3W Warm White High Power LED
Technical Data Sheet

Part No.: LL-HP70MW6F

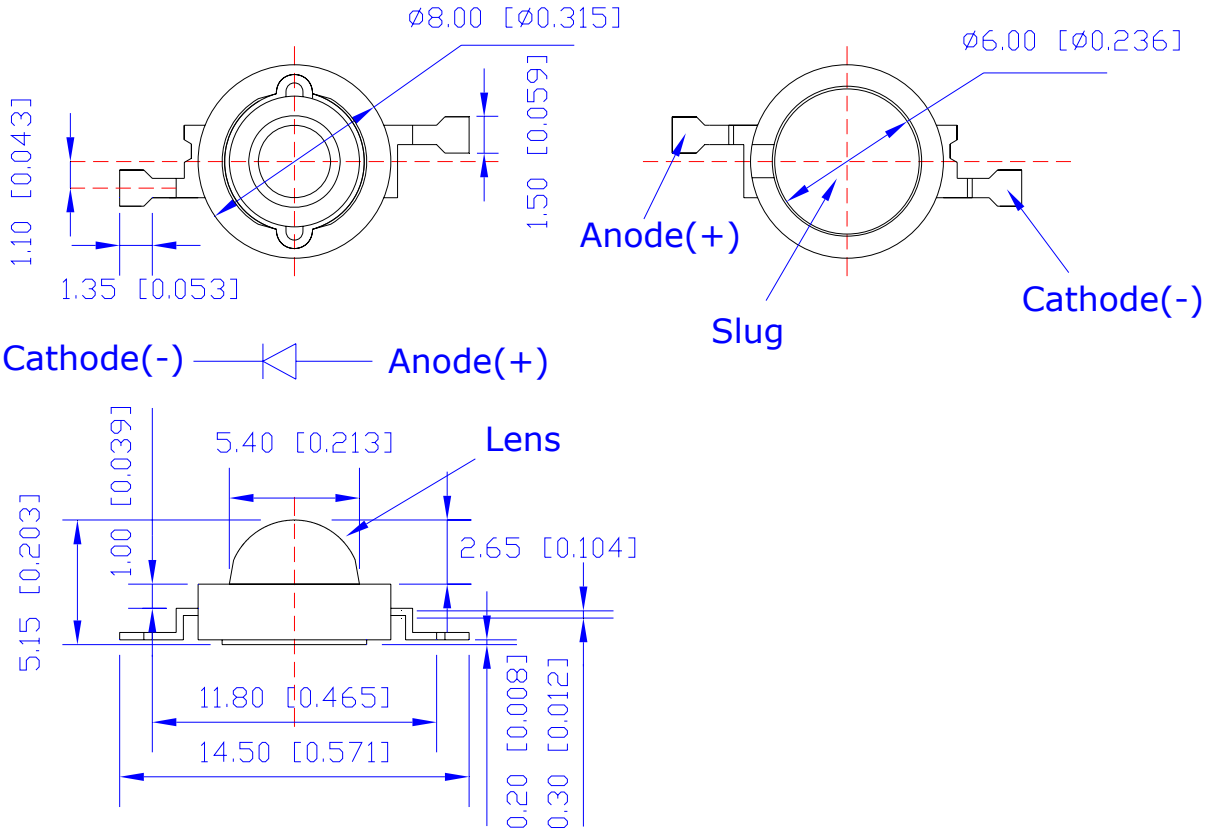
Features:

- ◇ Small package with high efficiency
- ◇ Long operating life.
- ◇ Available in white, green, blue, red, yellow.
- ◇ Typical color temperature: 3000 K.
- ◇ View angle: 135°.
- ◇ Low voltage DC operated.
- ◇ 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-HP70MW6F	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	***IF***	700	mA
PeakPulseCurrent (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℃

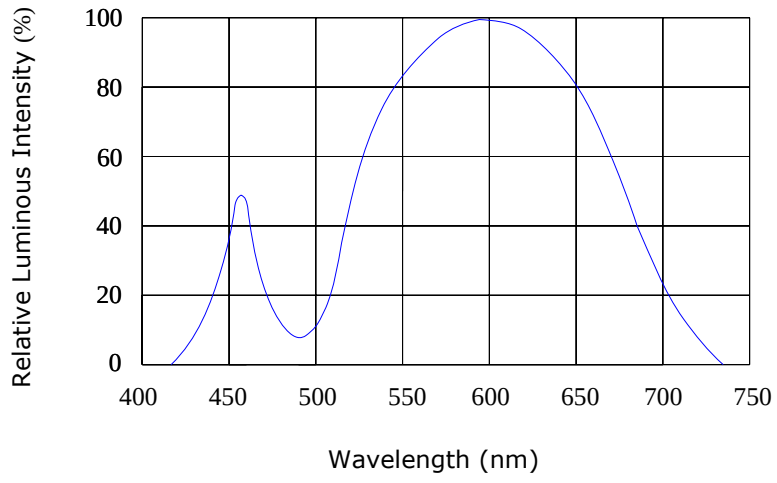
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Viewing Angle [1]	$2\theta_{1/2}$	---	135	--	Deg	IF=700mA
Forward Voltage [2]	V_F	2.8	3.5	4.0	V	IF=700mA
Reverse Current	I_R	---	---	10	μA	V_R=5V
Color Temperature [3]	***CCT***	2600	3000	4000	k	IF=700mA
Luminous Flux	***Φv***	130	150	---	lm	IF=700mA

