



LEDTECH ELECTRONICS CORP.

NANYA ROAD, MUGANG ZHAOQING  
CITY GUANGDONG CHINA.

TEL: 86-758-2875541, 2870651, 2877464, 2876185, 2877017

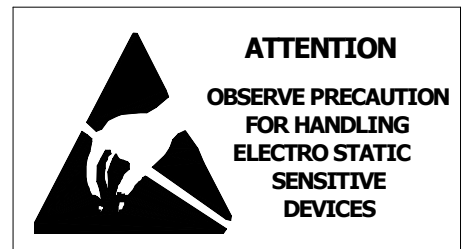
FAX: 86-758-2878014

[Http://www.ledtech.com.tw](http://www.ledtech.com.tw)

# SPECIFICATION

*PART NO. : LP30N3-S071*

COB 35 x 35mm TYPE



Approved by	Checked by	Prepared by
王方波	蘇智良	顏保宏





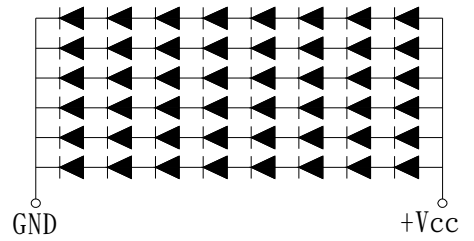
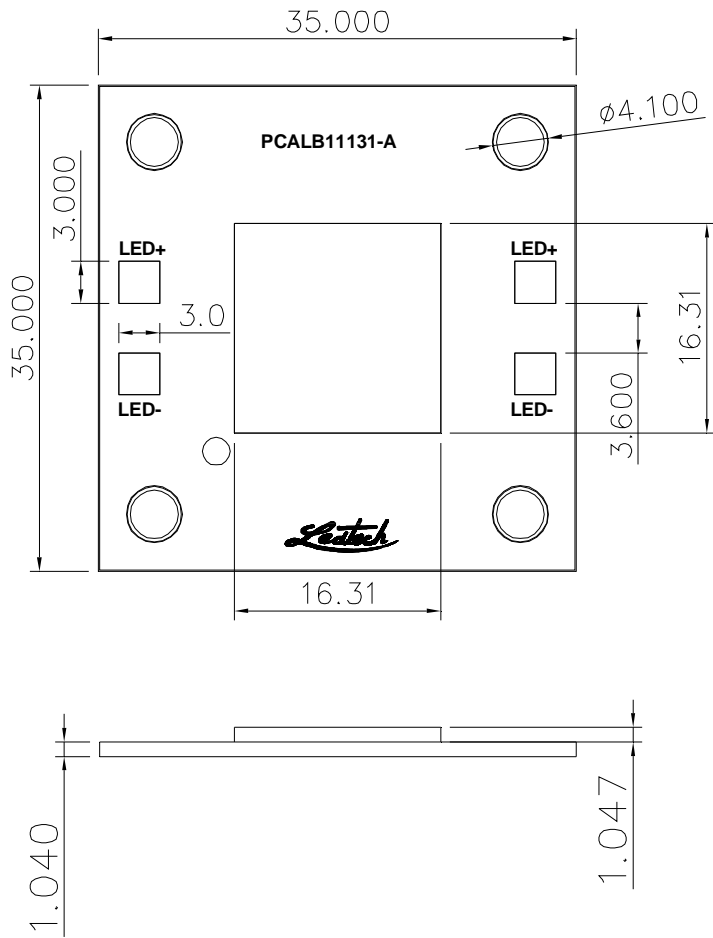
## Features

- Pb-Free soldering application
- RoHS compliance
- Multi-Chip package
- High Reliability

## Application

- Bay-light module
- Indoor decorative lighting
- Illumination
- Automotive Application
- Architectural Lighting
- Indicator / Decoration

**Package Dimensions**



**Notes:**

1. All dimensions are in mm.
2. Tolerance is  $\pm 0.25$ mm unless otherwise noted.

**Description**

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LP30N3-S071	InGaN/ Sapphire	White	Yellow Diffused

