SPECIFICATION FOR LED LAMP

MODEL No : WCN-501PG1-30N
DOC. No : LED-501PG1-30N

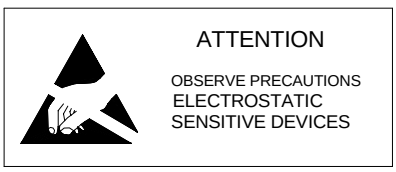
Description:

30 Degree 5mm LED Lamp in
Pure-Green Color without Stopper and
Water Clear Lens

Dice Material: InGaN

Confirmed
by Customer: _____

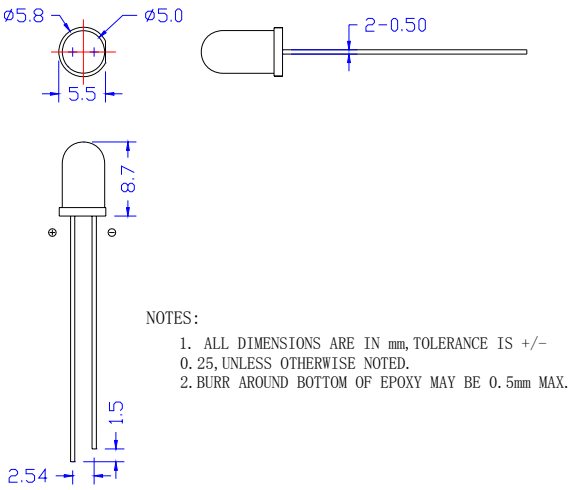
Date: _____



Applications:

- Advertising Signs
- Indicators
- Traffic Light
- Illuminations

Dimension Drawing



Absolute Maximum Ratings at Ta = 25°C

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I_F	25	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	90	mW
Operation Temperature	T_{opr}	-40 ~ + 95	°C
Storage Temperature	T_{stg}	-40 ~ + 100	°C
Lead Soldering Temperature	T_{sol}	Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb)	

pulse width <=0.1msec duty <=1/10

Typical Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F = 20mA	---	3.2	3.6	V
Reverse Current	I_R	V_R = 5V	---	---	10	μA
Luminous Intensity	I_V	I_F = 20mA	5000	10000	---	mcd
Peak Emission Wavelength	λp	I_F = 20mA	---	---	---	nm
Dominant Wavelength	λd	I_F = 20mA	520	525	530	nm
Spectral Line Half-Width	Δλ	I_F = 20mA	---	23	---	nm
50% Power Angle	2θ½	I_F = 20mA	---	30	---	deg

Important Notes:

1) All ranks will be included per delivery, rank ratio will be determined by WCN.

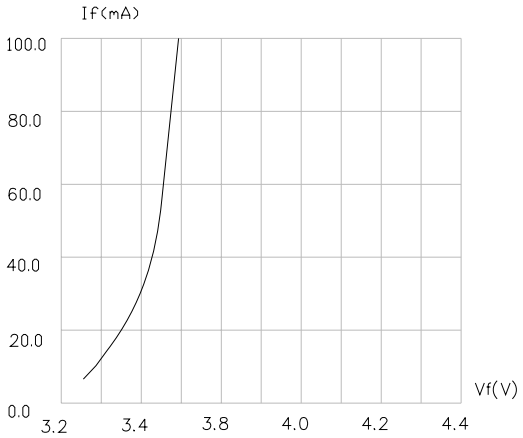
2) Tolerance of measurement of luminous intensity is ±15%.

3) Tolerance of measurement of Vf is ±0.05 V.

4) Packaging methods are available for selection, please refer to PACKAGING STANDARD.

5) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.

Graphs



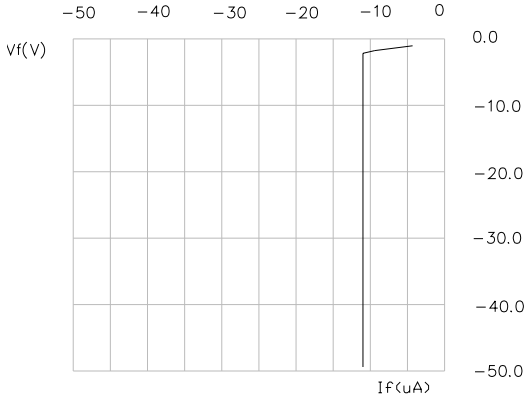


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

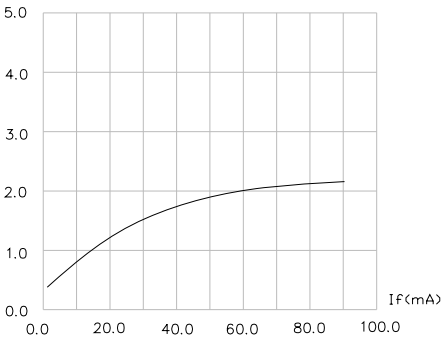


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

Half Power △WL=150nm

I(RELATIVE LUMINOUS INTENSITY)

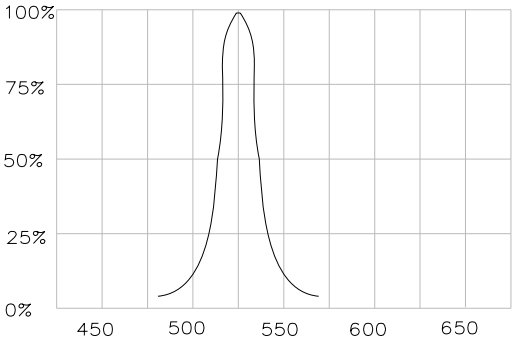


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

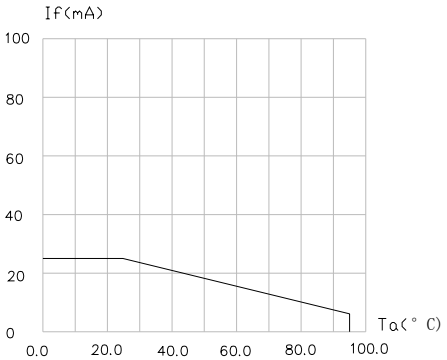
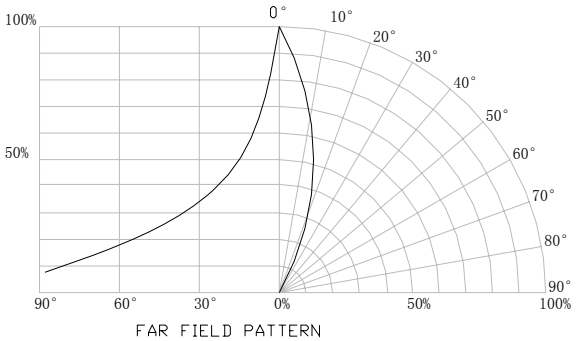


FIG.5 MAXIMUN FORWARD DC CURRENT VS. AMBIENT TEMPERATURE (Tjmax=95° C).

50% Power Angle : 30°



FAR FIELD PATTERN

Items	Signatures	Date	Revision History	
Prepared by			DOC. No.	CHANGE DESCRIPTION
Checked by				
Approved by				
ECN#				

Data is subject to change without prior notice.