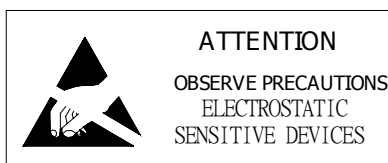




SPECIFICATION FOR LED LAMP

P/N : LW551CBN

Approved Sheet



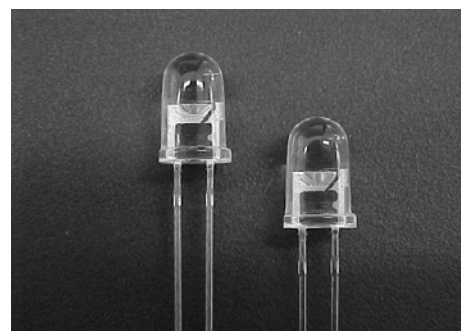
Designed by	Qualified by	Approved by Customer

Features

- ◆ Standard T-1 3/4 package
- ◆ General purpose leads
- ◆ Viewing Angle : 25°

Benefits

- ◆ High intensity
- ◆ Lower Power Consumption
- ◆ High Reliability and Firm and Solid
- ◆ Optimal Optical and Mechanical Design



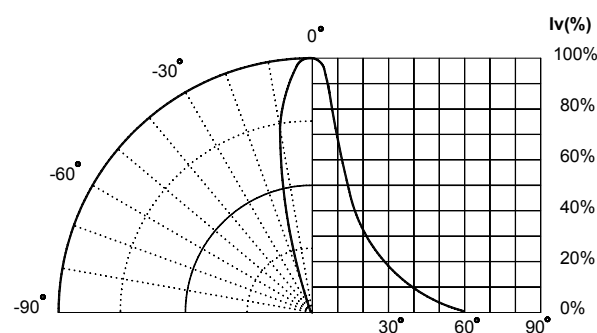
LED Picture

Applications

- ◆ Small Area Illumination
- ◆ General Purpose Indicators
- ◆ Legend Backlighting

Description

- ◆ The T-1 3/4 lamps are untinged, nondiffused .
The precise optical design takes fine or special radiant pattern. This characteristic provides suitable viewing angle and helpful for special lighting function.

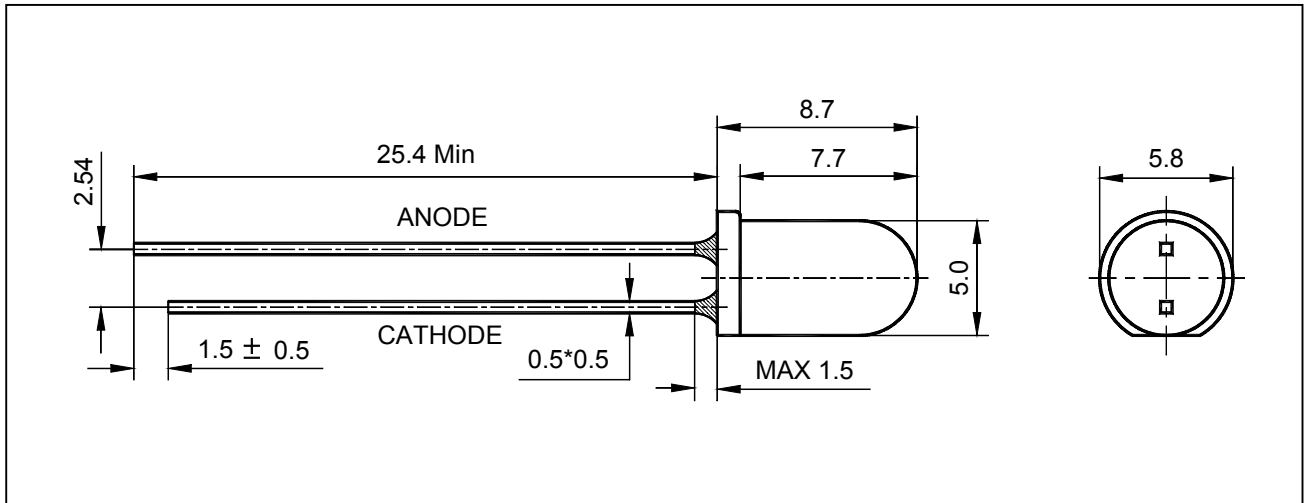


Beam Pattern

Device Selection Guide

Part Number	Viewing Angle	Resin Color	LED Color	Chip Material	Stand OFF
LW551C3N	25°	Water Clear	White	InGaN/Al ₂ O ₃	No

