

满坤电子有限公司
MANKUN ELECTRONIC CO., LTD.

Add: No.40 Shinan Street,Dawen Village,DongchongTown,
Nansha District,Guangzhou City,China. P.C.:511453
Web: www.mankun.net/www.mankun.net.cn
Tel: +86-20-3483-2899
Fax: +86-20-8072-0030
Mob: 133 9261 9948
E-mail: bellum@mankun.net



WWW.MANKUN.NET



WWW.MANKUN.NET.CN

满坤电子有限公司
MANKUN ELECTRONIC CO., LTD.

LED 照明方案·制·造·商
Manufacturer Of LED Lighting Solution

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于2005年8月，是集LED燈具PCB線路板研發、生產、銷售于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，并于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。產品主要應用于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

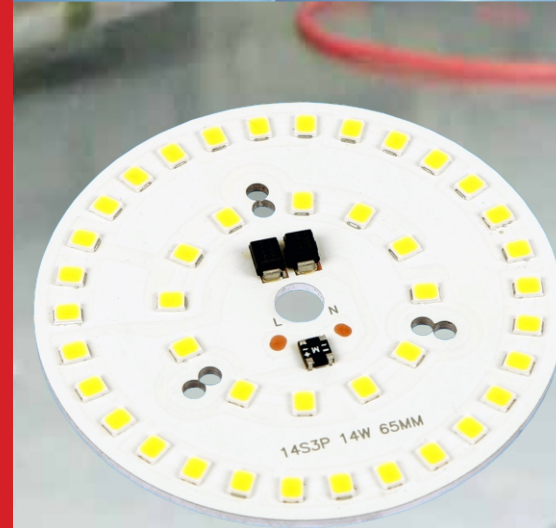
With our background and experience in the lighting industry we are able to create and offer customized products.

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

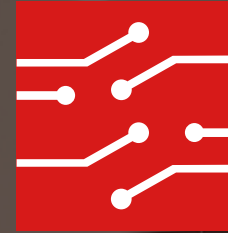
Mankun Electronics Co.,LTD is a global leader in LED Professional Lighting Program Provider.

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.



LED Module Design

Mankun designs and develops custom LED modules according to your exact needs to enable your unique LED lighting products.



Layout

PCB is designed to meet safety standards, while considering reliable electrical and thermal characteristics.



Conceptual Design

Key aspects the LED module are determined in close communication with customers. Such conceptual design includes PCB material and LED selection, and calculation of required number of LEDs.



Optics

Some LED modules are supplied with integrated optics. When there is no standard lens available, custom lens is development to meet customer's unique requirements. Our experience includes.

- Street light applications based on high power LED
- Wide beam angle lens for mid power LED



Driver Design

MANKUN currently has DMX dual-color temperature dimming controller and driver, product research and development based on "high compatibility, no flicker" for dimming, toning temperature, zoning networking, scene storage and other lighting control functions.



Packaging

Reliable and ESD-safe export packaging is designed for each model and applied to protect LED modules during transportation.



Mechanical drawing is also finalized during this stage defining external dimension, component and hole positions etc.



Wire Harness

For some applications, wire harness is developed and supplied together with LED modules to ensure convenient and reliable electrical connection.

现有产品方案 / PROTOTYPES

供货方式 / WE OFFER

-  数量不限
No MOQ
-  2个星期交货
Shipment in 2 weeks

所享服务 / YOU GET

-  定制要求设计生产
Customized design
-  订货数量大价便
Rebate on high VOLUME ORDERS

小批量订货方案 / SMALL VOLUME

供货方式 / WE OFFER

-  数量不限
No MOQ
-  4个星期交货
Shipment in 4 weeks

所享服务 / YOU GET

-  定制要求设计生产
Customized design
-  减少库存或试验性经营批量
Reduced inventory or pilot run lots

大批量订货方案 / HIGH VOLUME

供货方式 / WE OFFER

-  1000套起批量起订
Orders over 1,000pcs
-  4个星期交货
Shipment in 4 weeks

所享服务 / YOU GET

-  按客户需求定制及行业前景
Customized design and Competitiveness
-  减少库存、周转时间短、降低产品报废风险
Reduced inventory due to short lead time
and lower risk of product obsolescence

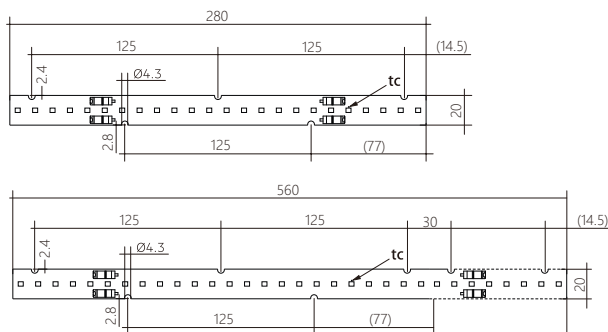
Dk286 20x280/560mm

- 15868-20x280mm-1000lm-24LED
- 15885-20x280mm-2000lm-24LED
- 15869-20x280mm-2200lm-24LED
- 16521-20x560mm-1400lm-32LED
- 15865-20x560mm-2000lm-48LED
- 15887-20x560mm-2400lm-48LED
- 15866-20x560mm-4400lm-48LED
- 16156-20x280mm-2000lm-48LED



Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 20 x 280/560 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 2200/4400lm @ 200mA, Tc=65 °C
- High efficacy of the module up to 166 lm/W @150mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- Push terminals for quick and simple wiring of LED module to LED module
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request



For standards see data sheet

For colour temperatures and tolerances see data sheet

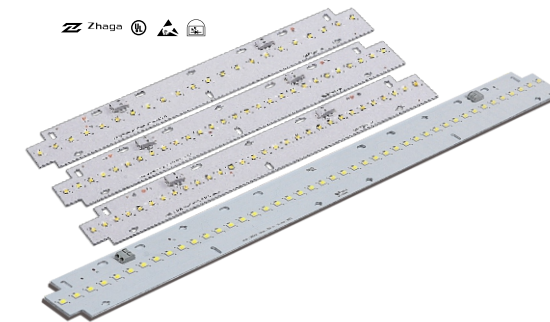
Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current at tp = 65 °C	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK286-15868	800lm	750lm	3,000K	>80	33.5V	38.4V	150mA	5.0W	320mA	160lm/W	150lm/W
	1,026lm	958lm					200mA	6.8W		151lm/W	141lm/W
	1,229lm	1,143lm					250mA	8.6W		143lm/W	133lm/W
	1,600lm	1500lm					150mA	10.0W		160lm/W	150lm/W
DK286-15865	2,052lm	1,916lm	3,000K	>80	33.5V	38.4V	200mA	16.0W	320mA	151lm/W	141lm/W
	2,458lm	2,286lm					250mA	17.2W		143lm/W	133lm/W
	792lm	740lm					75mA	5.0W		160lm/W	150lm/W
	1,006lm	938lm					100mA	6.8W		151lm/W	141lm/W
DK286-15885	1,221lm	1,135lm	3,000K	>80	67.0V	76.8V	125mA	8.6W	160mA	143lm/W	133lm/W
	1,600lm	1,500lm					75mA	10.0W		160lm/W	150lm/W
	2,230lm	2,087lm					200mA	14.3W		156lm/W	146lm/W
	2,723lm	2,539lm					250mA	18.4W		148lm/W	138lm/W
DK286-15887	3,486lm	3,276lm	3,000K	>80	67.0V	76.8V	150mA	21.0W	480mA	166lm/W	156lm/W
	4,460lm	4,174lm					200mA	28.6W		156lm/W	146lm/W
	5,446lm	5,078lm					250mA	36.8W		148lm/W	138lm/W
	1,072lm	1,005lm					150mA	6.7W		160lm/W	150lm/W
DK286-16521	1,359lm	1,269lm	3,000K	>80	44.8V	51.2V	200mA	9.0W	320mA	151lm/W	141lm/W
	1,644lm	1,529lm					250mA	11.5W		143lm/W	133lm/W
	1,600lm	1,500lm					150mA	10.0W		160lm/W	150lm/W
	2,052lm	1,916lm					200mA	16.0W		151lm/W	141lm/W
DK286-16156	2,458lm	2,286lm	3,000K	>80	33.5V	38.4V	200mA	16.0W	320mA	151lm/W	141lm/W
							250mA	17.2W		143lm/W	133lm/W

Tolerance for flux data is ±10%.
 Tolerance for efficacy data is ±10%.
 Tolerance range for optical data over the CCT range: ±5 %
 Measurement tolerance is ± 2.5% for the flux data and 5% for the efficacy data.

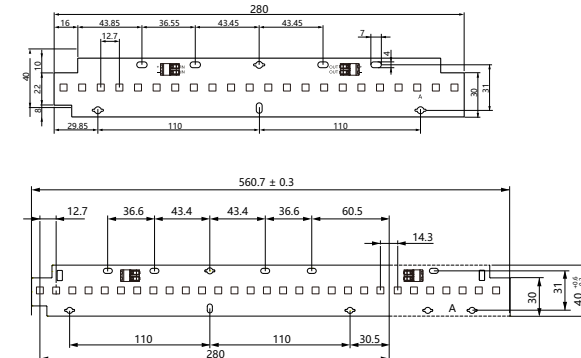
Dk280 40X280/560mm

- 15845-40x280mm-1100lm-22LED
- 15848-40x280mm-2000lm-22LED
- 15846-40x280mm-1200lm-28LED
- 15849-40x280mm-2500lm-28LED
- 15844-40x280mm-1400lm-30LED
- 15847-40x280mm-2700lm-30LED
- 16466-40x280mm-2700lm-30LED
- 15853-40x560mm-2200lm-44LED
- 15854-40x560mm-4000lm-44LED



Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 40 x 280/560 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 2000/4000lm @ 200mA, Tc=65 °C
- High efficacy of the module up to 169 lm/W @150mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- Push terminals for quick and simple wiring of LED module to LED module
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request



