CREE LED® High Efficacy
LED Modules MOD-96R559.5x20-JB2835BG family

DK240308

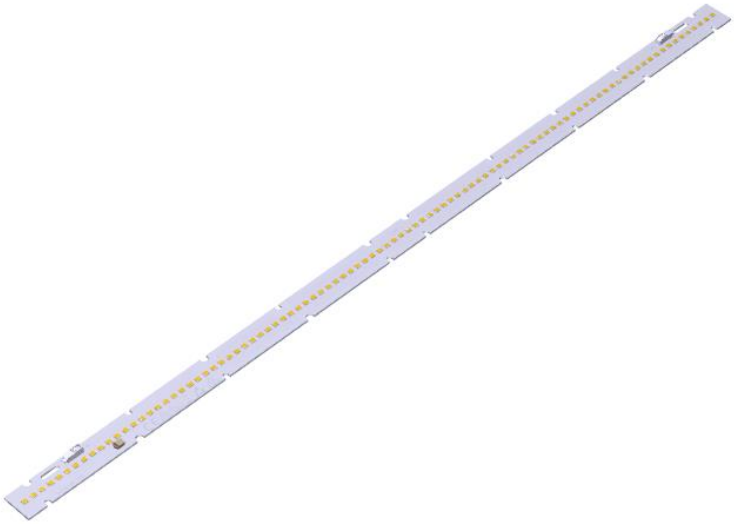
MOD-96R559.5x20-JB2835BG family are LED modules based on the CREE LED® J_Series® 2835 optimized for cost effective and high efficacy applications. MOD-96R559.5x20-JB2835BG modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **207 lm/W** and up to **21907 lm**.

LM-80 lifetime projections (IEC 62717)
> 100,000 (L70B10)*

Possibility to connect up to 3 modules in series per chain.

EPREL registered product.



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➢ SPECIFICATION

LED FAMILY	MOD-96R559.5x20-JB2835BG							
CCT/SDCM	2200K 3-STEP	2700K 3-STEP	3000K 3-STEP	3500K 3-STEP	4000K 3-STEP	5000K 3-STEP	5700K 3-STEP	6500K 3-STEP
Viewing Angle	120°							
Nominal Module Lumen Output[2]	G class CRI 80							
	3357 lm	3862 lm	4007 lm	4140 lm	4260 lm	4260 lm	4260 lm	4246 lm
	G class CRI 90							
	2853 lm	3278 lm	3424 lm	3543 lm	3662 lm	3662 lm	3662 lm	3649 lm
Nominal Efficacy[2]	G class CRI 80							
	163 lm/W	188 lm/W	195 lm/W	201 lm/W	207 lm/W	207 lm/W	207 lm/W	206 lm/W
	G class CRI 90							
	139 lm/W	159 lm/W	166 lm/W	172 lm/W	178 lm/W	178 lm/W	178 lm/W	177 lm/W
CRI	80; 90							
Nominal Driving Current	240 mA							
Voltage DC (typ.) [2]	85.7 V							
Power Consumption[2]	20.6 W							
Max. LED module working current [3]	**1440 mA / module**							
Voltage DC (max)[3]	**101.5 V**							
Max power[3]	**145 W**							
Max. LED module lumen output[3]	**G class CRI 80**							
	17266	**19859**	**20610**	**21293**	**21907**	**21907**	**21907**	**21838**
	G class CRI 90							
	14673	**16857**	**17607**	**18221**	**18836**	**18836**	**18836**	**18767**
Number of LEDs	96							
Power Supply Type	Constant Current							
Risk Group Classification[4]	RG-1 Low Risk for 2700K, 3000K, 3500K, 4000K; RG-2 Moderate Risk for 5000K, 5700K, 6500K when above 262 mA per LED							
Energy Class	**G class CRI 80**							
	C	**B**	**B**	**B**	**B**	**B**	**B**	**B**
	G class CRI 90							
	D	**D**	**C**	**C**	**C**	**C**	**C**	**C**
Operating Temperature	-30°C ÷ +60°C							
Tc max.	85°C							
Lifetime[1]/Tc life	>102 000 h @ 85˚C/105 ˚C, 240 mA,							

[1] **Lifetime of LEDs as declared by the manufacturer CREE LED® according to IES LM-80-2015 Testing Results Revision:32 :2025.**

[2] **Source performance in real-life conditions at Tc=55°C, 280 mA without heatsink.**

[3] **External heatsink required.**

[4] **According to Eye safety Cree document**

➢ FEATURES

Application:

