

**MANKUN**

**满坤电子有限公司**  
**MANKUN ELECTRONIC CO., LTD.**

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[WWW.MANKUN.NET.CN](http://WWW.MANKUN.NET.CN)

**满坤电子有限公司**  
**MANKUN ELECTRONIC CO., LTD.**

**LED 照明线路板 · 制 · 造 · 商**  
PCB circuit board manufacturer pcb assembly

## ABOUT US

Mankun electronics co., ltd. was founded in August 2005, is a collection of LED lighting PCB circuit board research and development, production, sales in one of the highModern enterprise with new technology. Has a number of imported automatic production lines, strict management system and excellent technology research and development and managementTalent, and in February 2008 established Taiwan man kun electronics co., LTD.

Professional PCB PCB is engaged in the production of single and double aluminum substrate, copper substrate, FR4 fiberboard, multilayer PCB and flexible PCB.A complete set of imported advanced circuit board production equipment and electronic mounting equipment. The products are mainly used in LED lighting (LED commercial lighting,LED indoor and outdoor lighting, LED industrial lighting, LED vehicle lighting) electronics, machinery, communications, medical and other areas with high heat dissipation requirements;The company has passed UL certification (certificate number: E334090) excellent quality circuit board manufacturers.

The company is the "quality first, keep improving" quality policy, strong research and development capacity, has a number of patents to lay a solid foundationOur products are widely exported to Europe, Russia, South Korea and other countries and regions. Companies adhering to the Customer-oriented, with better quality, better efficiency, better service, to create higher value for customers at home and abroad.

滿坤電子有限公司創立於2005年8月，是集LED燈具PCB線路板研發、生產、銷售於一體的高新技術現代化企業。擁有多條進口全自動生產線，嚴格的管理體系和優秀的技術研發及管理人才，於2008年2月成立臺灣滿坤電子有限公司。

專業PCB線路板從事生產單雙面鋁基板、銅基板、FR4玻纖板、多層線路板及軟性電路板等。全套引進先進的線路板生產設備及電子貼裝設備。產品主要應用於LED照明（LED商業照明、LED室內外照明、LED工業照明、LED車燈照明）電子、機械、通訊、醫療等高散熱需求領域；公司通過了UL認證（證號：E334090）品質卓越的線路板廠家。

公司本著“質量第一、精益求精”的質量方針，強大的研發能力，擁有多項發明專利奠定了雄厚的技術實力及豐富的生產經驗，產品廣泛出口到歐洲、俄羅斯、韓國等國家和地區。公司秉承以客戶為中心，用更好的質量、更好的效率、更好的服務、為國內外客戶創造更高的價值。



## MANKUN ELECTRONICS

MANKUN Electronics is a GuangZhou company established in 2005, focused on development of solid state lighting solutions (LEDs).

We continually enrich our product portfolio with state of the art LED solutions, enabling our customers to rapidly develop and deploy new fixtures with the latest technology.

We believe in each customer's unique needs. For this reason we count On our team's experience to deliver the right project.

## EXPERTISE

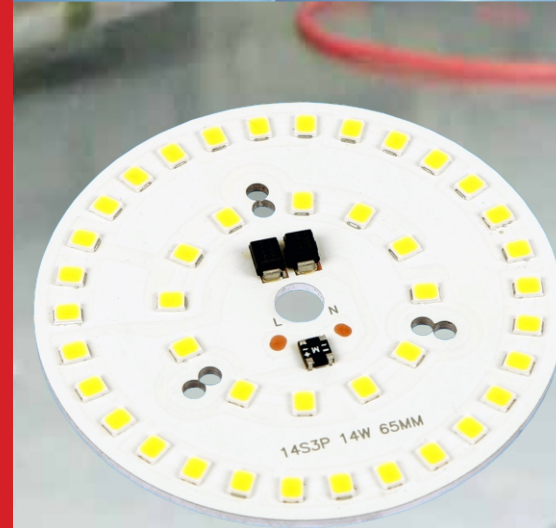
With our background and experience in the lighting industry we are able to create and offer customized products.

## INNOVATION

We invest in research, development and use of the latest technologies, leading us to innovative solutions.

## ENVIRONMENT

We develop products focused on conservation of energy resources.



## Overview & Technology

**Mankun Electronics Co.,LTD is a global leader in LED Professional Lighting Program Provider.**

With 15 year's PCB manufacturer experience,Mankun professional technical team is constantly improving the PCB technical level and production capacity. As a PCB vendor, We are not only provide one-stop service including PCB design, PCB manufacturer PCB assembly service. but also the LED technology enterprises which main in LED Commercial lighting, office light with design, development,production and marketing.







### 产品应用领域:

-   
建筑照明
-   
影视照明
-   
商业照明
-   
医疗照明
-   
舞台照明
-   
车灯照明
-   
手电照明
-   
路灯照明

## 金属基板特点及应用:

金属基板（铝基板、铜基板、铁基板）以其优异的散热性能、机械加工性能、电磁屏蔽性能、尺寸稳定性、磁力性能及多功能性能，在LED照明、混合集成电路、汽车、摩托车、办公自动化、大功率电器设备、电源设备等领域，得到了越来越多的应用，特别是在LED封装产品中作为底基板得到广泛应用。

