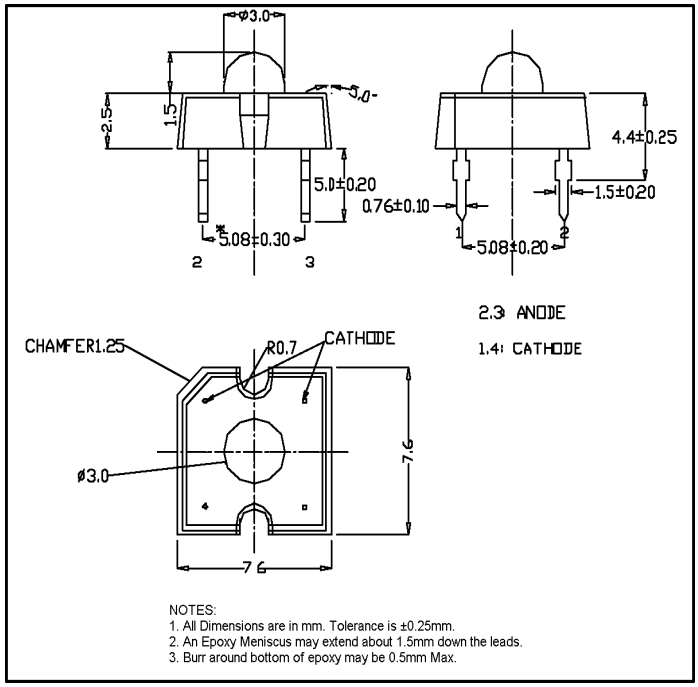
COTCO

Cotco P4 Ultra Bright White GaN LED

LP377PWH1−90G



Features

4 Pin Plastic Package
High Current Operation
High Flux Output
Low Profile
Water Clear Lens

Applications

Illuminator
Indicators
Architectural Lighting
Channel Letters
Strip Lighting

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Unit
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	140.00	mW
Operating Temperature	T_{opr}	−40 ~ +100	°C
Storage Temperature	T_{stg}	−40 ~ +100	°C
Soldering Temperature	T_{sol}	260	°C
Soldering Time	−	for 3 sec. max	−

Opto−Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=30mA	--	4.00	4.60	V
Reverse Current	I_R	V_R=5V	−	−	100	μA
Luminous Intensity	I_V	I_F=30mA	390.00	770.00	−	mcd
Viewing Angle	$2\theta^{1/2}$	−	−	90°	−	deg.
Peak Wavelength	λp	I_F=30mA	−	465	−	nm
Dominant Wavelength	λd	I_F=30mA	−	x=.31, y=.32	−	nm
Spectral Line Half Width	Δλ	I_F=30mA	−	28	−	nm

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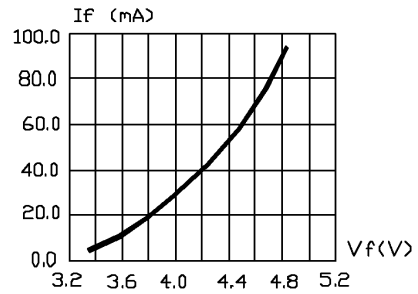

FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

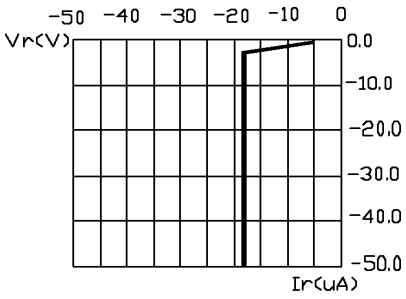

FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

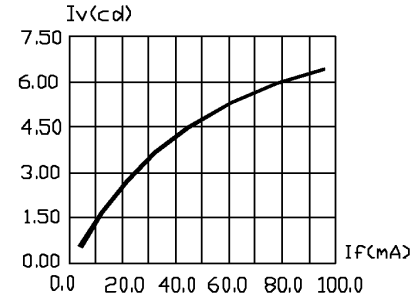

FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

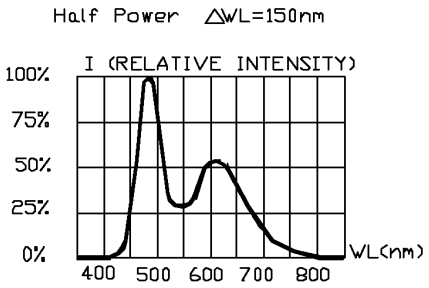

FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

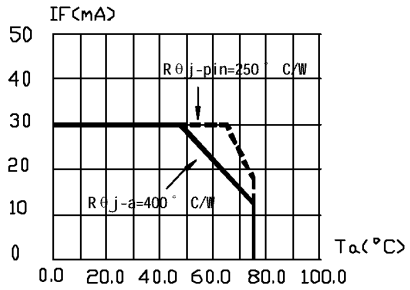

FIG.5 MAXIMUN FORWARD DC CURRENT VS AMBIENT TEMPERATURE . DERATING BASED ON Tjmax=95°c

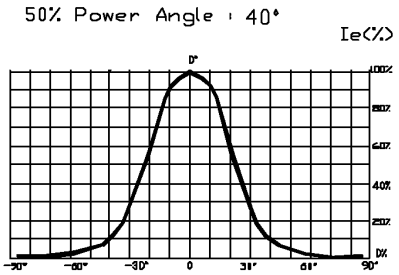

FIG.6 SPATIAL DISTRIBUTION.

