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SPECIFICATION

PART NO. : LP30NR-S895

13.5W COB 19*19mm TYPE



Approved by	Checked by	Prepared by
<i>Yue</i>	<i>Lian</i>	<i>JinHui</i>

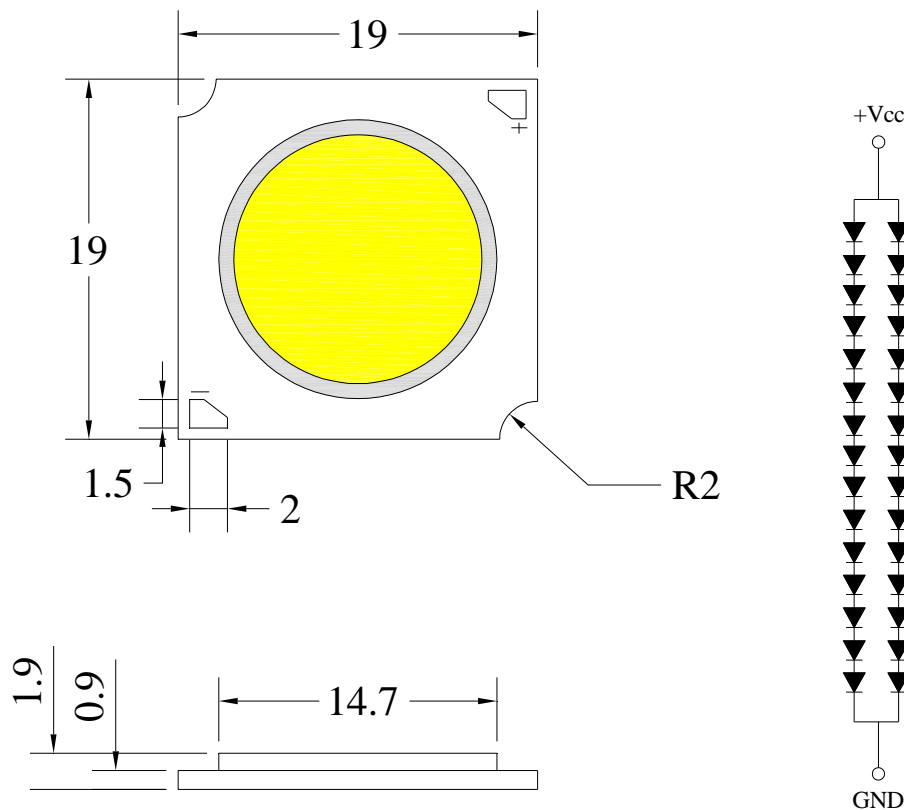
Features

- | 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



15S / 2P

Notes:

1. All dimensions are in mm.
2. Tolerance is ± 0.5 mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LP30NR-S895	InGaN/Sapphire	Neutral White	Yellow Diffused

Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	13.5	W
D.C. Forward Current	I _f	300	mA
LED Junction Temperature	T _j	150	°C
Operating Temperature Range	Topr.	-40 to +110	°C
Storage Temperature Range	Tstg.	-40 to +120	°C
Solder Heat Resistance	SHR	Hand Soldering:260±5°C for 10 sec.	
Electric Static Discharge Threshold (HBM)	ESD	1000	V

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Values			Units
			Min.	Typ.	Max.	
Luminous Flux	Φ _v	IF=300mA	1300	1400	1500	lm
Forward voltage	V _F	IF=300mA	--	43	--	V
			41		45	
Efficiency	η	IF=300mA	95	110	-	lm/W
Correlated Color Temperature	CCT	IF=300mA	2950	--	3150	--
CIE Chromaticity Coordinates: X Axis	X	IF=300mA		0.4386		--
CIE Chromaticity Coordinates: Y Axis	Y	IF=300mA		0.4120		--
Reverse Current	I _R	V _r =48V	--	--	50	μA
Color Rendering Index	CRI	IF=300mA		95	--	Ra
Viewing angle at 50% IV		2θ1/2	--	120	--	Deg.