项目	技术指标
表面工艺	喷纯锡、化学金、化学银、防氧化
层数	单面、双面、双面复合、特殊结构
最大加工尺寸	240mmx1490mm 和 490x1190mm
加工厚度	0.4-3.0mm
铜箔厚度	H 1/2/3/4(oz)
绝缘层厚度	50/75/100/125/150/175/200(um)
板材类型	铝基板、铜基板、铁基板、复合基板
金属基厚度	0.5/0.8/1.0/1.2/1.6/2.0/3.2/5.0(mm)
成型	模具冲切、数控铣（锣）外形
测试	100% 电脑开短路测试
成型公差	模具冲切 <±0.05mm, 数控铣（锣）<±0.15mm, V割 >0.15mm
孔位公差	±0.1mm
最小孔径	单面 0.5mm、双面 PTH(金属化孔) 0.3mm
阻焊层颜色	绿色、白色、黑色、红色、黄色
最小文字高度	0.8mm
最小线宽线距	0.15
最小文字线宽	0.15
文字层颜色	蓝色、白色、黑色、红色、黄色
特殊孔	沉孔、杯型孔、埋孔、埋槽
文字类型	Gerber,Protel,PowerPCB,AutoCAD etc

## FR4线路板特点及应用:

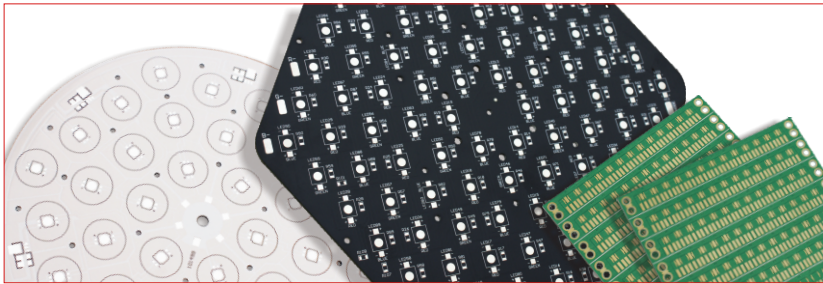
装配密度高、体积小、质量轻由于装配密度高，各组件（包括元器件）间的连线减少，因此提高了可靠性；可以增加布线层数，从而加大了设计灵活性；能构成具有一定阻抗的电路；可形成高速传输电路；可设置电路、磁路屏蔽层，还可设置金属芯散热层以满足屏蔽、散热等特种功能需要；安装简单，可靠性高。

项目	技术指标
表面工艺	喷纯锡、化学金、化学银、防氧化
层数	单面、双面、双面复合、板材混压
最大加工尺寸	610mmx1100mm
板厚范围	0.4-7.0mm
铜箔厚度	外层 35um - 175um、内层 17um - 175um
介质厚度	0.075mm - 6.0mm
板材类型	FR-4
塞孔直径	0.25mm - 0.6mm
成型	模具冲切、数控铣（锣）外形
测试	100% 电脑开短路测试
成型公差	模具冲切 <±0.05mm, 数控铣（锣）<±0.15mm, V割 >0.15mm
孔位公差	±0.1mm
最小孔径	单面 0.5mm、双面 PTH(金属化孔) 0.3mm
阻焊层颜色	绿色、白色、黑色、红色、黄色
最小文字高度	0.8mm
最小线宽线距	0.15
最小文字线宽	0.15
文字层颜色	蓝色、白色、黑色、红色、黄色
特殊孔	沉孔、杯型孔、埋孔、埋槽
文字类型	Gerber,Protel,PowerPCB,AutoCAD etc



