



## SPECIFICATION

Description:

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

Dice Material: InGaN

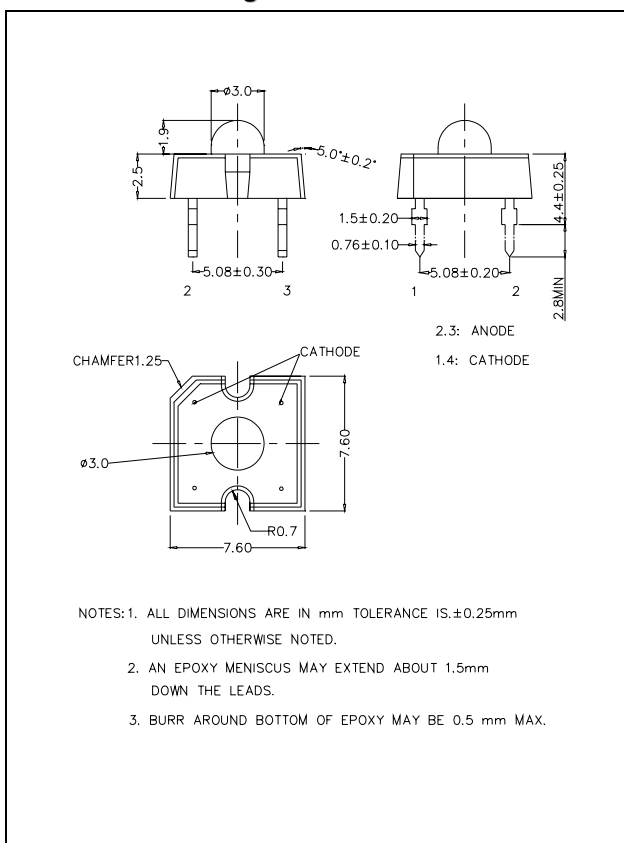
MODEL No : FP370ANPG11



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

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

## Dimension Drawing



## Applications

- Advertising Signs
- Indicators
- Message Board

## Absolute Maximum Ratings at Ta = 25°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	°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	$V_F$	$I_F = 30\text{mA}$	---	4.0	4.6	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	---	---	100	μA
Dominant Wavelength	$\lambda_D$	$I_F = 30\text{mA}$	515	527	535	nm
Luminous Flux	$\Phi_V$	$I_F = 30\text{mA}$	600	1500	---	mlm
50% Power Angle	20½ H-H	$I_F = 30\text{mA}$	---	70	---	deg

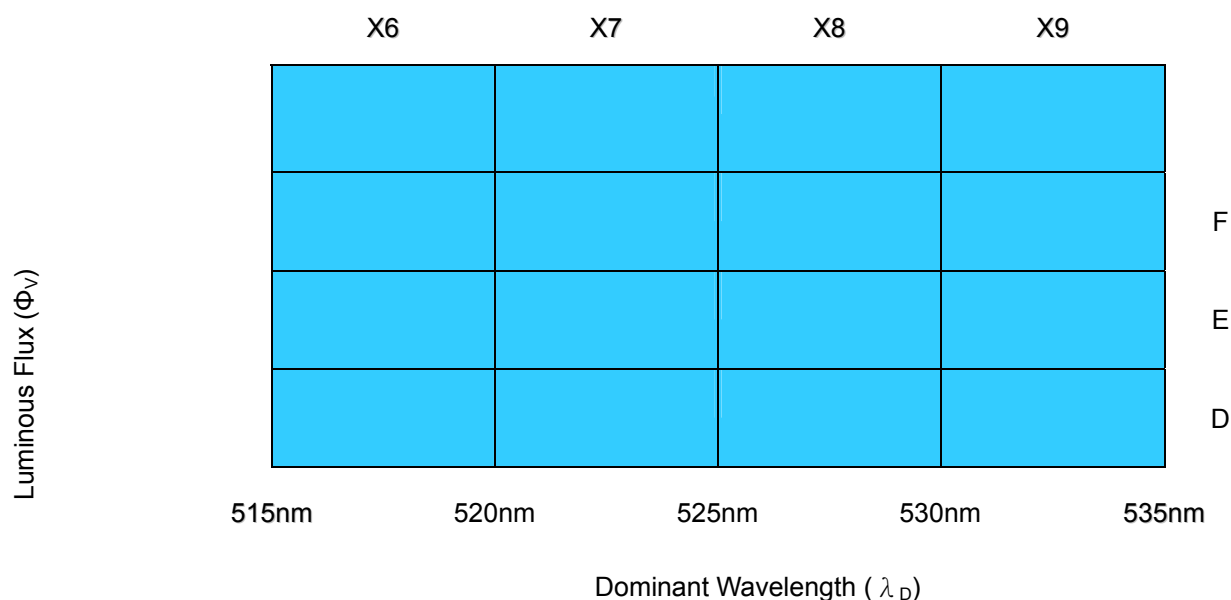
### Standard bins for FP370ANPG11 ( $I_F = 30\text{mA}$ ):

