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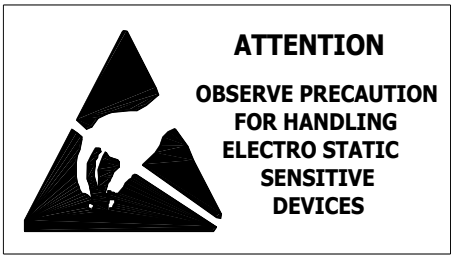
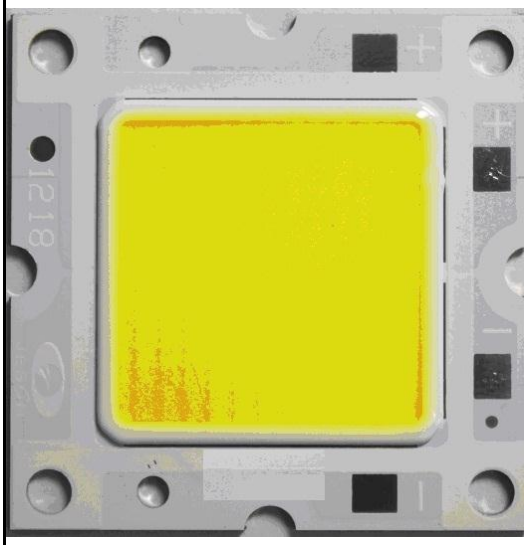
SPECIFICATION

PART NO. : LP30N3-S720

60W COB 40 x 40mm TYPE



Approved by	Checked by	Prepared by
Kj	*Lian*	*Jian*



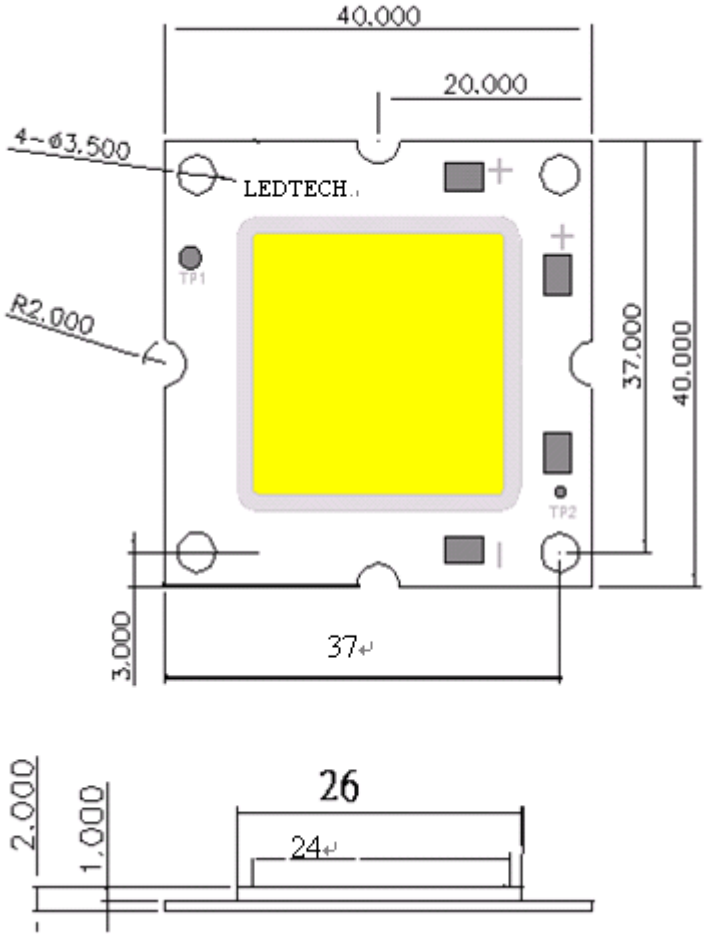
Features

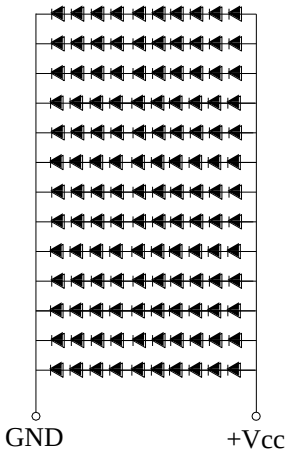
- Pb Free & RoHS Compliant
- Multi-Chip package
- Good Thermal Conductivity
- LED lighting engine
- Lambertian Distrubution Pattern
- No UV Emission
- Easy Optical System Module
- Long Operating Life

Application

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

Package Dimensions





10S / 13P

Notes:

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

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LP30N3-S720	InGaN/Sapphire	Cool White	Orange Diffused

