

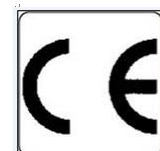
Approval Sheet

Customer: _____

Item: _____ High Power LED – 1W

Part No.: _____ KLHPW05C-R1W

Customer P/N: _____



APPROVED BY

SIGNATURE

CHECKED BY

APPROVED BY

供方签章:
SUOOLIER:

日期:
DATE:

客户签章:
CUSTOMER:

日期:
DATE:

备注: 承认签章后请回复一份(或复印件)给我公司, 其余由贵司留作存盘。如果在签章的承认书(或复印件)回复我司之前, 下了有关此零件的订单且又无特殊说明, 那么我司就确定贵司已完全承认。

Please return one specification or one copy of it with your chop and signature of approval and retain the others for your record. In the event of an order being placed for this part number before the chop and signed with specification (or copy) is returned and without special explanation, it will be assumed that full approval has been given.

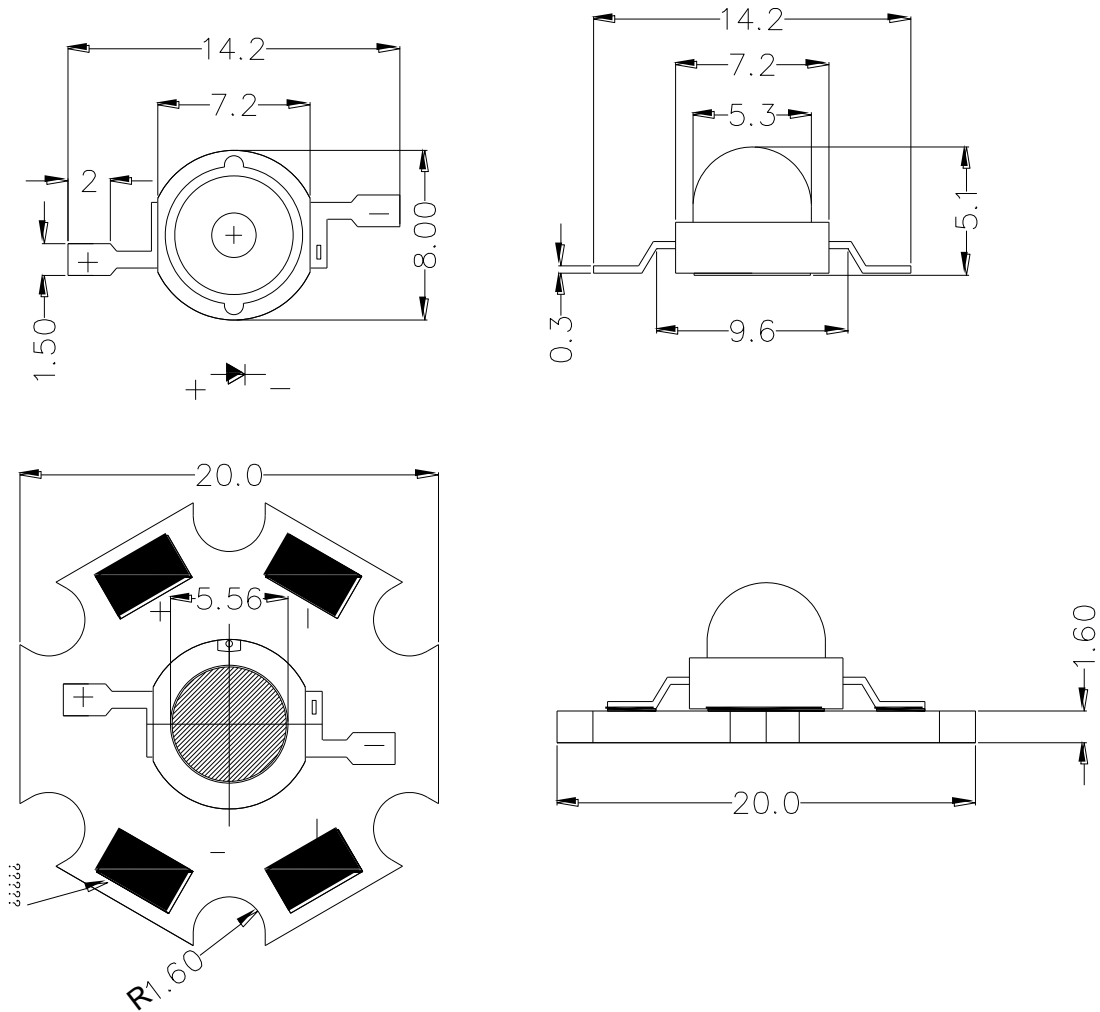
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DATE: 2018-1-16
DRAWN:

