

LL-S170PGC

DATA SHEET

QC:

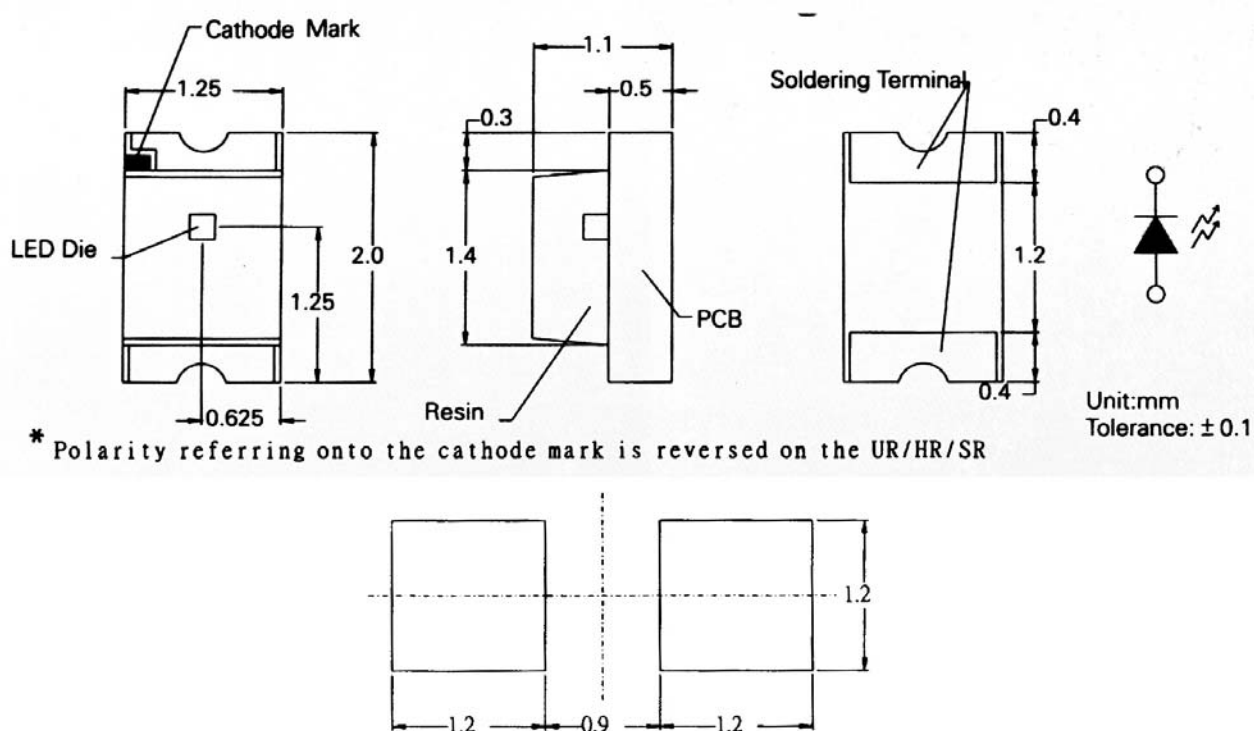
ENG:

Prepared By:

## Features

- ◆ High intensity
- ◆ 2.0\*1.1\*1.25mm(0805,SMD) package
- ◆ Wide viewing angle
- ◆ General purpose leads
- ◆ Reliable and rugged

## Package Dimension:



Part NO.	Lens Color	Source Color
LL-S170PGC	Water Clear	True Green

### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.10(.004")$  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	120	mW
Peak Forward Current (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	-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 <sub>v</sub>	---	65	---	mcd	I <sub>F</sub> =20mA (Note 1)
Viewing Angle	2 $\theta_{1/2}$	---	140	---	Deg	(Note 2)
Peak Emission Wavelength	$\lambda_p$	515	520	525	Nm	I <sub>F</sub> =20mA
Dominant Wavelength	$\lambda_d$	515	525	535	Nm	I <sub>F</sub> =20mA (Note 3)
Spectral Line Half-Width	$\Delta \lambda$	35	40	45	Nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	2.8	3.5	4.0	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	---	---	100	μA	V <sub>R</sub> =5V

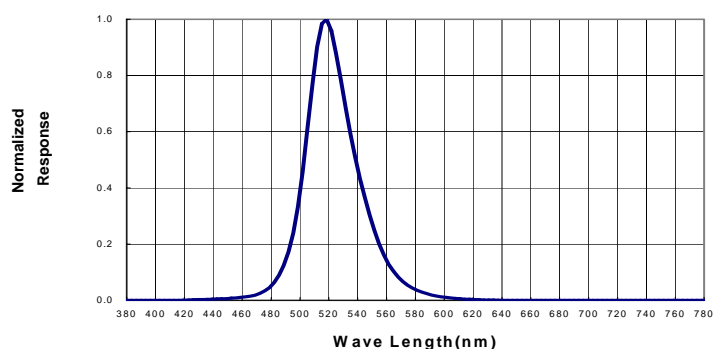
#### Note:

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.

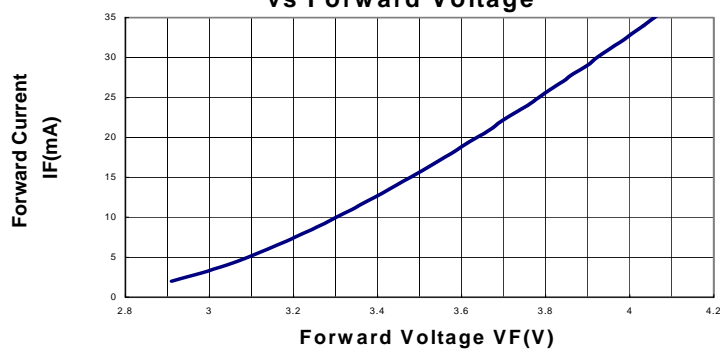
# Typical Electrical / Optical Characteristics Curves

25°C Ambient Temperature Unless Otherwise Noted)

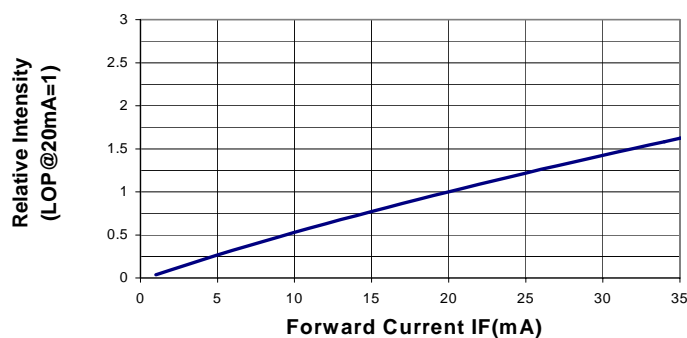
**Spectral Radiance (Peak @ 520nm)**



**Forward Current vs Forward Voltage**



**Relative Luminous Intensity vs Forward Current**



**Beam Pattern**