- ❖ Decorative lighting
- ❖ Accent lighting
- ❖ Task lighting
- ❖ General lighting
- ❖ Recessed furniture LED spotlight

Feature:

- ❖ The module is dimmable by current set (0-100%)
- ❖ Long Lifetime
- ❖ Energy Saving

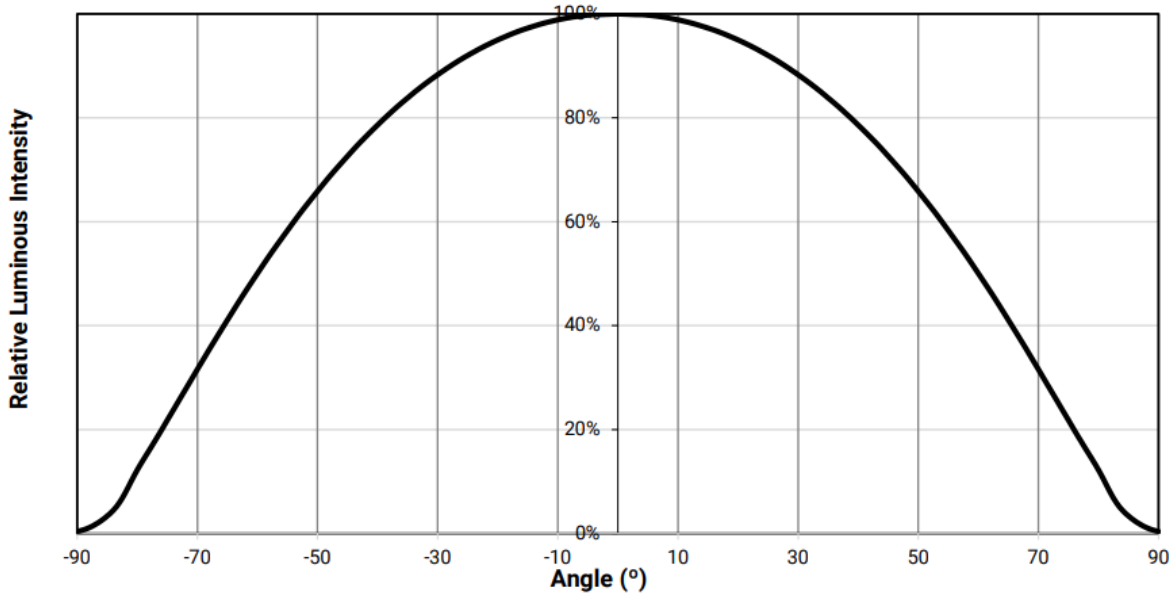
EPREL Database link

QR CODE

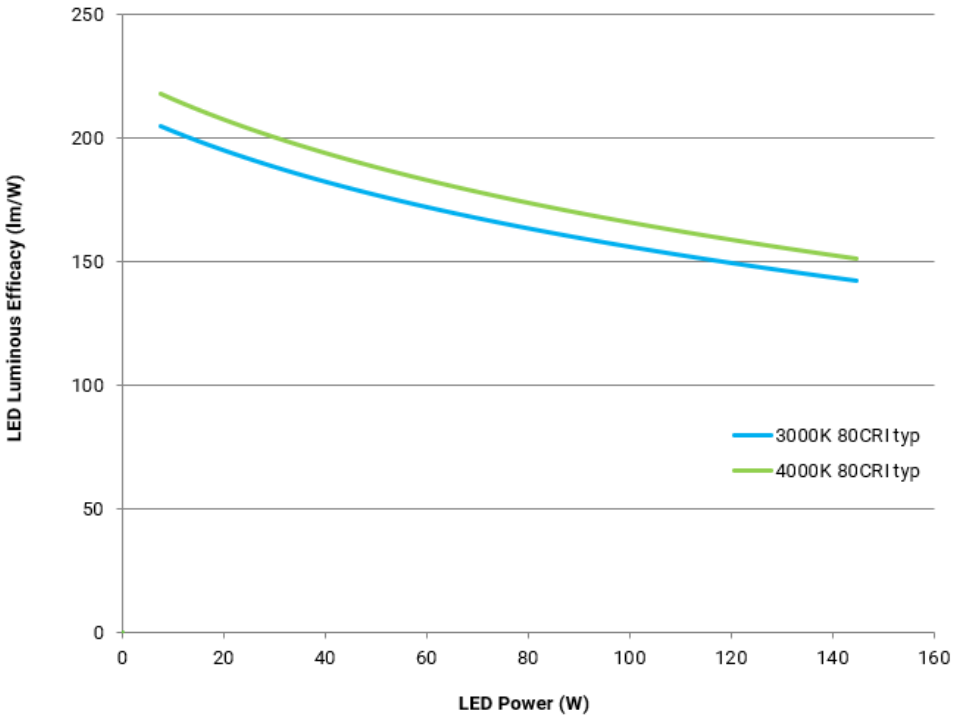
2200K 80CRI 2700K 80 CRI 3000K 80CRI 3500K 80CRI 4000K 80CRI 5000K 80CRI 5700K 80CRI 6500K 80CRI