Absolute Maximum Ratings at Ta=25 ℃

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	68	W
D.C. Forward Current	If	2	A
LED Junction Temperature	Tj	150	℃
Operating Temperature Range	Topr.	-40 to +110	℃
Storage Temperature Range	Tstg.	-40 to +120	℃
Solder Heat Resistance	SHR	Hand Soldering: 260±5℃ 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		Φv	IF=2A	-	7100	-	lm
	Rank L28			6000	-	6800	
	Rank L29			6800	-	7800	
	Rank L30			7800		8900	
Forward Voltage		VF	IF=2A	-	30.5	-	V
	Rank V1			28	-	31	
	Rank V2			31		34	
Efficiency		η	IF=2A	107		-	lm/W
Correlated Color Temperature		CCT	IF=2A	5450	--	5950	K
CIE Chromaticity Coordinates: X Axis		X	IF=2A	--	0.3268	--	
CIE Chromaticity Coordinates: Y Axis		Y	IF=2A	--	0.343	--	
Color Rendering Index		CRI	IF=2A	80	-	-	Ra
Viewing Angle		2θ1/2	IF=2A	-	120	-	Deg.

Notes:

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

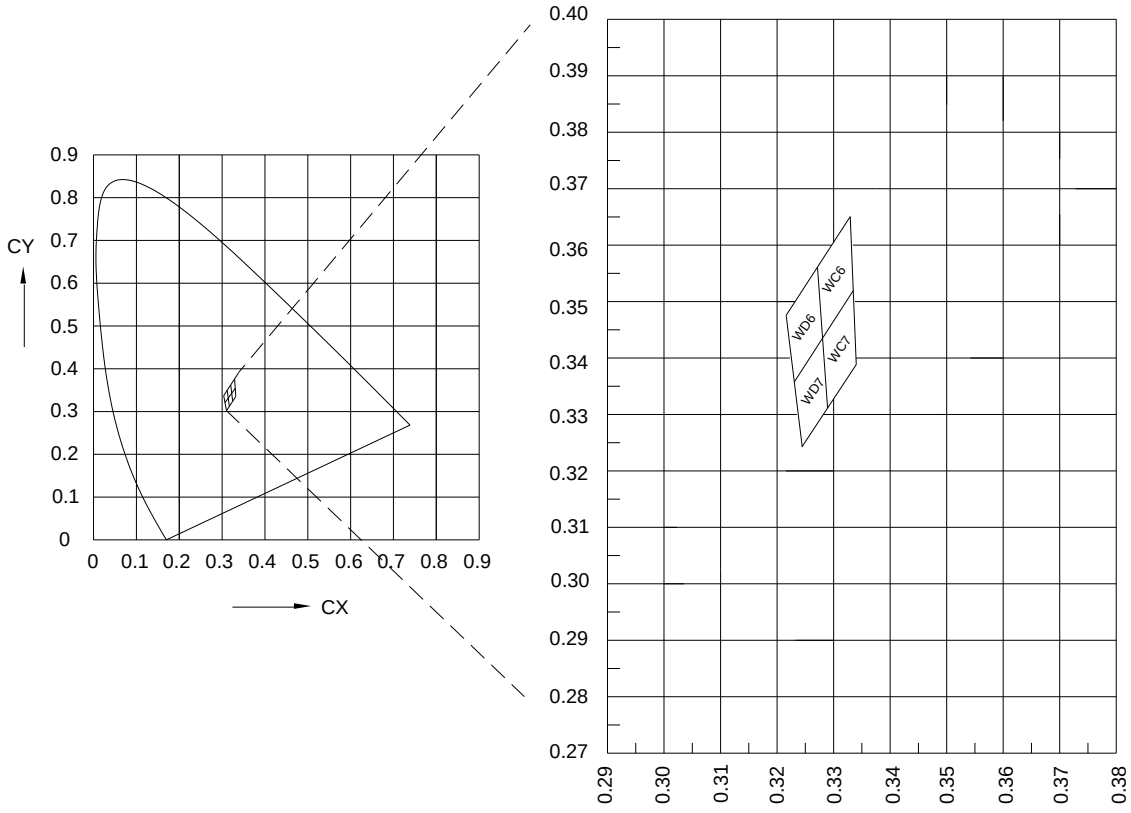
Chromaticity Coordinates Specifications for Bin Grading

COLOR RANKS (IF=2A.Ta=25℃)

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

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)