TYPE NO: KLHW05C-R1W

PACKAGE DIMENSIONS



Note:

1. All Dimensions are in millimeters
2. Tolerance is $\pm 0.25\text{mm}$ (0.010") Unless otherwise specified.

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Device Selection Guide

Material	Emitting Color	Lens Type
---	Warm White	Water Clear

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Max	Unit
Power Dissipation	P _D	1.2	W
Peak Forward Current 1/10 Duty Cycle, 0.1ms Pulse Width	I _{FP}	400	mA
Continuous Forward Current	I _F	320	mA
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{opr}	-40°C to +80°C	
Storage Temperature Range	T _{stg}	-25°C to +100°C	

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Forward Voltage	V _F	2.9	---	3.7	V	I _F =350mA
Luminous flux	φ	90	100	110	lm	I _F =350mA
Dominant Wavelength	λ _d	---	---	---	nm	I _F =350mA
Temperature Color	CCT	2700	----	7500	K	I _F =350mA
Reverse Current	I _R	---	---	10	μA	I _F =350mA
Viewing Angle	2θ _{1/2}	---	140	---	deg	I _F =350mA

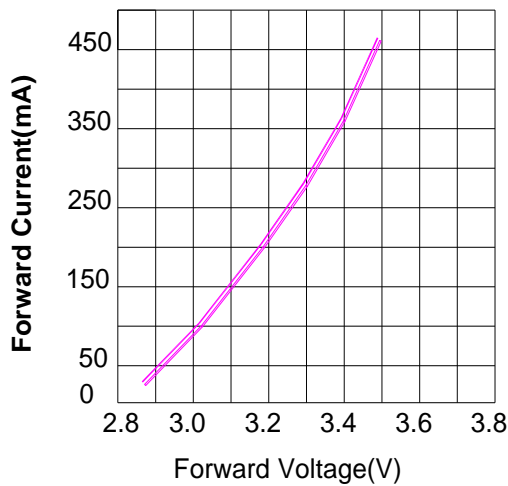
Note.

1. 2θ_{1/2} is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.

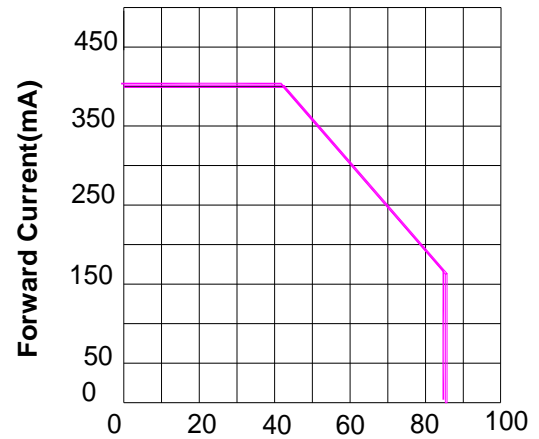
2. View angle tolerance is ± 10

Typical Electro-Optical Characteristics Curves

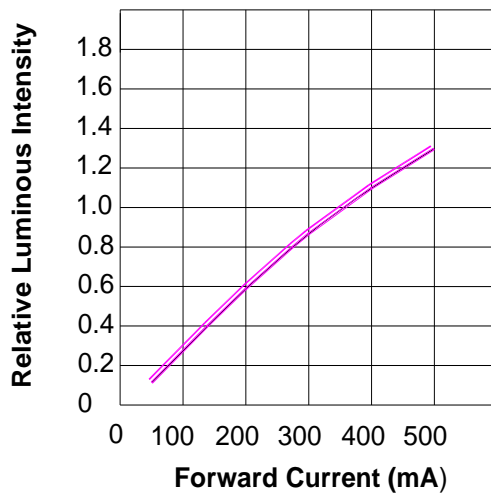
Relative Luminous Intensity vs Forward Current, $T_{Ambient}=25^{\circ}\text{C}$



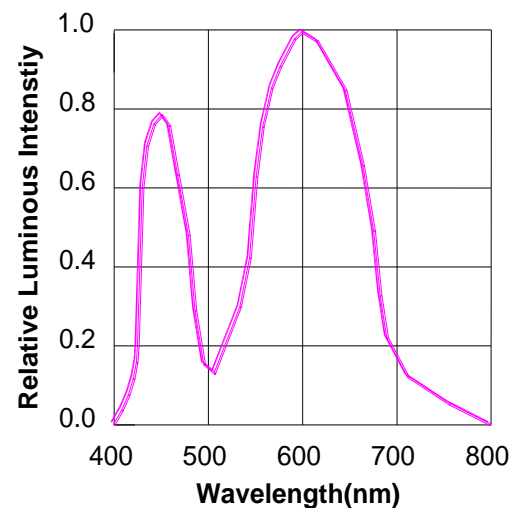
Forward Current Derating Curve, Derating based on $T_{jMAX}=125^{\circ}\text{C}$



