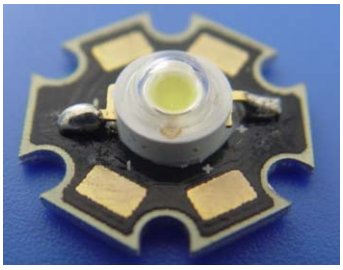
1W White High Power LED
Technical Data Sheet

Part No.: LL-HP60NWEB

Features:

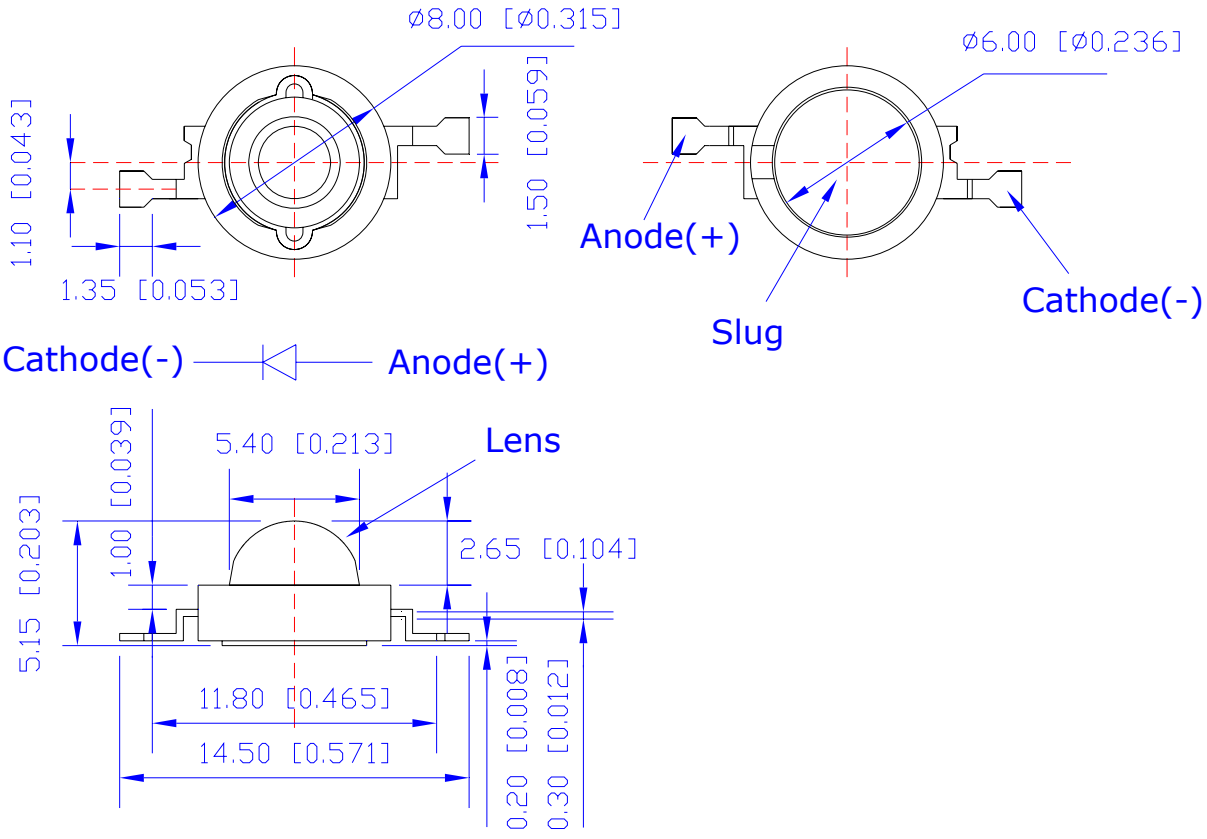


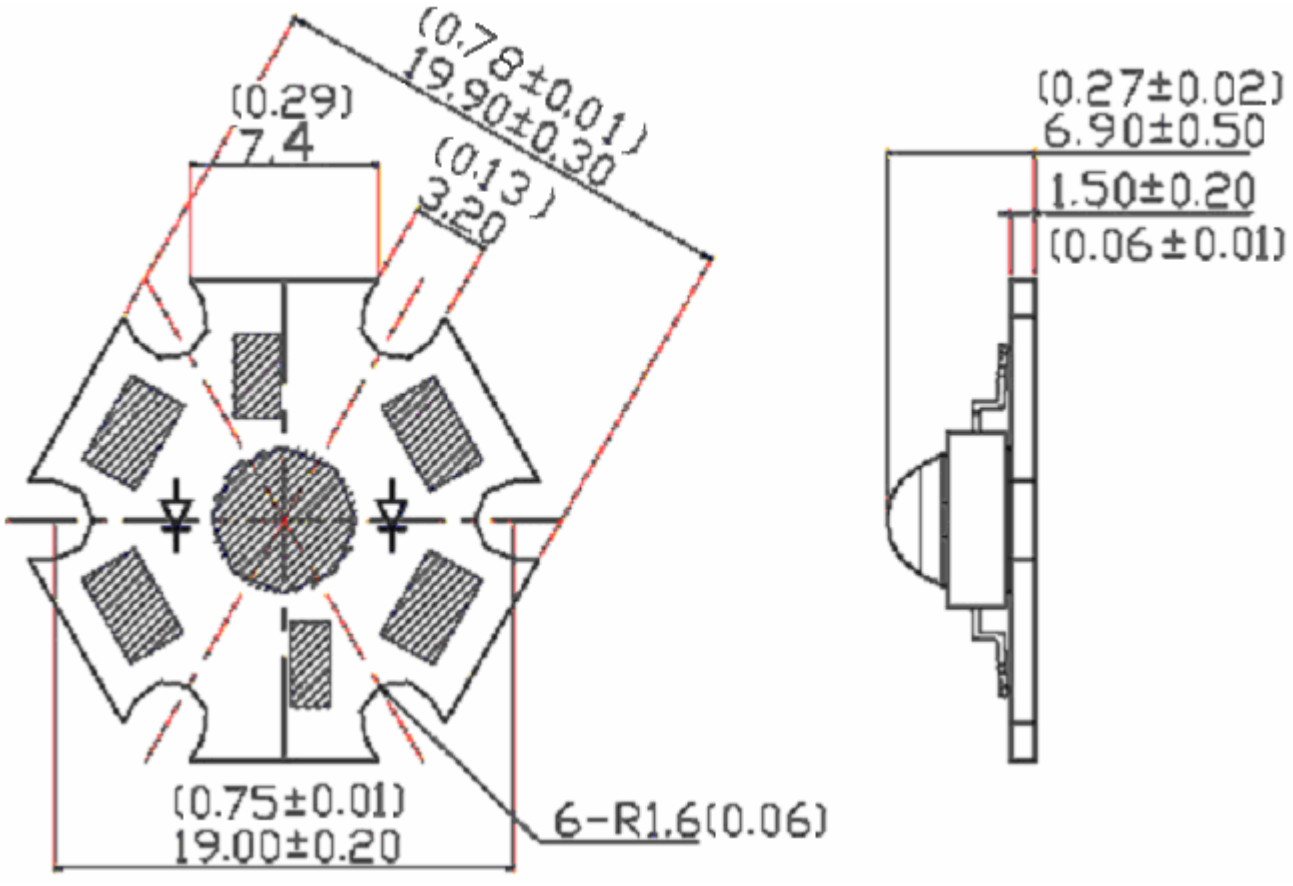
- ◇ Small package with high efficiency
- ◇ Long operating life.
- ◇ Available in white,warm white.
- ◇ Typical color temperature: 6500 K.
- ◇ View angle: 135°.
- ◇ Low voltage DC operated.
- ◇ The product can be used under 350mA and 700mA electric current condition
- ◇ The product itself will remain 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-HP60NWEB	InGaN	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	*IF*	350	mA
		700	
Peak Pulse Current (tp≤100μs, Duty cycle=0.25)	*I pulse*	1000	mA
Reverse Voltage	*VR*	5	V
LED Junction Temperature	*Tj*	125	℃
Operating Temperature Range	*Topr*	-40 to +80	℃
Storage Temperature Range	*Tstg*	-40 to +100	℃
Soldering Time at 260 ℃ (Max.)	*Tsol*	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℃