Notes: 1.Tolerance of Luminous Intensity is ±15%

2.Tolerance of Forward Voltage is ±0.1V

3.Tolerance of Correlated Colour Temperature is ±5%

4.Tolerance of Color Rendering Index is ±2

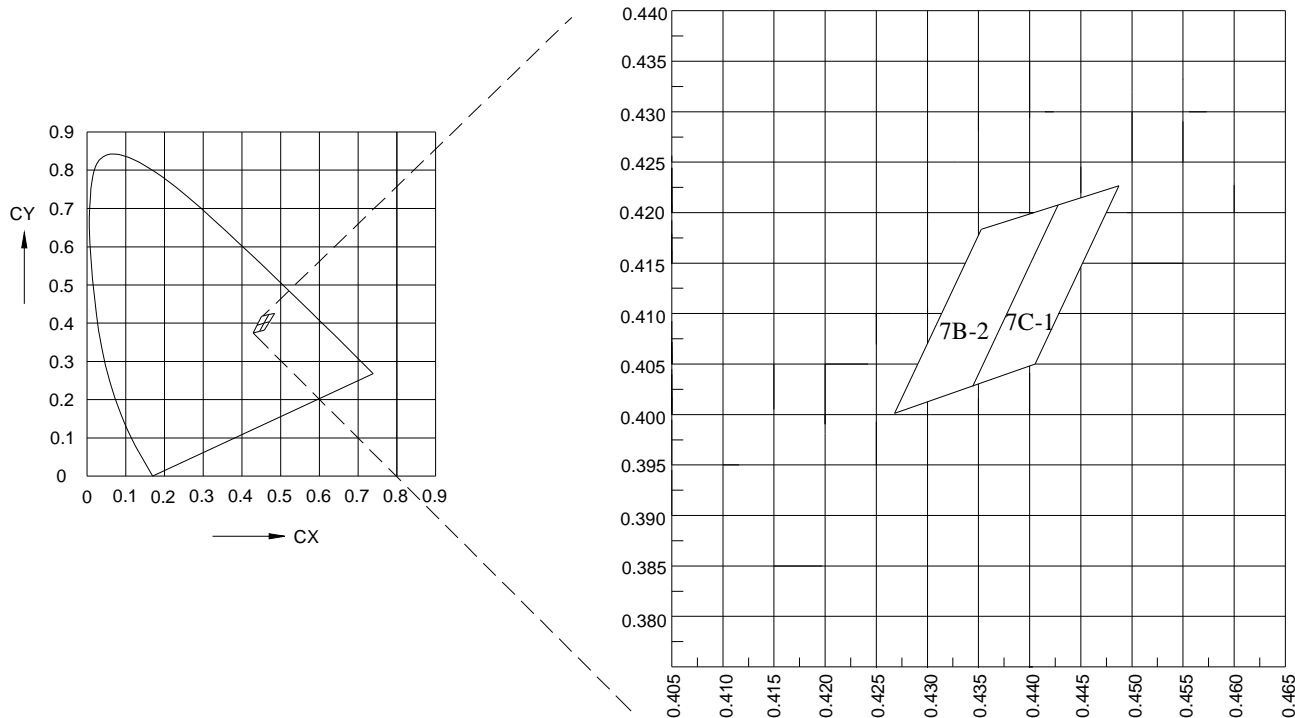
Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS (IF=300mA, Ta=25°C)

BIN	RANK				
	7B-2	X	0.4281	0.4359	0.443
Y		0.4006	0.4187	0.4212	0.4028
7C-1	X	0.4342	0.443	0.4496	0.4403
	Y	0.4028	0.4212	0.4236	0.4049

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)