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

Parameter	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	10.15	W
D.C. Forward Current	I <sub>f</sub>	350	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	I <sub>f</sub> (Peak)	400	mA
Operating Temperature Range	T <sub>opr.</sub>	-40 to +100	°C
Storage Temperature Range	T <sub>stg.</sub>	-40 to +100	°C
Solder Heat Resistance	SHR	Hand Soldering:300±5°C for 3 sec.	
Electric Static Discharge Threshold (HBM)	ESD	1000	V

**Electrical and Optical Characteristics :**

Parameter	Symbol	Condition	Values			Units
			Min.	Typ.	Max.	
Luminous Flux		I <sub>F</sub> =350mA		1000		lm
	Rank L2		900	--	1100	
	Rank L3		1100	--	1300	
Forward voltage		I <sub>F</sub> =350mA		25.2		V
	Rank V2		23	--	26	
	Rank V3		26	--	29	
Correlated Colour Temperature	CCT	I <sub>F</sub> =350mA	5500	--	6500	K
CIE Chromaticity Coordinates: X Axis	X	I <sub>F</sub> =350mA	--	0.3218	--	
CIE Chromaticity Coordinates: Y Axis	Y	I <sub>F</sub> =350mA	--	0.3353	--	
Reverse Current	I <sub>R</sub>	V <sub>r</sub> =5V	--	--	50	μA
Color Renderig Index	CRI	I <sub>F</sub> =350mA	--	75	--	Ra
Viewing angle at 50% IV	2θ1/2	I <sub>F</sub> =350mA	--	120	--	Deg.

Notes:

1. The datas tested by IS tester.
2. Customer's special requirements are also welcome.

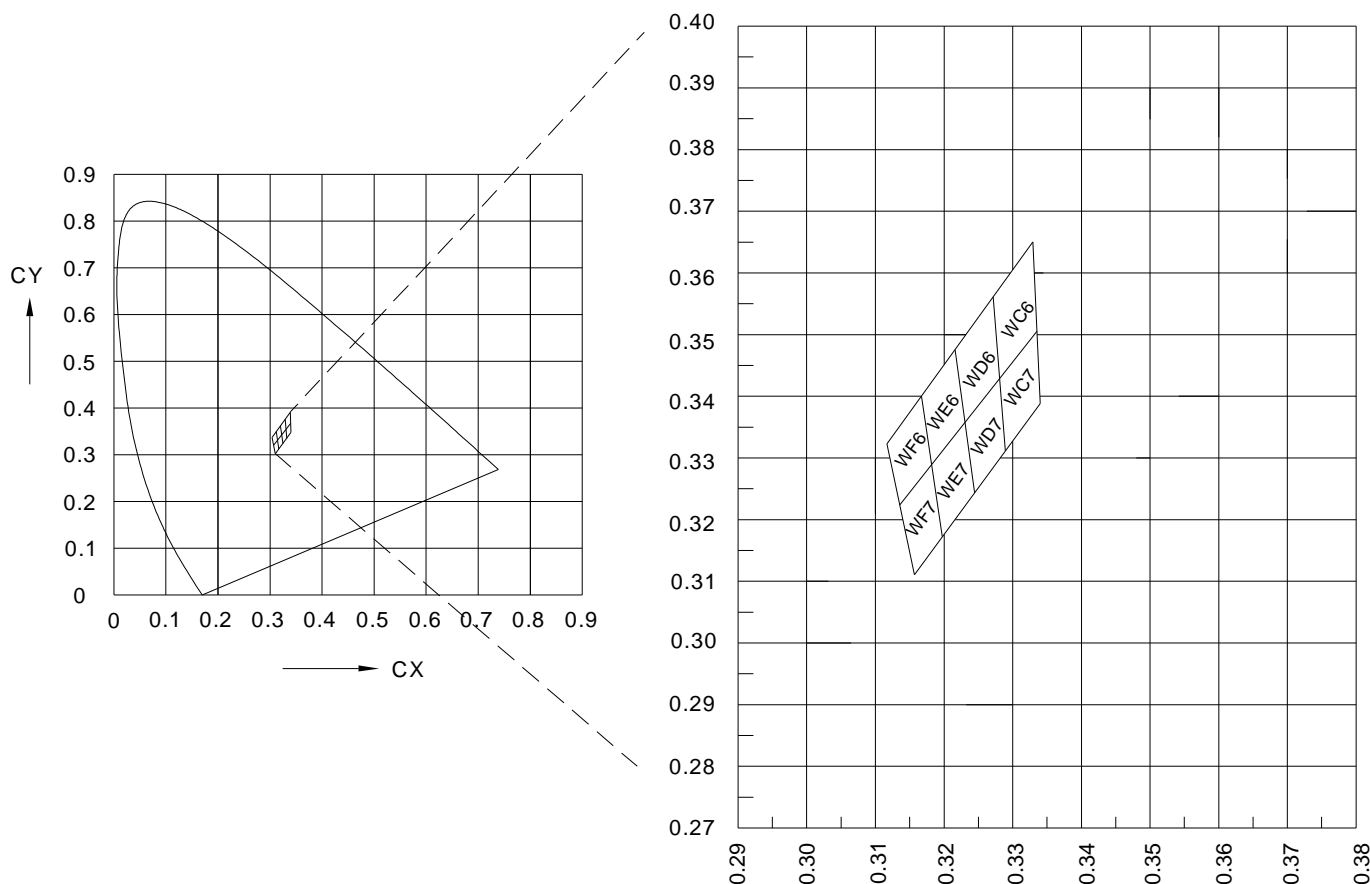
### Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS (IF=350mA, Ta=25°C)