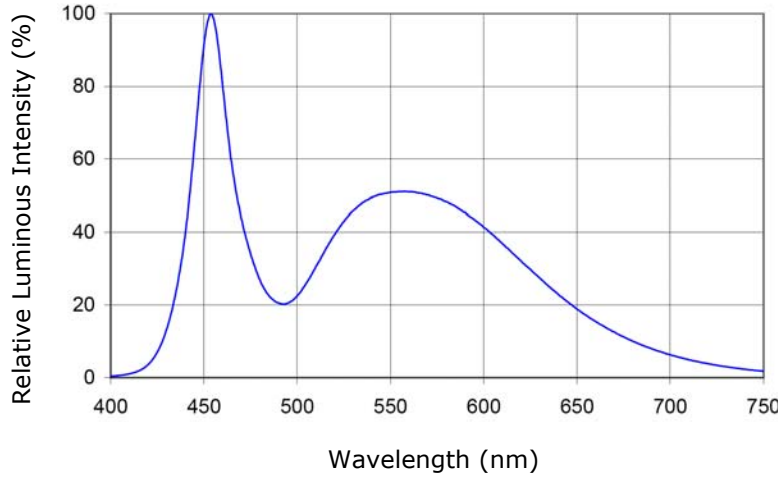
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Viewing Angle [1]	$2\theta_{1/2}$	---	135	---	Deg	IF=350mA
Forward Voltage [2]	V_F	2.8	3.3	3.8	V	IF=350mA
Reverse Current	I_R	---	---	10	μA	V_R=5V
Color Temperature [3]	*CCT*	4000	6500	10000	K	IF=350mA
Luminous Flux	*Φv*	85	100	---	lm	IF=350mA
		114	150	---		IF=700mA

Notes:

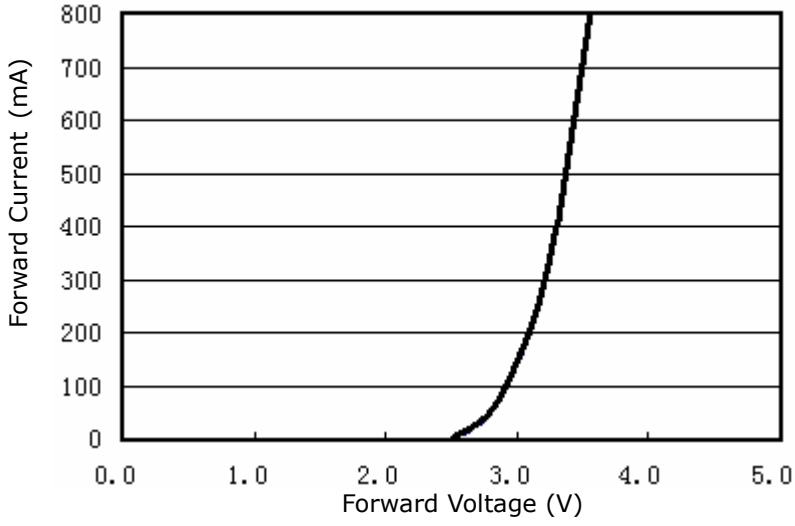
1. *2θ1/2* is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. Forward Voltage measurement tolerance : ±0.1V
3. X, Ycoordination for white light bin areas refer to EHP-A08 series White and Warm White Binning (DSE-A08-001)。