Lamps are sorted to Luminous Flux –  $\Phi_V$ ,  $V_F$  & Dominant Wavelength –  $\lambda_D$  bins shown.

Orders for FP370ANPG11 may be filled with any or all bins contained as below.

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

\* **D+**



Rank	D	E	F
Luminous Flux	600-1200 mlm	1000-1800 mlm	1500-2400 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  $\pm 0.05\text{ V}$ .

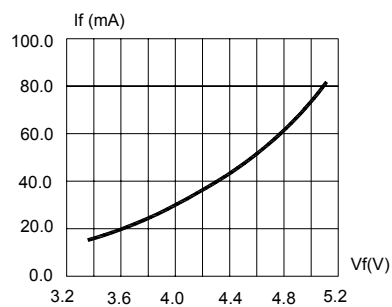


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

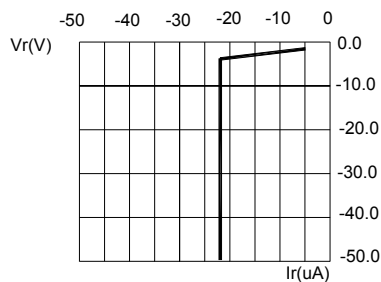


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

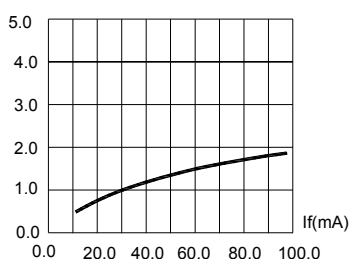


FIG.3 RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT.

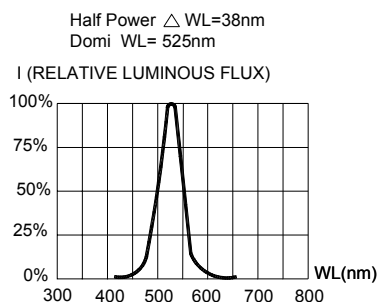


FIG.4 RELATIVE LUMINOUS FLUX VS. WAVELENGTH.

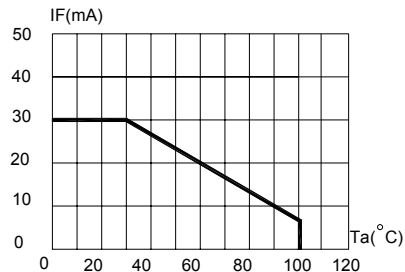


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE (Tjmax=120°C)

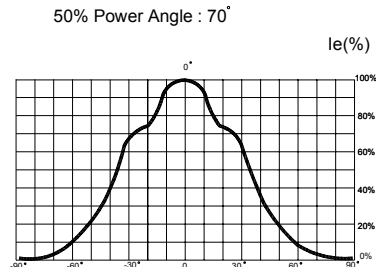


FIG.6 FAR FIELD PATTERN

Items	Signatures	Date	Revision History	
Prepared by	Lois	2004/10/14	DOC. No.	CHANGE DESCRIPTION
Checked by	Jarvis	2004/10/14	B 23Jun04	VF add V9. $\lambda_D$ (typ)525 to 527nm,
Approved by	D.W.Liu	2004/10/14	03 14Oct04	Change $T_{opr}$ & $T_{stg}$ ; Change FIG.1&3&5; Change $\Phi_V$ & $\lambda_D$ Rank form.
ECN#	ECN-H20040276			

Data is subject to change without prior notice.

Obsoletes Doc: B 23Jun04.