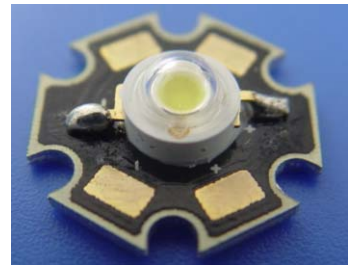


1W White High Power LED
Technical Data Sheet

Part No.: LL-HP60NW6EB

Features:

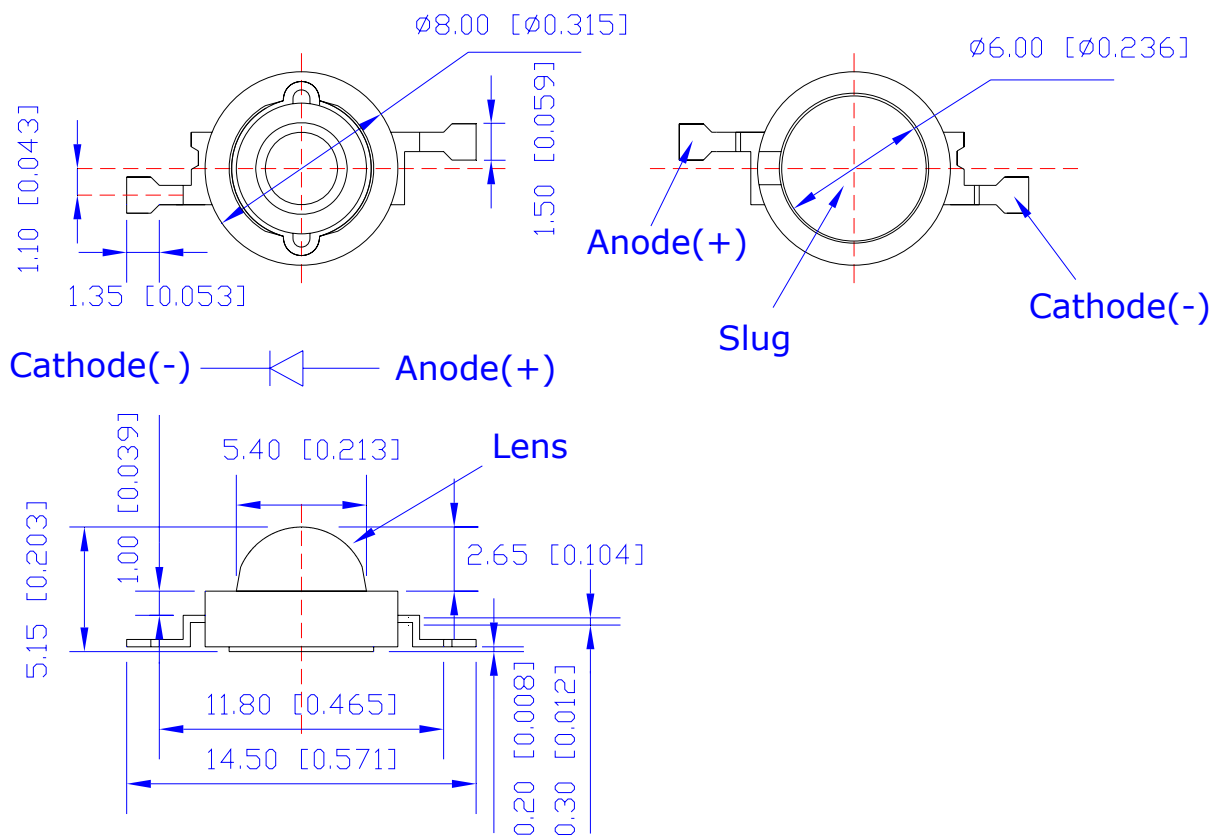
- ◇ Small package with high efficiency
- ◇ Long operating life.
- ◇ Available in white, warm white.
- ◇ Typical color temperature: 3000 K.
- ◇ View angle: 135°.
- ◇ Low voltage DC operated.
- ◇ The product can be used under 350mA and 700mA electric current condition
- ◇ The product itself will remain within RoHS compliant Version.