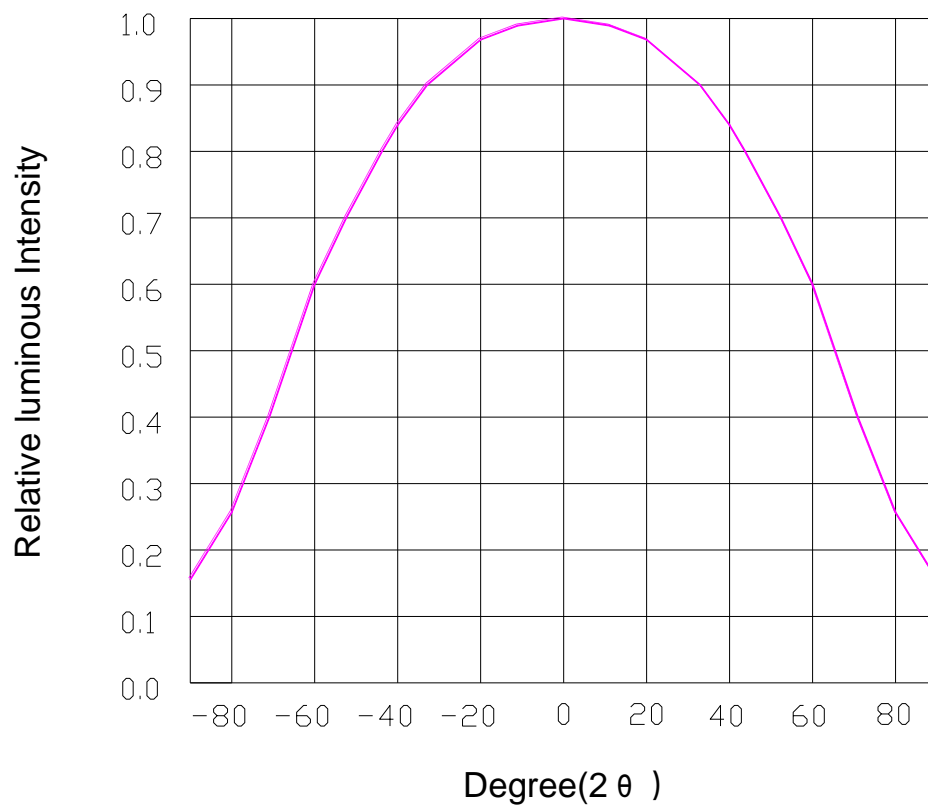
Relative Luminous Intensity vs Forward Current, $T_{Ambient}=25^{\circ}\text{C}$



Relative Spectral Distribution, $I_F=350\text{mA}$, $T_{Ambient}=25^{\circ}\text{C}$



