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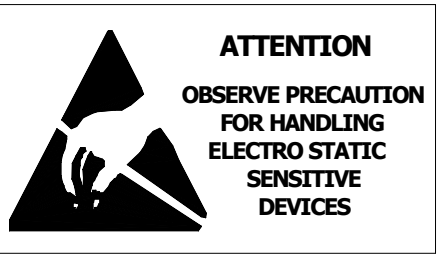
SPECIFICATION

PART NO. : LPCH63-12N-UDR3-S01

HIGH POWER LED



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

MODIFY RECORD

TAKE EFFECT DATE	MODIFY ISSUES	REMARKS

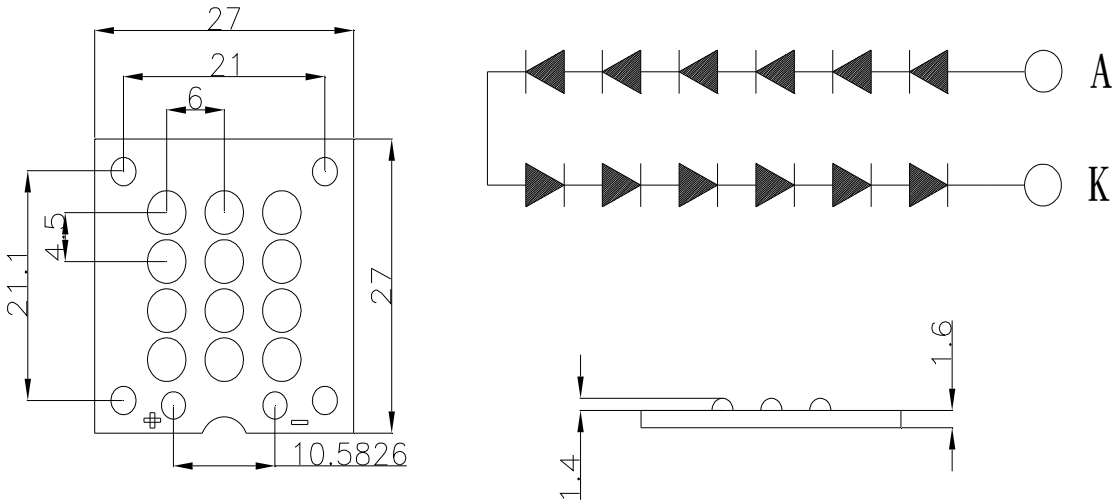
< Features >

*Excellent Transiting Heat from LED Chip Operating under 350mA
*High Luminous Output
*No UV

< Typical Applications >

*Reading Lights
*Portable Flashlight
*Uplighters and Downlighters
*Garden lighting
*LCD Backlights/Light Guides
*General Lighting

Package Dimensions



(UNIT: mm)

* All dimensions are in mm. *Tolerance：+/-0.5mm.

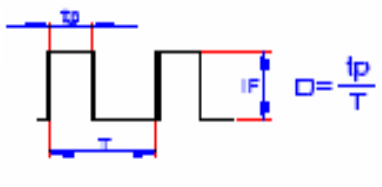
Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LPCH63-12N-UDR3-S01	InGaAlN/Metal	white	Water clear

Absolute Maximum Ratings at Ta=25℃ :

Parameter	Rating	Unit
Power Dissipation	14000	mW
LED Junction Temperature	120	℃
Reverse Voltage	5	V
D.C. Forward Current	350	mA
Pulsed Forward Current ; tp≦100μs,Duty cycle=0.005)*1	700	mA
Operating Temperature Range	-40 to +75	℃
Storage Temperature Range	-40 to +100	℃
Soldering Temperature	Reflow Soldering: 260℃ for 10 sec. Hand Soldering: 350℃ for 3 sec.	

Duty Cycle :



Notes:

1、Proper current derating must be observed to maintain junction temperature below the maximum .

2、All products not sensitive to ESD damage(6000 Volts by HBM condition).

3、Be careful with a powered up current limited power supply, because of current spikes during power up and/or connection. Best practice is to connect the LED then turn up the voltage gradually. People building their own power supplies should design for minimum current spikes during power up and connection.

4、For best results the customer needs to provide proper control of the thermal path ,protect against electrical overstress conditions, and ensure that Ledtech emitters are properly attached to the mcpcb/heat sink.

5、It is strongly recommended that the temperature of lead does not exceed 55℃.

6、It is strongly recommended to apply on electrically isolated heat conducting film between the slug and contact surfaces.

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Luminous Flux	Φv	IF=350mA	900	1050	--	lm
Efficlency	η	IF=350mA		90		Lm/W
CIE Chromaticity Coordinates : X Axis	X	IF=350mA		0.3357		
CIE Chromaticity Coordinates : Y Axis	Y	IF=350mA		0.3555		
Forward voltage	VF	IF=350mA	35	--	40	V
Correlated Colour Temperature	CCT	IF=350mA	5000	--	5750	K
Thermal Resistance Junction to Case	$R\theta_{J-C}$	IF=350mA	--	9	--	℃/W
Reverse Current	I_R	Vr=5V	--	--	50	μA
Viewing angle at 50% IV	2θ 1/2	IF=350mA	--	120	--	Deg.

Notes : 1.The datas tested by IS tester.

