

LD120-0IW-30D

Incandescent White

3mm, Domed, 5.1mm Height
30° viewing angle

DWG BY:
LL / GP
10-12-06

CHK BY:
PL
10-20-06

QA:

10-__-06

MFG:

__-__-__

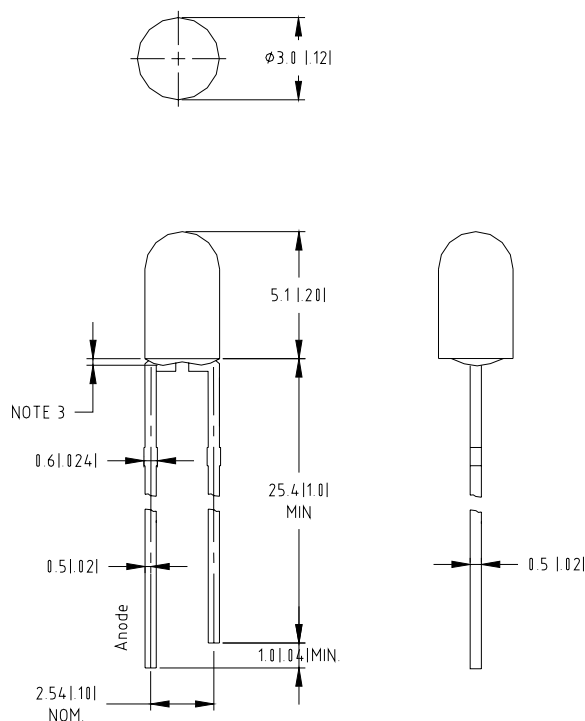
REVISION LTR: -

10-18-06

Features:

- ◆ High intensity
- ◆ 3mm diameter flangeless package
- ◆ General purpose leads
- ◆ Pb-free

Package Dimensions:



Part No.	Chip Material	Lens Color	Emission Color
LD120-0IW-30D	InGaN	Water Clear	Warm White

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ ($.010''$) 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.

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°C	0.4	mA/°C
Reverse Voltage	5	V
Electrostatic Discharge (ESD)	150	V
Operating Temperature Range	-20°C to +80°C	
Storage Temperature Range	-30°C to +100°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 _V	---	6500	---	mcd	I _F =20mA (Note 1)
Viewing Angle	2θ _{1/2}	---	30	---	Deg	(Note 2)
Forward Voltage	V _F	3.0	3.2	4.0	V	I _F =20mA
Reverse Current	I _R	---	---	50	μA	V _R =5V
SCP	---	---	0.20	---	---	---
Lumens	---	---	2.5	---	lm	---
Radiant Intensity	I _e	---	21	---	mW/sr	---
Color Rendering Index	CRI	68	---	70	---	---

Color Rank	LTWW			
CIE1931 x-coordinate	0.405	0.435	0.460	0.425
CIE1931 y-coordinate	0.365	0.375	0.436	0.427

Notes:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. Forward voltage measurement allowance is ±0.1V
4. Luminous Intensity Measurement Allowance is ± 10%.

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

CIE 1931 Chromaticity Diagram
 (Bin LTWW)