### ■ 热电分离金属基板

热电分离铜基板作为一种新型的固态管，具有满足大功率散热要求、延长使用寿命、保护环境等优点。高导热基板焊点扩散速度快，需要更强的焊锡铁才能达到理想的焊接效果



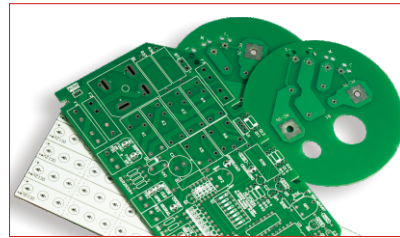
### ■ 金属基板

采用表面粘着技术在电路设计方案中对热扩散进行极为有效的处理。降低产品进行温度，提高产品功率密度和可靠性，延长产品使用寿命及良好的机械耐久力。



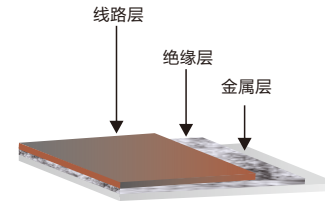
### ■ FPC软性板

可自由弯曲、折叠、卷绕、可随意移动及伸缩实现轻量化、小型化、薄型化、从而达到元件装置和导线连接一体化。



### ■ FR-4/CEM-1/CEM-3

具有较高的机械性能和介电性能。良好的耐热性



导电层：由铜箔经过胶处理而成。

绝缘层：分为有玻纤和无纤两种。

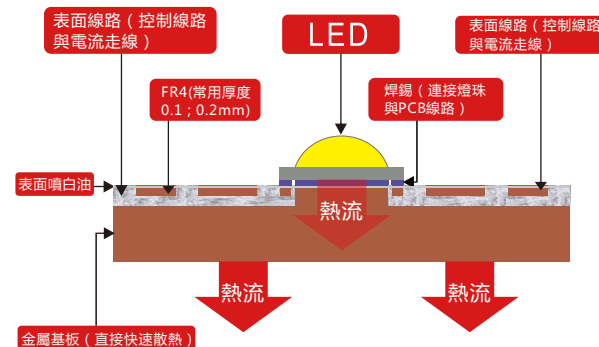
金属基层：铝板、铁板、不锈钢板、铜板。

### ■ Numerical table of heat conductivity of metal substrate 金属基板热传导率数值表

Product name 品名	Power substrate 电源基板	Power conversion 功率变频器		LED Lighting/car Lighting LED照明/车载照明			
Insulation type 绝缘层种类	Low dielectric 低介电	High heat dissipation 高散热		hypoeasticity 低弹性			
Insulation thickness 绝缘层厚度(μm)	80	125	125	125	80	100	
Copper foil thickness 铜箔厚度(μm)	35	70	70	70	70	70	
peel strength 剥离强度(N/cm)	18	20	21	20	20	13	
Interspace voltage resistance 一分間耐電壓(kv)	2	5	4.5	4	2	2.5	
Insulation failure voltage 绝缘破壞電壓(kv)	5	7	6	6	4	6	
Volume resistance 體積電阻(Ω·cm)	5X10 <sup>15</sup>		4X10 <sup>15</sup>		5X10 <sup>15</sup>		
Dielectric constant 介電常數	1MHZ	4.5	4.6	7.2	7.8	4.3	
Thermal resistance 熱阻(°C/W)	NSK method NSK法	0.5	0.65	0.55	0.35	0.5	
Thermal conductivity 熱傳導率(W/mk)	*1	1	1.5	2.0	3.0	3.0	
Solder heat resistance 焊料耐熱性	300°C	>10 points(分)				>2 points(分)	
Glass transition point 玻璃轉化點(°C)	*2:DSC *3:DMS	160*2	170*2	155*2	155*2	155*2	60*3

\*根據ASTM E 1530標準 ■以上數值是測試相對值、並非絕結值

### 热电分离金属基散热过程示意图：



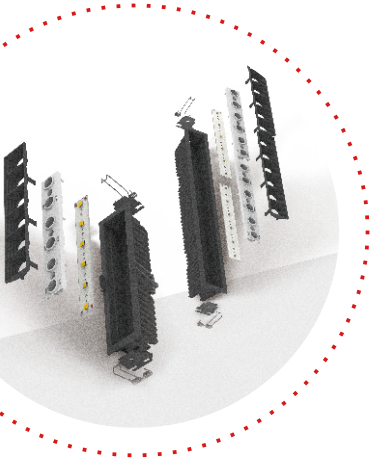
金属基导热系数：

铝基板: 230W/mk

铜基板: 390W/mk

经营理念：  
用户至上，创新制胜，以人为本，科学管理，专注品质，专注细节，专注效率。

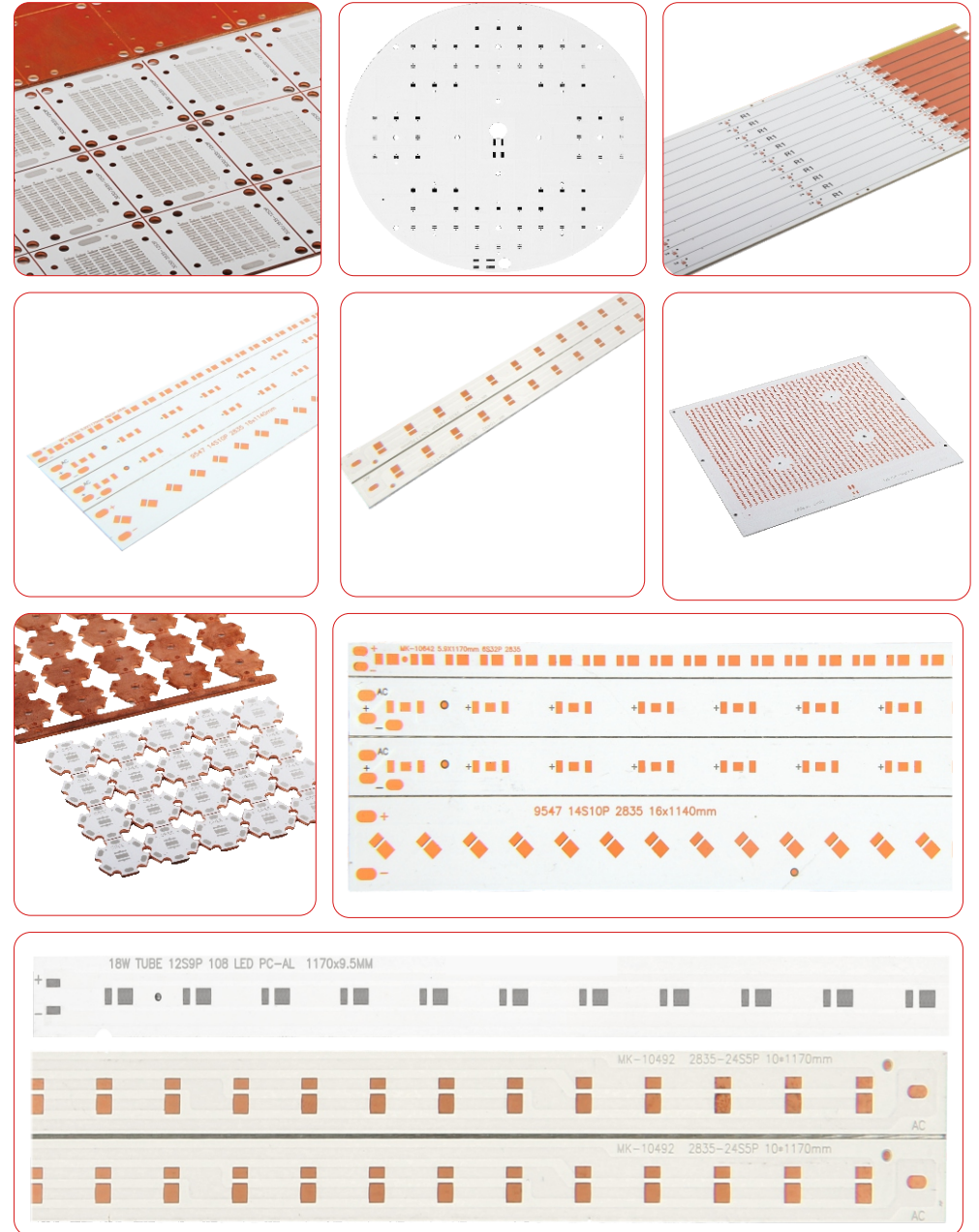
Management Concept,  
Customer First, Innovation, People-oriented, Scientific Management,  
Focus on Quality, Detail & Efficiency.