BIN	RANK					BIN	RANK				
WC6	X	0.3264	0.3327	0.3324	0.3268	WC7	X	0.3268	0.3324	0.3324	0.3272
	Y	0.3551	0.3650	0.3519	0.3430		Y	0.3430	0.3519	0.3388	0.3305
WD6	X	0.3210	0.3264	0.3268	0.3218	WD7	X	0.3218	0.3268	0.3272	0.3227
	Y	0.3468	0.3551	0.3430	0.3353		Y	0.3353	0.3430	0.3305	0.3233
WE6	X	0.3164	0.3210	0.3218	0.3175	WE7	X	0.3175	0.3218	0.3227	0.3186
	Y	0.3395	0.3468	0.3353	0.3283		Y	0.3283	0.3353	0.3233	0.3169
WF6	X	0.3122	0.3164	0.3175	0.3136	WF7	X	0.3136	0.3175	0.3186	0.3151
	Y	0.3331	0.3395	0.3283	0.3223		Y	0.3223	0.3283	0.3169	0.3114

Note: X,Y Tolerance each Bin limit is±0.01.

### Chromaticity Coordinates & Bin grading diagram:



**Typical Electrical/Optical Characteristic Curves**

(25°C Ambient Temperature Unless Otherwise Noted)

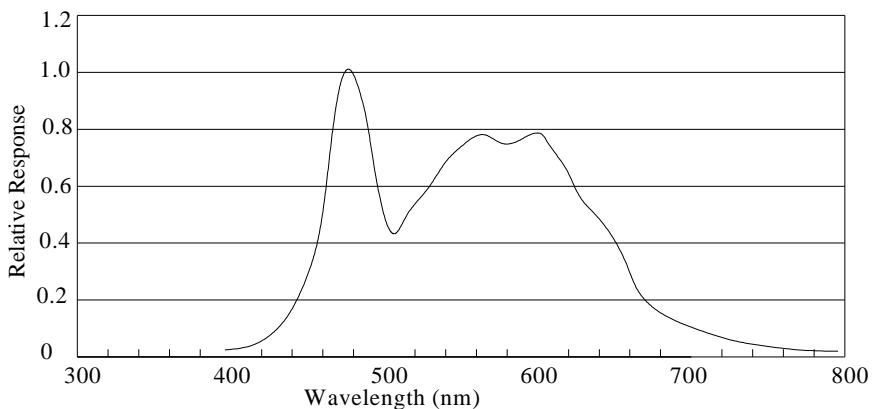
