LL-309BYM2E-001

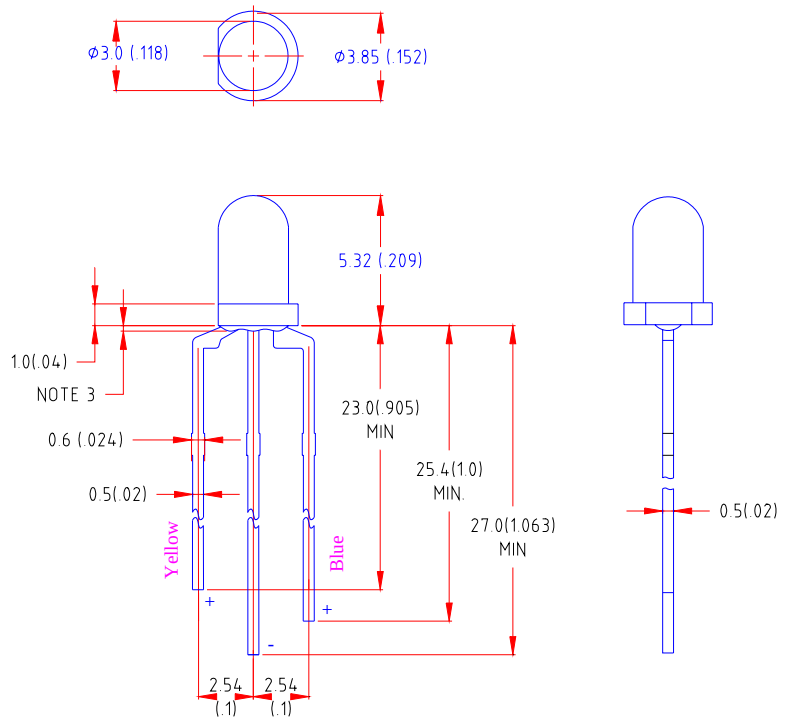
DATA SHEET

QC: ENG: Prepared By:

Features

- Standard T-1 type package
- Wide viewing angle
- General purpose leads
- Reliable and rugged

Package Dimension:



Part NO.	Lens Color	Source Color
LL-309BYM2E-001	White Diffused	Blue & Yellow

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.

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℃

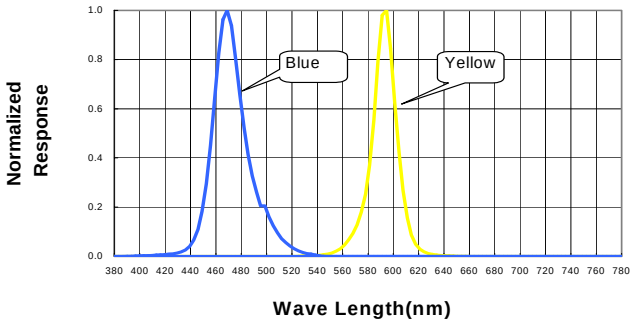
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Blue		70		mcd	I_f=20mA Note 1
		Yellow		200			
Viewing Angle	$2\theta_{1/2}$	Blue		90		Deg	Note 2
		Yellow		90			
Peak Emission Wavelength	λp	Blue		468		nm	Measurement @Peak
		Yellow		596			
Dominant Wavelength	λd	Blue		471		nm	Note 3
		Yellow		595			
Spectral Line Half-Width	$\triangle\lambda$	Blue		25		nm	
		Yellow		20			
Forward Voltage	V_F	Blue		3.7	4.5	V	I_F=20mA
		Yellow		1.95	2.50		
Reverse Current	I_R	Blue			100	μA	V_R=5V
		Yellow					

Note:

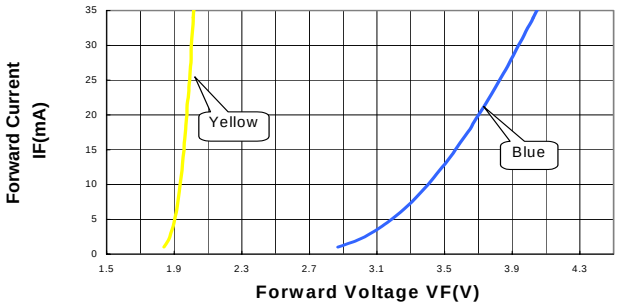
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength (λd) is derived from the CIE chromaticity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

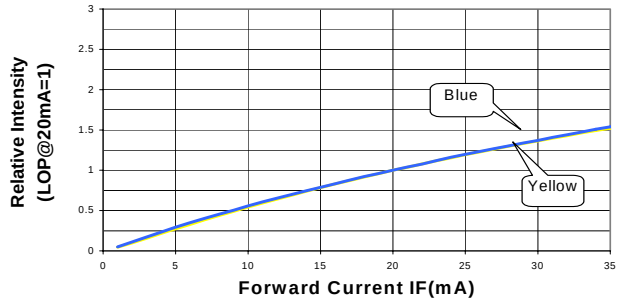
Spectral Radiance Yellow Peak @ 596nm
Blue Peak @ 468nm



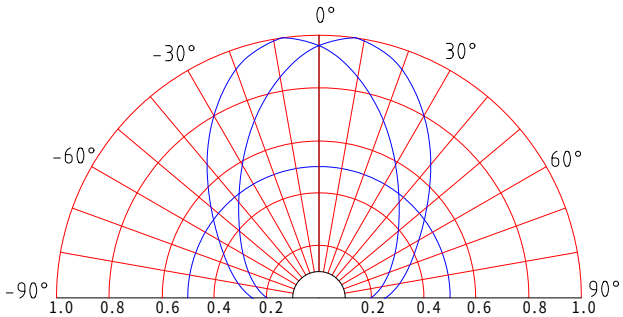
Forward Current
vs Forward Voltage



Relative Luminous Intensity
vs Forward Current



Beam Pattern



Relative Intensity (LOP @ MAX=1)