For standards see data sheet

For colour temperatures and tolerances see data sheet

Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current at tp = 65 °C	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK280-15845	783lm	652lm	4,000K	>80	30.8V	37.4V	150mA	4.6W	300mA	169lm/W	159lm/W
	1,015lm	951lm					200mA	6.3W		161lm/W	151lm/W
	1,230lm	1,144lm					250mA	8.0W		153lm/W	143lm/W
	967lm	908lm					150mA	5.9W		164lm/W	154lm/W
DK280-15846	1,248lm	1,168lm	4,000K	>80	39.2V	47.5V	200mA	8.0W	300mA	156lm/W	146lm/W
	1,519lm	1,417lm					250mA	10.2W		149lm/W	139lm/W
	1,141lm	1,071lm					250mA	7.0W		163lm/W	153lm/W
	1,350lm	1,264lm					300mA	8.6W		157lm/W	147lm/W
DK280-15844	1,550lm	1,448lm	4,000K	>80	28.0V	34.0V	350mA	10.2W	450mA	152lm/W	142lm/W
	1,554lm	1,462lm					150mA	9.2W		169lm/W	159lm/W
	2,028lm	1,902lm					200mA	12.6W		161lm/W	151lm/W
	2,448lm	2,288lm					250mA	16.0W		153lm/W	143lm/W
DK280-15853	1,588lm	1,494lm	4,000K	>80	61.6V	74.8V	150mA	9.4W	300mA	169lm/W	159lm/W
	2,559lm	2,423lm					200mA	12.8W		159lm/W	149lm/W
	2,445lm	2,282lm					250mA	16.3W		150lm/W	140lm/W
	1,987lm	1,868lm					150mA	11.9W		167lm/W	157lm/W
DK280-15849	2,559lm	2,396lm	4,000K	>80	81.2V	88.2V	200mA	16.3W	350mA	157lm/W	147lm/W
	3,001lm	2,794lm					250mA	20.7W		145lm/W	135lm/W
	2,316lm	2,173lm					250mA	14.3W		162lm/W	152lm/W
	2,714lm	2,523lm					300mA	17.4W		155lm/W	145lm/W
DK280-15847	3,037lm	2,822lm	4,000K	>80	58.0V	63.0V	350mA	20.6W	450mA	147lm/W	137lm/W
	2,233lm	2,096lm					400mA	13.7W		163lm/W	153lm/W
	2,714lm	2,523lm					500mA	17.4W		155lm/W	145lm/W
	3,037lm	2,822lm					600mA	20.6W		147lm/W	137lm/W
DK280-16466	3,177lm	2,989lm	4,000K	>80	34.8V	37.8V	150mA	18.8W	850mA	169lm/W	159lm/W
	4,070lm	3,814lm					200mA	25.6W		159lm/W	149lm/W
	4,890lm	4,564lm					300mA	32.6W		150lm/W	140lm/W
							250mA	32.6W			

Tolerance for flux data is ±10%. Tolerance for efficacy data is ±10%.
 Tolerance range for optical data over the CCT range: ±5 %
 Measurement tolerance is ± 2.5% for the flux data and 5% for the efficacy data.

Dk286 55x280/560mm

- 15859-55x280mm-1600lm-33LED
- 15862-55x565mm-3200lm-66LED
- 15860-55x280mm-2700lm-33LED
- 15863-55x560mm-5500lm-66LED
- 15861-55x280mm-1700lm-33LED
- 15864-55x560mm-3400lm-66LED
- 16165-55x275mm-1600lm-33LED
- 16167-55x275mm-1700lm-33LED

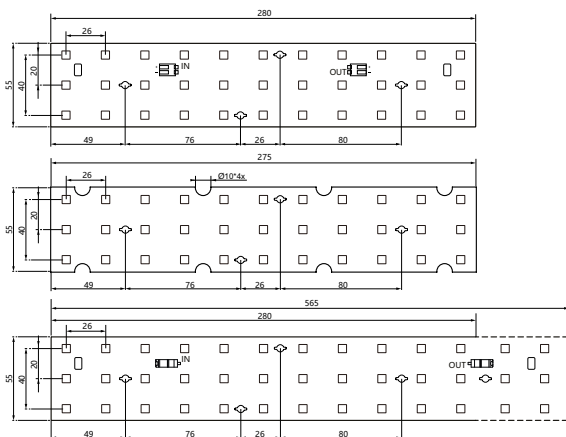


Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 55 x 280/560 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 2200/4400lm @ 200mA, Tc=65 °C
- High efficacy of the module up to 166 lm/W @150mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- Push terminals for quick and simple wiring of LED module to LED module
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For standards see data sheet

