

Preliminary

LL-U43A1C-001

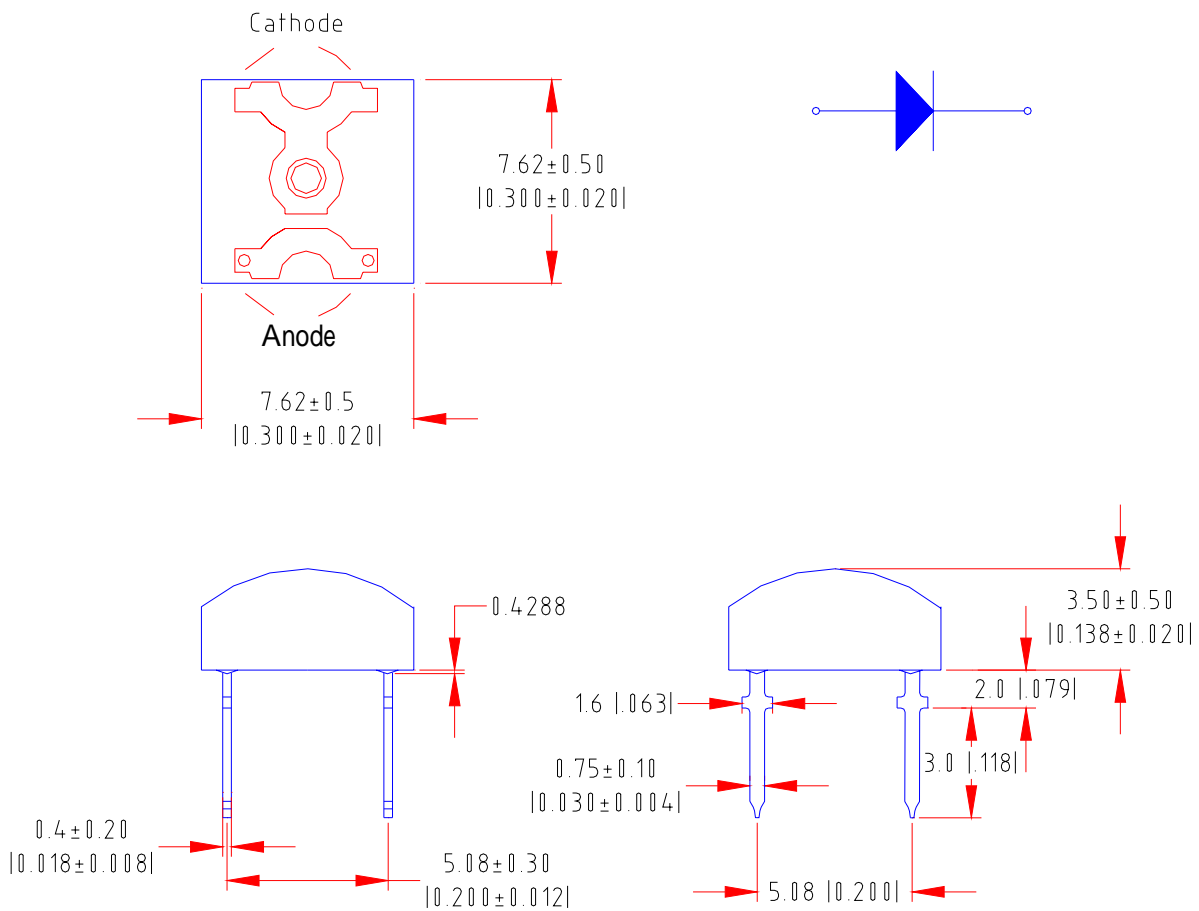
DATA SHEET

QC :

ENG :

Prepared By:

Package Dimensions:



| Part NO. | Chip Material | Lens Color | Source Color |
|---------------|---------------|-------------|--------------------|
| LL-U43A1C-001 | AlGaInP | Water Clear | Super Bright Amber |

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 | 90 | 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

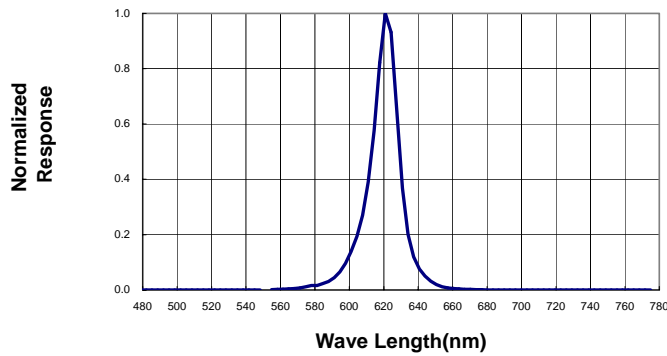
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|--------------------------|-------------|------|------|------|---------|---------------------|
| Luminous Intensity | I_v | 210 | 400 | 800 | mcd | $I_f=20mA$ (Note 1) |
| Viewing Angle | $2_{1/2}$ | 125 | 135 | 145 | Deg | (Note 2) |
| Peak Emission Wavelength | λ_p | 615 | 620 | 625 | nm | $I_f=20mA$ |
| Dominant Wavelength | λ_d | 610 | 615 | 620 | nm | $I_f=20mA$ (Note 3) |
| Spectral Line Half-Width | | 15 | 20 | 25 | nm | $I_f=20mA$ |
| Forward Voltage | V_f | 1.8 | 2.1 | 2.5 | V | $I_f=20mA$ |
| Reverse Current | I_R | --- | --- | 100 | μA | $V_R=5V$ |

Notes:

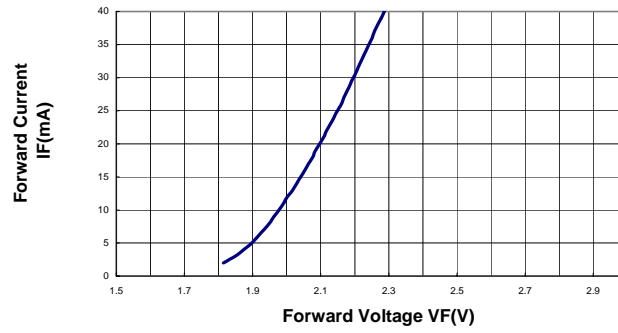
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
- 3.The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram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

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

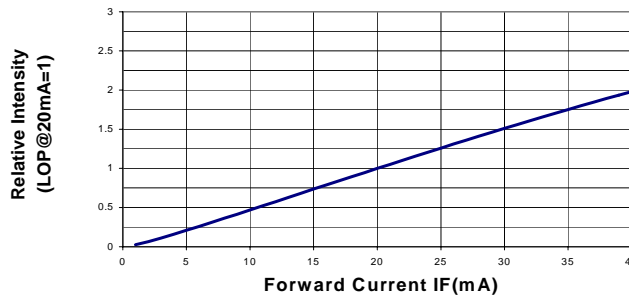
Spectral Radiance (Peak @ 620 nm)



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

