LEDTRONICS, INC.®

23105 Kashiwa Court, Torrance, CA 90505
Phone: (800) 579-4875 or (310) 534-1505 Fax: (310) 534-1424
E-mail: webmaster@ledtronics.com
Website: http://www.ledtronics.com

LDF120-0AG-12

Aqua Green
3mm, Cylindrical, 2.91mm Height
105° viewing angle

DWG BY: LL / GP 09-15-11
CHK BY: PL 09-23-11
R&D: PL 09-15-11
REVISION LTR: - 09-15-11

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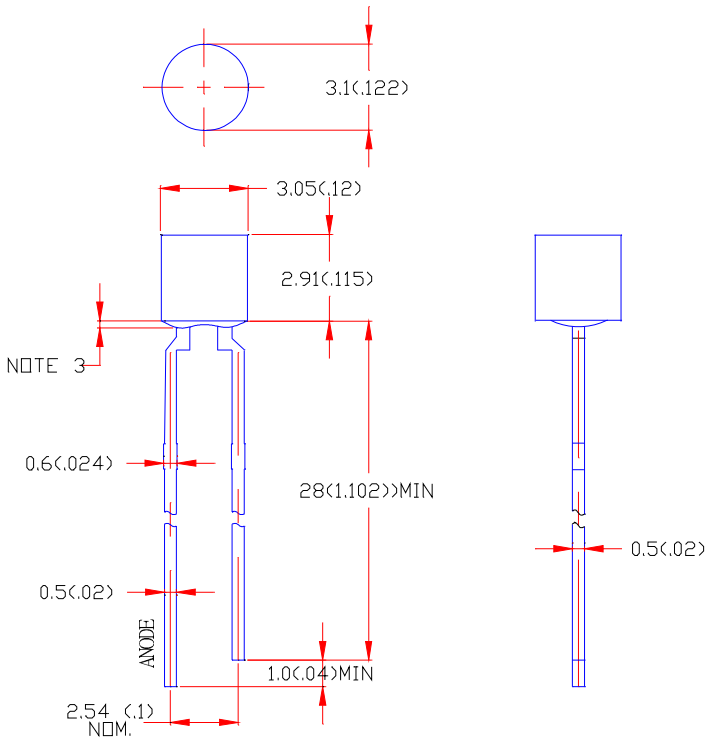
Features:

- High intensity
- Standard 3mm diameter package
- Tinned leads
- Pb-free

Package Dimensions:



Chip Material	Lens Color	Emission Color
InGaN	Water Clear	Aqua Green

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (.010”) 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 electricity and surge can 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.

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Absolute Maximum Ratings at Ta=25°C

Parameter	MAX	Unit
Power Dissipation	80	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	20	mA
Derating Linear From 50℃	0.4	mA/℃
Reverse Voltage	5	V
Electrostatic Discharge (ESD)	1000	V
Operating Temperature Range	-30℃ to +80℃	
Storage Temperature Range	-40℃ to +100℃	
Lead Soldering Temperature [4mm(.157") From Body]	255±5fi for 5 Seconds	
Wave Soldering Temperature	Peak Temperature 245℃~260℃ for 10 Seconds	

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I_V	460	1500	---	mcd	I_F=20mA (Note 1)
Viewing Angle	$2\theta_{1/2}$	100	105	110	Deg	(Note 2)
Peak Emission Wavelength	λp	518	520	522	nm	I_F=20mA
Dominant Wavelength	λd	523	525	527	nm	I_F=20mA (Note 3)
Spectral Line Half-Width	Δλ	---	33	---	nm	I_F=20mA
Forward Voltage	V_F	---	3.0	4.0	V	I_F=20mA
Reverse Current	I_R	---	---	10	μA	V_R=5V
SCP	---	---	0.32	---	cd	I_F=20mA
Lumens	---	---	4.0	---	lm	I_F=20mA
Radiant Intensity	---	---	32	---	mW/sr	I_F=20mA
Chromaticity Coordinates	x: ~0.16 y:~ 0.73					I_F=20mA

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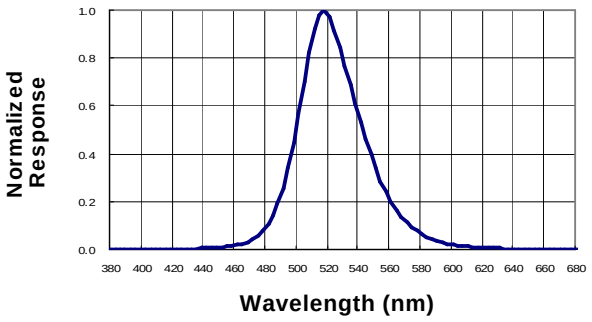
Notes:

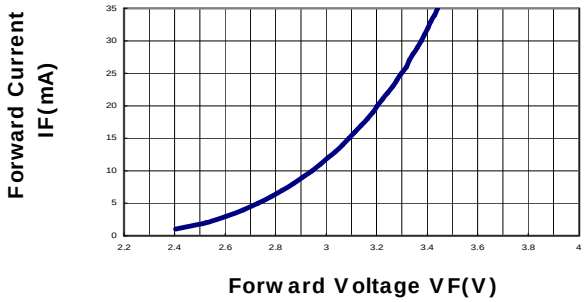
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength (λd) is derived from the CIE chromaticity diagram and single wavelength which defines the color of the device.
4. Forward voltage measurement allowance is ±0.1V
5. Luminous Intensity Measurement Allowance is ± 10%.

Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

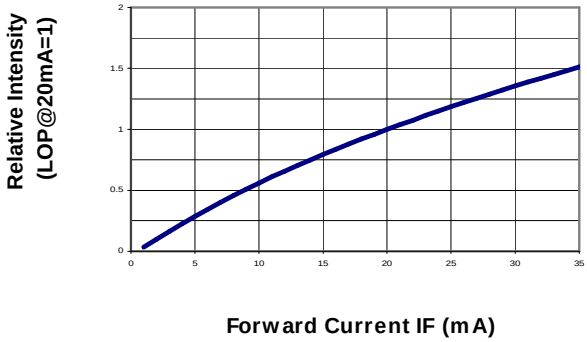
Spectral Radiance (Peak @ 520 nm)



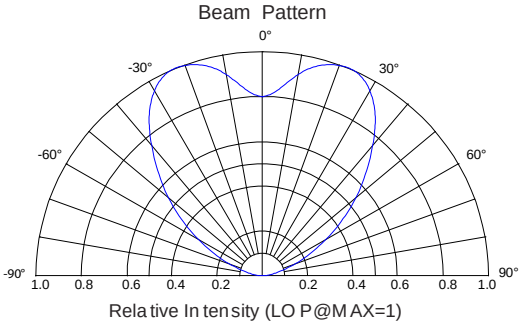
Forward Current vs Forward Voltage



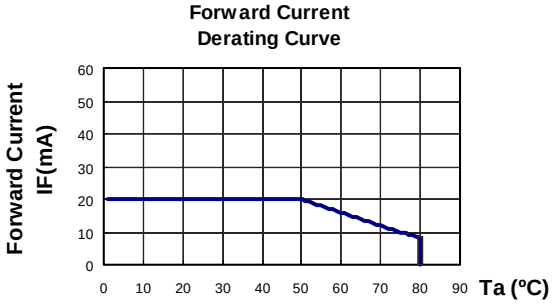
Relative Luminous Intensity vs Forward Current



Beam Pattern



Forward Current Derating Curve



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