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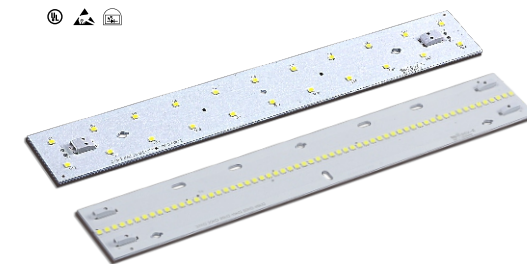
Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current at tp = 65 °C	Typ. power consumption at tp = 65 °C	Max. forward current at tp = 25 °C	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK286-15859	1,242lm	1,162lm	3,000K	>80	30.8V	37.4V	250mA	7.7W	570mA	161lm/W	151lm/W
	1,660lm	1,551lm					350mA	11.0W	151lm/W	141lm/W	
	2,028lm	1,886lm					450mA	14.4W	141lm/W	131lm/W	
	2,484lm	2,324lm					250mA	15.4W	161lm/W	151lm/W	
DK286-15862	3,320lm	3,102lm	3,000K	>80	61.6V	74.8V	350mA	22.0W	570mA	151lm/W	141lm/W
	4,056lm	4,572lm					450mA	28.8W	141lm/W	131lm/W	
	2,284lm	2,143lm					250mA	14.1W	162lm/W	152lm/W	
	2,788lm	2,597lm					350mA	19.1W	720mA	146lm/W	136lm/W
DK280-15860	3,245lm	3,001lm	3,000K	>80	63.8V	69.3V	450mA	24.4W	720mA	133lm/W	123lm/W
	4,568lm	4,286lm					250mA	28.2W	160lm/W	152lm/W	
	5,576lm	5,194lm					350mA	38.2W	720mA	146lm/W	136lm/W
	6,490lm	6,002lm					450mA	48.8W	133lm/W	123lm/W	
DK286-15861	1,259lm	1,177lm	3,000K	>80	30.8V	35.2V	250mA	7.9W	570mA	159lm/W	149lm/W
	1,698lm	1,584lm					350mA	11.4W	149lm/W	139lm/W	
	2,128lm	1,963lm					450mA	15.1W	140lm/W	130lm/W	
	2,518lm	2,354lm					250mA	15.8W	159lm/W	149lm/W	
DK286-15864	3,396lm	3,168lm	3,000K	>80	61.6V	70.4V	350mA	22.8W	570mA	149lm/W	139lm/W
	4,256lm	3,926lm					450mA	30.2W	140lm/W	130lm/W	
	1,242lm	1,162lm					250mA	7.7W	161lm/W	151lm/W	
	1,660lm	1,551lm					350mA	11.0W	570mA	151lm/W	141lm/W
DK286-16165	2,028lm	1,886lm	3,000K	>80	30.8V	37.4V	450mA	14.4W	570mA	141lm/W	131lm/W
	1,259lm	1,177lm					250mA	7.9W	159lm/W	149lm/W	
	1,698lm	1,584lm					350mA	11.4W	570mA	149lm/W	139lm/W
	2,128lm	1,963lm					450mA	15.1W	140lm/W	130lm/W	
DK286-16167	1,259lm	1,177lm	3,000K	>80	30.8V	35.2V	250mA	7.9W	570mA	159lm/W	149lm/W
	1,698lm	1,584lm					350mA	11.4W	570mA	149lm/W	139lm/W
	2,128lm	1,963lm					450mA	15.1W	140lm/W	130lm/W	

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Dk286 280x40/55mm

- 16163-40x280mm-1000lm-22LED
- 16162-40x280mm-2000lm-22LED
- 16164-40x280mm-1100lm-28LED
- 16311-40x280mm-2400lm-60LED
- 16778-40x286mm-4000lm-96LED
- 15804-55x280mm-4000lm-96LED

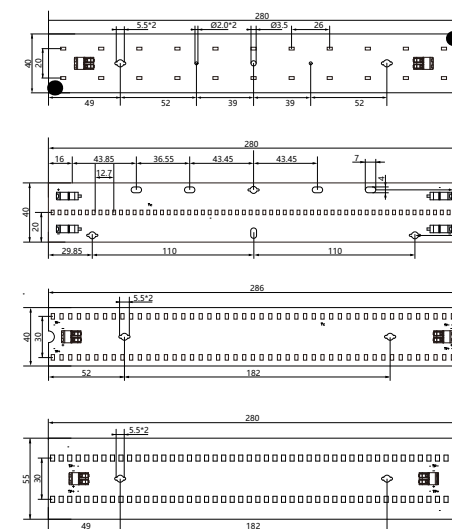


Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 280 x 40/55 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 1000/2000lm @ 200mA, Tc=65 °C
- High efficacy of the module up to 169 lm/W @150mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
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Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current at tp = 65 °C	Typ. power consumption at tp = 65 °C	Max. forward current at tp = 25 °C	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK286-16163	783lm	652lm	4,000K	>80	30.8V	37.4V	200mA	4.6W	300mA	169lm/W	159lm/W
	1,015lm	951lm					250mA	6.3W	161lm/W	151lm/W	
	1,230lm	1,144lm					250mA	8.0W	153lm/W	143lm/W	
	1,588lm	1,494lm					150mA	9.4W	169lm/W	159lm/W	
DK286-16162	2,035lm	1,907lm	4,000K	>80	63.8V	69.3V	200mA	12.8W	350mA	159lm/W	149lm/W
	2,445lm	2,282lm					250mA	16.3W	150lm/W	140lm/W	
	855lm	808lm					150mA	4.7W	182lm/W	172lm/W	
	1,124lm	1,059lm					200mA	6.5W	173lm/W	163lm/W	
DK286-16164	1,369lm	1,286lm	4,000K	>80	30.8V	35.2V	250mA	8.3W	350mA	165lm/W	155lm/W
	1,930lm	1,813lm					350mA	11.7W	165lm/W	155lm/W	
	2,402lm	2,249lm					450mA	15.3W	157lm/W	147lm/W	
	2,980lm	2,773lm					600mA	20.7W	144lm/W	134lm/W	
DK286-16311	3,232lm	3,030lm	4,000K	>80	33.6V	38.4V	450mA	20.2W	800mA	160lm/W	150lm/W
	4,164lm	3,890lm					800mA	27.4W	152lm/W	142lm/W	
	5,011lm	4,663lm					1000mA	34.8W	144lm/W	134lm/W	
	3,232lm	3,030lm					300mA	20.2W	160lm/W	150lm/W	
DK286-16778	4,164lm	3,890lm	4,000K	>80	33.6V	38.4V	400mA	27.4W	1250mA	152lm/W	142lm/W
	5,011lm	4,663lm					1000mA	34.8W	144lm/W	134lm/W	
	3,232lm	3,030lm					300mA	20.2W	160lm/W	150lm/W	
	4,164lm	3,890lm					400mA	27.4W	152lm/W	142lm/W	
DK286-15804	5,011lm	4,663lm	4,000K	>80	67.2V	76.8V	500mA	34.8W	800mA	144lm/W	134lm/W

