LL-309AZM2E-001

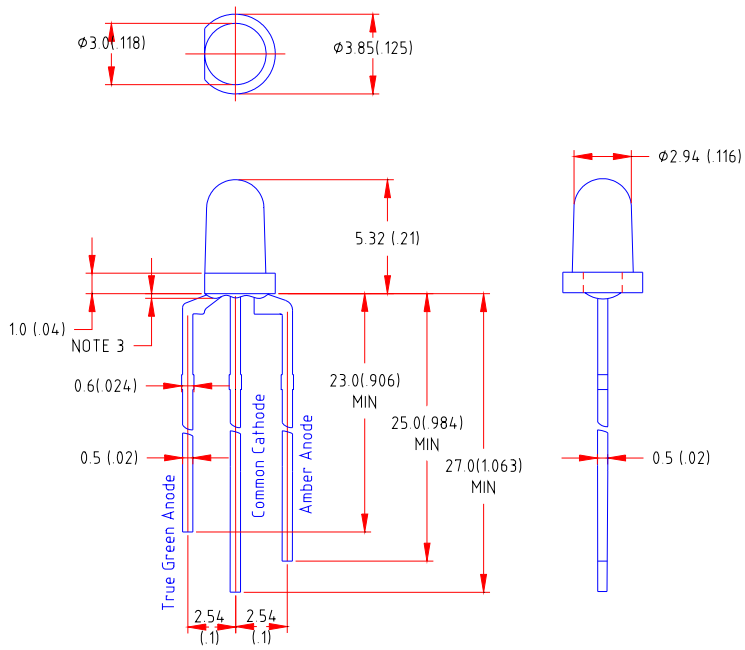
DATA SHEET

QC: ENG: Prepared By:

Features

- ♦ High intensity
- ♦ Standard T-1 diameter package
- ♦ Wide viewing angle
- ♦ General purpose leads
- ♦ Reliable and rugged

Package Dimension:



Part NO.	Chip Material		Lens Color	Source Color
LL-309AZM2E-001	Amber	Green	Water Clear	Amber & True Green
	AlGaInP	GaInN		

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:
   Siatic Electricity and surge damages the LED. lt is recommend to use a wrist band or anti-electrostatic glove when handling the LED.All devices, equipment and machinery must be properly grounded.
7. This data-sheet only valid for six months.

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℃

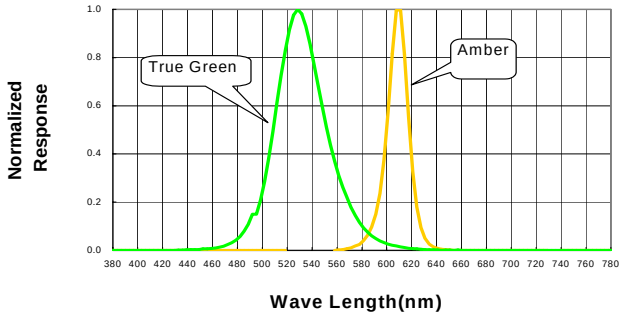
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Amber	50	110	240	mcd	I_f=20mA Note 1
		True Green	140	300	550		
Viewing Angle	$2\theta_{1/2}$	Amber	95	105	115	Deg	Note 2
		True Green	95	105	115		
Peak Emission Wavelength	λp	Amber	600	605	610	nm	Measurement @Peak
		True Green	520	525	630		
Dominant Wavelength	λd	Amber	600	605	610	nm	Note 3
		True Green	520	534	544		
Spectral Line Half-Width	$\triangle\lambda$	Amber	15	20	25	nm	
		True Green	30	35	40		
Forward Voltage	V_F	Amber	1.6	2.0	2.5	V	I_F=20mA
		True Green	2.8	3.2	4.0		
Reverse Current	I_R	Amber	---	---	100	μA	V_R=5V
		True Green					

Note:

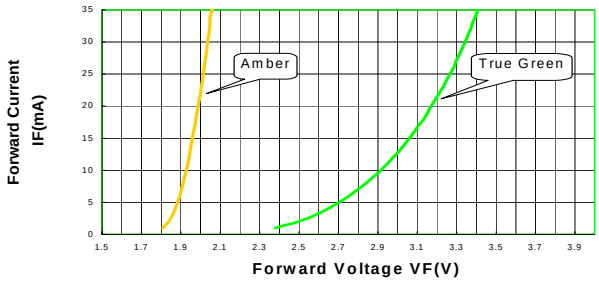
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength (λd) is derived from the CIE chromaticity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

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

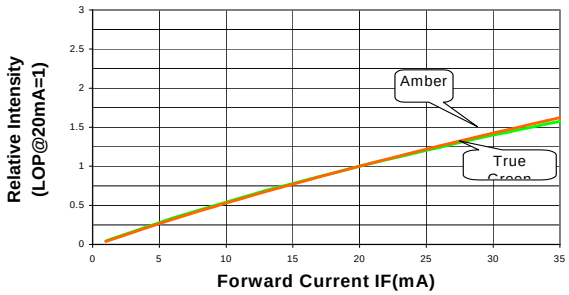
Spectral Radiance Amber Peak @ 605nm
True Green Peak @ 525nm



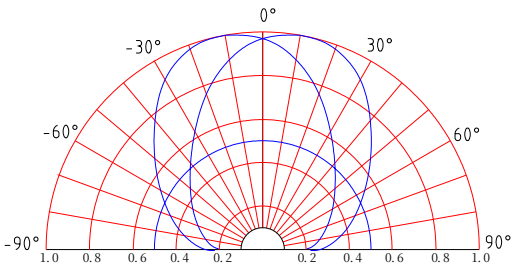
Forward Current
vs Forward Voltage



Relative Luminous Intensity
vs Forward Current



Beam Pattern



Relative Intensity (LOP @ MAX=1)