

SPECIFICATION FOR I-WITTY LED LAMP

MODEL No : LC512PWH1-25H
DOC. No : F 08Aug02

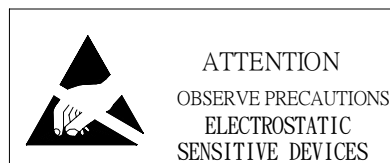
Description:

25 Degree 5mm LED Lamp in White
Color with Water Transparent Lens and
No Stopper

Dice Material: InGaN

Confirmed
by Customer: _____

Date: _____



I-WITTY TECHNOLOGY LTD.

Model No.	LC512PWH1-25H
Doc. No.	F 08Aug02

Applications:

- Advertising Signs
- Indicators
- LCD Back Light
- Illuminations

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	120	mW
Operation Temperature	T_{opr}	-20 ~ + 75	°C
Storage Temperature	T_{stg}	-30 ~ + 80	°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	$I_F = 20\text{mA}$	3.2	3.6	4.2	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Luminous Intensity	I_V	$I_F = 20\text{mA}$	2130	3500	---	mcd
Chromaticity Coordinates	x	$I_F = 20\text{mA}$	---	0.31	---	---
	y	$I_F = 20\text{mA}$	---	0.32	---	---
50% Power Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	---	25	---	deg

Ranks Combination ($I_F = 20\text{mA}$)

Rank	V	W	X
Luminous Intensity	2130-3000 mcd	3000-4180 mcd	4180-5860 mcd

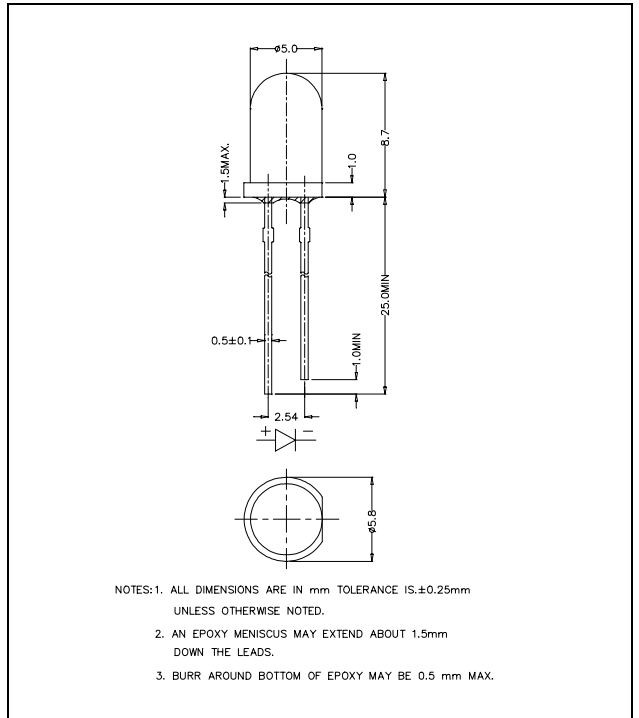
Rank	a					b1				b2				c			
Chromaticity Coordinates	x	0.280	0.264	0.283	0.296	0.287	0.283	0.330	0.330	0.296	0.287	0.330	0.330	0.330	0.330	0.361	0.356
	y	0.248	0.267	0.305	0.276	0.295	0.305	0.360	0.339	0.276	0.295	0.339	0.318	0.318	0.360	0.385	0.351

Rank	V9	V10	V11	V12	V13
Voltage	3.2-3.4 V	3.4-3.6 V	3.6-3.8 V	3.8-4.0 V	4.0-4.2 V

Important Notes:

