LUCKY LIGHT

LL-F506RGBC2E

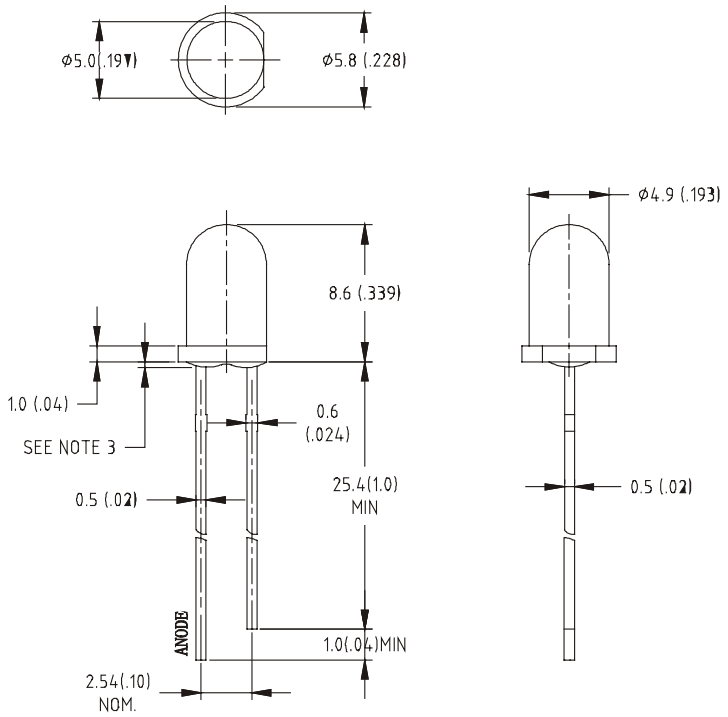
DATA SHEET

QC: ENG: Prepared By:

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 : ±20%
- With both sink and source output drivers.

Package Dimension:



Part NO.	Chip Material			Lens Color	Source Color
LL-F506RGBC 2E	Red	Green	Blue	Water Clear	Red & True Green & Blue
	AlGaAs	InGaN	GaInN		

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
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.

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Red	300	650	1300	mcd	I_F=20mA Note 1
		True Green	1200	2400	4500		
		Blue	280	550	1100		
Viewing Angle	$2\theta_{1/2}$	Red	30	35	40	Deg	Note 2
		True Green	30	35	40		
		Blue	30	35	40		
Peak Emission Wavelength	λp	Red	631	636	641	nm	Measurement @Peak
		True Green	520	525	530		
		Blue	467	472	477		
Dominant Wavelength	λd	Red	621	626	631	nm	Note 3
		True Green	520	532	542		
		Blue	464	475	485		
Spectral Line Half-Width	△λ	Red	15	20	25	nm	
		True Green	35	40	45		
		Blue	21	26	31		
Forward Voltage	V_F	Red	1.6	2.05	2.5	V	I_F=20mA
		True Green	2.8	3.2	4.0		
		Blue	2.8	3.6	4.4		
Reverse Current	I_R	Red	---	---	100	μA	V_R=5V
		True Green					
		Blue					

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

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	

Typical Electrical / Optical Characteristics Curves
(25℃ Ambient Temperature unless Otherwise Noted)