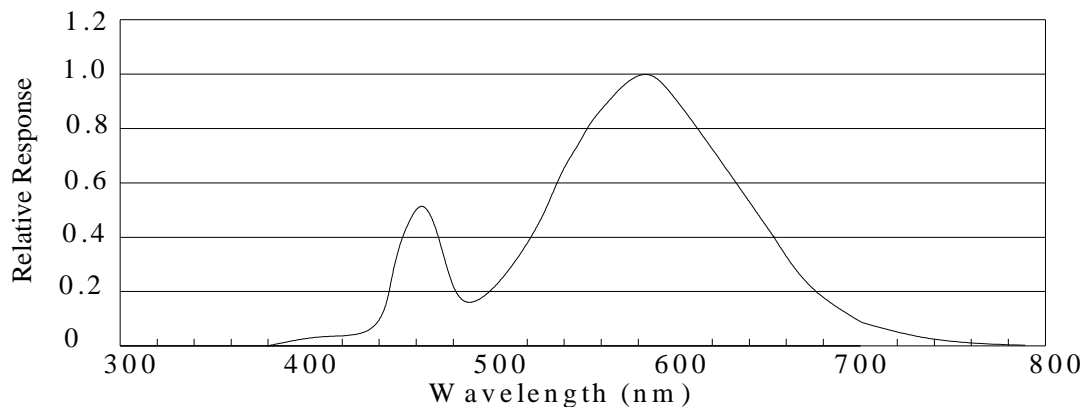
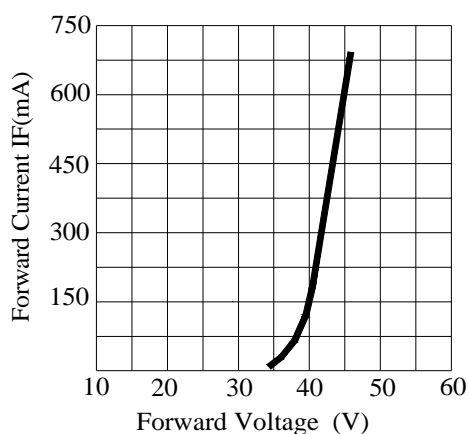
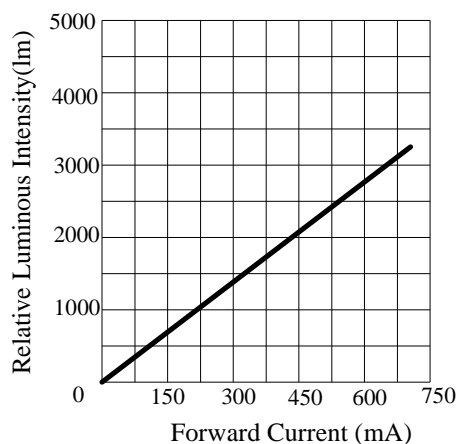


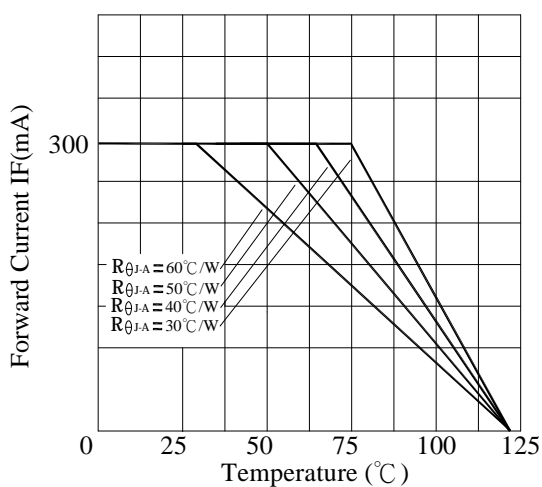
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



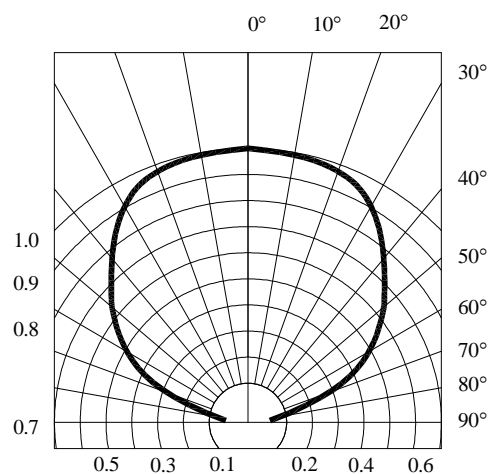
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Intensity



Ambient Temperature VS. Forward Current



Radiation Diagram

Sulfur-sensitive

- I There is silver-plated metal part on the inner/outer side of the outer package.
If exposed to the condition with corrosive gas, the silver plating surface may go bad, which will affect soldering strength and optical properties. Therefore, after opening it must be kept in a sealed container, etc.**
- I Materials contain sulfur component (gasket, adhesive, etc.) may have bad effects on the surface of the coating, so please do not use such materials in the product.**
- I In cardboard boxes and rubber, even in the atmosphere may contain minute amount of corrosive gases; In addition, the resin material may also contain halogen which has a bad effect on the surface of the coating.**
- I Even if the soldering installation and product assembly finished, by the effect of corrosive gas generated by relative materials of LED and external injected, the coating surface may go bad, so it is necessary to design the product taking into account the above factors.**
- I If requires, it is best to use a silicone washer, but be aware that low molecular silicone may cause the product poor contact.**
- I Keep the product in location where has less temperature change, because moisture condensation would be generated under a condition of strong temperature change.**