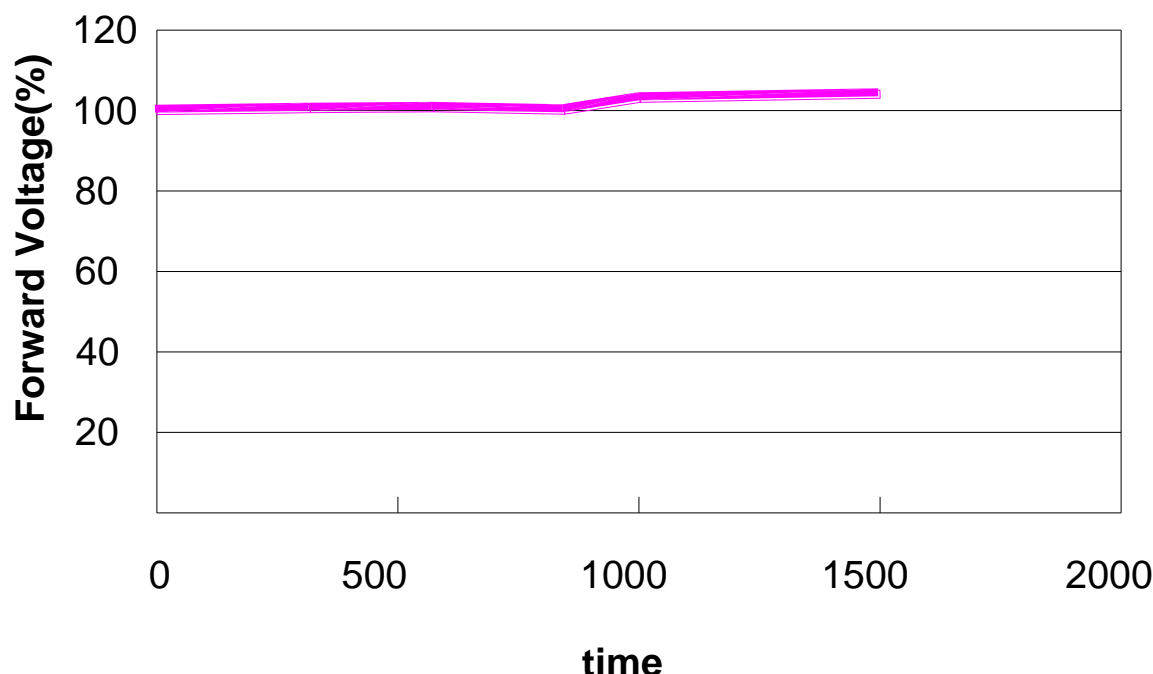
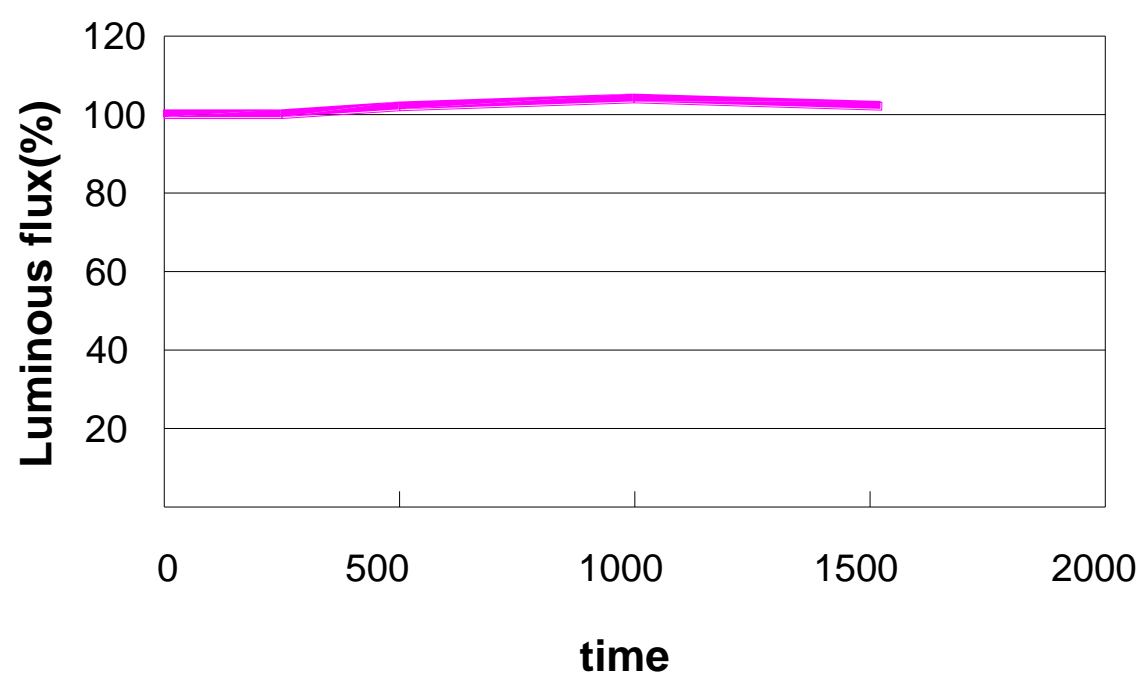
Typical Representative Spatial Radiation Pattern



Note.

1. $2\theta_{1/2}$ is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is ± 10

Reliability Data (If=350mA *T_{Ambient}*=25°C and H_{Ambient} 60%)