Package Dimensions



- Notes:**
1. All dimensions are in millimeters
 2. Tolerance is $\pm 0.20\text{mm}$ unless otherwise noted.
 3. Protruded resin under flange is 1.5mm max.
 4. Lead spacing is measured where the leads emerge from the package.
 5. Specifications are subject to change without notice.

Absolute Maximum Rating at Ta=25°C

Parameter	Value	Units
Power Dissipation	100	mW
Peak Forward Current(1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Forward Current	25	mA
Reverse Voltage	5	V
Operating Temperature Range	-20°C to + 75°C	
Storage Temperature Range	-30°C to + 80°C	
Lead Soldering Temperature(3mm From Body)	260°C for 5 Seconds	

Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Luminous Intensity	I_v	1300	---	----	mcd	$I_f=20mA$
Viewing Angle	$2\theta_{1/2}$	----	25	----	Deg.	$I_f=20mA$
Chromaticity Coordinates	X	----	0.31	----	----	$I_f=20mA$
	Y	----	0.32	----	----	$I_f=20mA$
Forward Voltage	V_f	----	3.5	4.0	V	$I_f=20mA$
Reverse Current	I_r	----	----	50	μA	$V_r=5V$

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, $2\theta_{1/2} = \theta_{1/2} + \theta_{1/2}$.

Bin Rank Combination

Rank	K	L	M	N
Luminous Intensity ($I_f = 20mA$)	1300~1700mcd	1700~2200mcd	2200~2800mcd	2800~3600mcd
Rank	P	Q	---	---
Luminous Intensity ($I_f = 20mA$)	3600~4700mcd	4700~6100mcd	---	---

Note: The quantity ratio of the ranks is decided by GVOPTO.

Measurement Uncertainty of the Luminous intensity : $\pm 15\%$

Measurement Uncertainty of the Forward Voltage : $\pm 0.1V$

Cautions on LED Usage

1. Static electricity and surge will damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
2. Use grounded soldering iron and do not solder the LEDs at the conditions beyond the absolute maximum ratings specified in the data sheet.
3. G.V. will not be held responsible for any damage caused by the operation exceeds the absolute maximum ratings.
4. Use the LEDs as soon as possible once the bag was opened. Store and use where there is no corrosive gas. The leads of LEDs will be rusty when the LEDs were exposed to the air for longer than one month.