LED照明方案開發與設計  
Development and Design of LED Lighting Scheme

一站式LED PCB設計與生產  
Assembly test production LED PCB

SKD零、散件、出貨  
SKD parts distribution





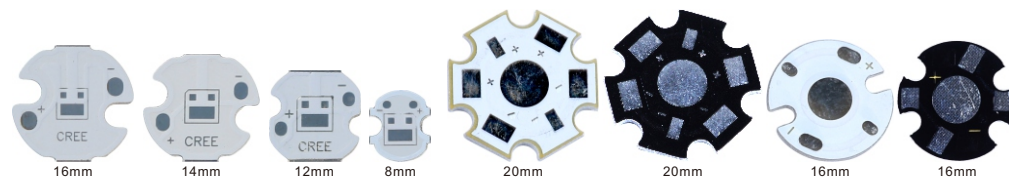
提供CREE全系列六角星公板，热电分离金属基板公板，长期备库存

产品展示  
Product display

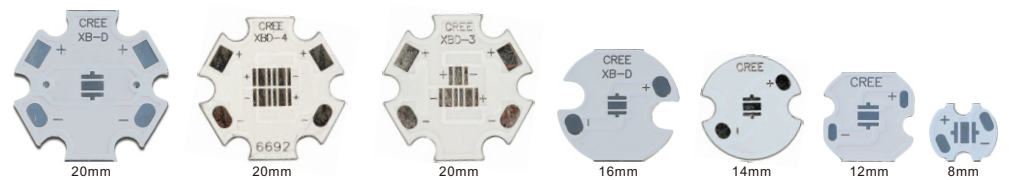
规格尺寸 Specification Size(mm)	产品型号 Product Model	厚度/材质		LED 数量/Qty (pcs)	LED品牌/型号 Led brand / model	铜厚 Copper Thickness (oz)	拼板方式 Makeup (pcs/PNL)	表面处理 surface preparation 制作工艺 Manufacturing process	
		Thickness (mm)	Material						
直径8mm Diameter 8mm	A85675	1.0	Aluminum	1	CREE XP	1	42	表面白油, 无铅锡	
	A82305	1.0		1	3030	1			
	A87575	1.0		1	CREE XBD	1			
	A82598	1.0		1	REBEL	1			
直径Diameter 9.8mm	A988668	1.2	Aluminum	1	CREE XP	1	24	Moulding, lead-free tin spray, white oil	
直径Diameter 10mm	A106794	1.0		1		1			20
直径Diameter 12.8mm	A1286535	1.0		1		1			1
直径Diameter 13.7mm	A13710196	1.6		1		1			20
直径12mm Diameter 12mm	A127498	1.0		Aluminum		1			CREE XP
	A127576	1.0	1		CREE XBD	1			
	A127513	1.0	1		CREE XML	1			
	A128644	1.0	1		REBEL	1			
	A129646	1.2	1		CREE XP	1			
	A127497	1.0	1		CREE XRE	1			
	A128005	1.0	1		3030	1			
	A127909	1.0	1		5630	1			
直径14mm Diameter 14mm	A148264	1.0	Aluminum	1	CREE XP	1	40	表面白油, 无铅锡	
	A145558	1.0		1	CREE XML	1	40		
	A148667	1.0		1	CREE XP	1	40		
	A149997	1.6		1	CREE XBD	1	40		
	A147577	1.0		1	3030	1	1		
直径16mm Diameter 16mm	A148643	1.0	Aluminum	1	REBEL	1	40	表面白油, 无铅锡	
	A167237	1.0		1	CREE XP	1	30		Moulding, lead-free tin spray, white oil
	A167578	1.0		1	CREE XBD	1			
	A167397	1.0		1	CREE XML	1			
	A168521	1.0		1	3030	1			
	A168088	1.0		1	5630	1			
	A1610284	1.0		2	CREE XP	1			
	A166949	1.0		1	CREE XRE	1			
	A168817	1.0		1	CREE XML	1			
	A168983	1.0		1	3030	1			
	A168642	1.0		1	REBEL	1			
直径18mm Diameter 18mm	A188504	1.0	Aluminum	1	CREE XP	1		20	
	A186590	1.0		1	CREE XML	1			
	A1810192	2.0		1	CREE XML	1			
	A1810040	1.6		1	CREE XP	1			
	A186641	1.6		1	CREE XML	1			
	A1810039	2.0		1	UV365-D	1			
直径20mm Diameter 20mm	A207391	1.6	Aluminum	1	CREE XP	1	20	表面白油, 无铅锡	
	A205130	1.6		1	CREE XP	1			
	A2010166	1.6		2	CREE XP	1			
	A202055	1.6		1	CREE XBD	1			
	A206932	1.6		3	CREE XBD	1			
	A206692	1.6		4	CREE XML	1			
	A207714	1.6		1	CREE XP	1			
	A206538	1.6		1	CREE XBD	1			1
	A208944	1.6		1	CREE XML	1			1
	A207390	1.6		1	CREE XML	1			20
	A209279	1.6		1	CREE XML-RGBW	1			20
	A207392	1.6		1	CREE XRE	1			1
	A206753	1.6		1	OSRAM	1			20
	A206588	1.6		1	EDISON	1			20
	A208804	1.6		1	CREE MTG	1			1
	A2010074	1.6		1	2835	1			20
	A208658	1.6		1	OSRAM 3030	1			20
	A206752	1.6		1	CREE MX-6	1			1
	A207487	1.6		1	MCE-RGBW	1			20
	A207265	1.6		1	MCE-RGBW	1			20
8990	1.0	Copper	1	5050	1	20	Moulding, lead-free tin spray, white oil		
8991	1.0		1	5050	1	1			

