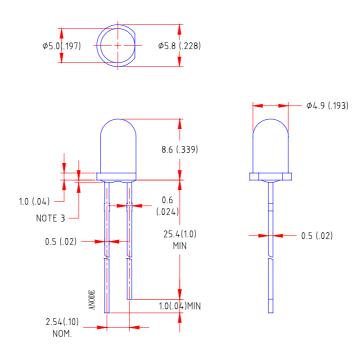


#### **Features**

- ♦ 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-503BC2E-002 | Water Clear | Super Bright<br>Deep Blue |  |

#### **Notes:**

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(.010)$  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. 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.

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|----------|----------------|----------|---------------|------|---------------|
|----------|----------------|----------|---------------|------|---------------|



### Absolute Maximum Ratings at Ta=25℃

| Parameter  | MAX.                | Unit  |  |
|--|---------------------|-------|--|
| Power Dissipation  | 100                 | mW    |  |
| Peak Forward Current<br>(1/10 Duty Cycle, 0.1ms Pulse Width) | 100                 | mA    |  |
| Continuous Forward Current                                   | 35                  | mA    |  |
| Derating Linear From 50°C                                    | 0.4                 | mA/°C |  |
| Reverse Voltage  | 5                   | V     |  |
| Operating Temperature Range                                  | -40°C to +80°C      |       |  |
| Storage Temperature Range                                    | -40°C to +80°C      |       |  |
| Lead Soldering Temperature [4mm(.157") From Body]            | 260°C for 5 Seconds |       |  |

## Electrical Optical Characteristics at Ta=25°C

| Parameter                | Symbol              | Min. | Тур. | Max. | Unit | Test Condition             |
|--------------------------|---------------------|------|------|------|------|----------------------------|
| Luminous Intensity       | Iv                  |      | 1100 |      | mcd  | $I_F=20$ mA (Note 1)       |
| Viewing Angle            | $2	heta_{_{1/2}}$   |      | 20   |      | Deg  | (Note 2)                   |
| Peak Emission Wavelength | λр                  |      | 468  |      | nm   | $I_{\rm F}$ =20mA          |
| Dominant Wavelength      | λd                  |      | 472  |      | nm   | $I_F=20\text{mA}$ (Note 3) |
| Spectral Line Half-Width | $\triangle \lambda$ |      | 23   |      | nm   | $I_{\rm F}$ = $20$ m $A$   |
| Forward Voltage          | $V_{\mathrm{F}}$    |      | 3.8  | 4. 5 | V    | $I_{\rm F}$ =20mA          |
| Reverse Current          | $I_R$               |      |      | 100  | μA   | $V_R=5V$                   |

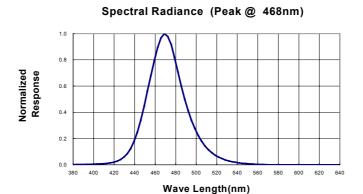
#### Note:

- 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 ( $\lambda d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

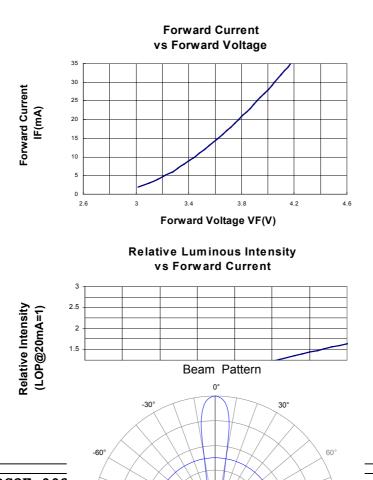
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### Typical Electrical / Optical Characteristics Curves



(25°C Ambient Temperature Unless Otherwise Noted)



Part No. LL-503BC2E-002

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