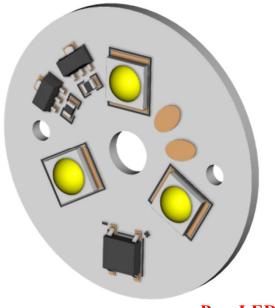
ParagonLED®

ParaLED G1D040006 Series Datasheet



ParaLED[®]

Introduction :

Compared with DC LED modules, ParagonLED AC SMD(Driver on Board)ParaLED[®] Series module does not need an external driver so that it is able to enhance lifespan and shows compact dimension.

Description :

- --120VAC
- --5/8/11W
- --70-80 LM/W
- --3000K CCT
- --80/90 CRI
- --PF>0.85
- --Customized available

Feature and Benefits:

- --Driver on Board
- --Industry grade solid state components
- -- Up to 0.5KV Surge protection built-in
- --Lifespan>50K hrs TC<85 $^\circ$ C
- --Lowest thermal resistance





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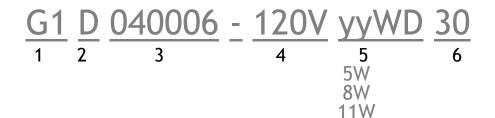
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General Information

Ordering Code Format



1 . Non Dimmable

- 2 . Product Series type
- 3. Outline Dimension(mm)
- 4. Voltage(VAC)
- 5 . Power Dissipation (W)
- 6 . Color Temperature(CCT)





Characteristics

Parameter	Symbol		Value		Unit
Forward Voltage	VF	120			VAC
Forward Voltage	VF		±10%		VAC
Operation Frequency	Fop	60			Hz
Power Dissipation	PD	5/8/11			W
Operating Temperature	Тор	-40 ~ +85			°C
Storage Temperature	Tst	-40 ~ +85		°C	
Surges Protection(L/N)	Vs	0.5		KV	
Insulation voltage	Viso[RMS]	120V:1240		VAC	
Power Factor	PF	>0.85			
Color coordination	ANSI C78.377:2008		IEC 60081:1997		97

ANSI CCT	step*	Сх	Су
2700K	3	0.458	0.410
3000K	3	0.434	0.403
3500K	3	0.407	0.392
4000K	3	0.382	0.380
4500k	3	0.361	0.366
5000K	3	0.345	0.355
5700k	5	0.329	0.342
6500K	5	0.312	0.328

*Color region stay within MacAdam ellipse from the chromaticity center.

IEC CCT	step*	Cx	Су
2700K	3	0.463	0.420
3000K	3	0.440	0.403
3500K	3	0.409	0.394
4000K	3	0.380	0.380
5000K	3	0.346	0.359
6500K	5	0.313	0.337

* Color region stay within MacAdam ellipse from the chromaticity center.



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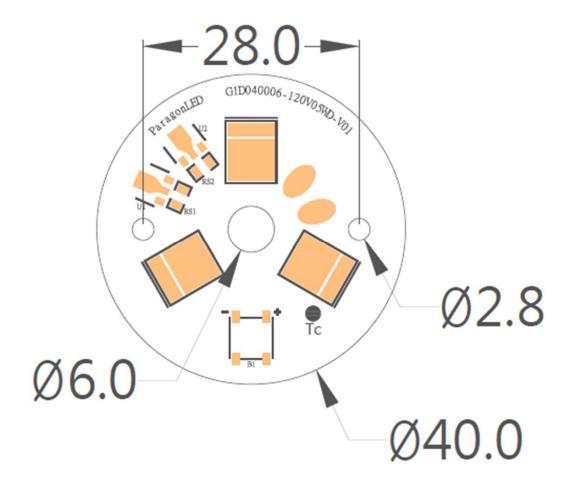
Luminous Flux Characteristic

Product No	Forward Voltage	Watt	lm/W	Lumen	Color rendering	Color Temperature
G1D040006-120V05D-3000	120V	5	80	400	80	3000
G1D040006-120V05D-3000	120V	5	70	350	90	3000
G1D040006-120V08D-3000	120V	8	80	640	80	3000
G1D040006-120V08D-3000	120V	8	70	560	90	3000
G1D040006-120V11D-3000	120V	11	80	880	80	3000
G1D040006-120V11D-3000	120V	11	70	770	90	3000





Mechanical Dimensions



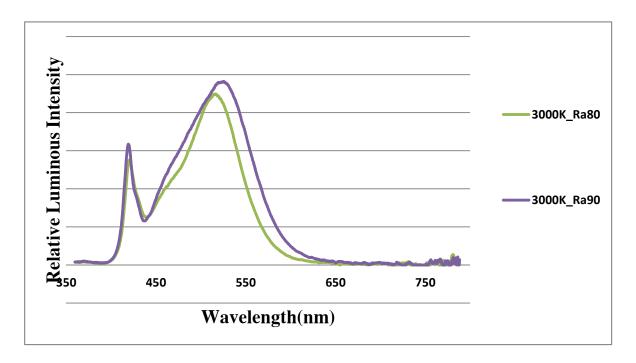
- 1. All dimensions are measured in mm.
- 2. Tolerance : ± 0.2mm
- 3. Thickness:1.0±0.1mm