2. Customer's special requirements are also welcome.

Typical Electrical/Optical Characteristic Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

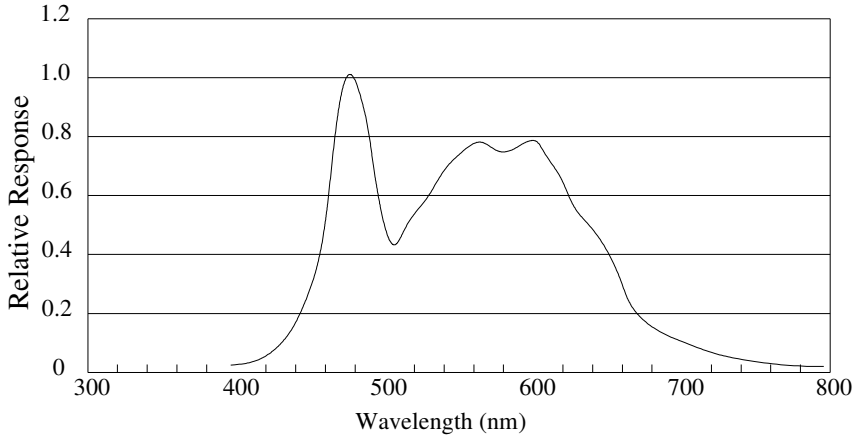
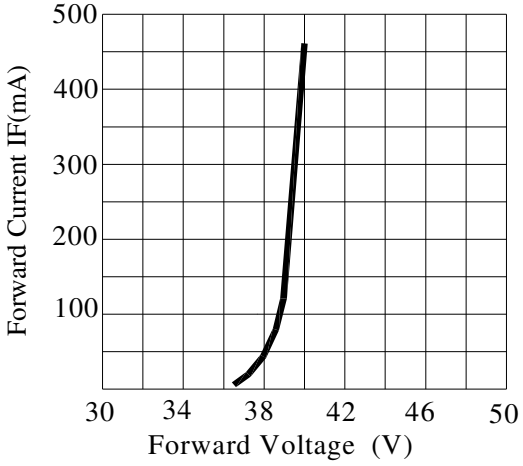
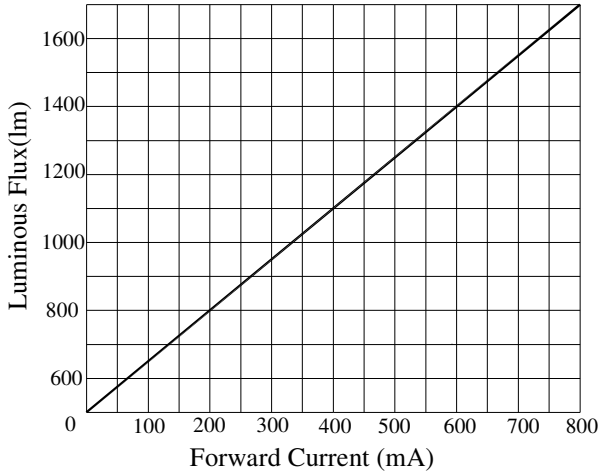


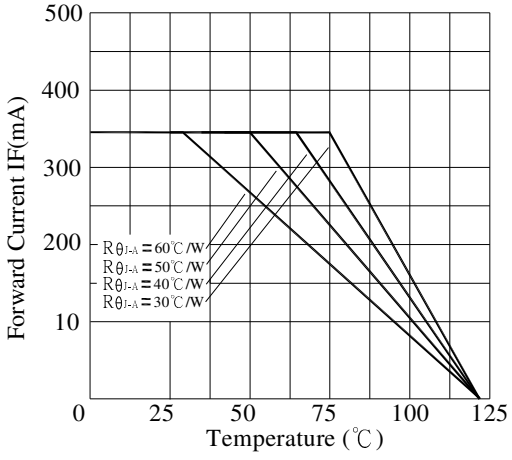
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



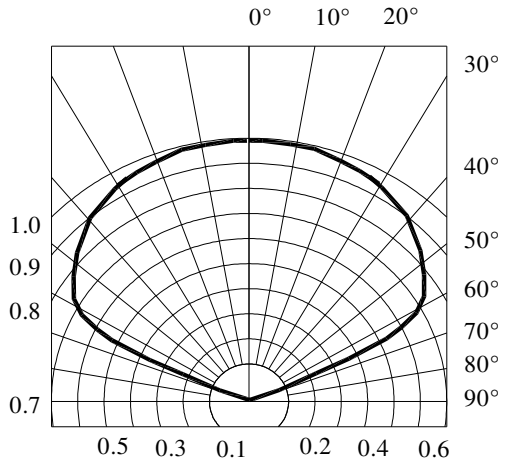
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Flux



Ambient Temperature VS. Forward Current



Radiation Diagram

Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS (IF=350mA.Ta=25℃)

Region	X	Y	Region	X	Y
WA6	0.3394	0.3719	WA7	0.3390	0.3591
	0.3473	0.3800		0.3463	0.3670
	0.3463	0.3670		0.3453	0.3550
	0.3390	0.3591		0.3385	0.3465
WB6	0.3327	0.3650	WB7	0.3324	0.3519
	0.3394	0.3719		0.3390	0.3591
	0.3390	0.3591		0.3385	0.3465
	0.3324	0.3519		0.3324	0.3388
WC6	0.3264	0.3551	WC7	0.3268	0.3430
	0.3327	0.3650		0.3324	0.3519
	0.3324	0.3519		0.3324	0.3388
	0.3268	0.3430		0.3272	0.3305

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