Tolerance for flux data is ±10%.
 Tolerance for efficacy data is ±10%.
 Tolerance range for optical data over the CCT range: ±5 %
 Measurement tolerance is ± 2.5% for the flux data and 5% for the efficacy data.

OUTDOOR LIGHT

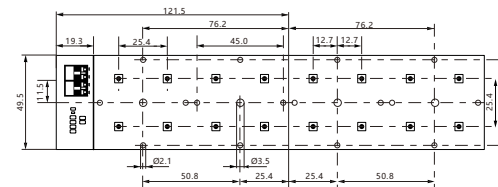
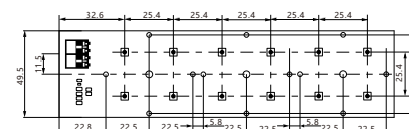
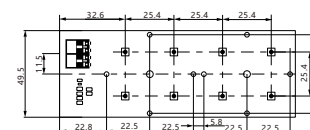
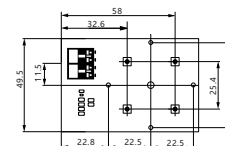
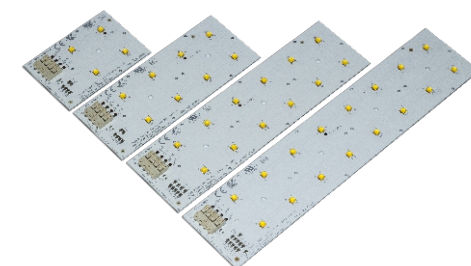
户外照明

FOCUS ON OUTDOOR HIGH POWER LIGHTING



Dk5050 49x72/223mm

- 15547-49x72 mm- 1000lm- 4x1 LED
- 15548-49x120mm- 2000lm- 8x1 LED
- 15549-49x172mm-3000lm-12x1 LED
- 15550-49x223mm-4000lm-16x1 LED



Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 49 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 1000 ~ 4000lm @ 700mA, Tc=65 ° C
- High efficacy of the module up to 140 lm/W @350mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- For use with standard 2x2 lenses
- Installation of the module together with lens in the luminaire by means of an M3 screw
- Push-in terminals for simple and quick wiring
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request

For standards see data sheet

For colour temperatures and tolerances see data sheet

Specific technical data

Type	Typ. Colour temperature (CCT)	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. forward current	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. power consumption at tp = 65 °C	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C	Colour rendering index CRI	
DK5050-15547	595lm	553lm	4,000K	>80	11.2V	12.0V	350mA	4.1W	145lm/W	135lm/W	
	1,011lm	926lm					700mA	8.5W	1500mA	119lm/W	109lm/W
	1,320lm	1,188lm					1050mA	13.2W	100lm/W	90lm/W	
	1,189lm	1,107lm					350mA	8.2W	145lm/W	135lm/W	
DK5050-15548	2,023lm	1,853lm	4,000K	>80	22.4V	24.0V	700mA	17.0W	1500mA	119lm/W	109lm/W
	2,640lm	2,376lm					1050mA	26.4W	100lm/W	90lm/W	
	1,785lm	1,659lm					350mA	12.3W	145lm/W	135lm/W	
	3,033lm	2,778lm					700mA	25.5W	1500mA	119lm/W	109lm/W
DK5050-15549	3,960lm	3,564lm	4,000K	>80	33.6V	36.0V	1050mA	39.6W	1500mA	100lm/W	90lm/W
	2,380lm	2,212lm					350mA	16.4W	149lm/W	139lm/W	
	4,044lm	3,704lm					700mA	34.0W	1500mA	119lm/W	109lm/W
	5,280lm	4,752lm					1050mA	52.8W	100lm/W	90lm/W	

1) Integral measurement over the complete module.

