



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. : LP30NR-S062

COB 50X50mm TYPE



Approved by

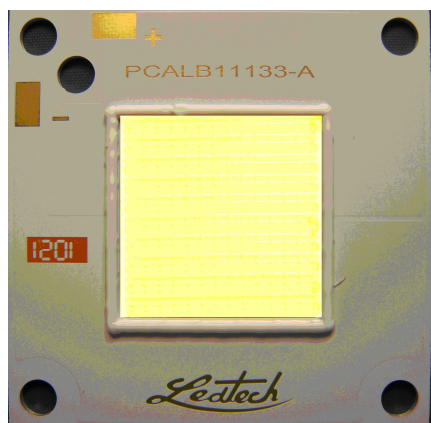
Checked by

Prepared by

王方波

蘇智良

顏保宏



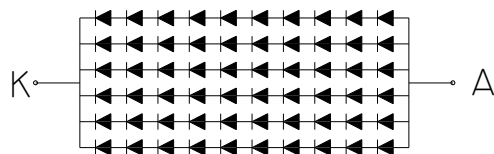
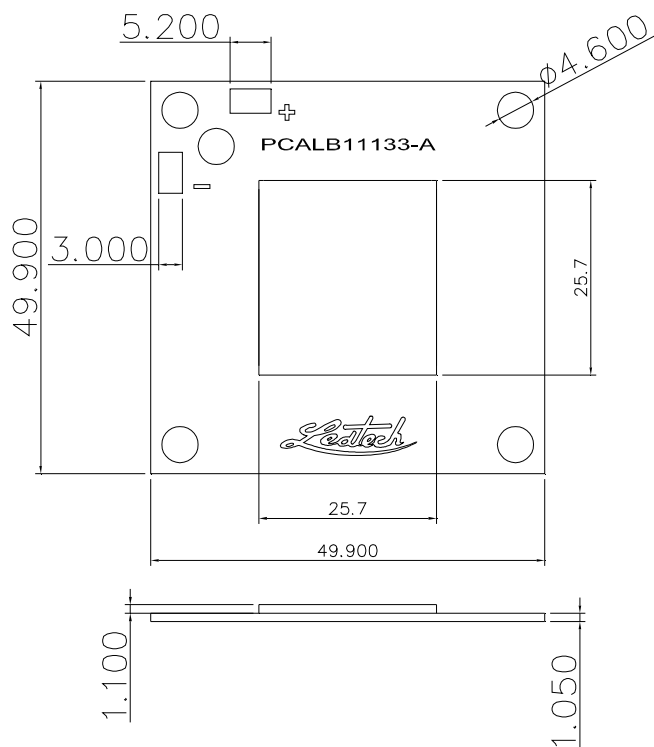
Features

- 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 $\pm 0.5\text{mm}$ unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LP30NR-S062	InGaN/ Sapphire	Warm White	Yellow Diffused

Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	11.1	W
Reverse Voltage	V _R	37	V
D.C. Forward Current	I _f	360	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	I _f (Peak)	360	mA
Operating Temperature Range	T _{opr.}	-40 to +100	°C
Storage Temperature Range	T _{stg.}	-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	Min.	Typ.	Max.	Unit
Luminous Flux		I _f =360mA	-	900	-	lm
	Rank 01		800	-	1100	
	Rank 02		1100	-	1400	
Forward Voltage		I _f =360mA	-	31.5	-	V
	Rank U07		27	-	32	
	Rank U08		32	-	37	
Efficiency	η	I _f =360mA	-	95	-	lm/W
CIE Chromaticity Coordinates : X Axis	X	I _f =360mA	-	0.4221	-	
CIE Chromaticity Coordinates : X Axis	Y	I _f =360mA	-	0.3984	-	
Correlated Color Temperature	CCT	I _f =360mA	3000	-	3500	°K
Color Rendering Index	CRI	I _f =360mA	70	-	-	R _a
Reverse Current	I _r	V _r =5V	-	-	100	μA
Viewing Angle	2 θ 1/2	I _f =360mA	-	120	-	deg
Thermal Resistance Junction to Case	Rθ _{J-C}	I _f =360mA	-	15	-	°C/W

Notes:

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

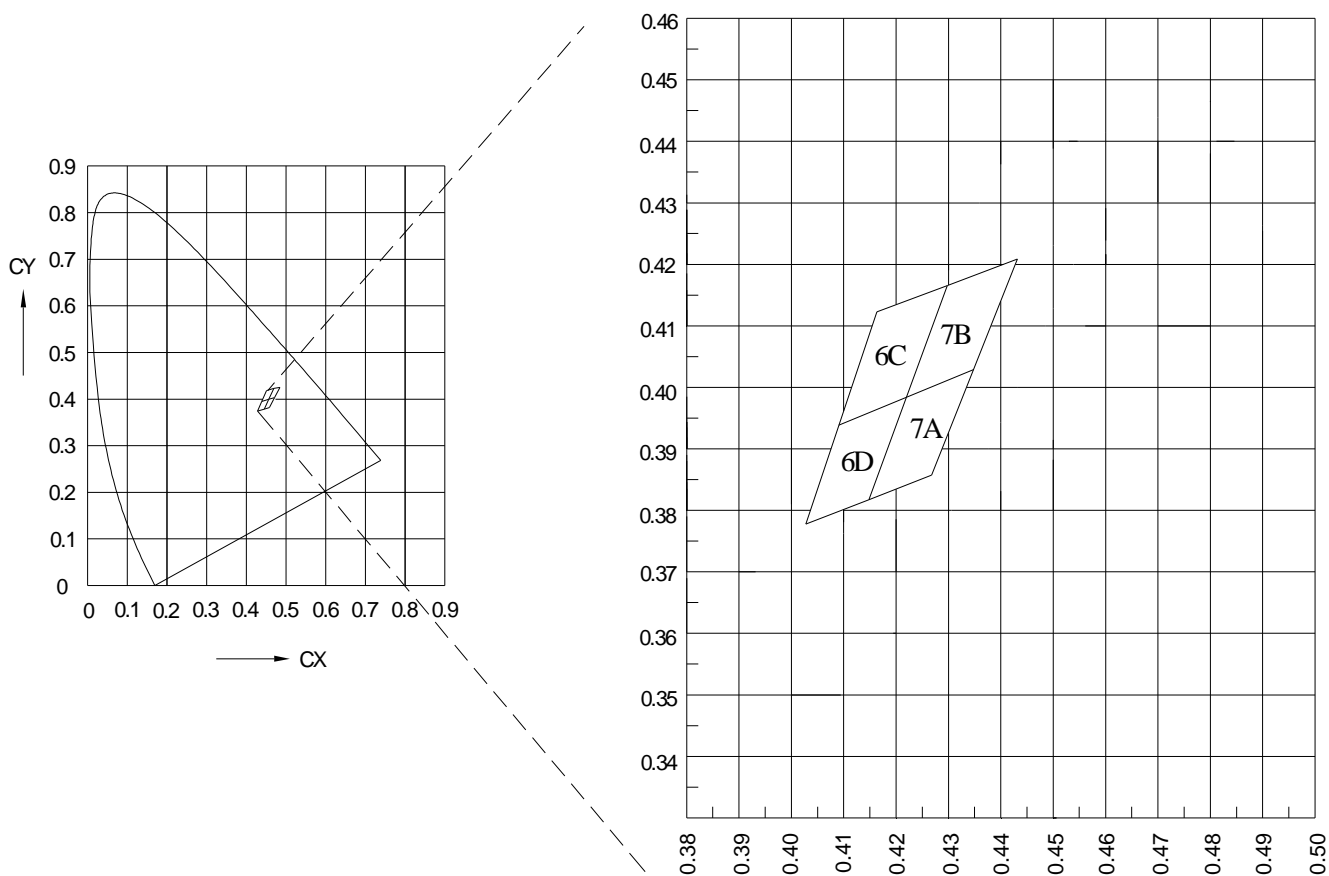
Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS (IF=360mA, Ta=25°C)

BIN	RANK				
7A	X	0.4147	0.4221	0.4342	0.4259
	Y	0.3814	0.3984	0.4028	0.3853
7B	X	0.4221	0.4299	0.4430	0.4342
	Y	0.3984	0.4165	0.4212	0.4028
6C	X	0.408	0.4146	0.4299	0.4221
	Y	0.3916	0.4089	0.4165	0.3984
6D	X	0.4017	0.408	0.4221	0.4147
	Y	0.3751	0.3916	0.3984	0.3814

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)