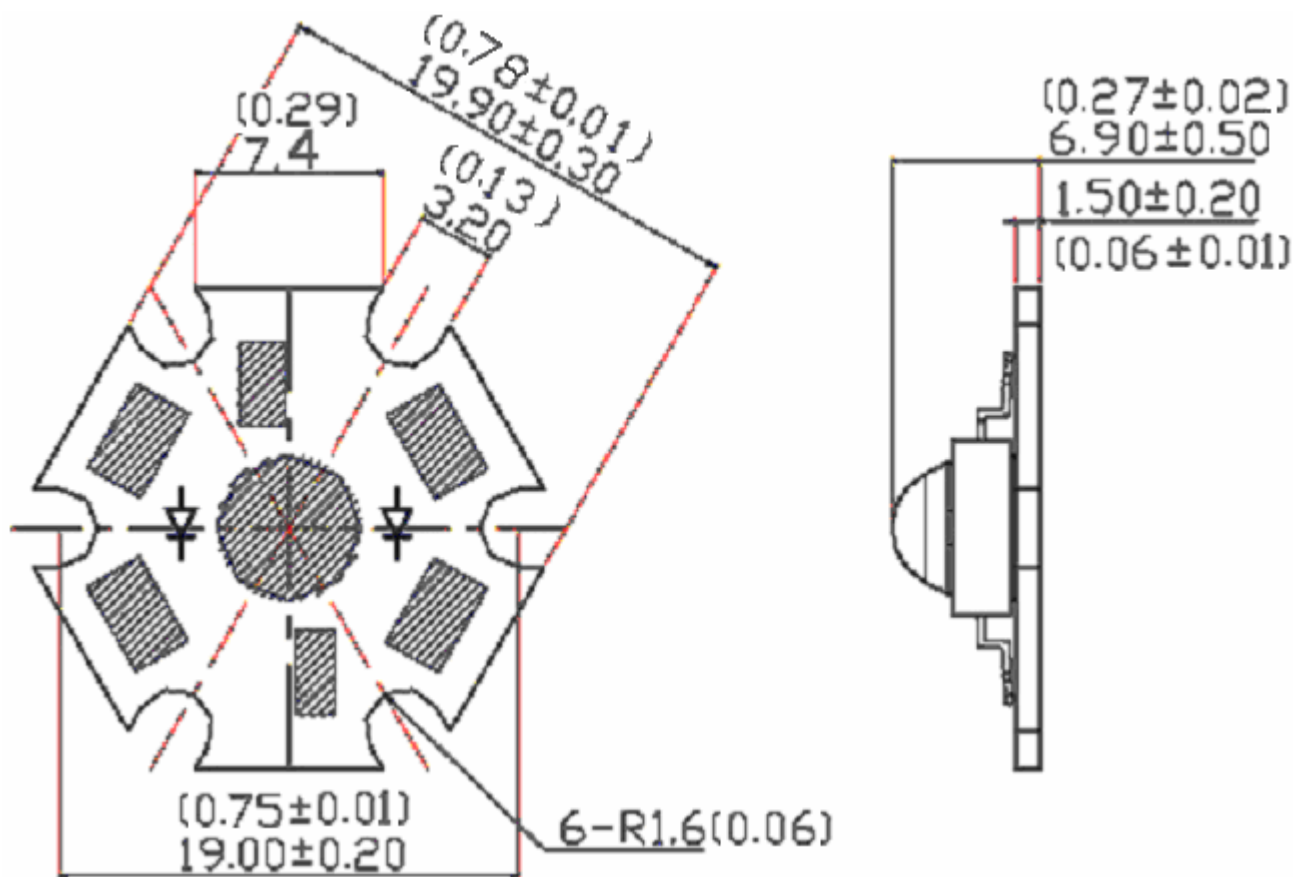


Applications:

- ◇ Reading lights (car, bus, aircraft).
- ◇ Portable (flashlight, bicycle).
- ◇ Mini_accent/Uplighters/Downlighters/Orientation.
- ◇ Bollards/Security/Garden.
- ◇ Cove/Undershelf/Task.
- ◇ Automotive rear combination lamps.
- ◇ Traffic signaling/Beacons/ Rail crossing and Wayside.
- ◇ Indoor/Outdoor Commercial and Residential Architectural.
- ◇ Edge_lit signs (Exit, point of sale).
- ◇ LCD Backlights/Light Guides.