### CREE REBEL 系列

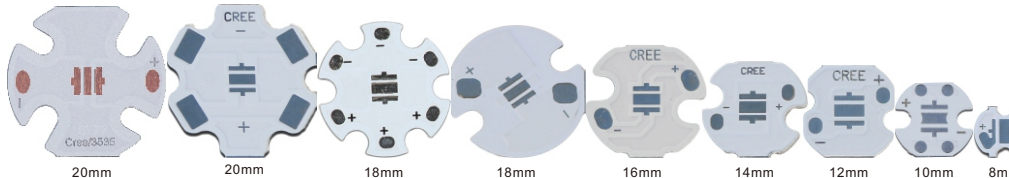
### 仿流明 系列



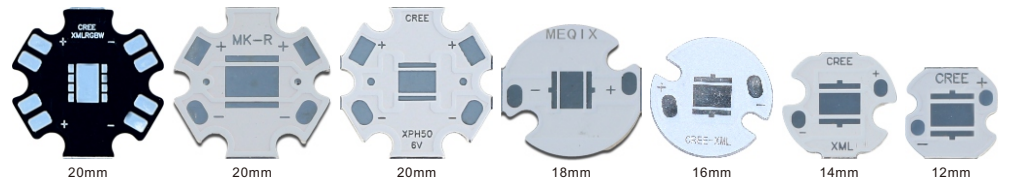
### CREE XB-D 系列



### CREE XP-G 系列

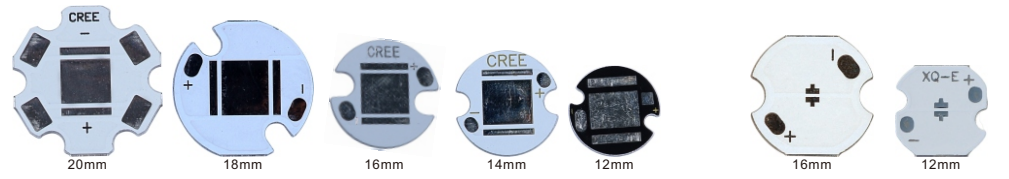


### CREE XML 系列

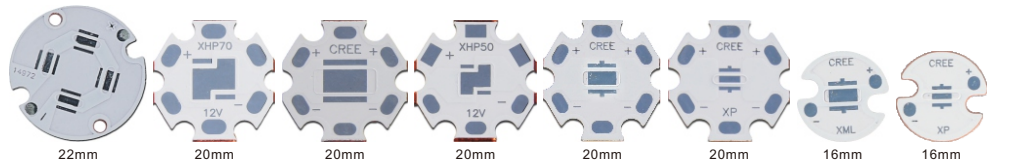


### CREE XRE 系列

### XQ-E 1616 系列

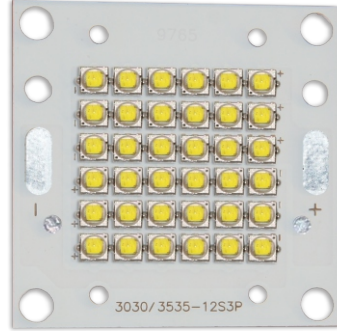


### 热电分离铜基板 系列



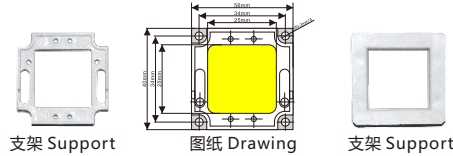
**型号：9765**

产品名称：LED集成光源150W  
外形尺寸：40X40mm  
PCB材质：热电分离铜基板  
PCB厚度：1.6mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：150W-12串3并  
产品电压：40V 产品电流：4000mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



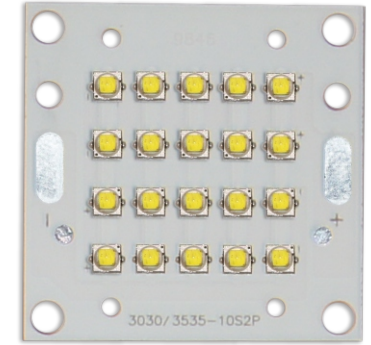
**LED Module 150W**

- PCB size: 40X40mm
- Metal Material: Copper
- PCB thickness: 1.6mm
- Voltage: 40V Current:4000 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



