LEDTECH ELECTRONICS CORP.

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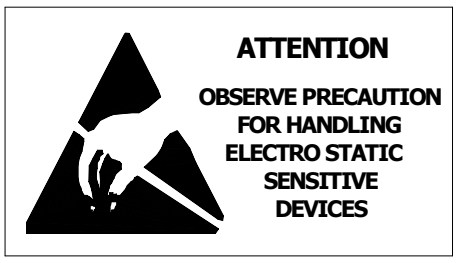
SPECIFICATION

PART NO. : LP30N3-S075

COB 35 x 35mm TYPE



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

Ledtech	LP30N3-S075	COB 35 x 35mm TYPE

MODIFY RECORD

TAKE EFFECT DATE	MODIFY ISSUES	REMARKS

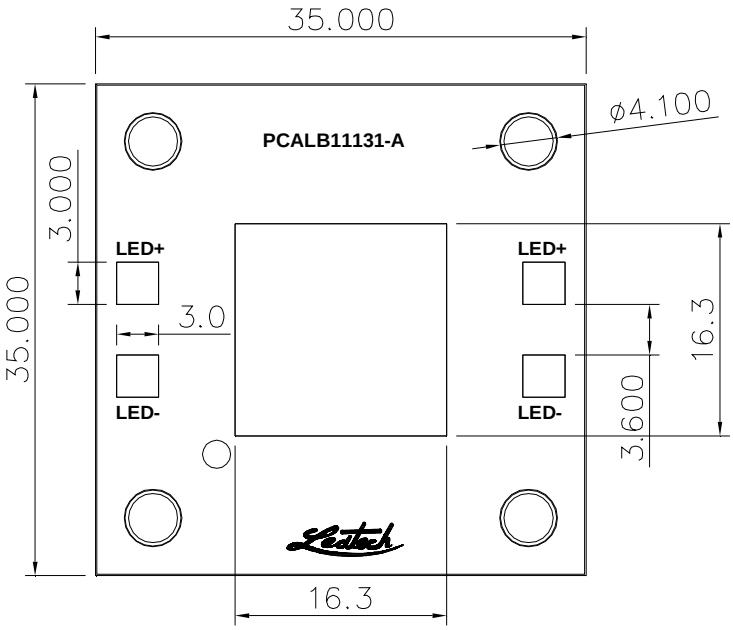
Features

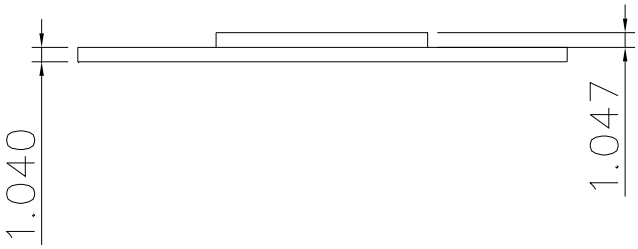
- Pb-Free soldering application
- RoHS compliance
- Multi-Chip package
- High Reliability

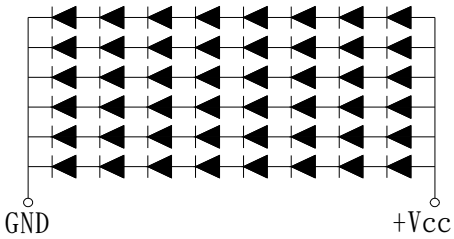
Application

- 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 ±0.25mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LP30N3-S075	InGaN/Sapphire	Neutral White	Orange Diffused

Absolute Maximum Ratings at Ta=25 ℃

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	9.8	W
D.C. Forward Current	If	350	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	If(Peak)	400	mA
Operating Temperature Range	Topr.	-40 to +100	℃
Storage Temperature Range	Tstg.	-40 to +100	℃
Solder Heat Resistance	SHR	Hand Soldering:300±5℃ 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		Φv	IF=350mA		770		lm
	Rank L2			700	--	900	
	Rank L3			900	--	1100	
Forward voltage		VF	IF=350mA		25.1		V
	Rank V2			22	--	25	
	Rank V3			25	--	28	
Correlated Colour Temperature		CCT	IF=350mA	3700	--	4300	K
CIE Chromaticity Coordinates: X Axis		X	IF=350mA	--	0.3818	--	
CIE Chromaticity Coordinates: Y Axis		Y	IF=350mA	--	0.3797	--	
Reverse Current		I_R	Vr=5V	--	--	50	μA
Color Renderig Index		CRI	IF=350mA	80	--	--	Ra
Viewing angle at 50% IV		2θ1/2		--	120	--	Deg.