2200K 90CRI 2700K 90CRI 3000K 90CRI 3500K 90CRI 4000K 90CRI 5000K 90CRI 5700K 90CRI 6500K 90CRI

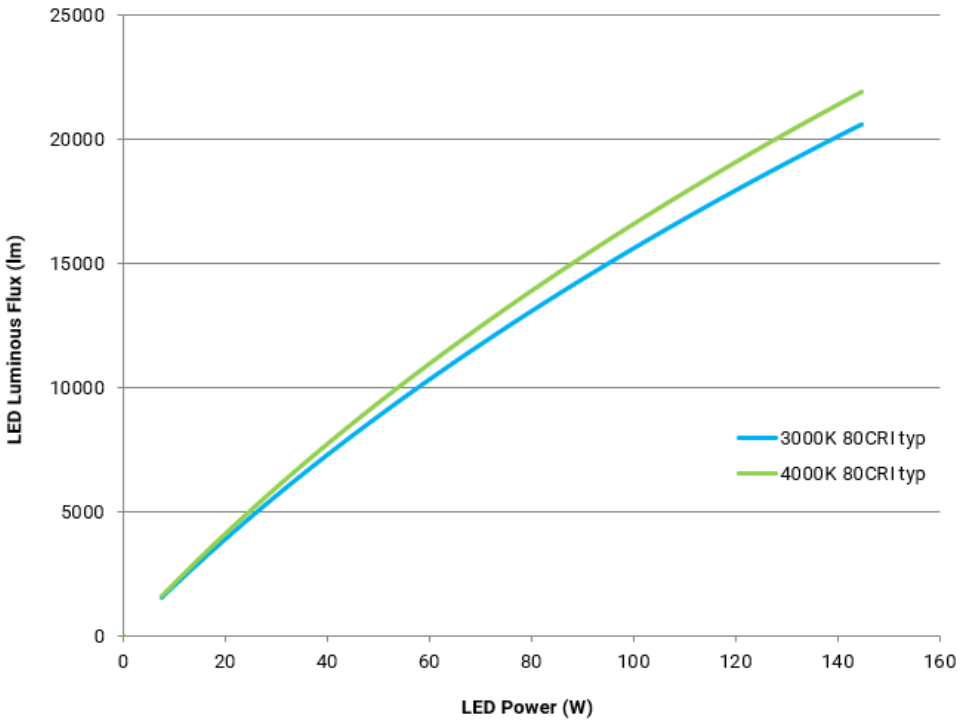
➢ TYPICAL SPATIAL DISTRIBUTION



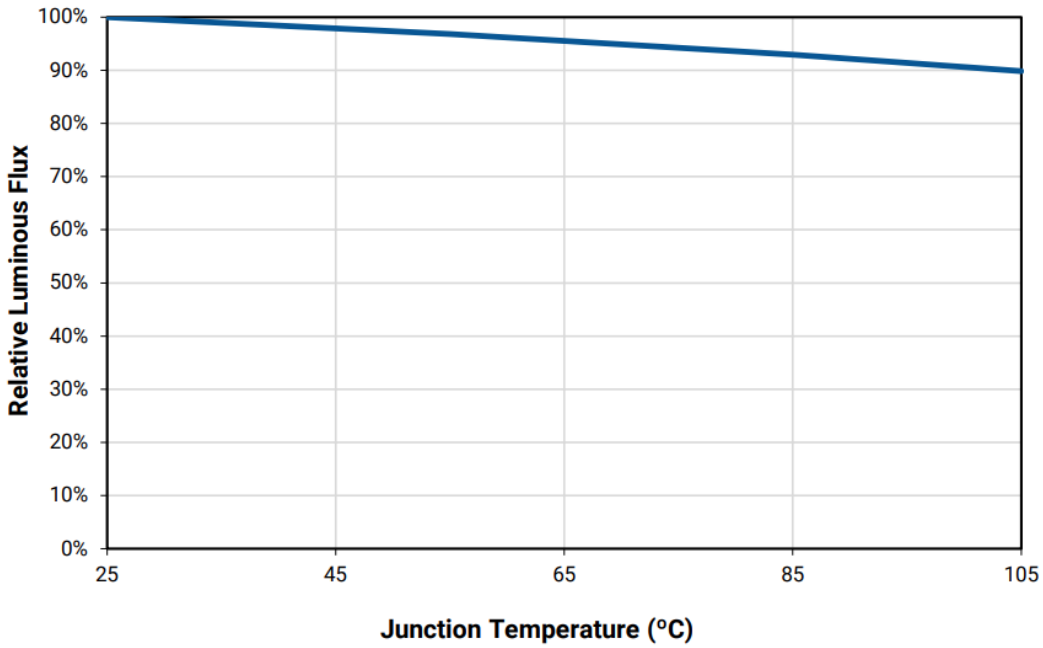
- **LUMINOUS EFFICACY VS. POWER**