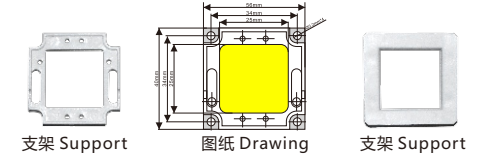
**型号：9846**

产品名称：LED集成光源80W  
外形尺寸：40X40mm  
PCB材质：热电分离铜基板  
PCB厚度：1.6mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：80W-10串2并  
产品电压：32V 产品电流：2500mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



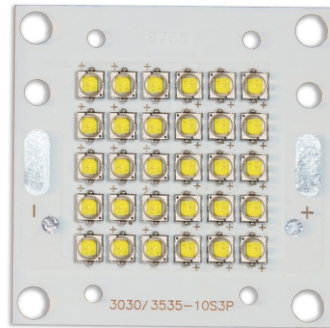
**LED Module 80W**

- PCB size: 40X40mm
- Metal Material: Copper
- PCB thickness: 1.6mm
- Voltage: 32V Current:2500 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



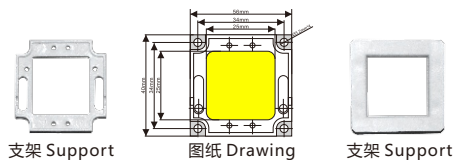
**型号：9766**

产品名称：LED集成光源120W  
外形尺寸：40X40mm  
PCB材质：热电分离铜基板  
PCB厚度：1.6mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：120W-10串3并  
产品电压：32V 产品电流：4000mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



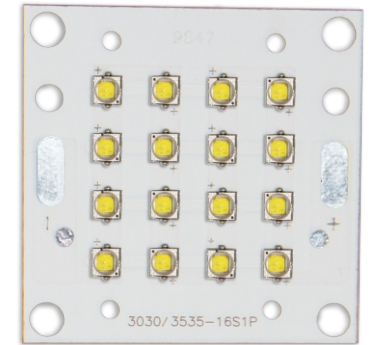
**LED Module :120W**

- PCB size: 40X40mm
- Metal Material: Copper
- PCB thickness: 1.6mm
- Voltage: 32V Current:4000 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



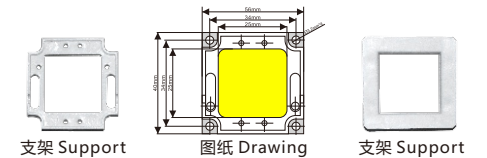
**型号：9847**

产品名称：LED集成光源60W  
外形尺寸：40X40mm  
PCB材质：热电分离铜基板  
PCB厚度：1.6mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：60W-16串1并  
产品电压：50V 产品电流：1200mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



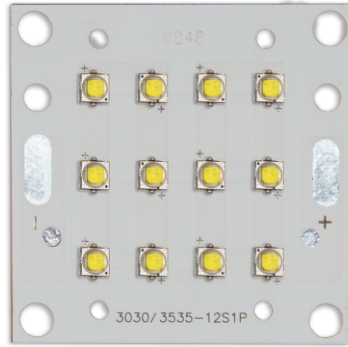
**LED Module : 60W**

- PCB size: 40X40mm
- Metal Material: Copper
- PCB thickness: 1.6mm
- Voltage: 50V Current: 1200 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



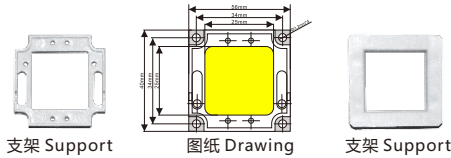
**型号：9848**

产品名称：LED集成光源50W  
外形尺寸：40X40mm  
PCB材质：热电分离铜基板  
PCB厚度：1.6mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：80W-10串2并  
产品电压：38V 产品电流：1300mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



**LED Module 50W**

- PCB size: 40X40mm
- Metal Material: Copper
- PCB thickness: 1.6mm
- Voltage: 38V Current:1300 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



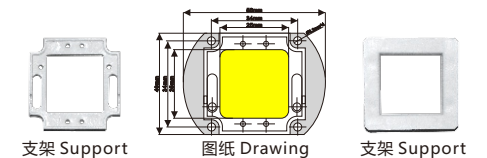
**型号：15978**

产品名称：LED集成光源20W  
外形尺寸：56X40mm  
PCB材质：铝基板  
PCB厚度：1.6mm、2.0mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：20W-5串9并  
产品电压：24V 产品电流：850mA  
产品色温：3000K/4000K/6500K  
LED规格：3030  
使用寿命：大于5000小时



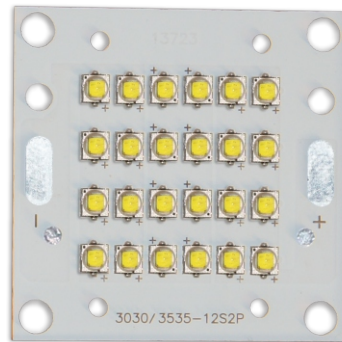
**LED Module 20W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 24V Current:850 mA
- LED Chip: 3030
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



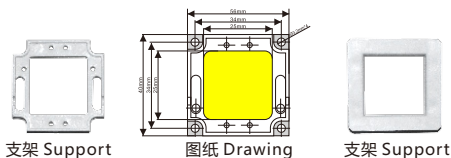
**型号：13723**

产品名称：LED集成光源90W  
外形尺寸：40X40mm  
PCB材质：热电分离铜基板  
PCB厚度：1.6mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：90W-12串2并  
产品电压：38V 产品电流：2500mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



