

Preliminary

LL-U46Z1C-013

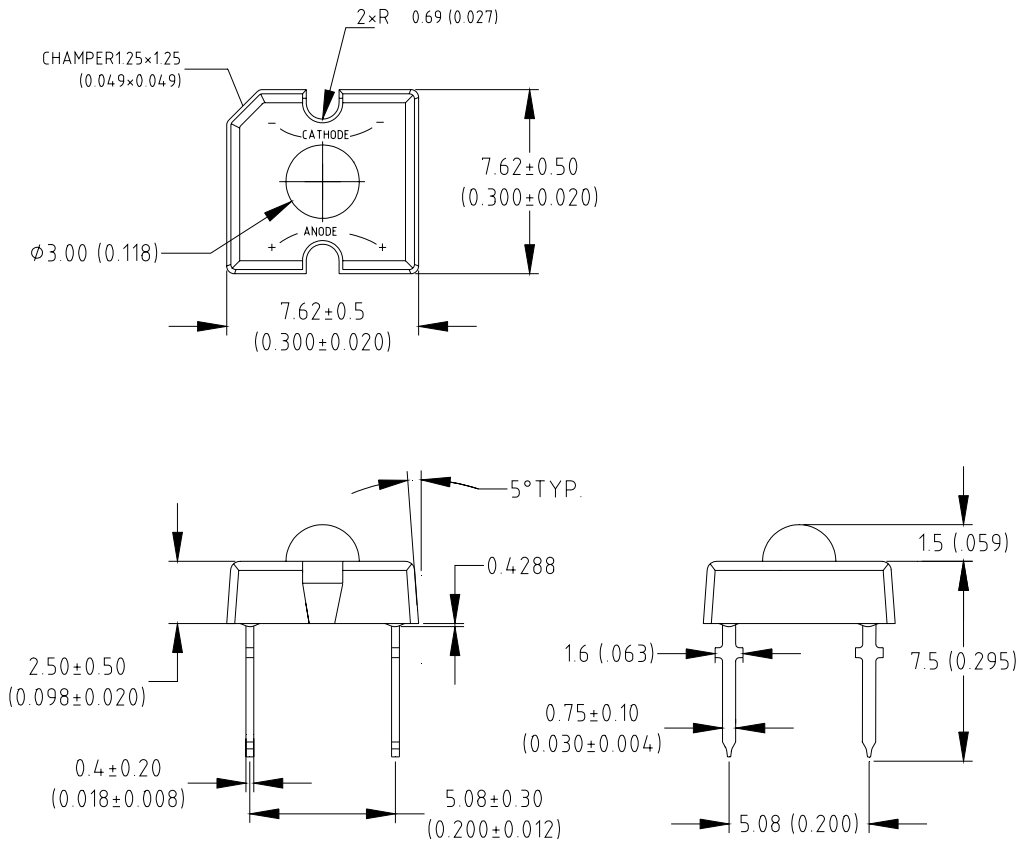
DATA SHEET

QC :

ENG :

Prepared By:

Package Dimension:



Part NO.	Chip Material	Lens Color	Source Color
LL-U46Z1C-013	InGaN	Water Clear	Super Bright True Green

Notes:

- All dimensions are in millimeters (inches).
- Tolerance is ± 0.25 mm (.010") unless otherwise noted.
- Protruded resin under flange is 1.0mm(.04") max
- Lead spacing is measured where the leads emerge from the package.
- Specifications are subject to change without notice
- Precautions for ESD:
 STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.
- This data-sheet only valid for six months.

Absolute Maximum Ratings at Ta=25

Parameter	MAX.	Unit
Power Dissipation	120	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Derating Linear From 50	0.4	mA/
Reverse Voltage	5	V
Operating Temperature Range	-30 to +80	
Storage Temperature Range	-40 to +100	
Lead Soldering Temperature [4mm(.157") From Body]	260 for 5 Seconds	

Electrical Optical Characteristics at Ta=25

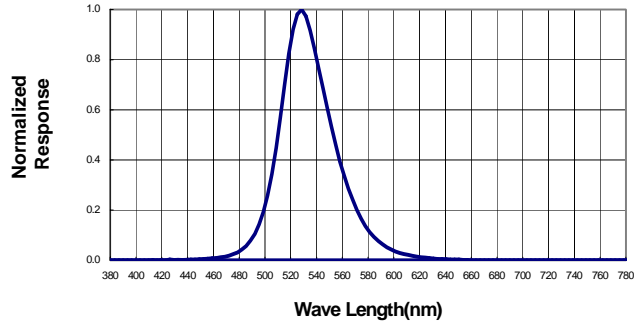
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_v	460	1000	2200	mcd	$I_f=20mA$ (Note 1)
Viewing Angle	$2_{1/2}$	80	90	100	Deg	(Note 2)
Peak Emission Wavelength	λ_p	520	525	530	nm	$I_f=20mA$
Dominant Wavelength	λ_d	520	530	540	nm	$I_f=20mA$ (Note 3)
Spectral Line Half-Width		30	35	40	nm	$I_f=20mA$
Forward Voltage	V_f	2.8	3.2	4.0	V	$I_f=20mA$
Reverse Current	I_R	---	---	100	μA	$V_R=5V$

Notes:

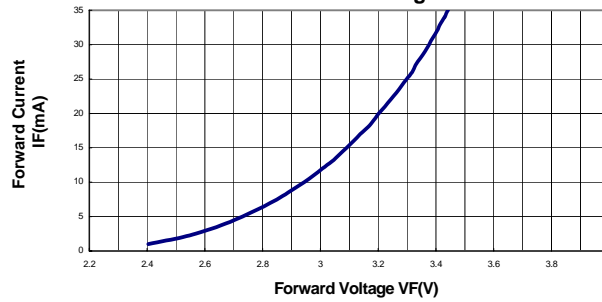
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
- 3.The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram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

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

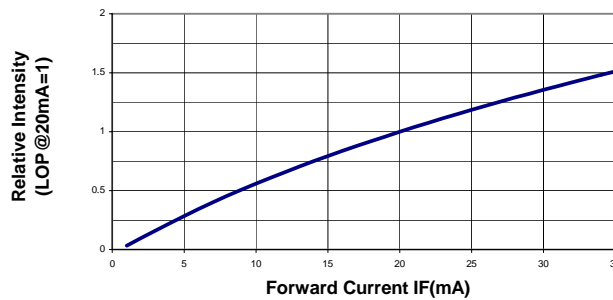
Spectral Radiance (Peak @525nm)



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

