



SPECIFICATION

Description:

70 Degree 7.6 x 7.6mm LITEFO Lamp
in Bluish Green Color with Water
Transparent Lens and Stopper

Dice Material: InGaN

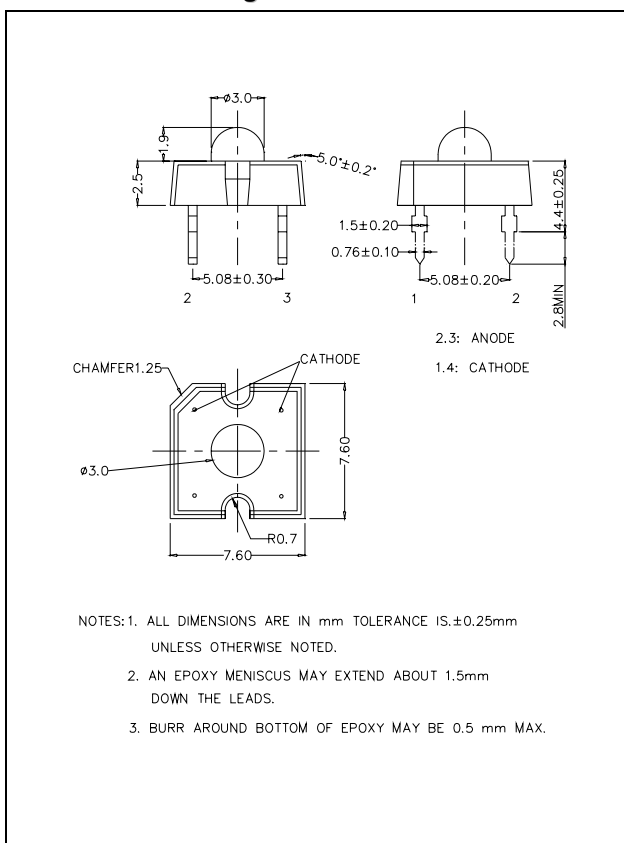
MODEL No : FP370ANBG11



Confirmed
by Customer: _____

Date: _____

Dimension Drawing



Applications

- Advertising Signs
- Indicators
- Message Board

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I_F	30	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	140	mW
Operation Temperature	T_{opr}	-40 ~ +100	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +100	$^\circ\text{C}$
Lead Soldering Temperature	T_{sol}	Max.260 $^\circ\text{C}$ 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 ($T_a = 25^\circ\text{C}$)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 30\text{mA}$	---	4.0	4.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	100	μA
Dominant Wavelength	λ_D	$I_F = 30\text{mA}$	495	505	510	nm
Luminous Flux	Φ_V	$I_F = 30\text{mA}$	600	1200	---	mlm
50% Power Angle	$2\theta_{1/2}$ H-H	$I_F = 30\text{mA}$	---	70	---	deg

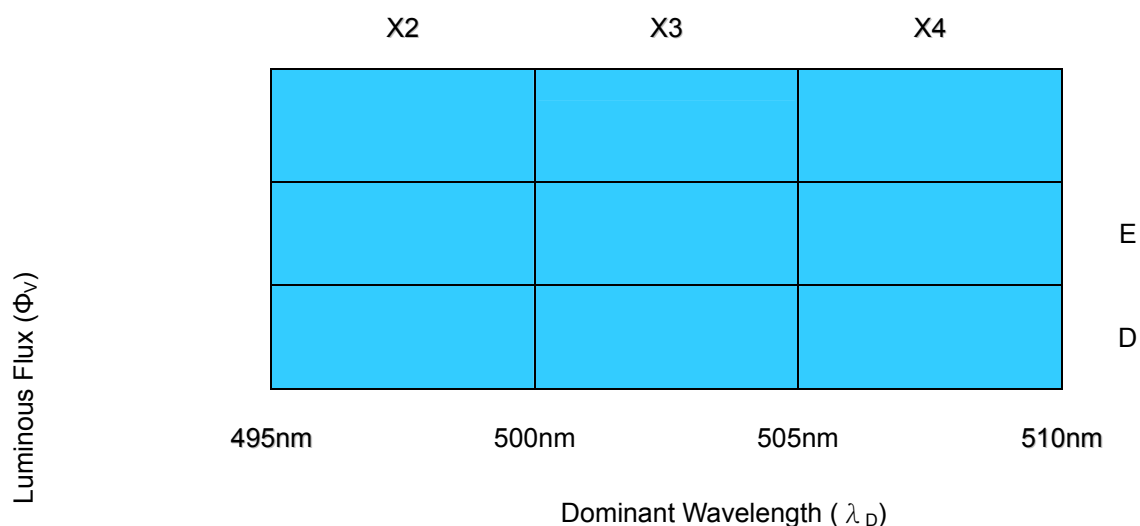
Standard bins for FP370ANBG11 ($I_F = 30\text{mA}$):

Lamps are sorted to Luminous Flux – Φ_V , V_F & Dominant Wavelength – λ_D bins shown.

