

**SPECIFICATION FOR LED LAMP**

MODEL No : WCN-501HY1-30N

DOC. No : LED-501HY1-30N

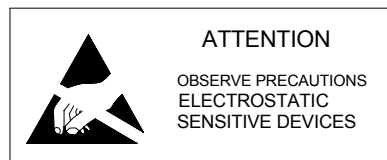
Description:

30 Degree 5mm LED Lamp in Yellow  
Color without Stopper and Water Clear  
Lens

Dice Material: AllnGaP

Confirmed  
by Customer: \_\_\_\_\_

Date: \_\_\_\_\_



**Applications:**

- Advertising Signs
- Indicators
- Traffic Light
- Illuminations

**Absolute Maximum Ratings at Ta = 25°C**

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	$I_F$	50	mA
Peak Forward Current*	$I_{FP}$	200	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	130	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)	

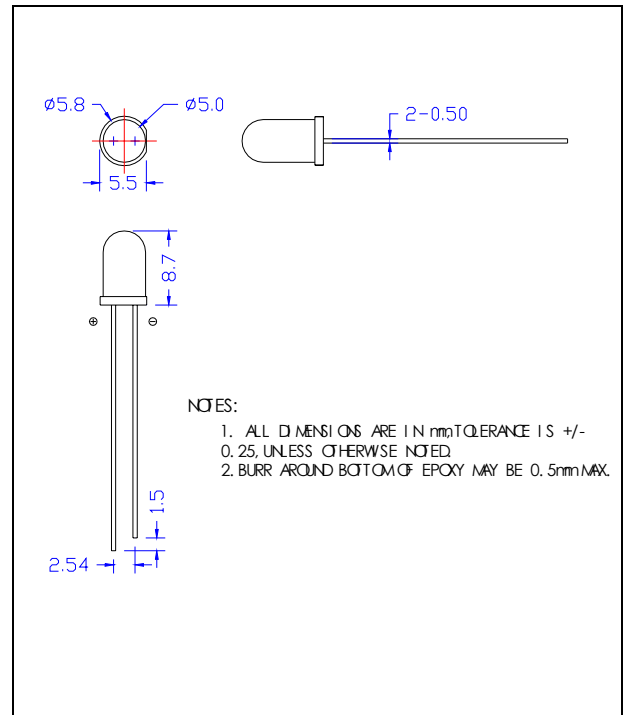
pulse width  $\leq 0.1\text{msec}$  duty  $\leq 1/10$

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

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	---	2.1	2.6	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	---	---	10	$\mu\text{A}$
Luminous Intensity	$I_V$	$I_F = 20\text{mA}$	4500	7000	---	mcd
Peak Emission Wavelength	$\lambda_p$	$I_F = 20\text{mA}$	---	---	---	nm
Dominant Wavelength	$\lambda_d$	$I_F = 20\text{mA}$	585	590	595	nm
Spectral Line Half-Width	$\Delta \lambda$	$I_F = 20\text{mA}$	---	28	---	nm
50% Power Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	---	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  $\pm 15\%$ .
- 3) Tolerance of measurement of  $V_f$  is  $\pm 0.05\text{V}$ .
- 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.

**Dimension Drawing**


Graphs

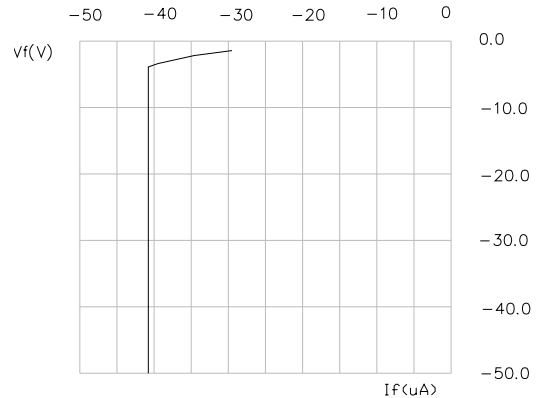
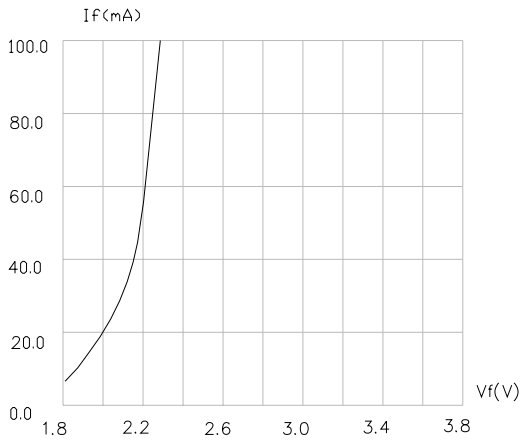


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

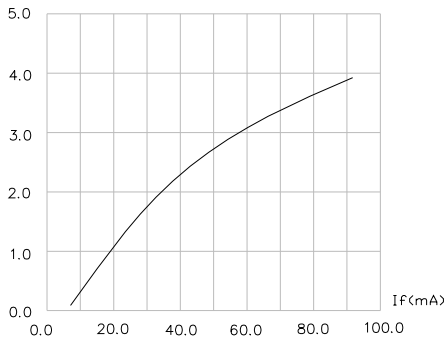


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

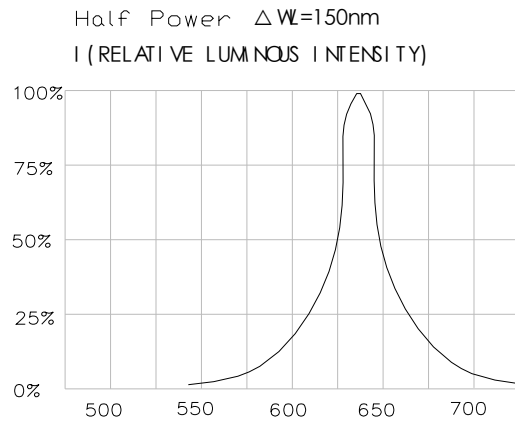


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

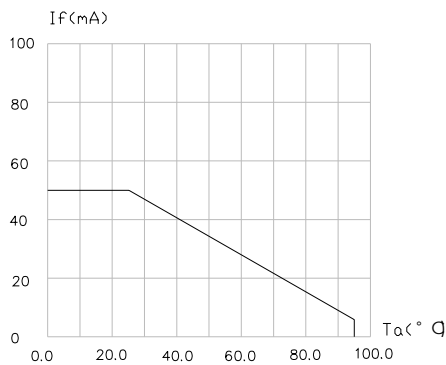
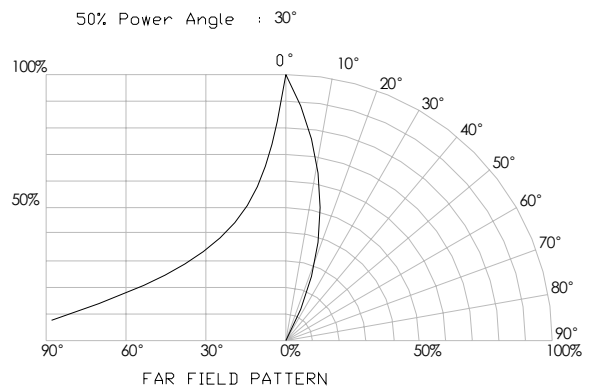


FIG.5 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE ( $T_{jmax}=95^{\circ}C$ ).



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

Data is subject to change without prior notice.