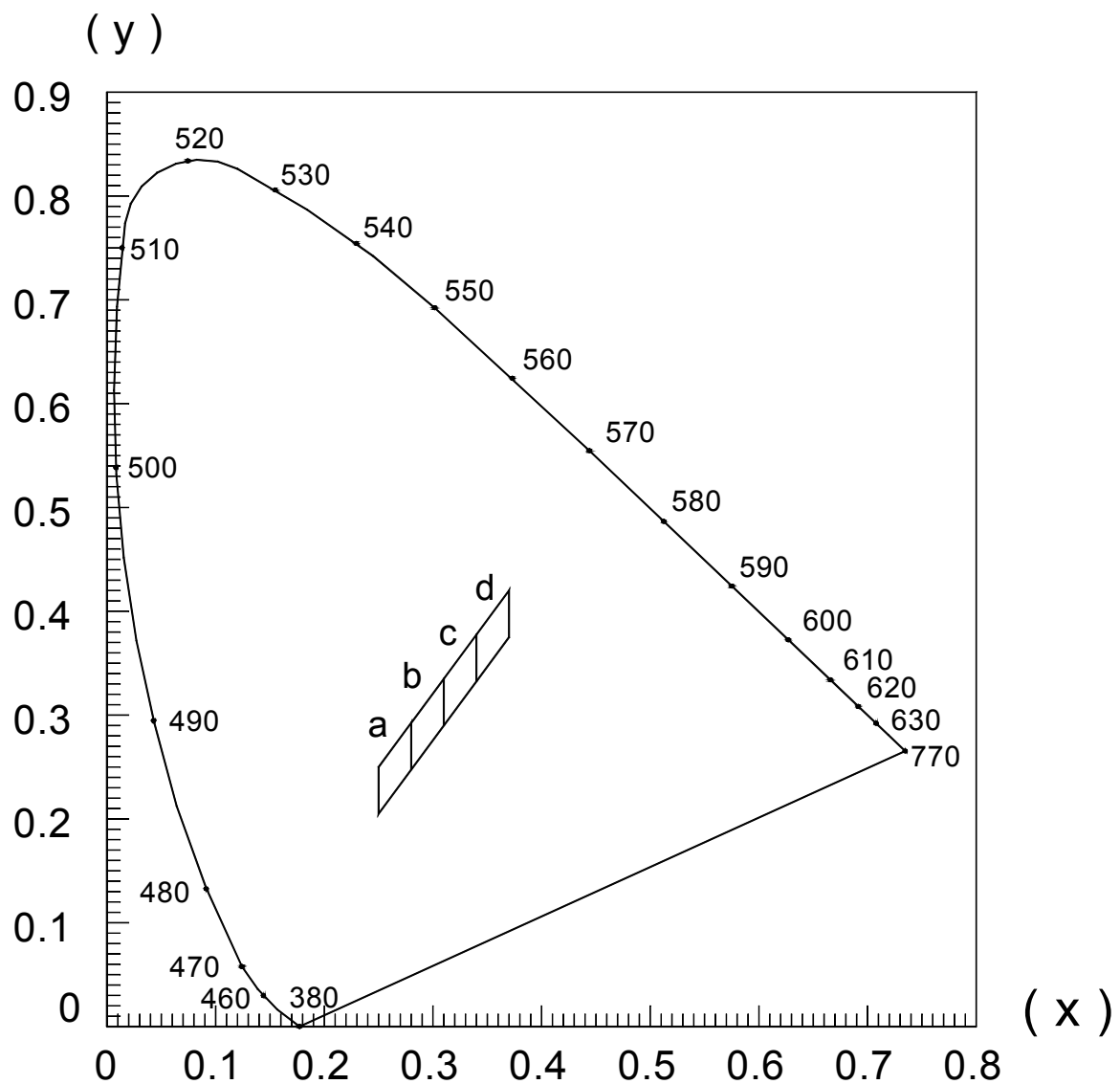
Color Ranks (If = 20mA , Ta=25°C)