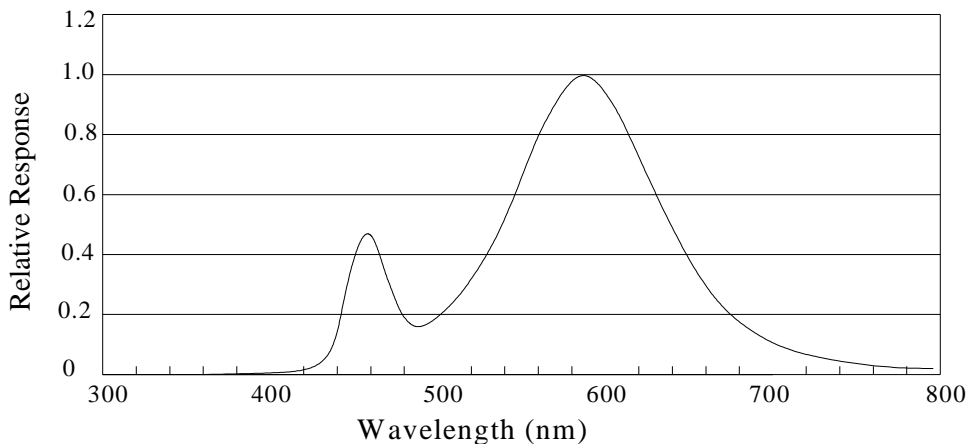
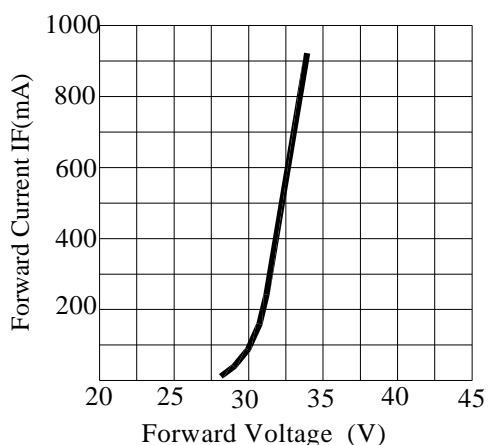
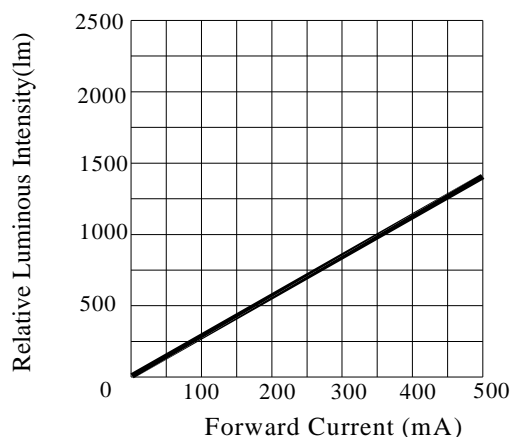


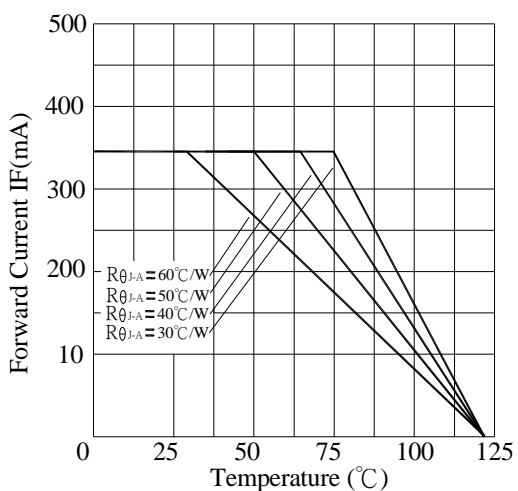
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



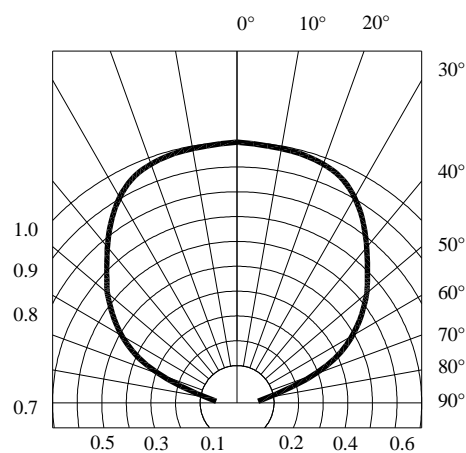
Forward Current VS. Applied Voltage



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

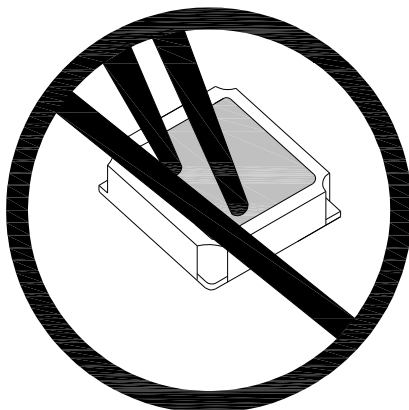


Figure 1

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.

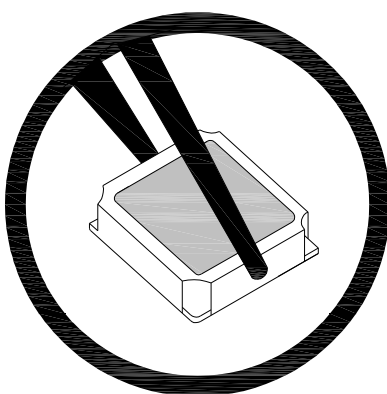


Figure 2

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.