**LED Module：90W**

- PCB size: 40X40mm
- Metal Material: Copper
- PCB thickness: 1.6mm
- Voltage: 38V Current: 2500 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



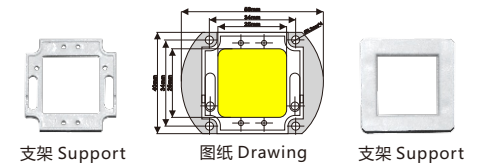
**型号：15979**

产品名称：LED集成光源30W  
外形尺寸：56X40mm  
PCB材质：铝基板  
PCB厚度：1.6mm、2.0mm  
发光面尺寸：25X25mm  
孔径：Ø4mm 孔距：34X34mm  
产品功率：20W-10串1并  
产品电压：32V 产品电流：950mA  
产品色温：3000K/4000K/6500K  
LED规格：科锐 3535  
使用寿命：大于5000小时



**LED Module 30W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 32V Current:950 mA
- LED Chip: Cree 3535
- High color rendering (CRI > 80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



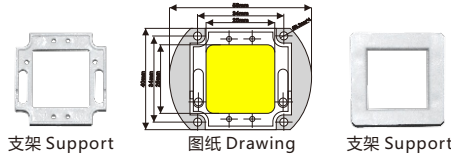
**型号: 15980**

产品名称: LED集成光源50W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 50W-2串5并  
产品电压: 50V 产品电流: 1000mA  
产品色温: 3000K/4000K/6500K  
LED规格: 飞利浦 5050  
使用寿命: 大于5000小时



**LED Module 50W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 50V Current:1000 mA
- LED Chip: LUXEON 5050
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



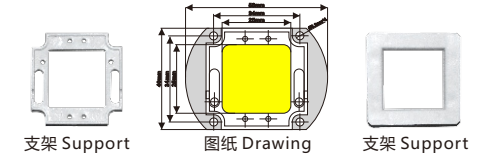
**型号: 15982**

产品名称: LED集成光源70W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 50W-12串3并  
产品电压: 36V 产品电流: 2000mA  
产品色温: 3000K/4000K/6500K  
LED规格: 科锐 3535  
使用寿命: 大于5000小时



**LED Module 70W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 36V Current:2000 mA
- LED Chip: Cree 3535
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



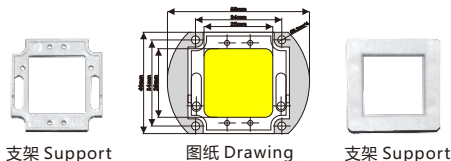
**型号: 15981**

产品名称: LED集成光源45W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 45W-5串9并  
产品电压: 32V 产品电流: 1500mA  
产品色温: 3000K/4000K/6500K  
LED规格: 3030  
使用寿命: 大于5000小时



**LED Module 45W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 32V Current:1500 mA
- LED Chip: 3030
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



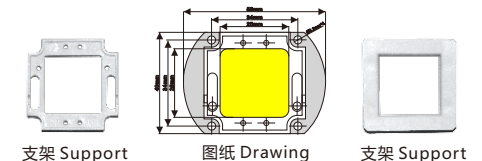
**型号: 15983**

产品名称: LED集成光源100W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 90W-2串8并  
产品电压: 50V 产品电流: 2000mA  
产品色温: 3000K/4000K/6500K  
LED规格: 5050  
使用寿命: 大于5000小时



**LED Module 100W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 50V Current:2000 mA
- LED Chip: 5050
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



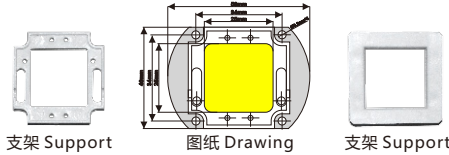
**型号: 15984**

产品名称: LED集成光源45W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 45W-7串7并  
产品电压: 42V 产品电流: 1050mA  
产品色温: 3000K/4000K/6500K  
LED规格: 3030  
使用寿命: 大于5000小时



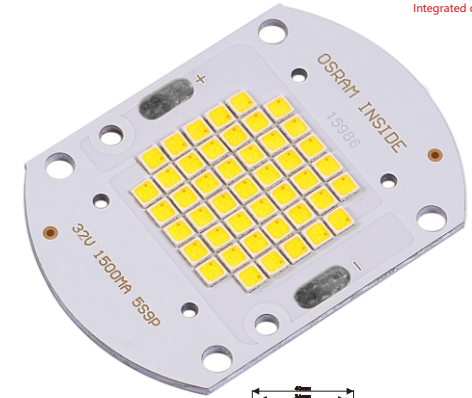
**LED Module 45W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 42V Current:1050 mA
- LED Chip: 3030
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



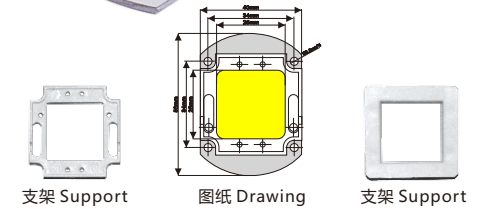
**型号: 15986**

产品名称: LED集成光源45W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 45W-5串9并  
产品电压: 32V 产品电流: 1500mA  
产品色温: 3000K/4000K/6500K  
LED规格: 飞利浦 3030  
使用寿命: 大于5000小时