DISCLAIMER

- 1. Our department reserves the right(s) on the adjustment of product material mix for the specification.**
- 2.The product meets our department published specification for a period of twelve (12) months from date of shipment.**
- 3.The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.**
- 4.When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. Our department assumes no responsibility for any damage resulting from the use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.**
- 5.These specification sheets include materials protected under copyright of our department.
Reproduction in any form is prohibited without obtaining our department's prior consent.**
- 6.This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or life saving applications or any other application which can result in human injury or death. Please contact authorized our department sales agent for special application request.**

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

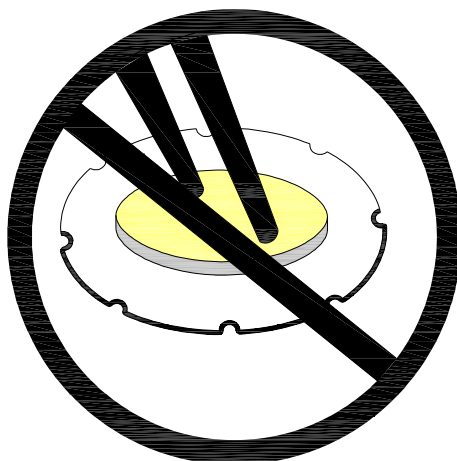


Figure 1

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.

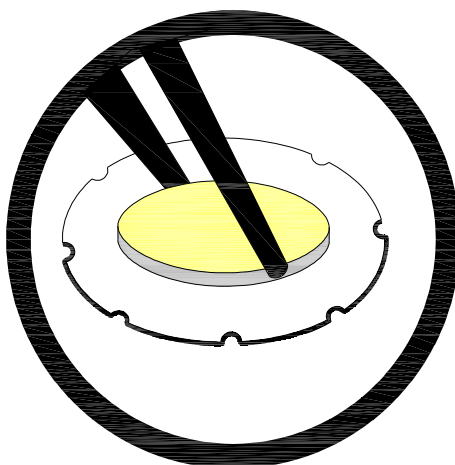
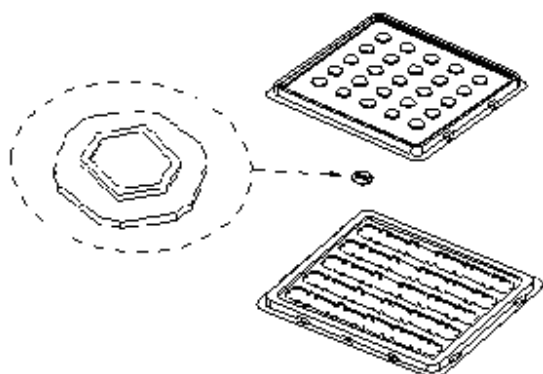


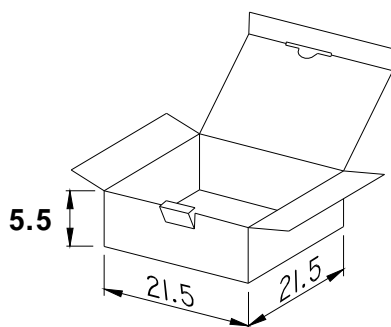
Figure 2

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.

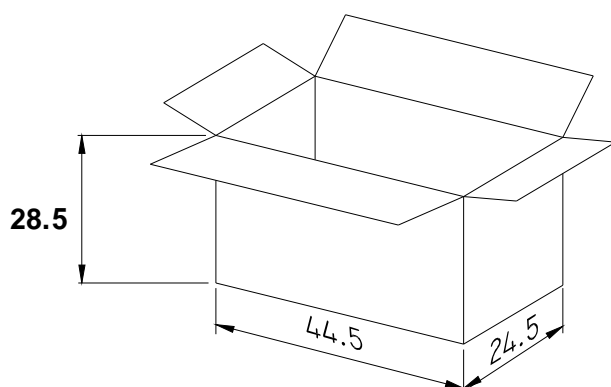
This is assured by choosing a pick and place nozzle which is larger than the LED's reflector area.

Tray packaging

36 PCS LED / 1 TRAY



4 PCS TRAY / 1 INNER BOX



10 PCS INNER BOX / 1 OUTER BOX

UNIT : cm**Notes :**

1. All dimensions are in mm.
2. There are 36pcs in a tray.
3. There are 4 trays in an inner box.
4. There are 10 inner boxes in an outer box.