Mechanical Dimensions:





Part No.	Chip Material	Source Color
LL-HP60NW6EB	InGaN	Warm White

Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.25 mm (.010") unless otherwise noted.

Absolute Maximum Ratings at Ta=25℃

Parameters	Symbol	Rating	Units
Forward Current	<i>I_F</i>	350	mA
		700	
Peak Pulse Current (tp≤100μs, Duty cycle=0.25)	<i>I_{pulse}</i>	1000	mA
Reverse Voltage	<i>V_R</i>	5	V
LED Junction Temperature	<i>T_j</i>	125	℃
Operating Temperature Range	<i>T_{opr}</i>	-40 to +80	℃
Storage Temperature Range	<i>T_{stg}</i>	-40 to +100	℃
Soldering Time at 260 ℃ (Max.)	<i>T_{sol}</i>	5	Seconds

Notes:

1. Proper current derating must be observed to maintain junction temperature below the maximum.
2. LEDs are not designed to be driven in reserve bias.

Electrical Optical Characteristics at Ta=25℃

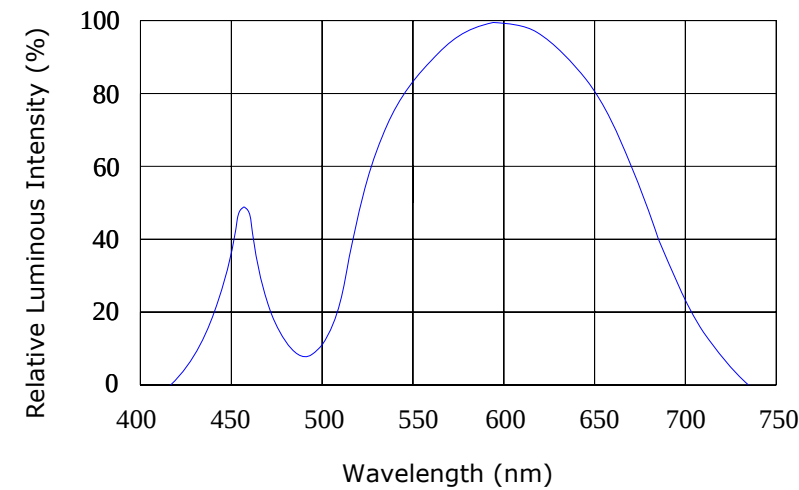
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Viewing Angle [1]	<i>2θ_{1/2}</i>	---	135	---	Deg	IF=350mA
Forward Voltage [2]	<i>V_F</i>	2.8	3.3	3.8	V	IF=350mA
Reverse Current	<i>I_R</i>	---	---	10	μA	V _R =5V
Color Temperature [3]	CCT	2600	3000	4000	K	IF=350mA
Luminous Flux	<i>Φ_v</i>	85	100	---	lm	IF=350mA
		110	140	---		IF=700mA

Notes:

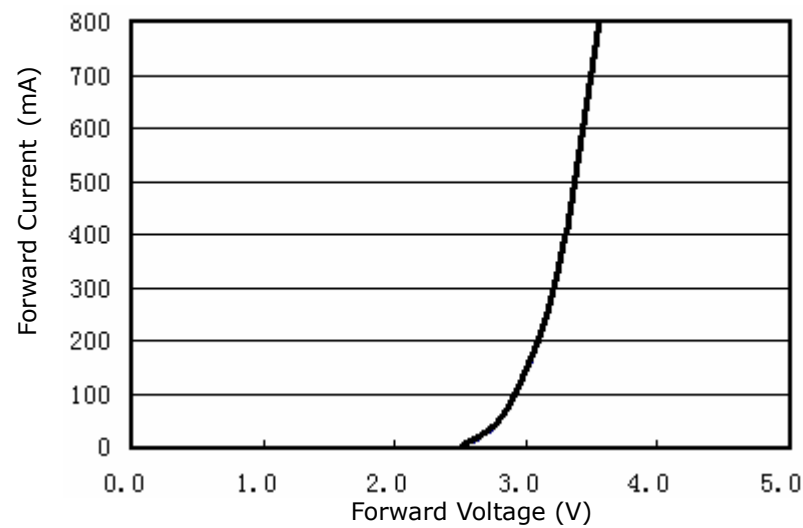
1. 2θ_{1/2} is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. Forward Voltage measurement tolerance : ±0.1V
3. X, Ycoordination for white light bin areas refer to EHP-A08 series White and Warm White Binning (DSE-A08-001).

