LUCKY LIGHT

LL-S170WC

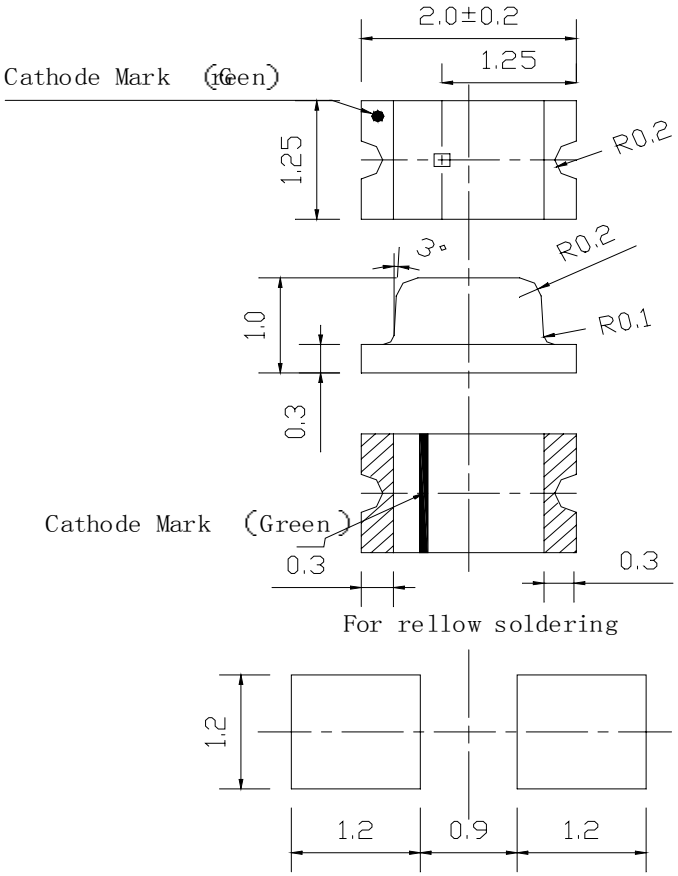
DATA SHEET

QC: ENG: Prepared By:

Features

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

Package Dimension:



Part NO.	Material	Lens Color	Source Color
LL-S170WC	lnGaN/SiC	Water Clear	White

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±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

Absolute Maximum Ratings at Ta=25℃

Parameter	MAX.	Unit
Power Dissipation	100	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	Iv		60		mcd	I_f=20mA (Note 1)
Viewing Angle	$2\theta_{1/2}$		140		Deg	Note 2
$x=\frac{X}{X+Y+Z}=\frac{Red}{Red+Green+Blue}$	x	0.20	0.27	0.34	---	I_F=20mA (Note 3)
$y=\frac{Y}{X+Y+Z}=\frac{Green}{Red+Green+Blue}$	y	0.20	0.27	0.35	---	I_F=20mA (Note 3)
Forward Voltage	V_F	2.8	3.6	4.0	V	I_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. It use many parameters that correspond to the CIE 1931 2°. X,Y, and Z are CIE 1931 2°values of Red, Green and Blue content of the measurement.

Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)