
High Power Solid-State Light Source

LustOn Emitter

LustOn is an energy-efficient light source. By using high power Light Emitting Diode (LED), LustOn has great performance in both reliability and brightness. We offer the best possible reference design in optics and thermal management regarding your applications.

Features

- High brightness
- Long operating life (up to 100k hours max)
- Multiple colors (Also available for request in Red, Green, Blue, UV and IR)
- Low DC operating Voltage
- Energy efficient
- Fast electrical response
- Good heat dissipation with metal substrate
- Flat and compact
- First COB solution in mass production

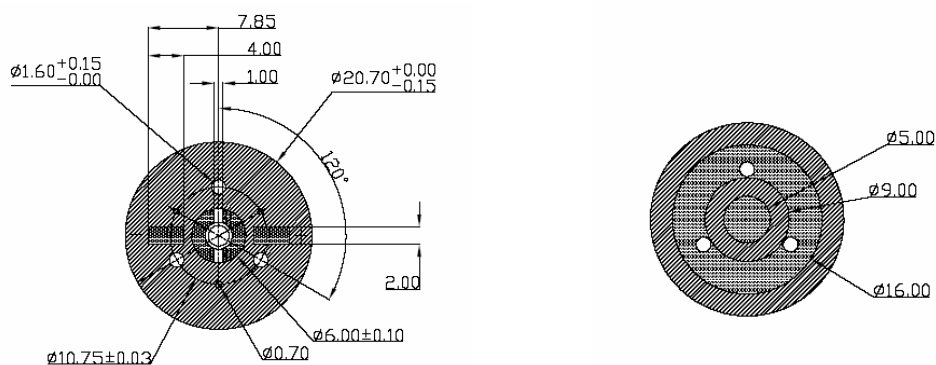
Applications

- Portable light source
- Automotive
- General lightings
- Landscape
- Entertainment Lighting
- Traffic Signal
- Surveillance system (IR)
- Medical devices (UV)

Specifications for UV *LustOn*

Part No: NHW201NP

Mechanical Dimensions (units: mm)



Thickness : 1.6 mm

*All dimensions are subject to change without further notice.

Absolute maximum ratings

Parameters	UV
Forward Voltage (V)	3.3~4.0
Forward Current (mA)	350
Peak Pulsed Forward Current (mA)	500
Average Temperature @ Ta=25 °C 1W (°C)	60~75
Operating Ambient Temperature (°C)	-40 ~ +100
Storage Temperature (°C)	-40 ~ +100
Soldering Temperature (°C)	260 For 5sec max

Electro-Optical Characteristics (25°C)

- Chip size: 40mil x 40mil

Color	Parameter	Symbol	Condition	Min	Typ	Max
Blue	Forward Voltage (V)	$V_{f,B}$	$I_{f,B} = 350 \text{ mA}$	3.3	3.5	4.0

Optical Characteristics

1. Luminous Performance

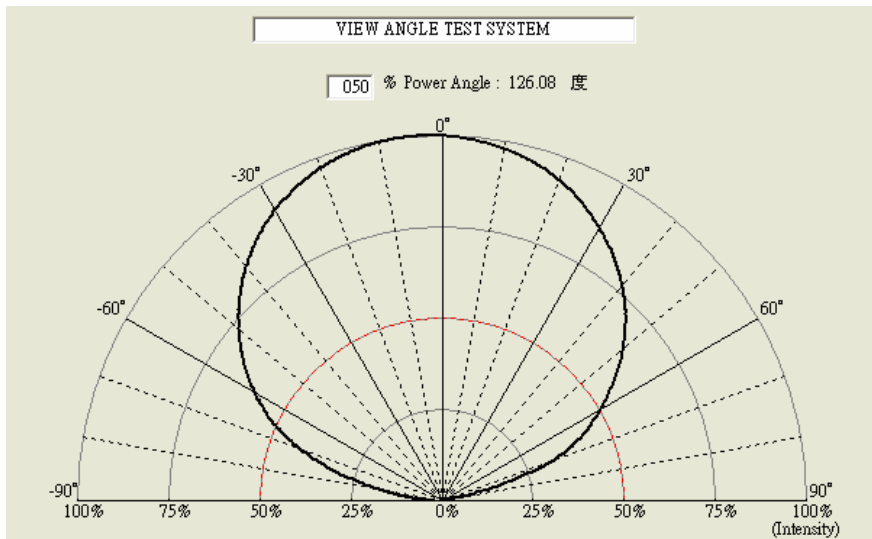
Unit: mW

Max	140
Min	90

2. Chromaticity

Parameter	Symbol	Condition	Min	Typ	Max
UV	λ	$I_{f,B} = 350 \text{ mA}$	385nm	390~400nm	415nm

3. View Angle Test



View Angle of 50% Power: 126 degree.

Reliability Test

Sequence No.	Test Item	Testing Condition	Remark
1	Bubble Test	1 atm, 125 ⁰ C , 30sec	Pass
2	Baking	125 ⁰ C , 24hrs	Pass
3	Soaking (Level 3)	30 ⁰ C , 60%, 192hrs	Pass
4	Reflow Soldering	260 ⁰ C , 10 sec, 3 times	Pass