Typical Electrical-Optical Characteristics Curves
(25°C Ambient Temperature Unless Otherwise Noted)

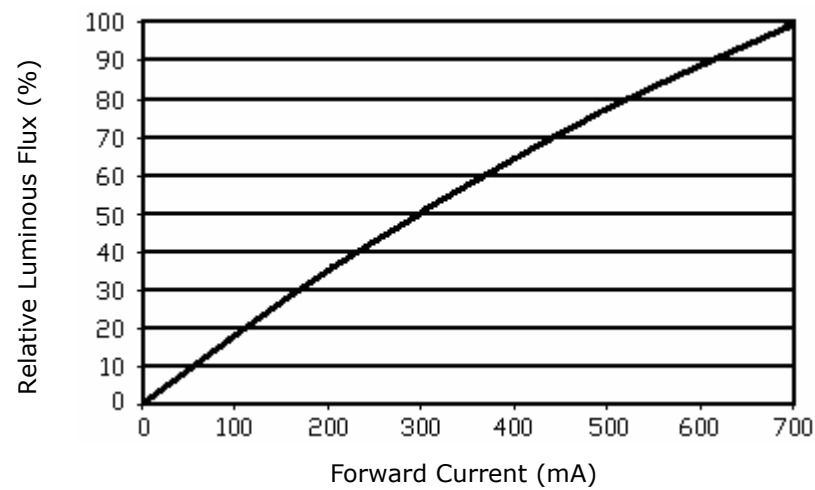
Relative Spectral Distribution



Forward Current VS Forward Voltage

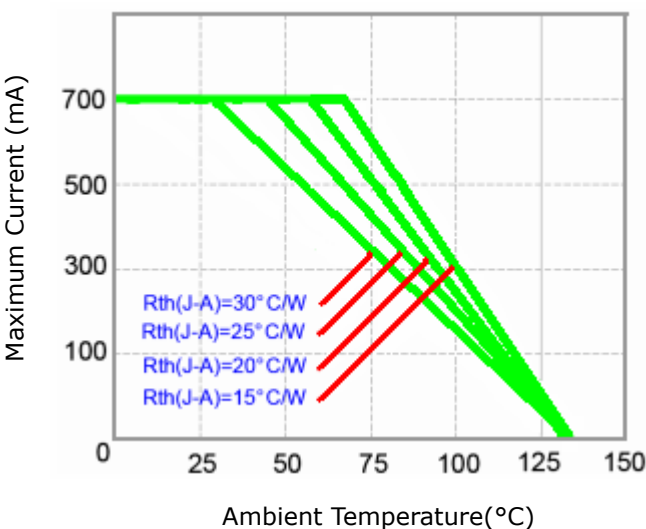
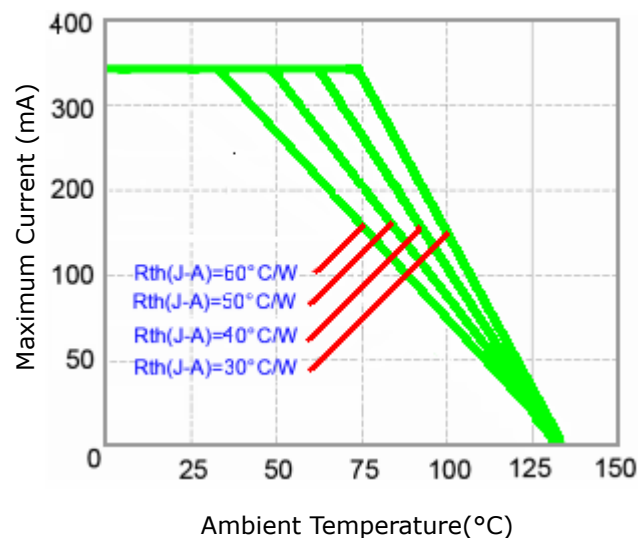


Luminous Flux VS Forward Current



Typical Electrical-Optical Characteristics Curves

Maximum Current VS Ambient Temperature



Typical Spatial Radiation Pattern