Notes:

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

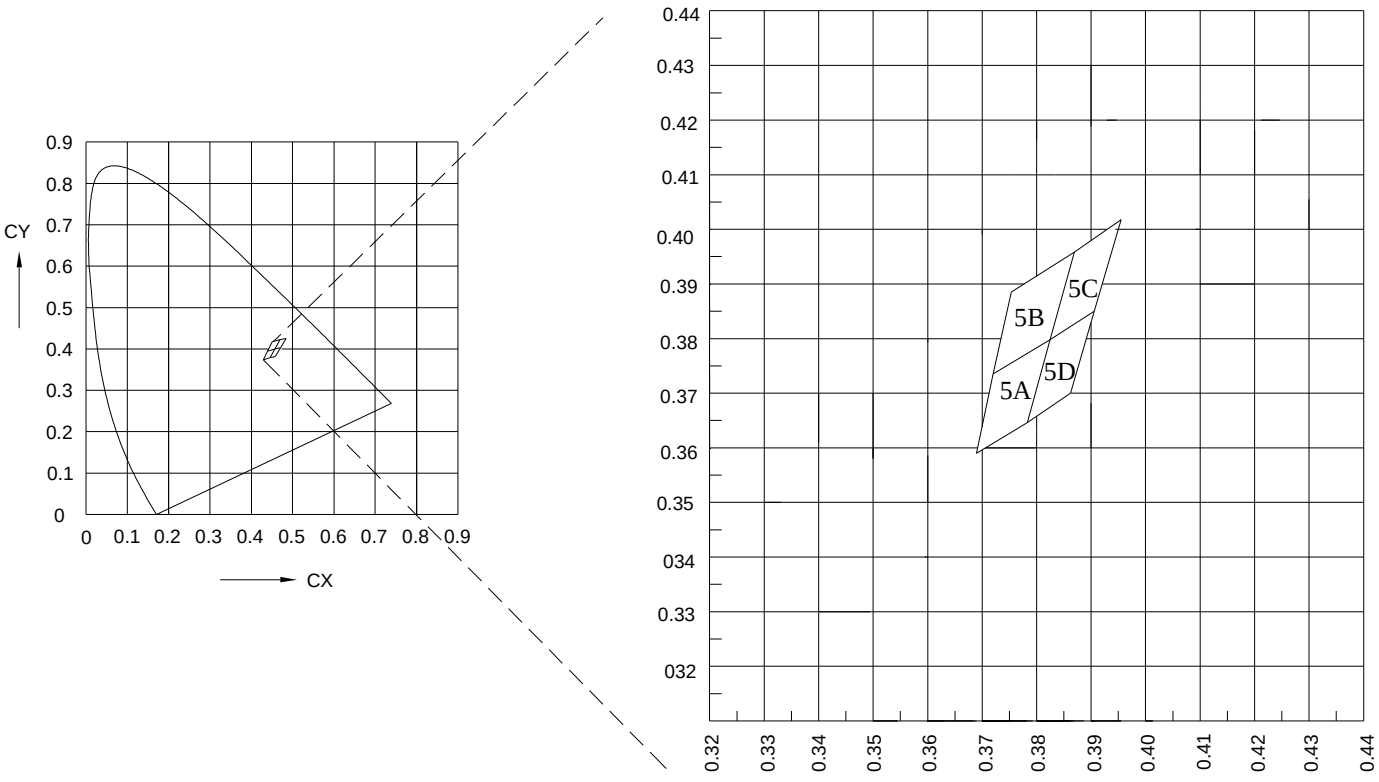
Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS (IF=350mA.Ta=25℃)

BIN	RANK				
5A	X	0.3690	0.3720	0.3825	0.3783
	Y	0.3590	0.3735	0.3798	0.3646
5B	X	0.3720	0.3754	0.3869	0.3825
	Y	0.3735	0.3885	0.3958	0.3798
5C	X	0.3825	0.3869	0.3955	0.3906
	Y	0.3798	0.3958	0.4018	0.3850
5D	X	0.3783	0.3825	0.3906	0.3862
	Y	0.3646	0.3798	0.3850	0.3700

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

Chromaticity Coordinates & Bin grading diagram:



Typical Electrical/Optical Characteristic Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