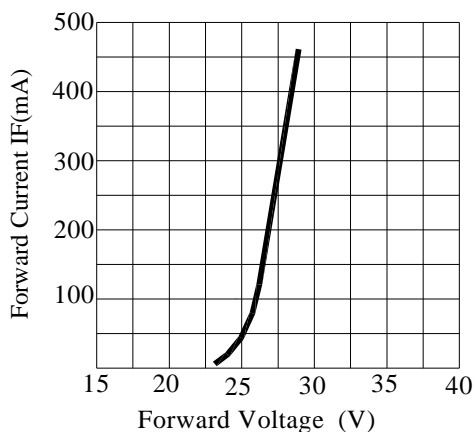
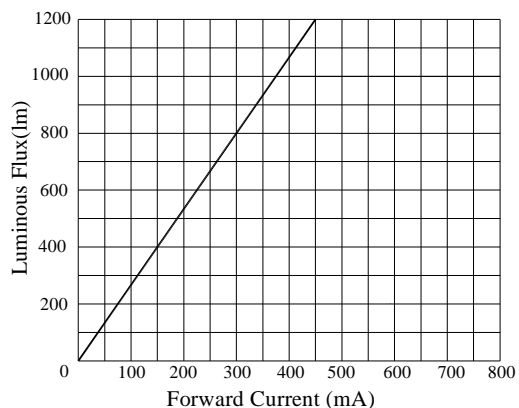


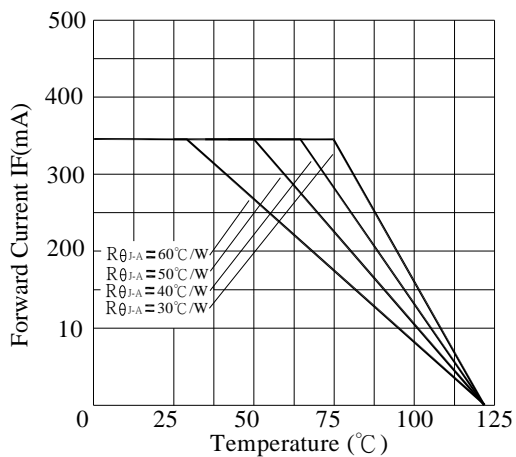
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



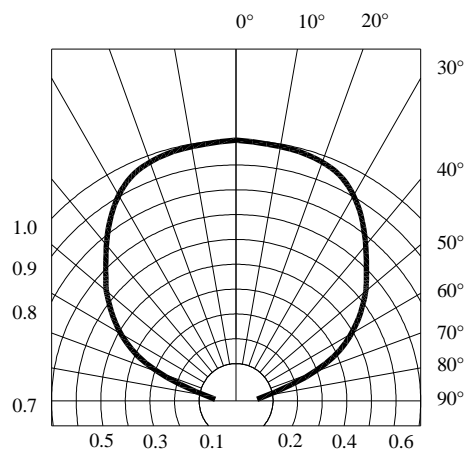
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Intensity



Ambient Temperature VS. Forward Current



Radiation Diagram

## Handling of Silicone Resin LEDs

### Handling Indications

During processing, mechanical stress on the surface should be minimized as much as possible. Sharp objects of all types should not be used to pierce the sealing compound



Figure 1

In general, LEDs should only be handled from the side. By the way, this also applies to LEDs without a silicone sealant, since the surface can also become scratched.

