



**LUCKY LIGHT**

# **LL-F503SC2E**

## DATA SHEET

QC:

ENG:

Prepared By:

<b>Part No.</b>	<b>LL-F503SC2E</b>	<b>Spec No.</b>	<b>S/N-02040426S</b>	<b>Page</b>	<b>1 of 4</b>
-----------------	--------------------	-----------------	----------------------	-------------	---------------

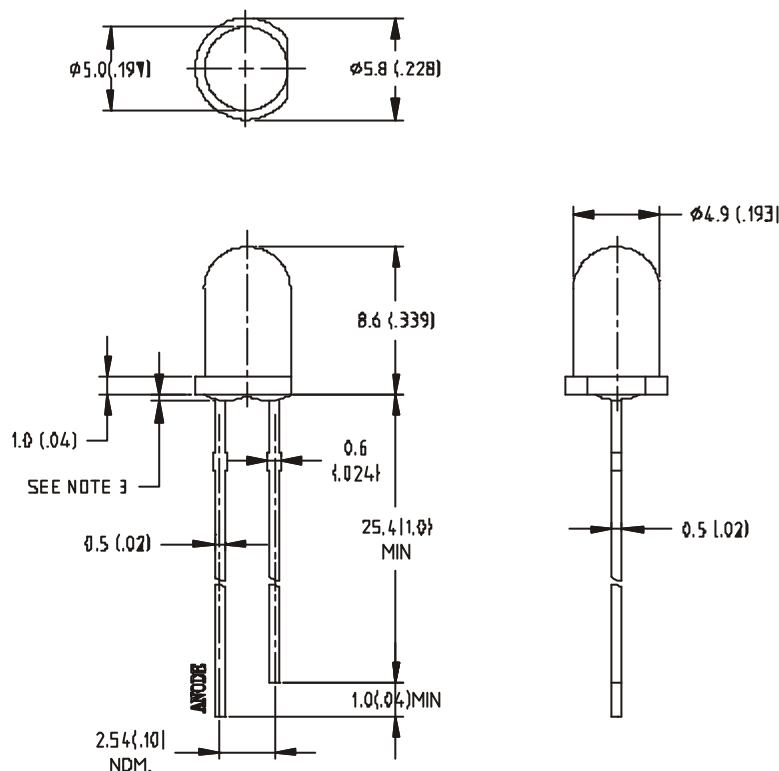


# LUCKY LIGHT

## Features:

- ◆ CMOS Technology.
- ◆ Designed for bonding with LED chip.
- ◆ Operating voltage range : 3V-10V DC
- ◆ 1/4 Duty cycle.
- ◆ Blinking frequency : 2.4Hz (Vdd=5V)
- ◆ Frequency tolerance :  $\pm 20\%$
- ◆ With both sink and source output drivers.

## Package Dimensions:



Part NO.	Chip Material	Lens Color	Source Color
LL-F503SC2E	GaInN	Water Clear	Red

## 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. 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.

7. This data-sheet only valid for six months.

**LUCKY LIGHT****Absolute Maximum Ratings at Ta=25**

Parameter	Max	Unit
Continuous Forward Current	30	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	

**LUCKY LIGHT**

Electrical Optical Characteristics at Ta=25  
(Vdd=5V Unless Otherwise Specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	220	300	---	mcd	I <sub>F</sub> =20mA (Note 1)
Peak Emission Wavelength	p	655	660	665	nm	Measurement @Peak
Dominant Wavelength	d	635	640	645	nm	Note 1
Operating Voltage	V <sub>dd</sub>	3	5	10	V	--
Output Sink Current	I sink	--	45	--	mA	--
Output Source Current	I source	--	25	--	mA	--
Blinking Frequency	F blk	2.0	2.4	2.8	Hz	--
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.The dominant wavelength ( 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 @ 660nm)**