1. Storage

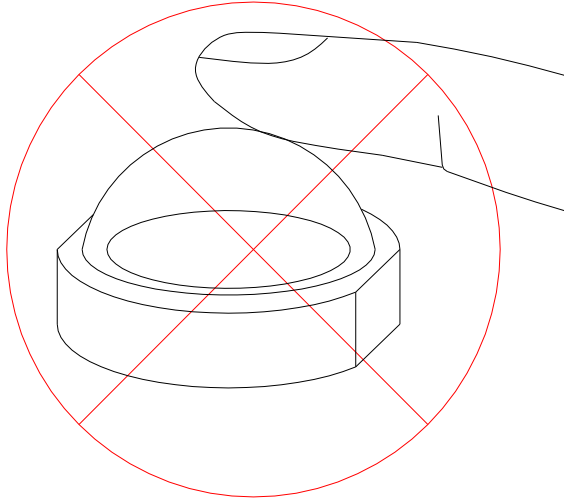
1. Do not open the moisture proof bag before the devices are ready to use.
2. Before the package is opened, LEDs should be stored at temperatures less than 30°C and humidity less than 90%.
3. LEDs should be used within a year.
4. After the package is opened, LEDs should be stored at temperatures less than 30°C and humidity less than 60%.
5. LEDs should be used within 168 hours (7 days) after the package is opened.
6. If the moisture absorbent material (silicone gel) has faded away or LEDs have exceeded the storage time, baking treatment should be implemented based on the following conditions: pre-curing at 60±5°C for 24 hours.

2. Thermal Management

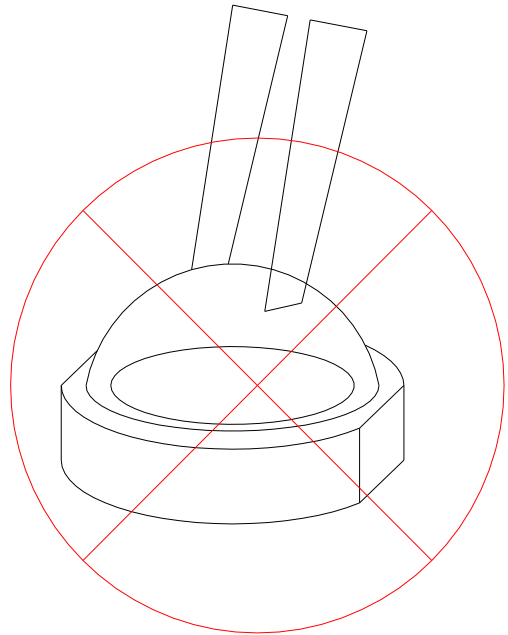
- 1). For maintaining the high flux output and achieving reliability, LEDs should be mounted on a metal core printed circuit board (MCPCB) or other kinds of heat sink with proper thermal connection to dissipate approximately 1W of thermal
- 2). Don't reflow solder.
- 3). Sufficient thermal management must be implemented. Otherwise, the junction temperature of die may exceed over the limit at high current driving conditions and the LEDs' lifetime may be decrease dramatically.
- 4). For further thermal management suggestions, please consult the Wenliang Design Guide or local representatives for assistance.
- 5). Special thermal designs are also recommended to take in outer heat sink design, such as FR4 PCB on Aluminum with thermal vias or FPC on Aluminum with thermal conductive adhesive, etc.

3.Proper Handling

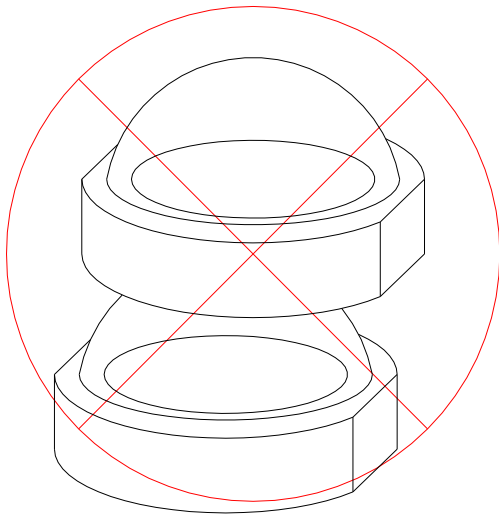
Please do not touch leds as four pictures listed below.



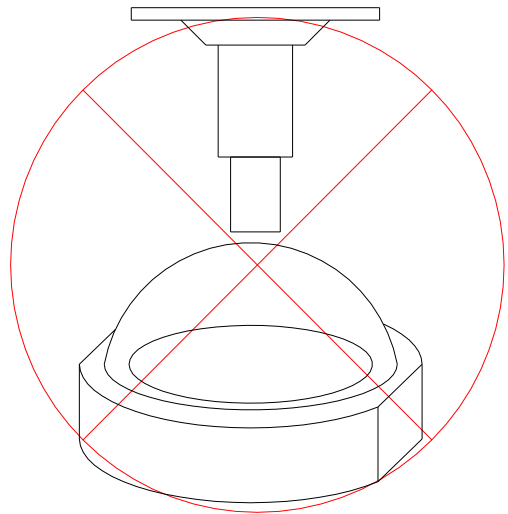
Do not press on the resin directly.



Do not touch the resin.



Do not stack the led together.



Avoid directly contacting with nozzle.