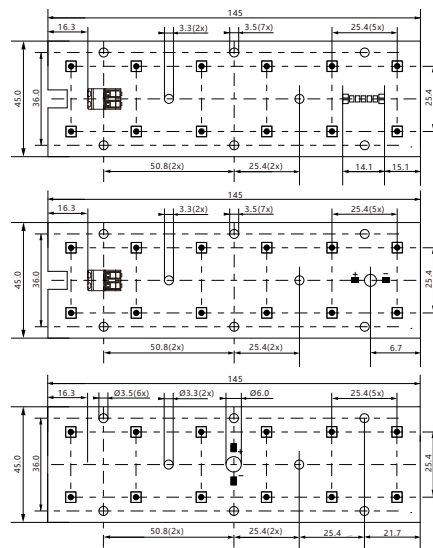
2) If mounted with M3 screws.

3) Measured at I = 1,800 mA.

4) HE ... high efficiency, NM ... nominal mode, HO ... high output.

5) Tolerance range for optical and electrical data: ±10 %.

Dk173 49x145mm



- 16165-45x145mm-12LED
- 16197-45x145mm-12LED
- 15715-45x145mm-12LED
- 16205-45x145mm-12LED
- 15597-45x145mm-30LED
- 15566-45x145mm-36LED

Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 45 x 145 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 3000 ~ 5000lm @ 700mA, Tc=65 ° C
- High efficacy of the module up to 145 lm/W @350mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- For use with standard 2x2 lenses
- Installation of the module together with lens in the luminaire by means of an M3 screw
- Push-in terminals for simple and quick wiring
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request

For standards see data sheet

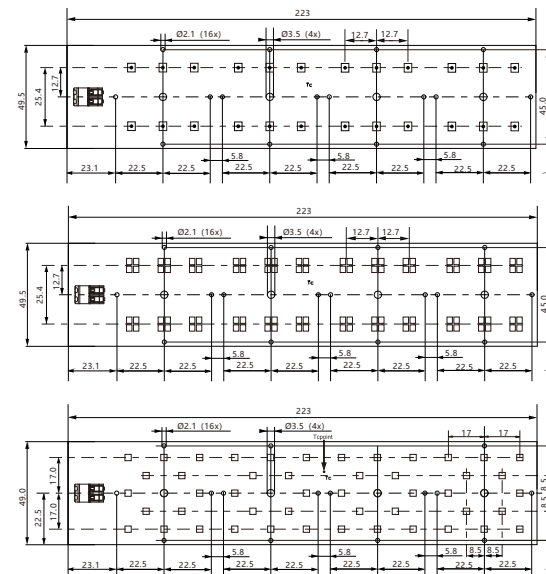
For colour temperatures and tolerances see data sheet

Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current at tp = 65 °C	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK173-16165	1,785lm	1,659lm	4,000K	>80	33.6V	36.0V	350mA	12.3W	1500mA	145lm/W	135lm/W
	3,033lm	2,778lm					700mA	25.5W	119lm/W	109lm/W	
	3,960lm	3,564lm					1050mA	39.6W	100lm/W	90lm/W	
DK173-16197	1,785lm	1,659lm	4,000K	>80	33.6V	36.0V	350mA	12.3W	1500mA	145lm/W	135lm/W
	3,033lm	2,778lm					700mA	25.5W	119lm/W	109lm/W	
	3,960lm	3,564lm					1050mA	39.6W	100lm/W	90lm/W	
DK173-15715	1,766lm	1,645lm	4,000K	>80	33.6V	36.0V	350mA	12.1W	1500mA	146lm/W	136lm/W
	3,024lm	2,772lm					700mA	25.2W	120lm/W	110lm/W	
	4,027lm	3,636lm					1050mA	39.1W	103lm/W	93lm/W	
DK173-16205	5,115lm	4,785lm	5,000K	>80	47.0V	52.0V	700mA	33.0W	1440mA	155lm/W	145lm/W
	5,434lm	6,321lm					1000mA	49.0W	139lm/W	129lm/W	
	8,640lm	7,920lm					1400mA	72.0W	120lm/W	110lm/W	
DK173-15597	1,908lm	1,788lm	4,000K	>80	34.8V	37.8V	350mA	12.0W	1200mA	159lm/W	149lm/W
	2,640lm	2,464lm					500mA	17.6W	150lm/W	140lm/W	
	3,507lm	3,251lm					700mA	25.6W	137lm/W	127lm/W	
DK173-15566	1,977lm	1,860lm	5,000K	>80	34.8V	37.8V	350mA	11.7W	1440mA	169lm/W	159lm/W
	2,768lm	2,595lm					500mA	17.3W	160lm/W	150lm/W	
	3,650lm	3,400lm					700mA	25.0W	146lm/W	136lm/W	

1) Integral measurement over the complete module.
 2) If mounted with M3 screws.
 3) Measured at l = 1,800 mA.
 4) HE ... high efficiency, NM ... nominal mode, HO ... high output.
 5) Tolerance range for optical and electrical data: ±10 %.