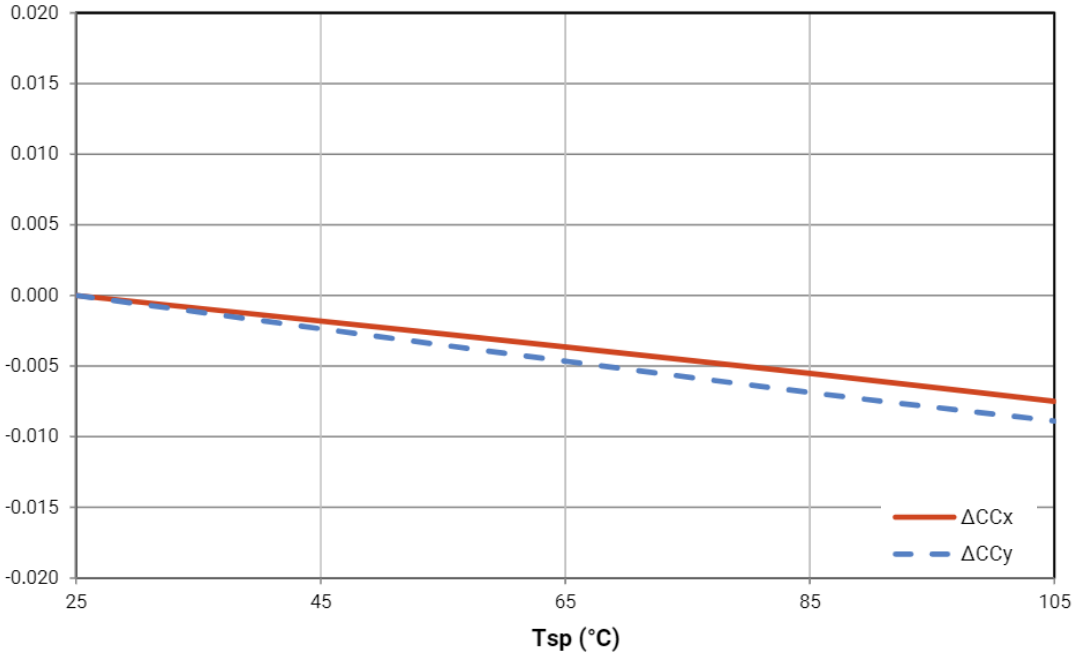
- **LUMINOUS FLUX VS. POWER**



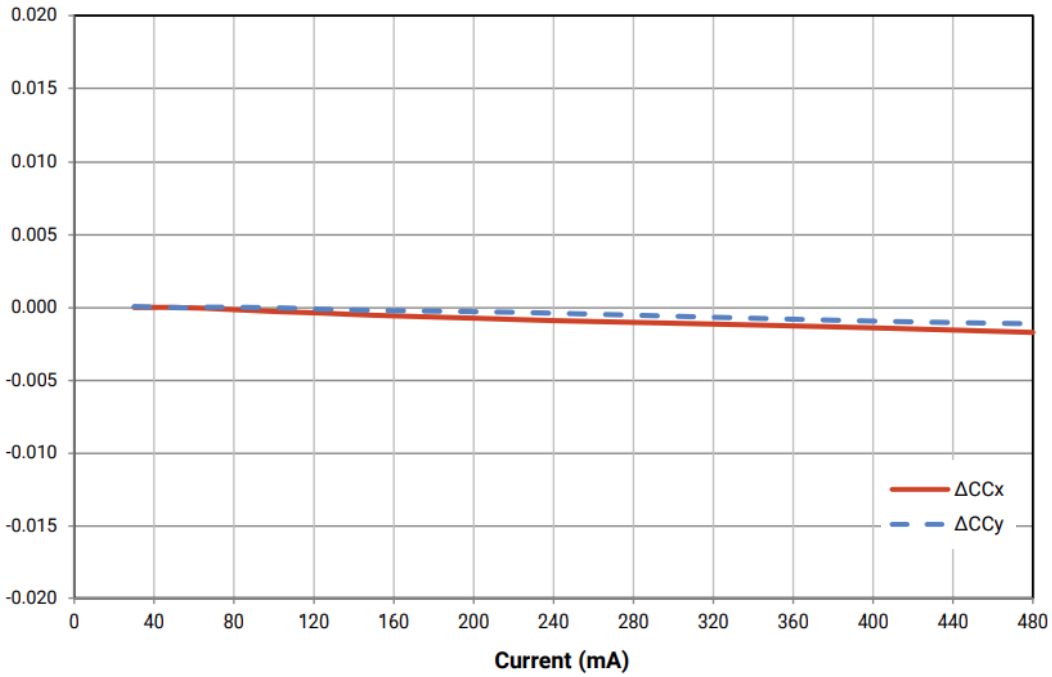
- **LUMINOUS FLUX VS. JUNCTION TEMPERATURE**



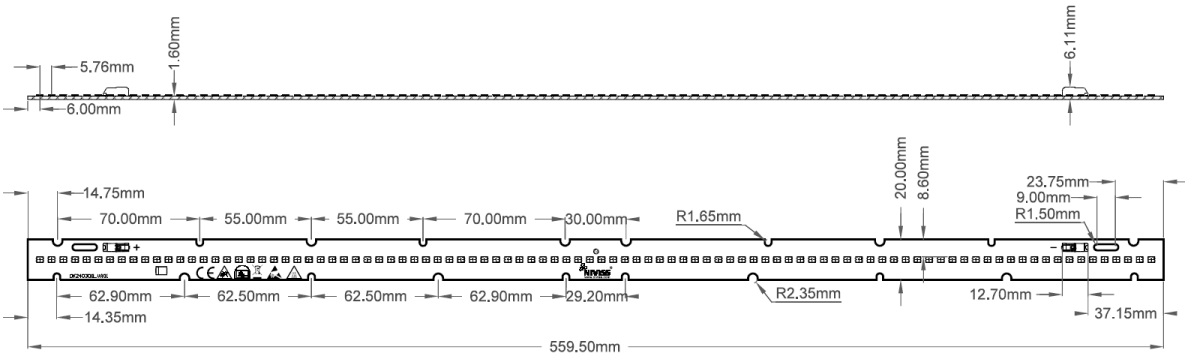
- **RELATIVE CHROMATICITY VS. TEMPERATURE**



➢ RELATIVE CHROMATICITY VS. CURRENT



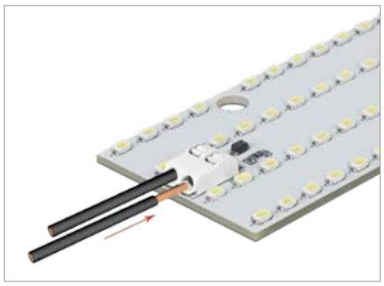
➢ DIMENSIONS



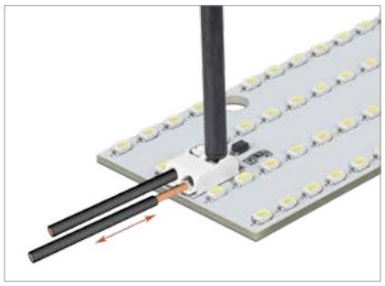
Notes:
Drawing is not to scale.
All dimensions are in millimeters.