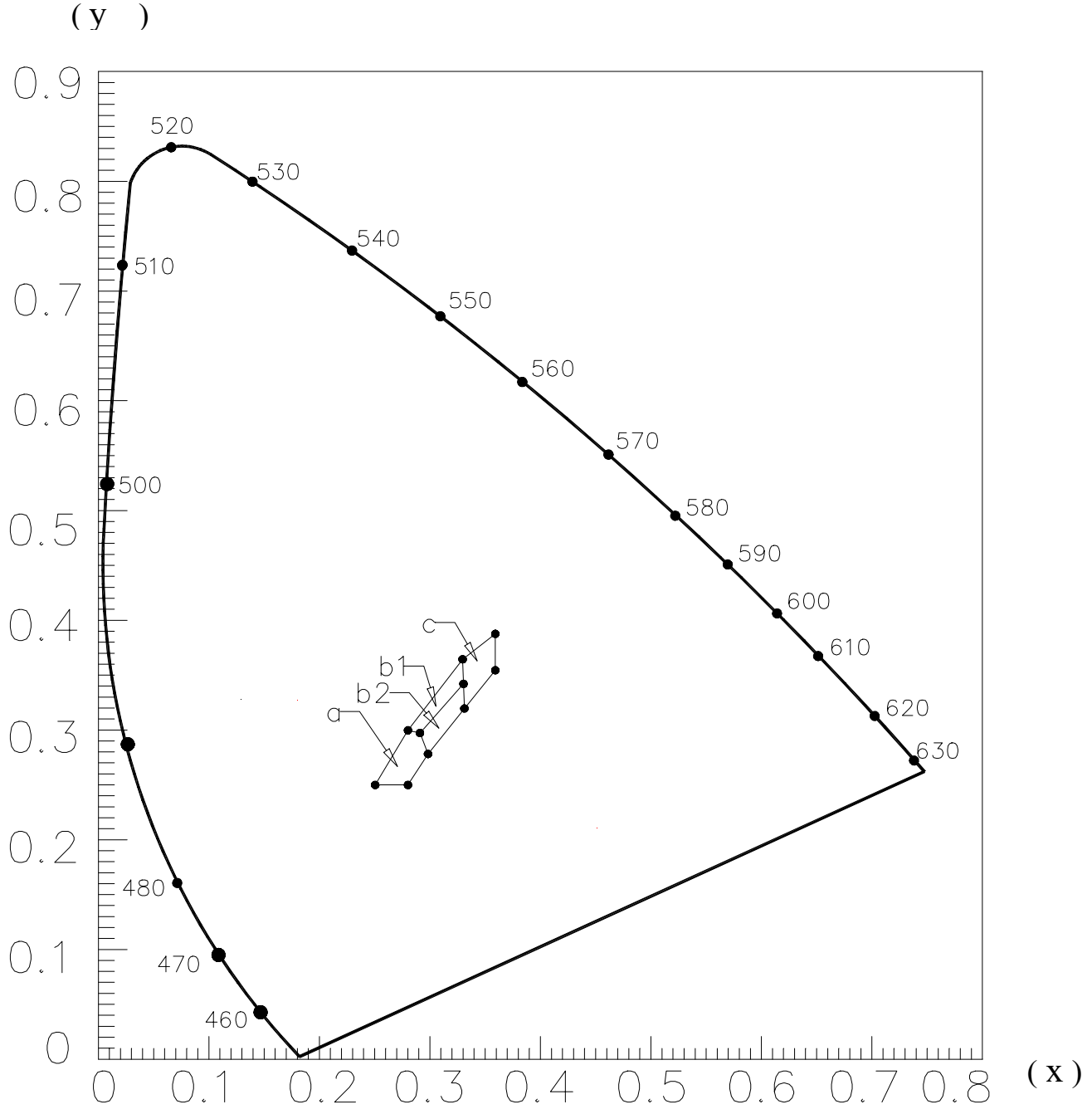
- 1) All ranks will be included per delivery, rank ratio will be determined by I-WITTY.
- 2) Tolerance of measurement of luminous intensity is $\pm 15\%$.
- 3) Tolerance of measurement of the Color Coordinates is ± 0.02 .
- 4) Tolerance of measurement of V_f is $\pm 0.05\text{V}$.
- 5) Packaging methods are available for selection, please refer to PACKAGING STANDARD.
- 6) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.