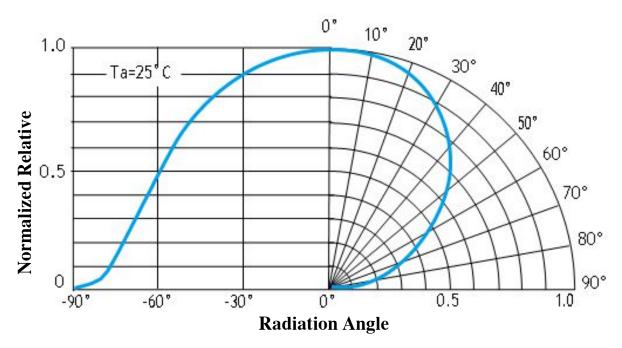


Characteristic curve

Color Spectrum



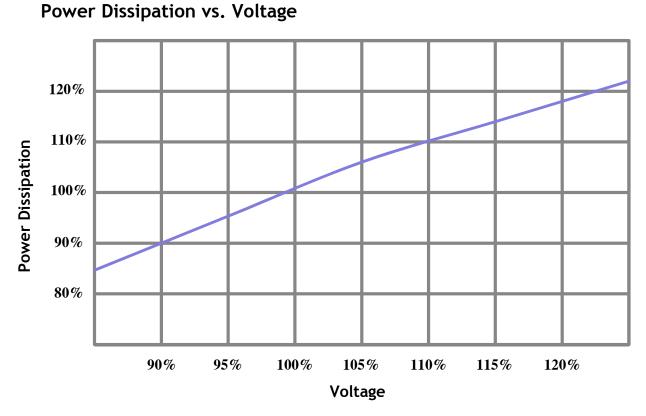
Beam Pattern



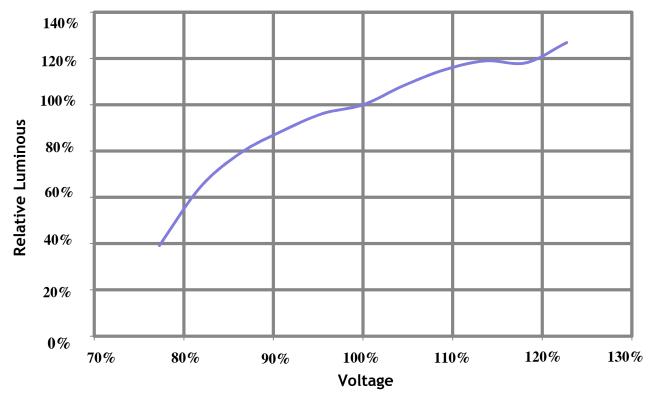




Characteristic curve









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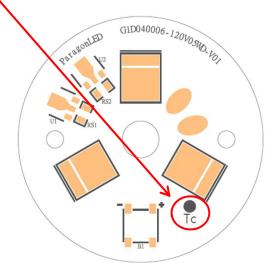
Reliability

No.	Test Item	Test Condition	Remark
1	Temperature Cycle	-40°C~100°C (30 mins / 30 mins)	100 Cycle
2	Low-Temperature Storage	Ta= -40°C	1000 hrs
3	High-Temperature Storage	Ta=85°C	1000 hrs
4	High Temperature High Humidity Life test	Ta=85°C, RH=85%	500 hrs
5	High Temperature Operation Life test	Tc = 55°C / 70°C / 85°C	6000 hrs
6	ON/OFF Test	3 sec ON, 3 sec OFF	2Million times

Ta : Temperature Ambient

RH : Relative Humidity

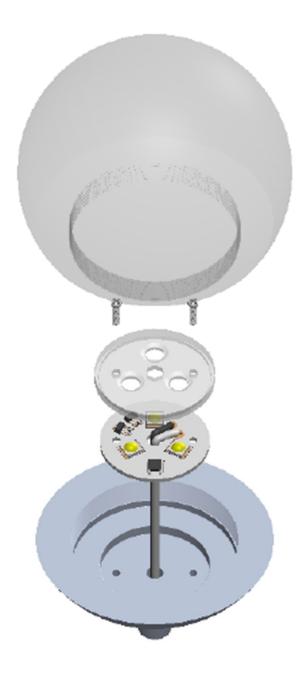
Tc Point







Assembly Notes





10 V01



Assembly Notes

Correct

Recommended to antistatic gloves



Wrong



Do not pile up light engine or lay heavy object over light engine



Do not touch the emitting area with sharp stuff





About ParagonLED

Established in 2008, Paragon Semiconductor Lighting Technology Co., Ltd. (ParagonLED®) has been devoted to be a comprehensive supplier of COB LED products. Our product lines include 1.AC LED module 2.Thermal management integration 3.Optical integration 4.AI integration 5.Constant power module series. We have been addressed ourselves to provide good quality products to satisfy clients' needs. Meanwhile we are not in a standstill situation, but keep pursuing progression and innovation.

ParagonLED® pride ourselves on our products, so we have overall arrangement in patent; the total applied patents have been reached 135 items until now. Our manufacturing techniques are also patented by many countries, and we still keep moving forward. Meanwhile we supply good quality products with good performance on CRI and efficiency (lm/w), and strictly controlled CCT.

In ParagonLED®, we do not only supply products, but also provide technical recommendations. What's more, we are more than willing to solve problems with clients together. Hence ParagonLED® and our clients can work together to supply reliable and qualified products to end users! Devote ourselves to bring more added-value to clients

• \rightarrow Direct Marketing + Localized operation

We have offices in Taiwan, in DongGuan, China, so that we can deal with enquiries directly. Also with agents in many different countries, we and they are able to take care of clients on local basis.

 $\boldsymbol{\cdot} \rightarrow \text{Fast delivery}$

With the manufacturing site located in New Taipei City Linkou, Taiwan, we have different yet convenient transportation ways to reach the world.

\rightarrow Customized service

Through professional and experienced research and development techniques, we provide customized products that can be tailored to different requirements.