1. Cathode PAD Area (0.18 ×0.18 ×2inch^2)
2. Height above nominal seating plane in inches(0.3inch)

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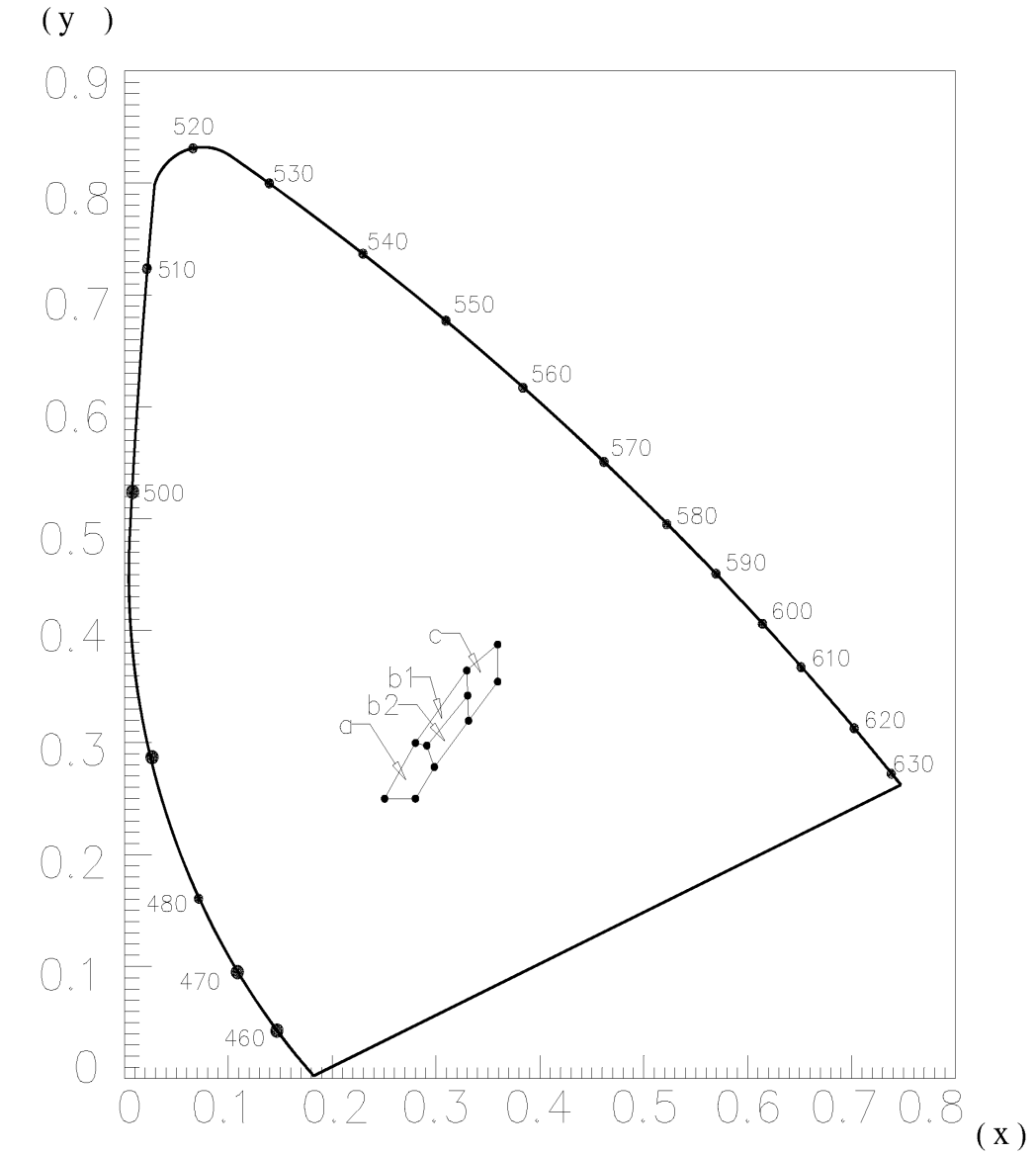
LP377PWH1 90G Graphs

CIE Chromaticity Diagram



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