Dk5050 49x223mm



- 16106-49x223mm-24LED
- 16107-49x223mm-24LED
- 16108-49x223mm-24LED
- 16109-49x223mm-96LED
- 16110-49x223mm-48LED
- 16338-49x185mm-48LED

Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 49 x 223 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 4000 ~ 7000 lm @ 1000mA, Tc=65 ° C
- High efficacy of the module up to 155 lm/W @700mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- Push terminals for quick and simple wiring of LED module to LED module
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request

For standards see data sheet

For colour temperatures and tolerances see data sheet

Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current at tp = 65 °C	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK5050-16106	3,679lm	3,427lm	4,000K	>80	33.6V	36.0V	700mA	25.2W	3000mA	146lm/W	136lm/W
	4,452lm	4,081lm					1000mA	37.1W	120lm/W	110lm/W	
	5,036lm	4,547lm					1400mA	48.9W	103lm/W	93lm/W	
DK5050-16107	3,679lm	3,427lm	4,000K	>80	33.6V	36.0V	700mA	25.2W	3000mA	146lm/W	136lm/W
	4,452lm	4,081lm					1000mA	37.1W	120lm/W	110lm/W	
	5,036lm	4,547lm					1400mA	48.9W	103lm/W	93lm/W	
DK5050-16108	5,115lm	4,785lm	5,000K	>80	47.0V	52.0V	700mA	33.0W	2880mA	155lm/W	145lm/W
	5,434lm	6,321lm					1000mA	49.0W	139lm/W	129lm/W	
	8,640lm	7,920lm					1400mA	72.0W	120lm/W	110lm/W	
DK5050-16109	5,179lm	4,836lm	3,000K	>80	34.3V	37.8V	1000mA	34.3W	2880mA	151lm/W	141lm/W
	7,408lm	6,875lm					1500mA	53.3W	139lm/W	129lm/W	
	9,356lm	8,625lm					2000mA	73.1W	128lm/W	118lm/W	
DK5050-16110	2,873lm	2,703lm	3,000K	>80	34.8V	37.8V	500mA	17.0W	1920mA	169lm/W	159lm/W
	3,895lm	3,650lm					700mA	24.5W	159lm/W	149lm/W	
	5,278lm	4,914lm					1000mA	36.4W	145lm/W	135lm/W	
DK5050-16338	3,243lm	3,013lm	3,000K	>80	45.6V	49.6V	500mA	23.0W	1440mA	141lm/W	131lm/W
	4,329lm	3,996lm					700mA	33.3W	130lm/W	120lm/W	
	5,173lm	4,727lm					1000mA	44.6W	116lm/W	106lm/W	

1) Integral measurement over the complete module.
 2) If mounted with M3 screws.
 3) Measured at l = 1,800 mA.
 4) HE ... high efficiency, NM ... nominal mode, HO ... high output.
 5) Tolerance range for optical and electrical data: ±10 %.

Dk5050 49x223mm

- 16111-49x223mm-64LED
- 16112-49x223mm-96LED
- 16113-49x223mm-32LED
- 16533-49x223mm-64LED
- 15723-49x223mm-48LED
- 15727-49x223mm-16LED

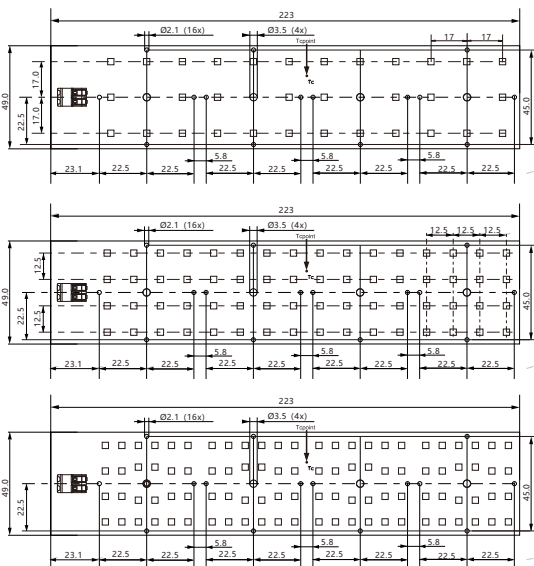


Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 49 x 223 mm (ZHAGA compliant), Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 4000 ~ 7000 lm @ 1000mA, Tc=65 °C
- High efficacy of the module up to 155 lm/W @700mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- Push terminals for quick and simple wiring of LED module to LED module
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request

For standards see data sheet

For colour temperatures and tolerances see data sheet



Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK5050-16111	4,741lm	4,414lm	4,000K	>80	45.6V	49.6V	700mA	32.7W	1920mA	145lm/W	135lm/W
	6,415lm	5,929lm					1000mA	48.6W	132lm/W	122lm/W	
	7,126lm	6,537lm					1200mA	58.9W	121lm/W	111lm/W	
DK5050-16112	5,179lm	4,836lm	3,000K	>80	34.3V	37.8V	1000mA	34.3W	2880mA	151lm/W	141lm/W
	7,408lm	6,875lm					1500mA	53.3W	139lm/W	129lm/W	
	9,356lm	8,625lm					2000mA	73.1W	128lm/W	118lm/W	
DK5050-16113	2,656lm	2,492lm	3,000K	>80	33.6V	36.0V	350mA	16.4W	960mA	162lm/W	152lm/W
	3,566lm	3,325lm					500mA	24.1W	148lm/W	138lm/W	
	4,681lm	4,329lm					700mA	35.2W	133lm/W	123lm/W	
DK5050-16533	4,741lm	4,414lm	4,000K	>80	45.6V	49.6V	700mA	32.7W	1920mA	145lm/W	135lm/W
	6,415lm	5,929lm					1000mA	48.6W	132lm/W	122lm/W	
	7,126lm	6,537lm					1200mA	58.9W	121lm/W	111lm/W	
DK5050-15723	2,873lm	2,703lm	3,000K	>80	34.8V	37.8V	500mA	17.0W	1920mA	169lm/W	159lm/W
	3,895lm	3,650lm					700mA	24.5W	159lm/W	149lm/W	
	5,278lm	4,914lm					1000mA	36.4W	145lm/W	135lm/W	
DK5050-15727	6,804lm	6,365lm	5,000K	>80	72.0V	96.0V	700mA	43.9W	1440mA	155lm/W	145lm/W
	9,076lm	8,423lm					1000mA	65.3W	139lm/W	129lm/W	
	11,460lm	10,549lm					1400mA	95.9W	120lm/W	110lm/W	