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

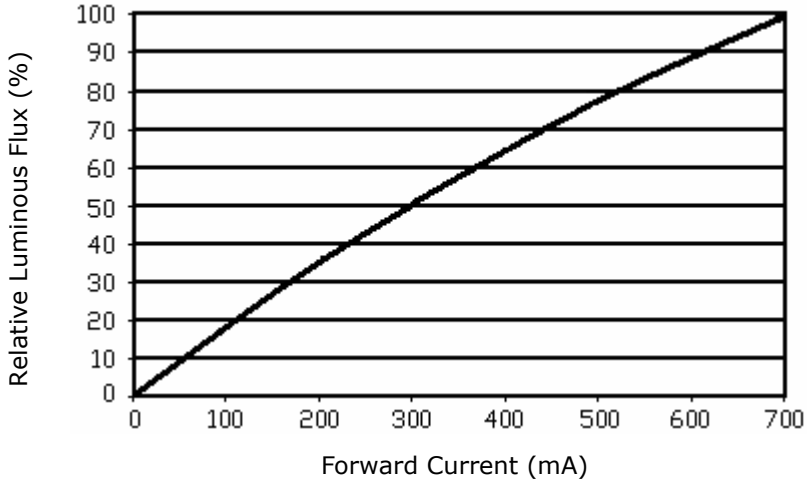
Relative Spectral Distribution



Forward Current VS Forward Voltage

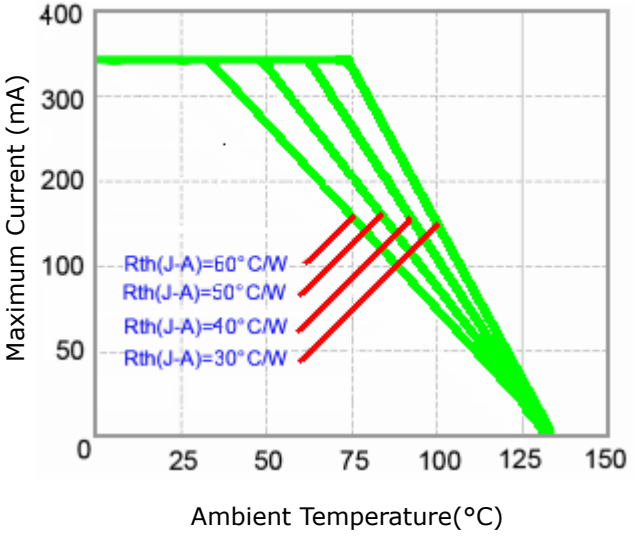


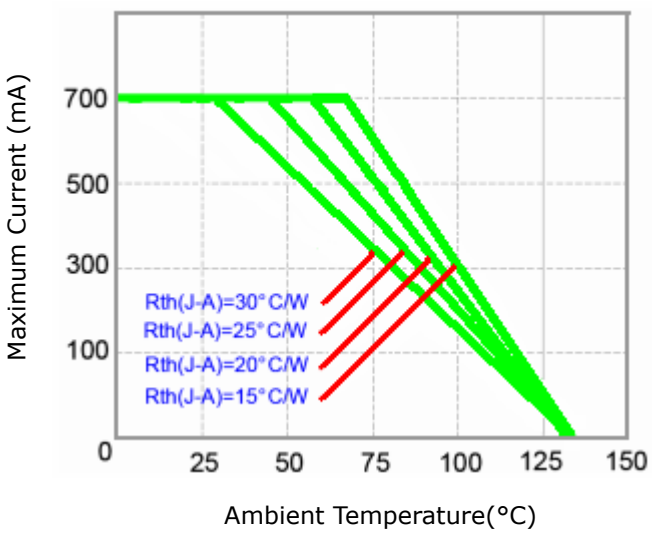
Luminous Flux VS Forward Current



Typical Electrical-Optical Characteristics Curves

Maximum Current VS Ambient Temperature





Typical Spatial Radiation Pattern