MECHANICAL SPECIFICATION	
Dimensions	559.5 x 20 mm
Board Thickness	1.6 mm
Board Material	MCPCB; white soldermask
Shape	Rectangular

➢ CONNECTION

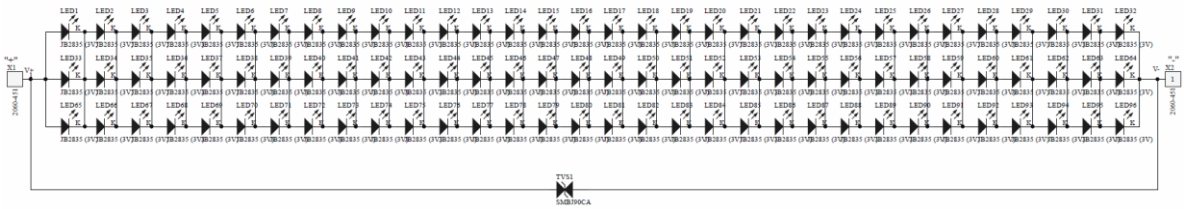


Inserting solid conductors via push-in termination.

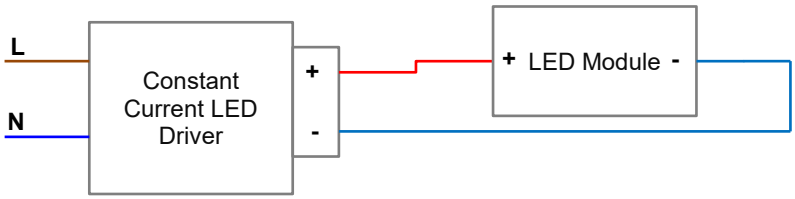


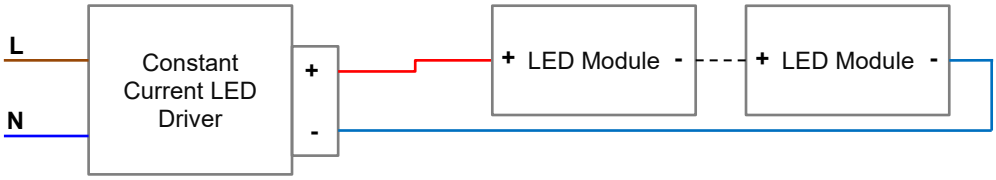
Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

➢ ELECTRICAL SCHEMA



➢ ELECTRICAL INSTALLATION





➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-96R559.5x20-JB2835BG-2280-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 2200K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-2780-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 2700K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-3080-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 3000K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-3580-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 3500K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-4080-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 4000K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-5080-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 5000K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-5780-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 5700K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-6580-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 6500K, CRI 80, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-2290-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 2200K, CRI 90, 1.6 mm MCPCB
MOD-96R559.5x20-JB2835BG-2790-VA01	Linear Led Module 559.5x20mm, High Efficacy, High Reflectivity White Soldermask, 96 LED, JB22835BG, 2700K, CRI 90, 1.6 mm MCPCB
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➢ COMMERCIAL INFORMATION

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Connector	WAGO 2060-451
Available Lenses	No
Minimum Order Quantity	10 pcs.
Warranty	3 years

➢ GENERAL TERMS OF USE

1. The range of acceptable input voltages must include the expected voltage dropout across the LED string check on CREE LED Website J Series® 2835
2. Connecting to the power supply should be done when the power supply is off.
3. Modules should be connected to heatsink to dissipate heat form LED module. Temperature on the module shouldn't be higher than recommended by Cree®. Due to power of the module, appropriate heatsink should be used with thermal conductive tape or paste. The lower temperature on LED module causes longer lifetime.
4. During installation of the LED module it is absolutely necessary to use ESD protection. Luminaire design should protect the module from ESD. Installation of the LED module should be done by qualified person.
5. Lenses, diodes and other components on the module must be protected against mechanical damage and exposure to liquids and dirt.
6. The modules shouldn't have contact with hazardous and corrosive substances or aromatic organic compounds such as toluene, acetone, xylene, benzene.
7. For installation of modules use substances recommended and tested by the CREE LED®. List of substances available on the manufacturer's website: cree-led.com

Niviss is not responsible for any damage or failure due to not comply with above rules.
Otherwise, the complaint will not be taken into account.

➢ ENVIRONMENTAL CAUTION

Caution!

It is prohibited to dispose of obsolete and waste electrical and electronic equipment together with regular household wastes. They should be properly sorted and recycled. Old electrical and electronic equipment should be returned to a waste collection point established by a waste-management service. Waste electrical and electronic equipment can be broken down to base materials and then recycled. For more information regarding waste management please contact your local authorities, waste-management service or the seller of electrical and electronic devices.

➢ DATA DOWNLOAD

- ➢ 3D PDF FILE
- ➢ STEP FILE
- ➢ EU DECLARATION OF CONFORMITY (CE)