Ranks a				
x	0.2500	0.2500	0.2800	0.2800
y	0.2500	0.2050	0.2925	0.2475

Ranks b				
x	0.2800	0.2800	0.3100	0.3100
y	0.2925	0.2475	0.3350	0.2900

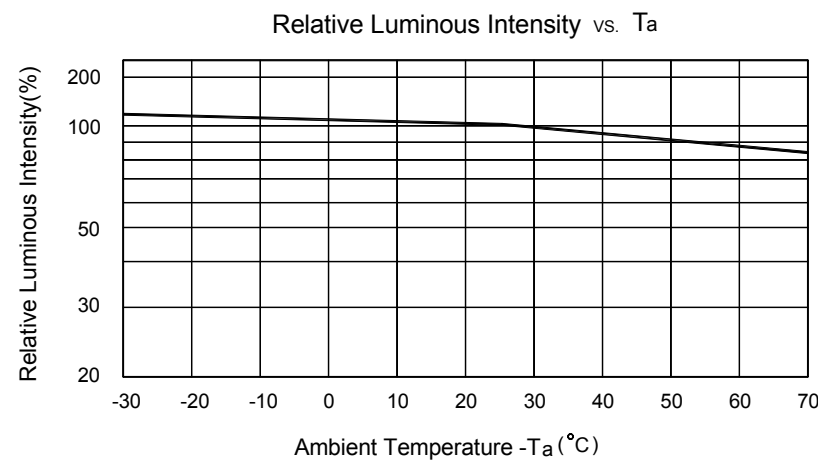
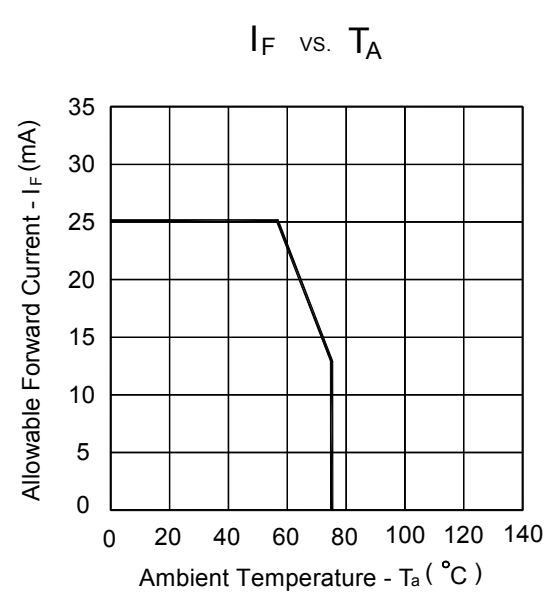
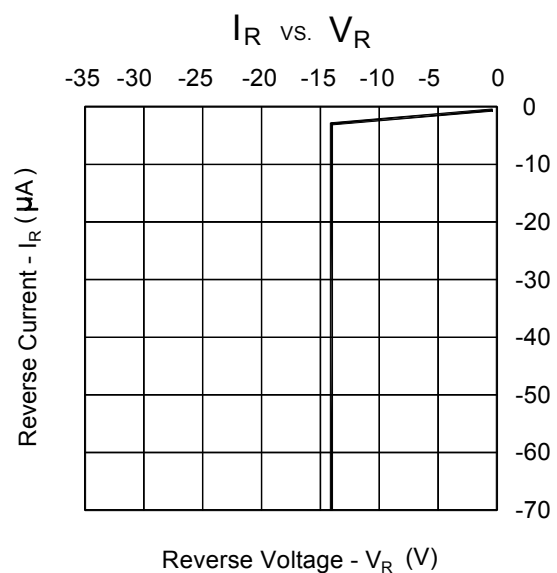
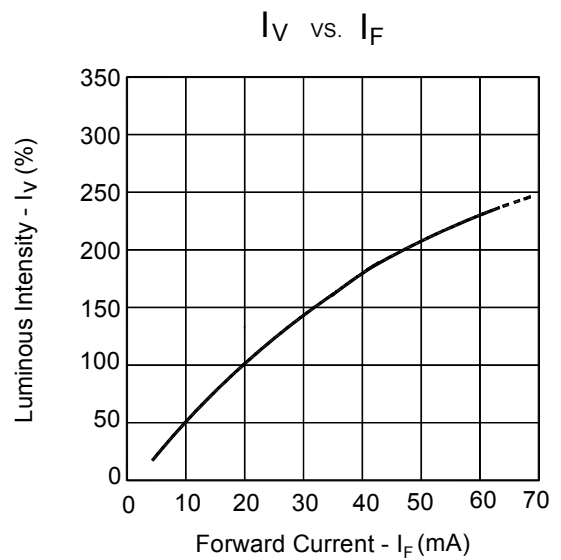
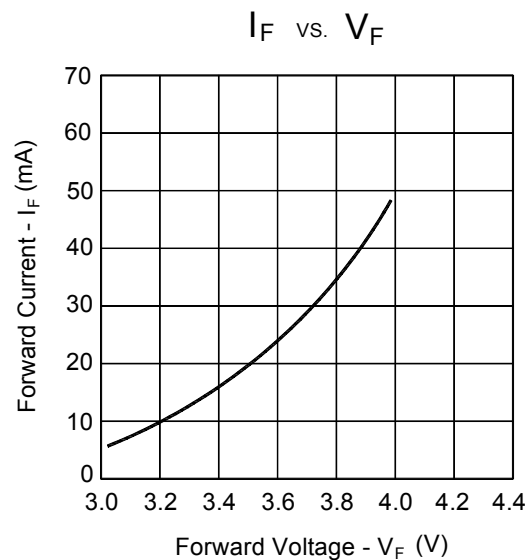
Ranks c				
x	0.3100	0.3100	0.3400	0.3400
y	0.3350	0.2900	0.3775	0.3325