Dimension Drawing



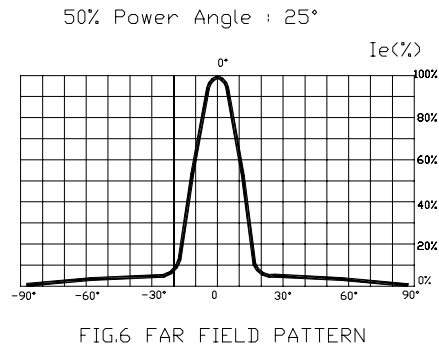
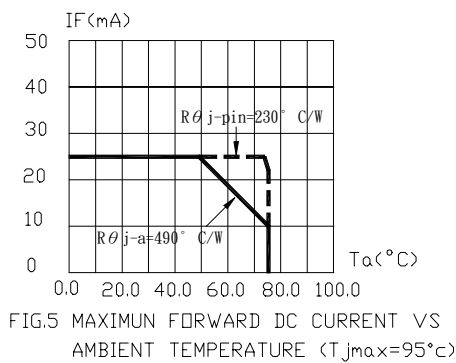
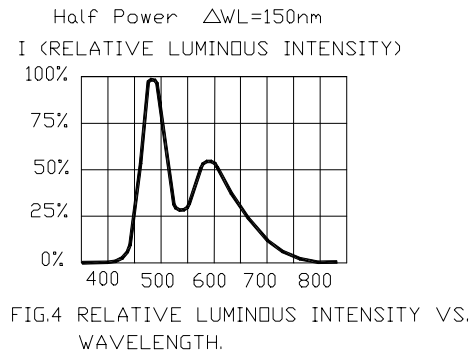
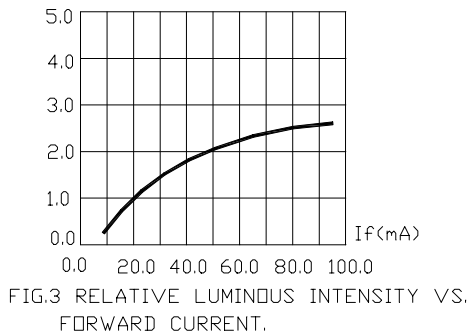
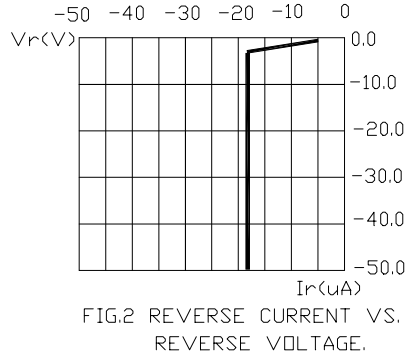
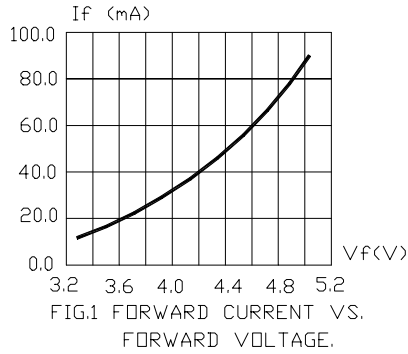
Model No.	LC512PWH1-25H
Doc. No.	F 08Aug02

CIE Chromaticity Diagram



Model No.	LC512PWH1-25H
Doc. No.	F 08Aug02

Graphs



1. Cathode PAD Area ($0.18 \times 0.18 \text{inch}^2$)
2. Height above nominal seating plane in inches(0.3inch)

Items	Signatures	Date	Revision History	
Prepared by	LiuZM	2002/8/08	DOC. No.	CHANGE DESCRIPTION
Checked by	ZouGR	2002/8/08	D 15Apr02	CHANGE DIMENSION DRAWING
Approved by	David	2002/8/08	E 09May02	MODIFY ABSOLUTE MAXIMUM FORWARD CURRENT
ECN#	ECN-H20020774		F 08Aug02	CHANG CIE CHROMATICITY DIAGRAM

Data is subject to change without prior notice.

Obsoletes Doc: E 09May02