Notes:

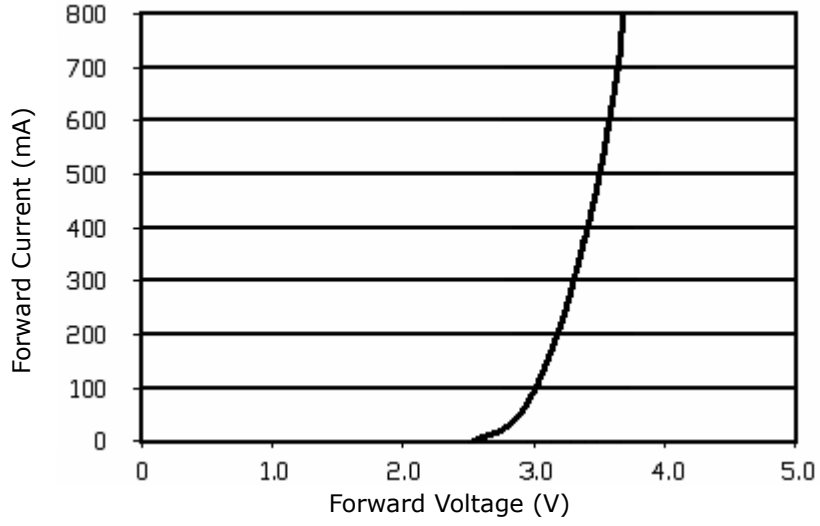
1. *2θ1/2* is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. Forward Voltage measurement tolerance : ±0.1V
3. X, Ycoordination for white light bin areas refer to EHP-A08 series White and Warm White Binning (DSE-A08-001)。

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

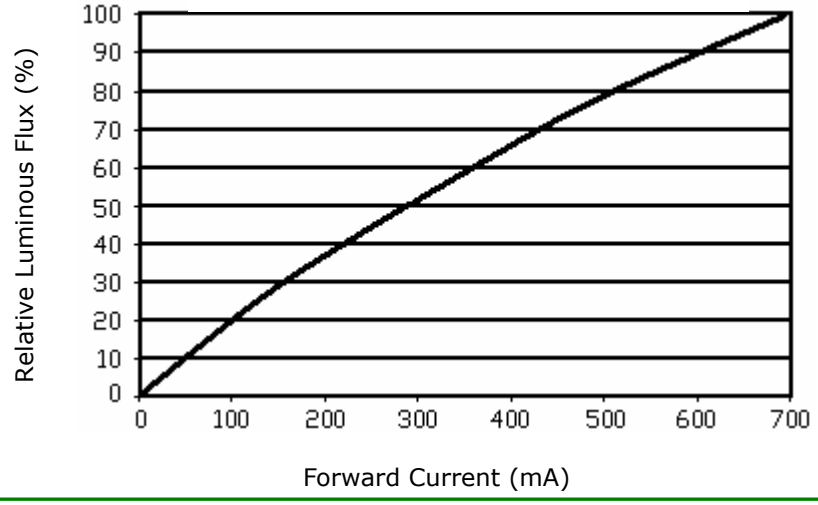
Relative Spectral Distribution



Forward Current VS Forward Voltage

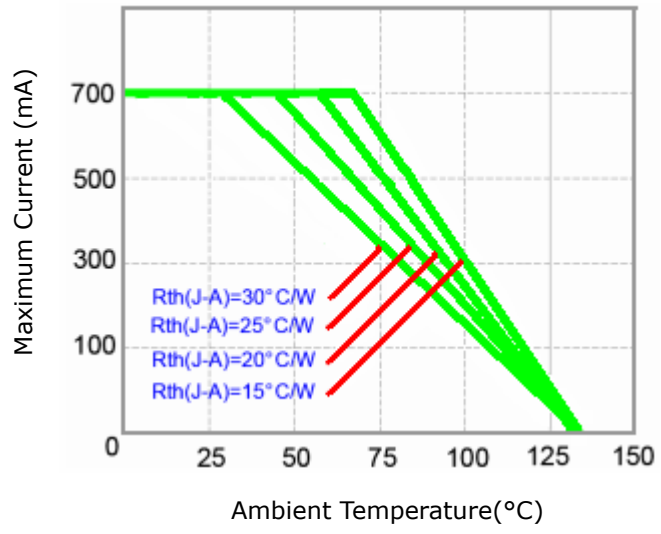


Luminous Flux VS Forward



Typical Electrical-Optical Characteristics Curves

Maximum Current (mA) VS Ambient



Typical Spatial Radiation Pattern