- 1) Integral measurement over the complete module.
- 2) If mounted with M3 screws.
- 3) Measured at l = 1,800 mA.
- 4) HE ... high efficiency, NM ... nominal mode, HO ... high output.
- 5) Tolerance range for optical and electrical data: ±10 %.

Dk252 44x225mm

- 16306-45x208mm-28LED
- 16307-44x227mm-84LED
- 16308-45x215mm-40LED
- 16309-44x225mm-64LED
- 15662-47x222mm-56LED
- 15663-47x222mm-56LED

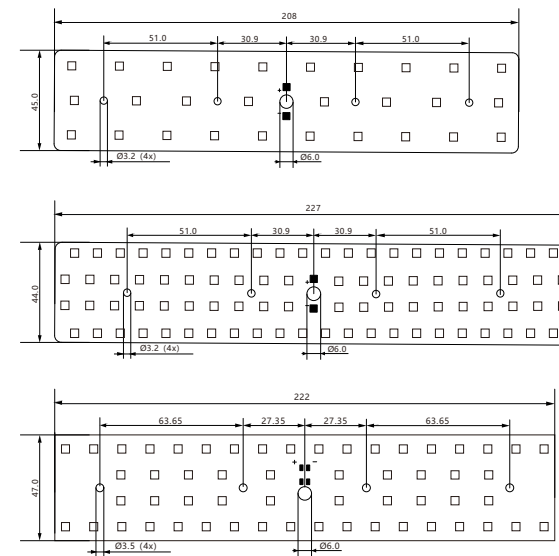


Product description

- Linear LED modules for application in linear and area lighting
- Slim design with 44 ~ 47 mm Ideal for linear and panel luminaires
- Choice of color temperatures (3000 K ~ 6500 K)
- luminous flux of 4000 ~ 7000 lm @ 1000mA, Tc=65 °C
- High efficacy of the module up to 155 lm/W @700mA
- High color rendering (CRI >80)
- Excellent color consistency of 5 SDCM
- Beam characteristic 120°
- Ambient temperature ta -25 ... +55 °C
- Wide temperature (Tc) range from -40 °C to +85 °C
- Small luminous flux tolerances
- Push terminals for quick and simple wiring of LED module to LED module
- Long life-time: 50,000 hours
- 5-year guarantee
- For product data sheet go to www.mankun.net, or available on request

For standards see data sheet

For colour temperatures and tolerances see data sheet



Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK252-16306	2,332lm	2,188lm	3,000K	>80	32.9V	40.0V	350mA	14.4W	960mA	162lm/W	152lm/W
	3,122lm	2,911lm					500mA	21.1W	148lm/W	138lm/W	
	4,096lm	3,788lm					700mA	30.8W	133lm/W	123lm/W	
DK252-16307	5,870lm	5,476lm	4,000K	>80	32.9V	40.0V	1,150mA	39.4W	2100mA	149lm/W	139lm/W
	7,213lm	6,705lm					1,450mA	50.8W	142lm/W	132lm/W	
	8,167lm	7,562lm					1,700mA	60.5W	135lm/W	125lm/W	
DK252-16308	2,982lm	2,799lm	4,000K	>80	45.6V	49.6V	400mA	18.3W	1200mA	163lm/W	153lm/W
	3,596lm	3,364lm					500mA	23.2W	155lm/W	145lm/W	
	4,042lm	3,676lm					600mA	27.5W	147lm/W	137lm/W	
DK252-16309	4,741lm	4,414lm	4,000K	>80	45.6V	49.6V	700mA	32.7W	1920mA	145lm/W	135lm/W
	6,415lm	5,929lm					1000mA	48.6W	132lm/W	122lm/W	
	7,126lm	6,537lm					1200mA	58.9W	121lm/W	111lm/W	
DK252-15562	4,147lm	3,861lm	4,000K	>80	32.9V	40.0V	500mA	18.3W	1920mA	145lm/W	135lm/W
	5,610lm	5,185lm					700mA	28.6W	132lm/W	122lm/W	
	6,231lm	5,716lm					1200mA	51.5W	121lm/W	111lm/W	

- 1) Integral measurement over the complete module.
- 2) If mounted with M3 screws.
- 3) Measured at l = 1,800 mA.
- 4) HE ... high efficiency, NM ... nominal mode, HO ... high output.
- 5) Tolerance range for optical and electrical data: ±10 %.