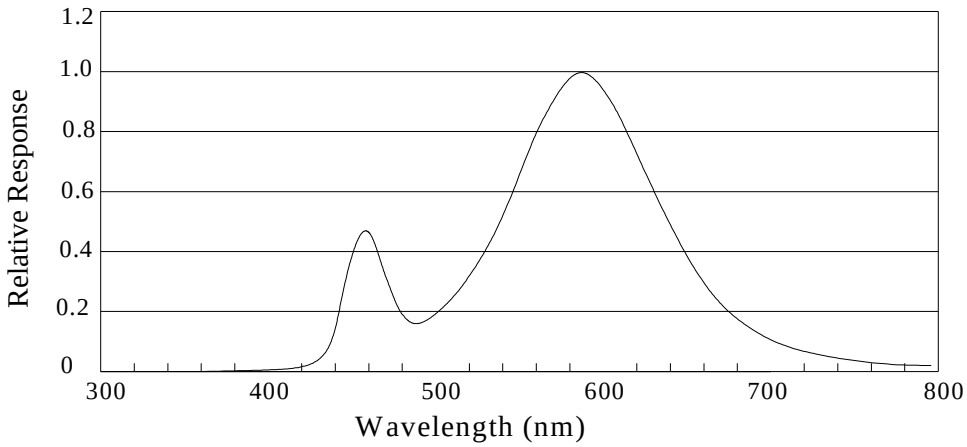
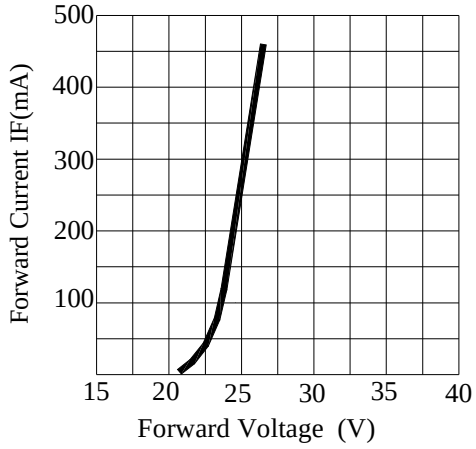
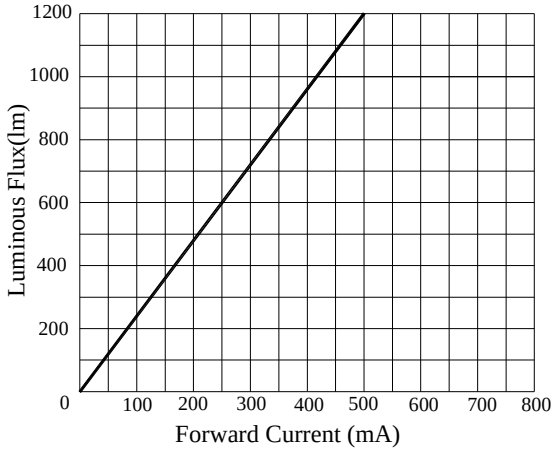


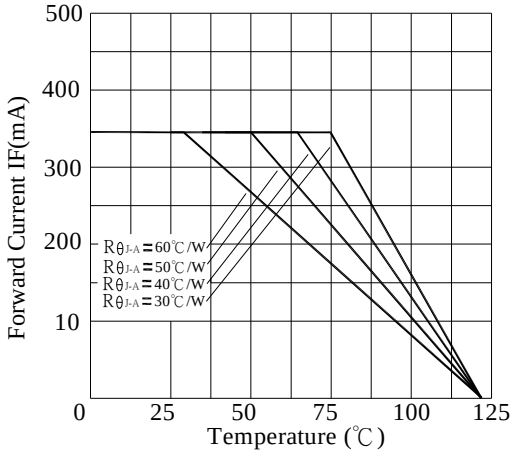
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



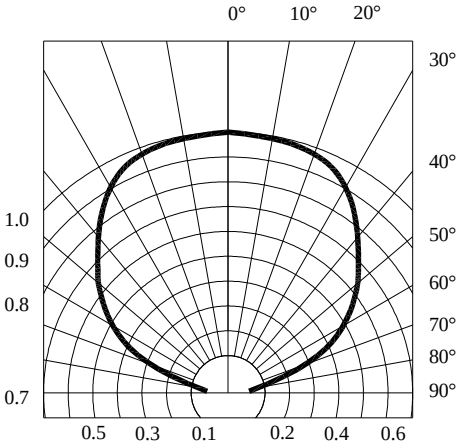
Forward Current VS. Applied Voltage



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.

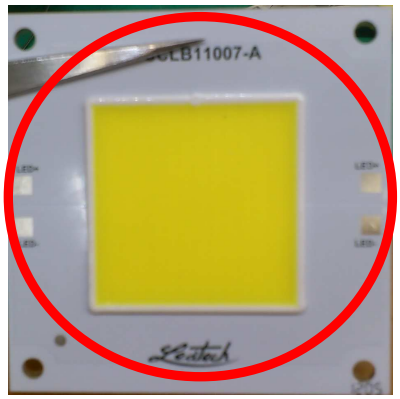


Figure 2

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.