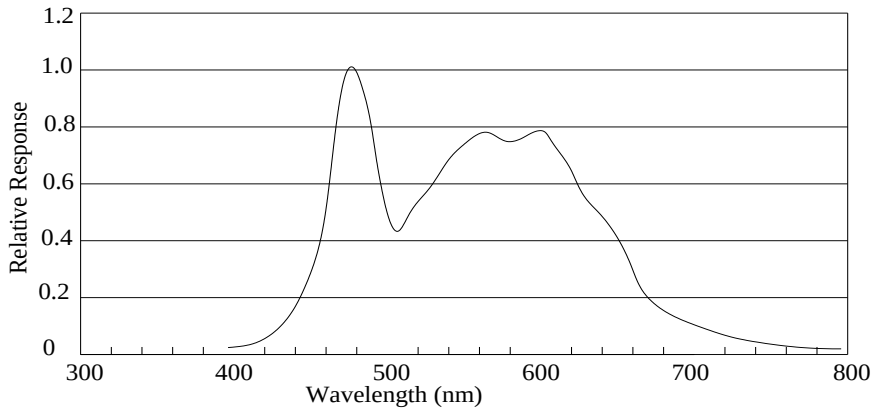
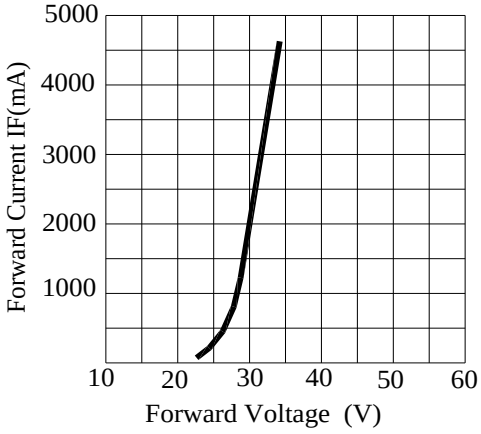
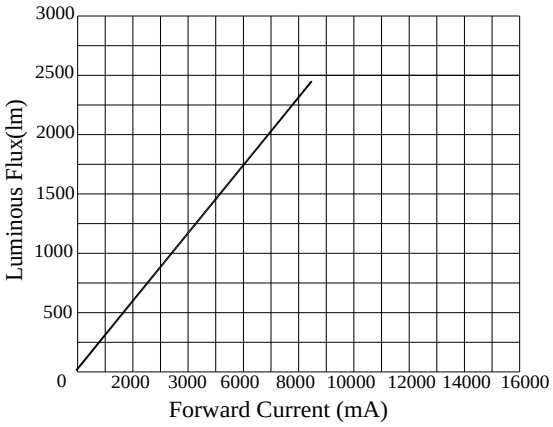


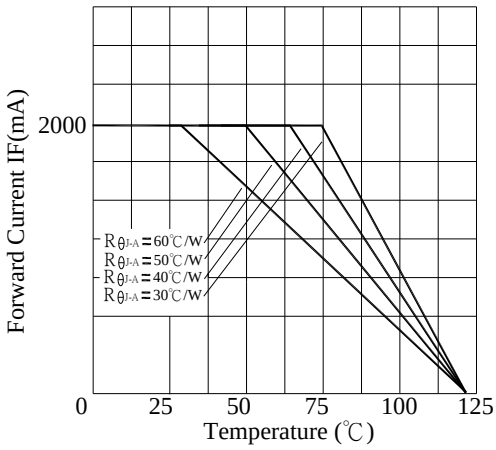
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



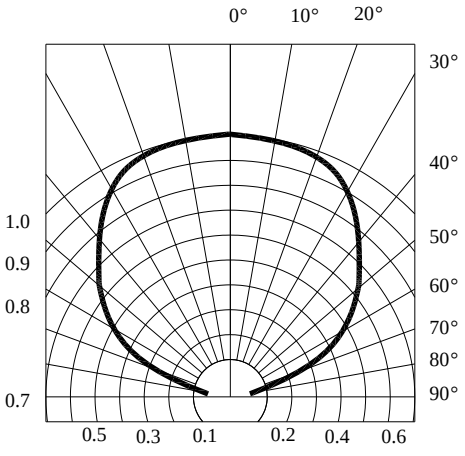
Forward Current VS. Applied Voltage



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

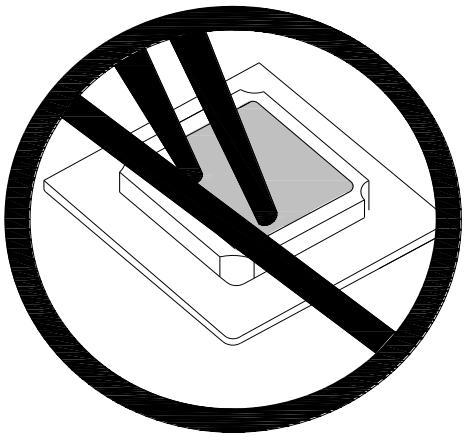


Figure 1

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.

