

LD200-0CW-30X70

Cool White

5x4mm, Oval, 7mm Height
30° on Y axis and 70° on X axis
viewing angle

DWG BY:

LL / MM

02-21-07

CHK BY:

PL

02-26-07

QA:

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MFG:

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REVISION LTR: -

02-21-07

- ◆ High intensity
- ◆ 5×4 mm diameter oval package
- ◆ Tinned leads
- ◆ Pb-free

Technical drawing of a catheter tip assembly showing three views: top, front, and side. Dimensions are in inches with tolerances in brackets.

Top View:

- Overall width: 5.2 [1.205]
- Overall height: 3.8 [1.50]

Front View:

- Overall width: 5.1 [1.201]
- Overall height: 7.0 [1.276]
- Radius of the top semi-circular section: 0.6 [1.024]
- Length of the main body: 25.4 [1.0] MIN
- Length of the anode section: 1.0 [0.4] MIN
- Radius of the anode section: 0.5 (.02)
- Overall length: 2.54 [1.1] NOM

Side View:

- Overall width: 3.4 [1.34]
- Radius of the top semi-circular section: 0.5 [1.02]

NOTE 3: The anode section is indicated by a dashed line and the label "ANODE".

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	3000	4000	---	mcd	I _F =20mA (Note 1)
Viewing Angle	2θ _{1/2}					
	X(Axis)	---	70	---	Deg	(Note 2)
	Y(Axis)	---	30	---		
Forward Voltage	V _F	---	3.2	4.0	V	I _F =20mA
Reverse Current	I _R	---	---	50	μA	V _R =5V

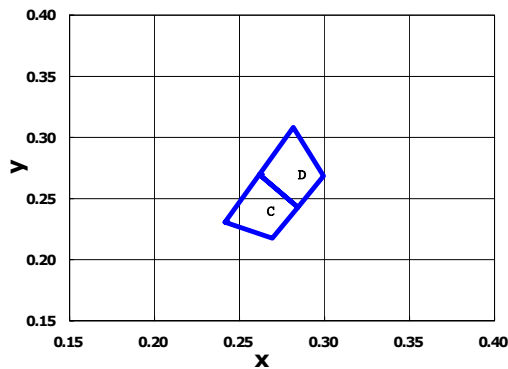
Color Rank	x	y	x	y	x	y	x	y
LTC & LTD	0.270	0.285	0.288	0.250	0.305	0.275	0.295	0.325

Notes:

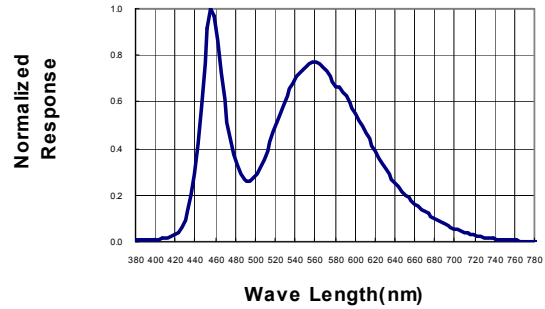
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- Forward voltage measurement allowance is ±0.1V
- Luminous Intensity Measurement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

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

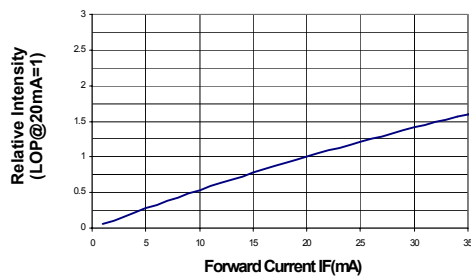
CIE 1931 Chromaticity Diagram



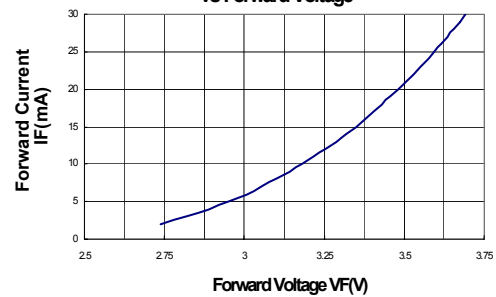
Spectral Radiance



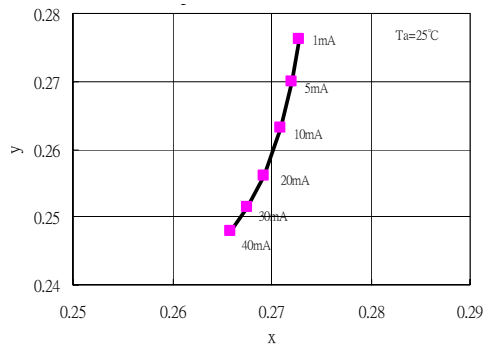
Relative Luminous Intensity vs Forward Current



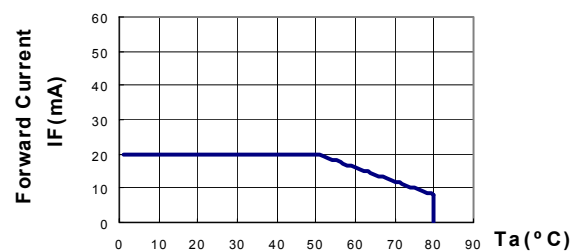
Forward Current vs Forward Voltage



Forward Current VS. Chromaticity coordinate



Forward Current Derating Curve



Beam Pattern