**LED Module 45W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 32V Current:1500 mA
- LED Chip: Lumileds 3030 2D
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



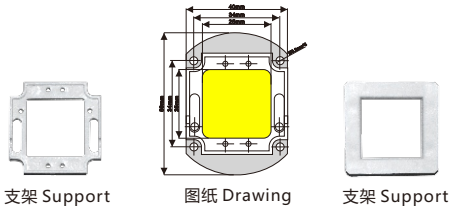
**型号: 15985**

产品名称: LED集成光源45W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 45W-5串9并  
产品电压: 32V 产品电流: 1500mA  
产品色温: 3000K/4000K/6500K  
LED规格: 飞利浦 3030  
使用寿命: 大于5000小时



**LED Module 45W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 32V Current:1500 mA
- LED Chip: Lumileds 3030
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



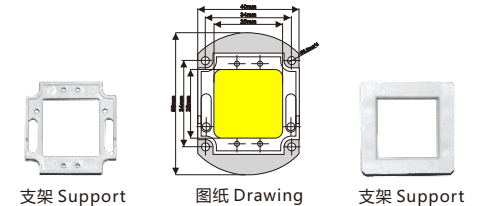
**型号: 15987**

产品名称: LED集成光源45W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 45W-5串9并  
产品电压: 32V 产品电流: 1500mA  
产品色温: 3000K/4000K/6500K  
LED规格: 科锐 3030  
使用寿命: 大于5000小时



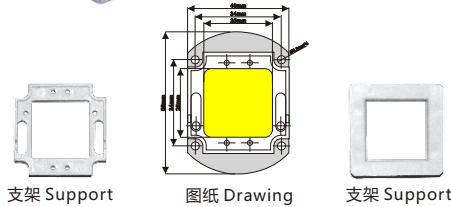
**LED Module 45W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 32V Current:1500 mA
- LED Chip: Cree 3030
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours



**型号: 15988**

产品名称: LED集成光源40W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 40W-7串7并  
产品电压: 42V 产品电流: 1050mA  
产品色温: 3000K/4000K/6500K  
LED规格: 飞利浦 3030  
使用寿命: 大于5000小时

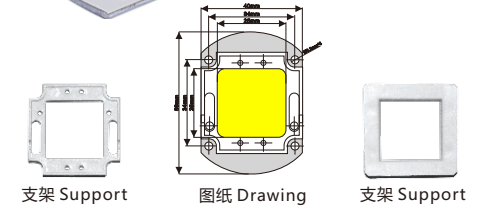


**LED Module 40W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 42V Current:1050 mA
- LED Chip: Lumileds 3030 2D
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours

**型号: 15990**

产品名称: LED集成光源40W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 40W-7串7并  
产品电压: 42V 产品电流: 1050mA  
产品色温: 3000K/4000K/6500K  
LED规格: 科锐 3030  
使用寿命: 大于5000小时

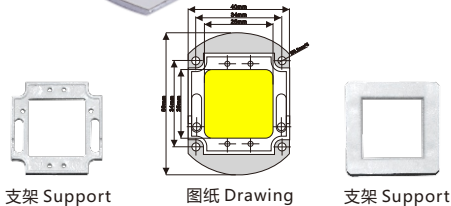
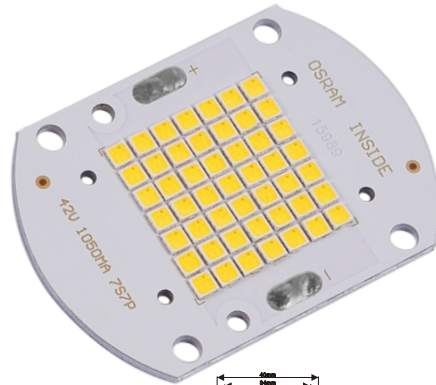


**LED Module 40W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 42V Current:1050 mA
- LED Chip: Cree 3030
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours

**型号: 15989**

产品名称: LED集成光源40W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 40W-7串7并  
产品电压: 42V 产品电流: 1050mA  
产品色温: 3000K/4000K/6500K  
LED规格: 欧诗朗 3030  
使用寿命: 大于5000小时

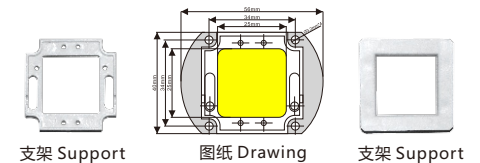


**LED Module 40W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 42V Current:1050 mA
- LED Chip: Osram 3030
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours

**型号: 15991**

产品名称: LED集成光源35W  
外形尺寸: 56X40mm  
PCB材质: 铝基板  
PCB厚度: 1.6mm、2.0mm  
发光面尺寸: 25X25mm  
孔径: Ø4mm 孔距: 34X34mm  
产品功率: 35W-10串1并  
产品电压: 24V 产品电流: 1500mA  
产品色温: 3000K/4000K/6500K  
LED规格: 欧诗朗 5050  
使用寿命: 大于5000小时



**LED Module :35W**

- PCB size: 56X40mm
- Metal Material: Aluminum
- PCB thickness: 1.6mm or 2.0mm
- Voltage: 24V Current:1500 mA
- LED Chip: Osram 5050
- High color rendering (CRI >80)
- Color consistency of 5 SDCM
- Choice of color temperatures (3000 K, 4000 K and 5000 K)
- Long life-time: > 50,000 hours