Ranks d				
x	0.3400	0.3400	0.3700	0.3700
y	0.3775	0.3325	0.4200	0.3750

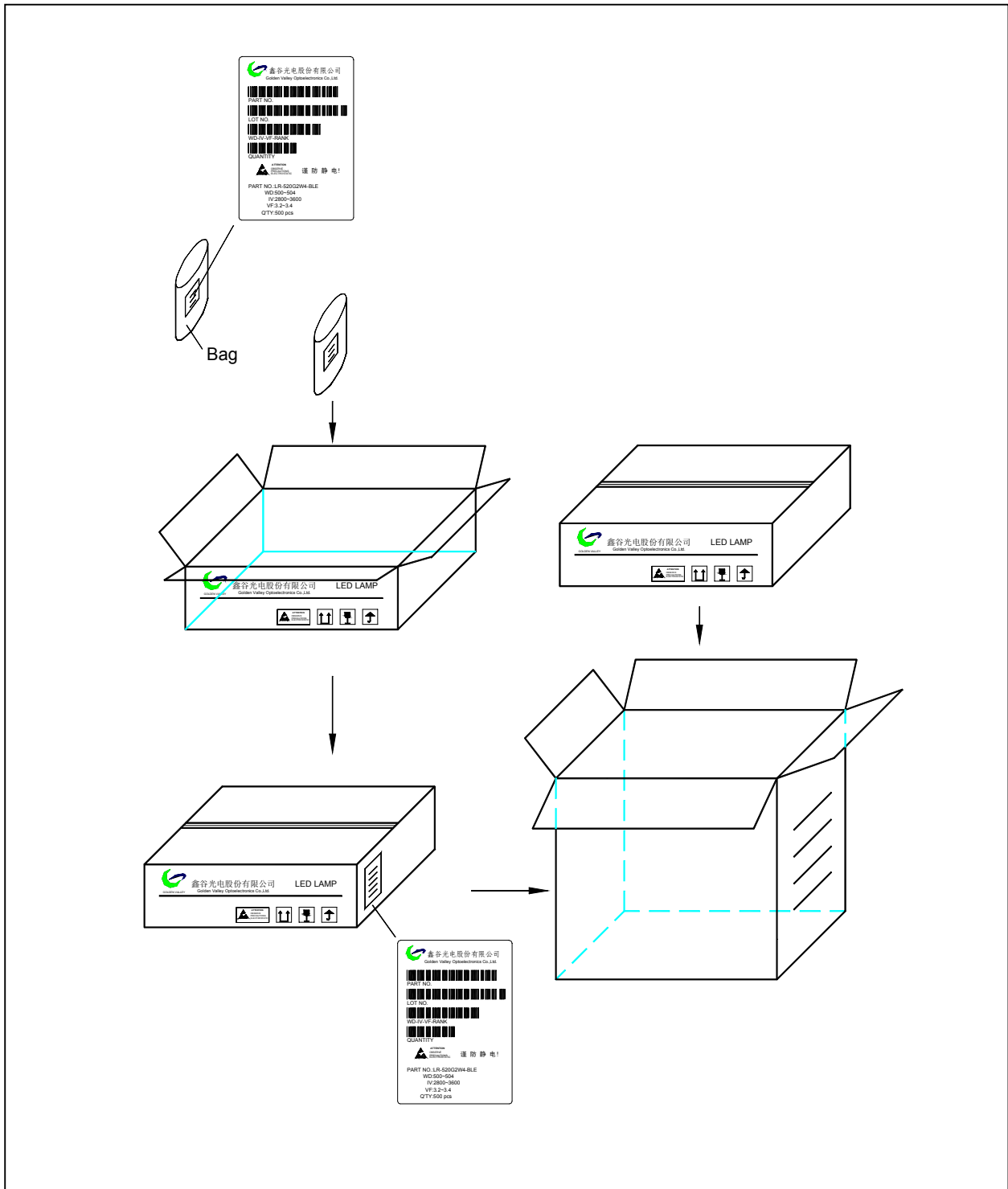
Measurement Uncertainty of the Color Coordinates : ± 0.02 **CIE Chromaticity Diagram**

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Packing Specification



Notes :

1. Inner play bag is common products
2. 30 bags per inner box, 15 kpcs per inner box .
3. 3 inner box per outer box, 45 kpcs per outer box