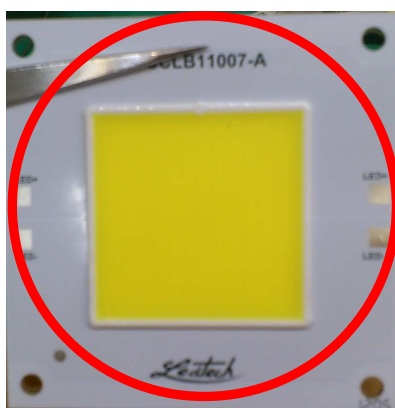
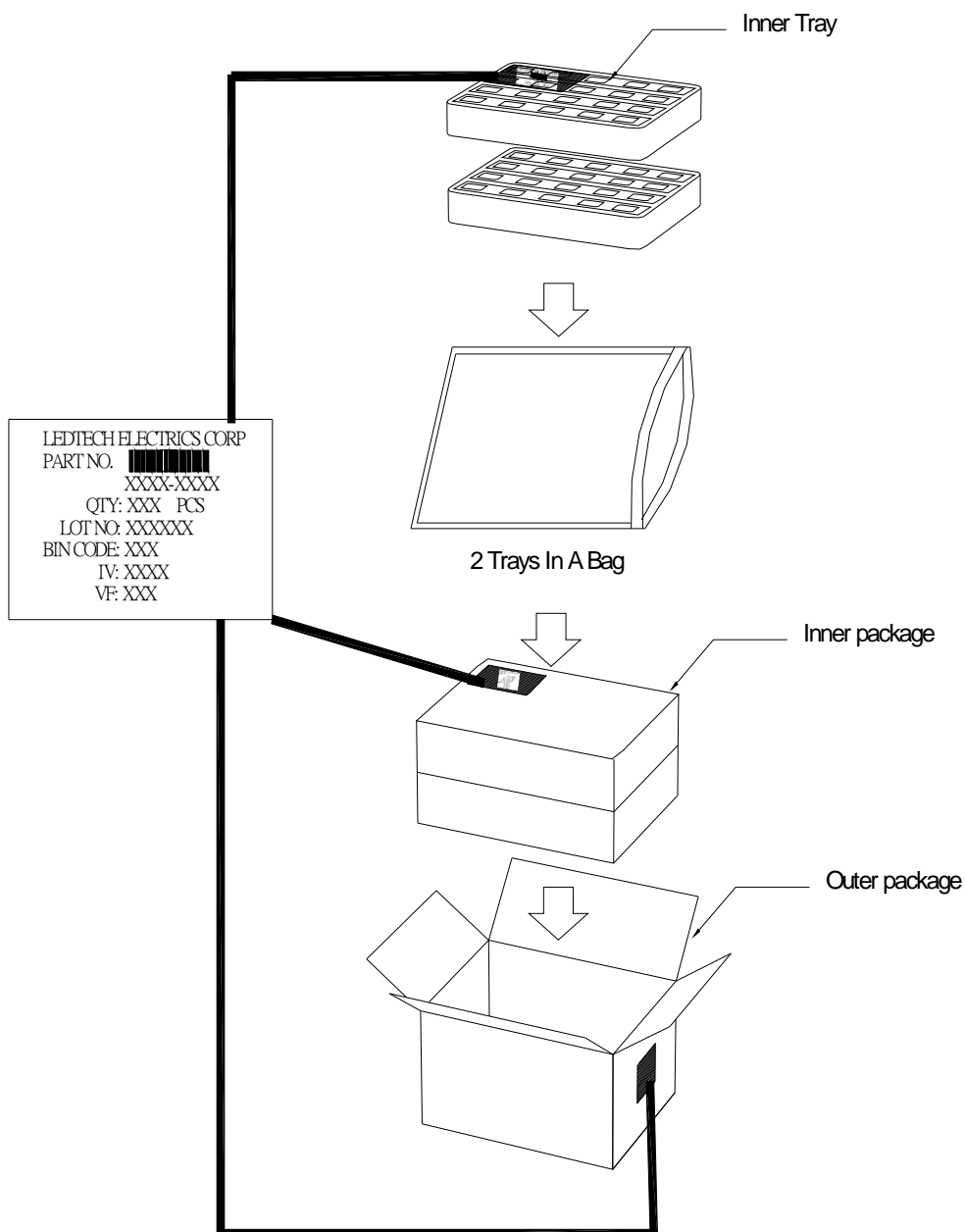


Figure 2

When populating boards in SMT production, there are basically no restrictions regarding the form of the pick and place nozzle, except that mechanical pressure on the surface of the resin must be prevented.

This is assured by choosing a pick and place nozzle which is larger than the LED's reflector area.

**Packaging :****Notes :**

1. All dimensions are in mm.
2. There are 16pcs in a tray.
3. There are 2 trays in an inner box.
4. There are 2 inner boxes in an outer box.