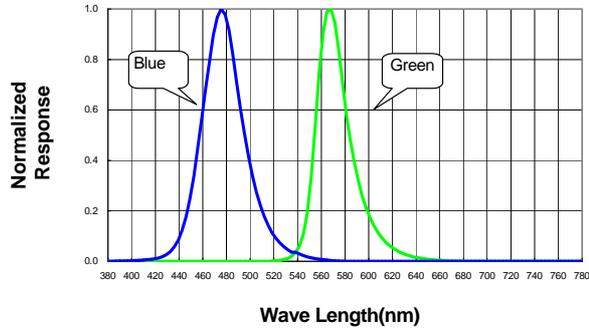
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Blue		600		mcd	I _f =20mA Note 1
		Green		120			
Viewing Angle	2 _{1/2}	Blue		22		Deg	Note 2
		Green		22			
Peak Emission Wavelength	λ _p	Blue		468		nm	I _f =20mA
		Green		568			
Dominant Wavelength	λ _d	Blue		472		nm	I _f =20mA Note 3
		Green		573			
Spectral Line Half-Width		Blue		30		nm	I _f =20mA
		Green		29			
Forward Voltage	V _F	Blue		3.6	4.0	V	I _f =20mA
		Green		2.2	2.6		
Reverse Current	I _R	Blue			100	μA	V _R =5V
		Green					

Note:

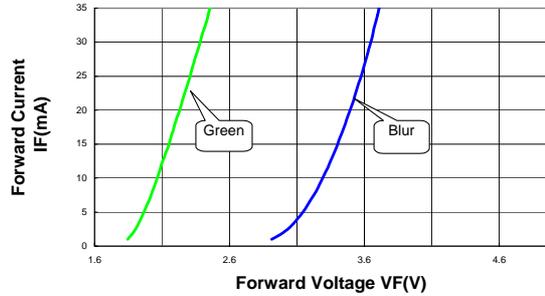
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. _{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram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

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

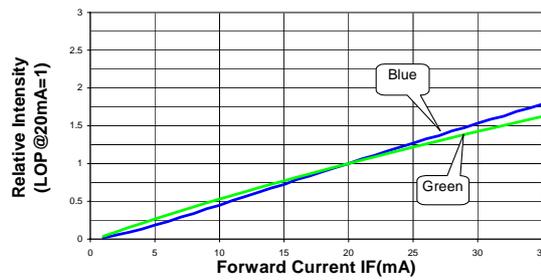
Spectral Radiance Green Peak @ 568nm
 Blue Peak @ 468nm



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