Orders for FP370ANBG11 may be filled with any or all bins contained as below.

All Luminous Flux – Φ_V , V_F & Dominant Wavelength – λ_D values shown and specified are at $I_F=30\text{mA}$.

* **D+**



Rank	D	E
Luminous Flux	600-1200 mlm	1000-1800 mlm

* D+ indicates Luminous Flux is at D bin or above.

Forward Voltage (V_F)

Rank	V9	V10	V11	V12	V13	V14	V15
Voltage	3.2-3.4V	3.4-3.6V	3.6-3.8V	3.8-4.0V	4.0-4.2V	4.2-4.4 V	4.4-4.6 V

Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by LITEFO.
- 2) No tolerance in the measurement of luminous flux.
- 3) Tolerance of measurement of dominant wavelength is $\pm 1\text{nm}$.
- 4) Tolerance of measurement of V_f is $\pm 0.05\text{ V}$.

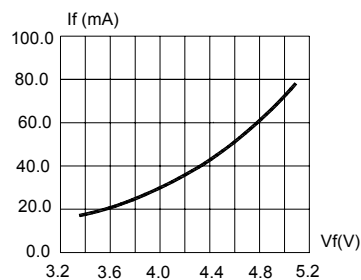


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

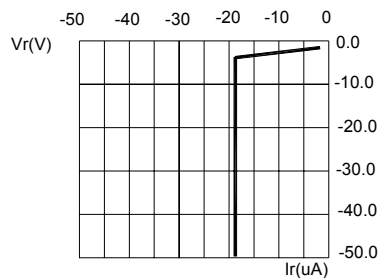


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

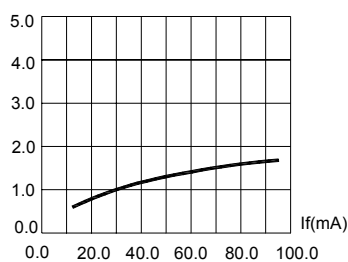


FIG.3 RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT.

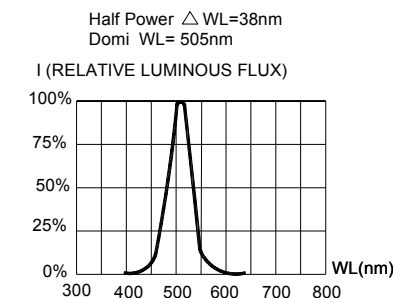


FIG.4 RELATIVE LUMINOUS FLUX VS. WAVELENGTH.

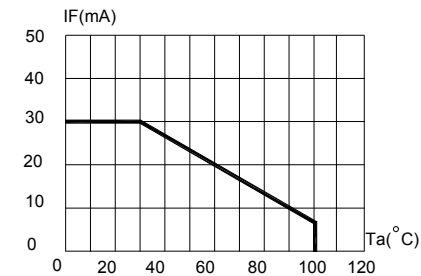


FIG.5 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE ($T_{jmax}=120^{\circ}\text{C}$)

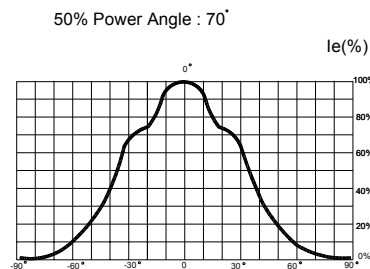


FIG.6 FAR FIELD PATTERN

Items	Signatures	Date	Revision History	
Prepared by	Lois	2004/10/14	DOC. No.	CHANGE DESCRIPTION
Checked by	Jarvis	2004/10/14	B 22Jun04	VF add V9.
Approved by	D.W.Liu	2004/10/14	03 14Oct04	Change T_{opr} & T_{stg} ; Change FIG.1&3&5; Change Φ_V & λ_D Rank form.
ECN#	ECN-H20040276			

Data is subject to change without prior notice.

Obsoletes Doc: B 22Jun04.