

LL-S192BC

DATA SHEET

QC:

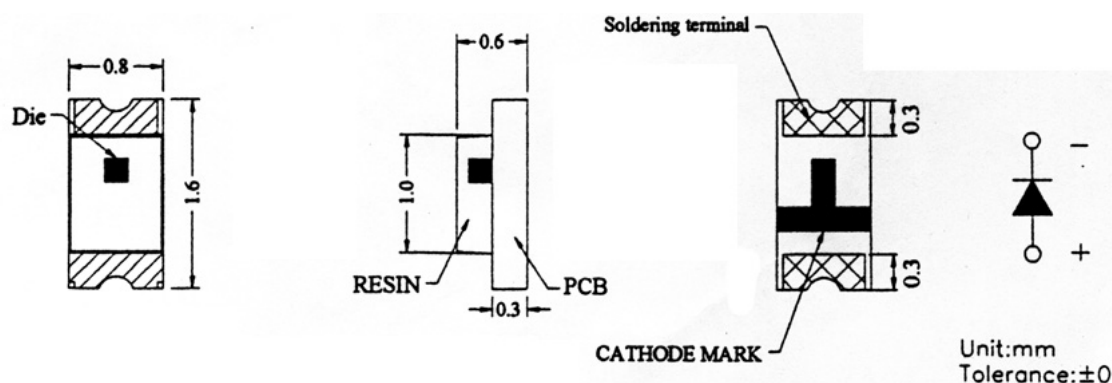
ENG:

Prepared By:

Features

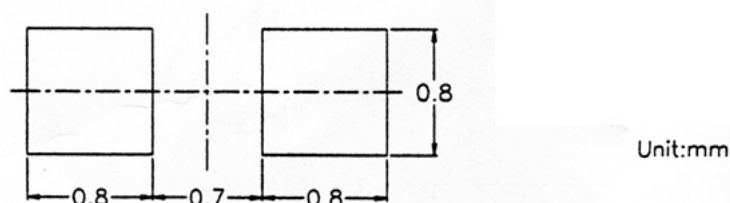
- ◆ High intensity
- ◆ 1.6x0.8x0.6 mm (0603 SMD) package
- ◆ Wide viewing angle
- ◆ General purpose leads
- ◆ Reliable and rugged

Package Dimension:



1. Soldering terminal may shift in x, y direction.
2. Polarity referring onto the cathode mark is reversed on the UR/HR/SR

◆ Recommended Soldering Pad Dimensions



| Part NO. | Lens Color | Source Color |
|-----------|-------------|-------------------|
| LL-S192BC | Water Clear | Super Bright Blue |

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.10 (.004") unless otherwise specified.
3. Specifications are subject to change without notice.
4. Caution in ESD:
Static 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.

Absolute Maximum Ratings at Ta=25°C

| Parameter | MAX. | Unit |
|--|---------------------|-------|
| Power Dissipation | 78 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 100 | mA |
| Continuous Forward Current | 30 | mA |
| Derating Linear From 50°C | 0.4 | mA/°C |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -30°C to +80°C | |
| Storage Temperature Range | -40°C to +85°C | |
| Lead Soldering Temperature [4mm(.157") From Body] | 260°C for 5 Seconds | |

Electrical Optical Characteristics at Ta=25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|--------------------------|------------------|------|------|------|------|-------------------------------|
| Luminous Intensity | I _v | 15 | 45 | --- | mcd | I _F =20mA (Note 1) |
| Viewing Angle | 2 $\theta_{1/2}$ | --- | 130 | --- | Deg | (Note 2) |
| Peak Emission Wavelength | λ_p | 465 | 470 | 475 | Nm | I _F =20mA |
| Dominant Wavelength | λ_d | 470 | 475 | 480 | Nm | I _F =20mA (Note 3) |
| Spectral Line Half-Width | $\Delta \lambda$ | 35 | 40 | 45 | Nm | I _F =20mA |
| Forward Voltage | V _F | 2.8 | 3.5 | 4.0 | V | I _F =20mA |
| Reverse Current | I _R | --- | --- | 10 | μA | V _R =5V |

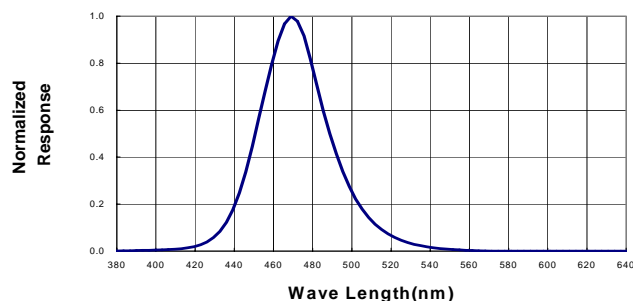
Note:

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 (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

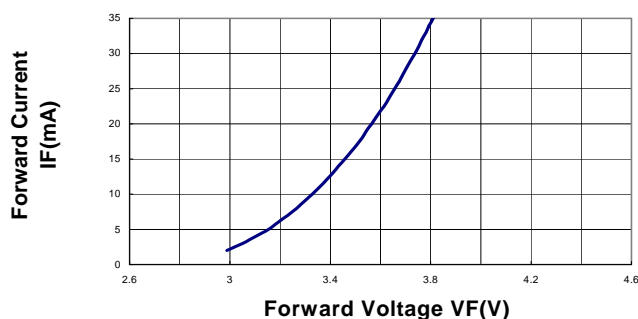
Typical Electrical / Optical Characteristics Curves

25°C Ambient Temperature Unless Otherwise Noted)

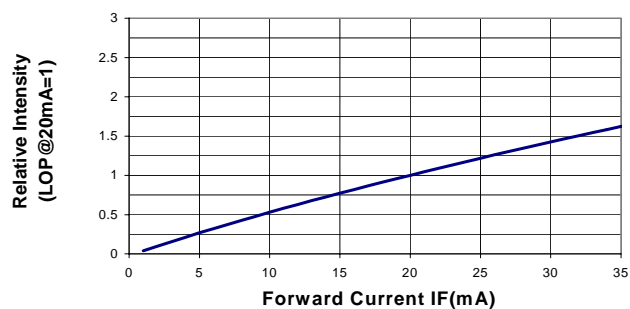
Spectral Radiance (Peak @ 470nm)



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Pattern