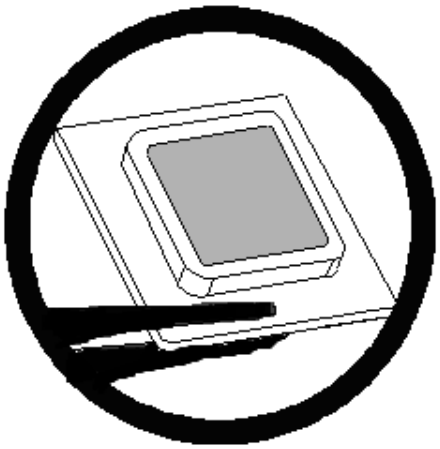
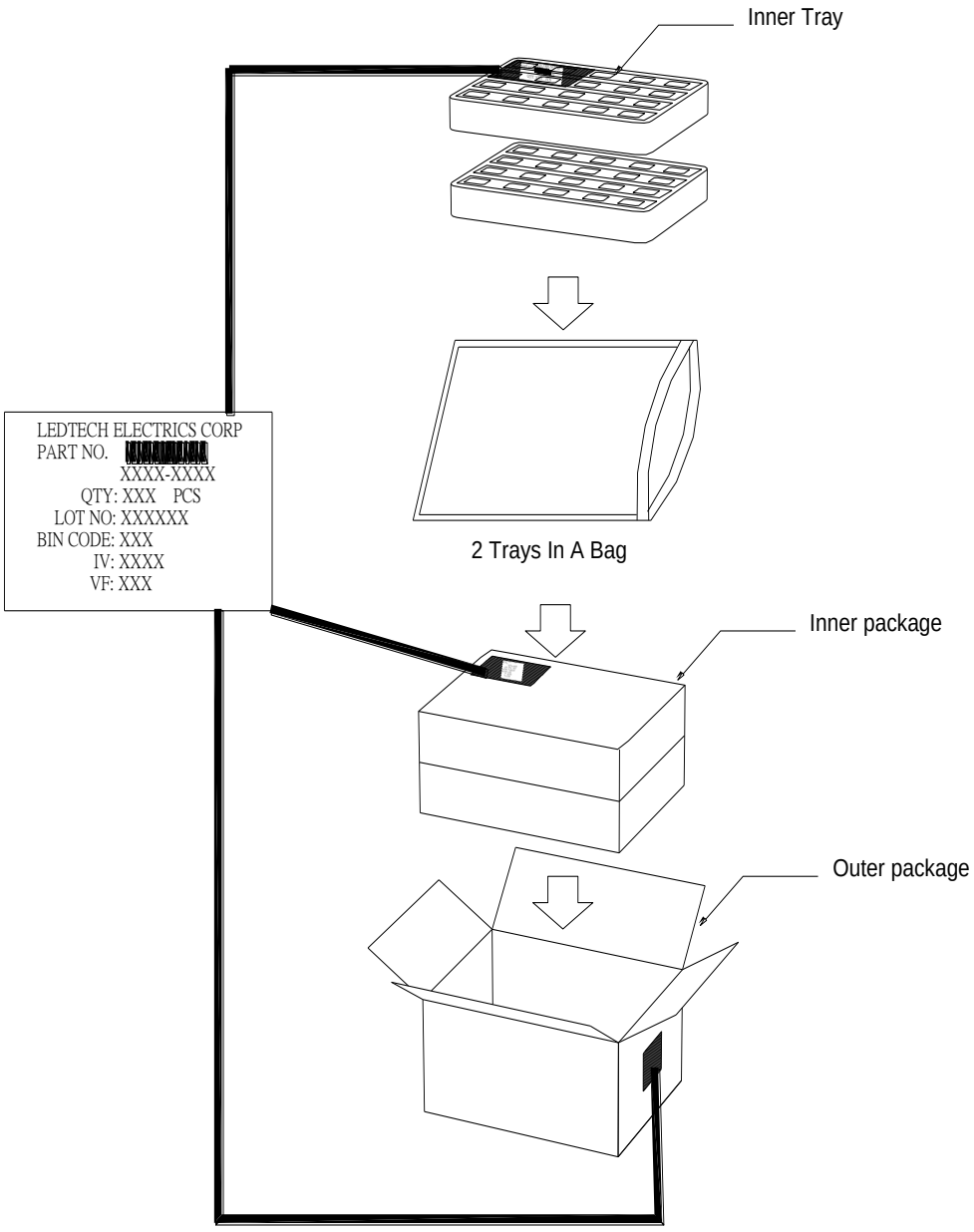


Figure 2

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.

Packaging :



Notes：

1. All dimensions are in mm.
2. There are **9** pcs in a tray.
3. There are **4** trays in an inner box.
4. There are **10** inner boxes in an outer box.