

LL-509ABC2E-003

DATA SHEET

QC :

ENG :

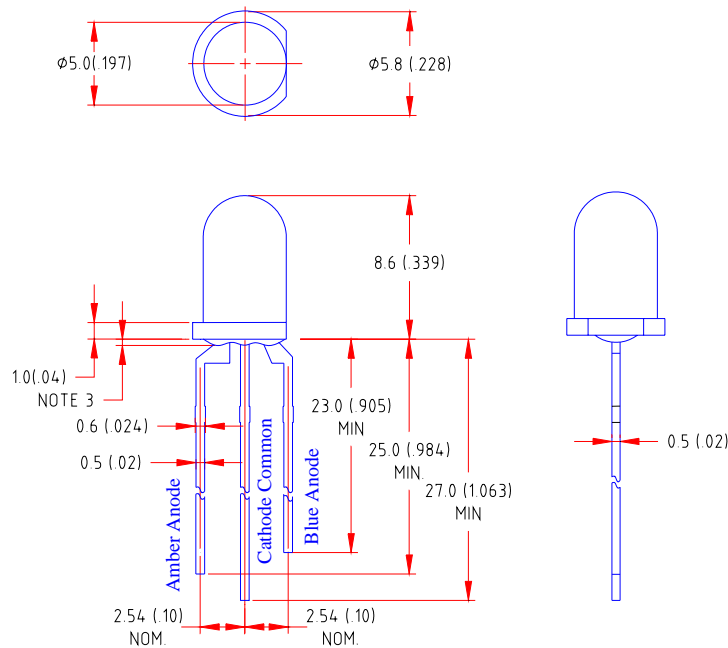
Prepared By:

Part No.	LL-509ABC2E-003	Spec No.	S/N-01090906D	Page	1 of 5
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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-509ABC2E-003	Water Clear	Amber & Blue

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

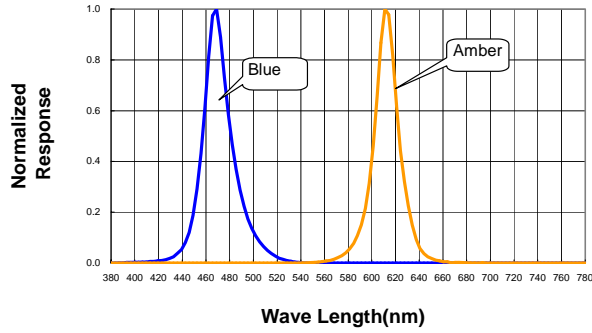
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Amber	280	650	1200	mcd	I _f =20mA Note 1
		Blue	200	450	800		
Viewing Angle	2 _{1/2}	Amber	24	30	36	Deg	Note 2
		Blue	24	30	36		
Peak Emission Wavelength	p	Amber	607	612	617	nm	Measurement @Peak
		Blue	465	470	475		
Dominant Wavelength	d	Amber	600	605	610	nm	Note 3
		Blue	464	474	480		
Spectral Line Half-Width		Amber	15	20	25	nm	
		Blue	19	24	29		
Forward Voltage	V _F	Amber	1.6	1.9	2.5	V	I _f =20mA
		Blue	2.8	3.6	4.0		
Reverse Current	I _R	Amber	---	---	100	μA	V _R =5V
		Blue					

Note:

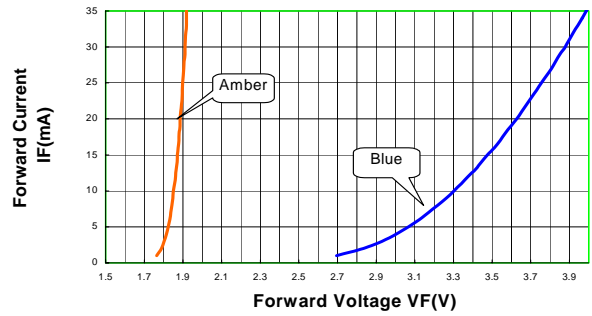
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. _{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength (d) is derived from the CIE chromaticity diagram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

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

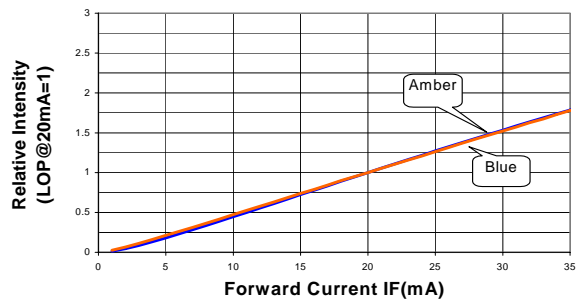
Spectral Radiance Amber Peak @ 612nm
 Green Peak @ 570nm



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

