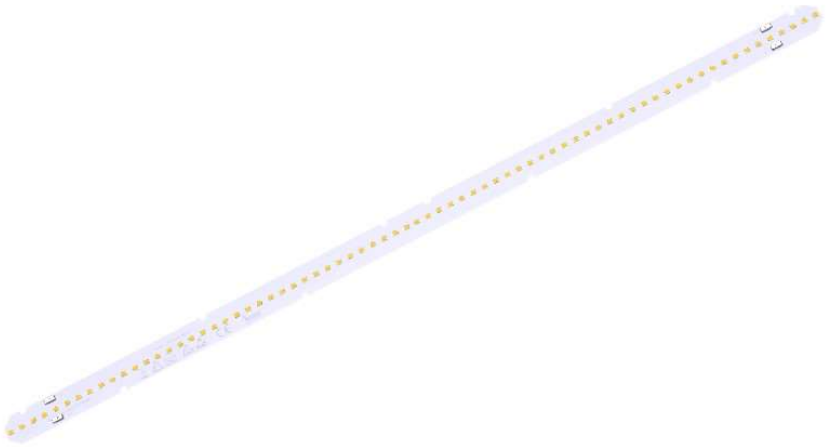
CREE LED® High Efficacy
LED Module 560x20mm 72V JB2835B family

DK250606

LED Modules 560x20mm are constant current LED module based on the CREE LED® J Series® 2835 optimized for cost effective and high efficacy. LED Modules 560x20mm are providing optimized and easy integration by four connectors for parallel system or two connectors for series system, with excellent quality, reliability and precision, low nominal power

- High efficacy **204 lm/W** and up to **15590 lm**.
- LM-80 lifetime projections (IEC 62717) **> 100,000 (L70)**[1]
- Quick and effective heat dissipation due to the using MCPCB 1.0mm Lead or standard FR-4 1.6mm, Free HASL.
- EPREL registered product.
- Available CCT 3000K, 3500K, 4000K, 5000K, 6500K.
- Available CRI 80 or 90.



➢ SPECIFICATION

LED FAMILY	560x20mm 72V JB 2835 SERIES				
CCT/SDCM	3000K 3-STEP	3500K 3-STEP	4000K 3-STEP	5000K 3-STEP	6500K 3-STEP
Viewing Angle	120°				
Nominal Module Lumen Output[2]	J class CRI 80				
	2196 lm	2270 lm	2338 lm	2338 lm	2338 lm
	J class CRI 90				
	1870 lm	1932 lm	2000 lm	2000 lm	2000 lm
Nominal Efficacy[2]	J class CRI 80				
	191 lm/W	198 lm/W	204 lm/W	204 lm/W	204 lm/W
	J class CRI 90				
	163 lm/W	168 lm/W	174 lm/W	174 lm/W	174 lm/W
CRI	80; 90				
Nominal Driving Current	180 mA				
Voltage DC (typ.)[2]	72 V				
Power Consumption[2]	11.4 W				
Max. LED module working current[3]	**1440 mA / module**				
Voltage DC (max)[3]	**76.0 V**				
Max power[3]	**108.8 W**				
Max. LED module lumen output[3]	**J class CRI 80**				
	14634	**15138**	**15590**	**15590**	**15590**
	J class CRI 90				
	12472	**12874**	**13328**	**13328**	**13328**
Number of LEDs	72				
Power Supply Type	Constant Current				
Risk Group Classification[4]	RG-1 Low Risk for 3000K, 35000K, 4000K; RG-2 Moderate Risk for 5000K/6500K when above 262 mA per LED				
Energy Class	**J class CRI 80**				
	B	**B**	**B**	**B**	**B**
	J class CRI 90				
	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, 180 mA without heatsink.**
[3] **External heatsink required.**
[4] **According to Eye safety Cree document**

➢ FEATURES

Application:

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

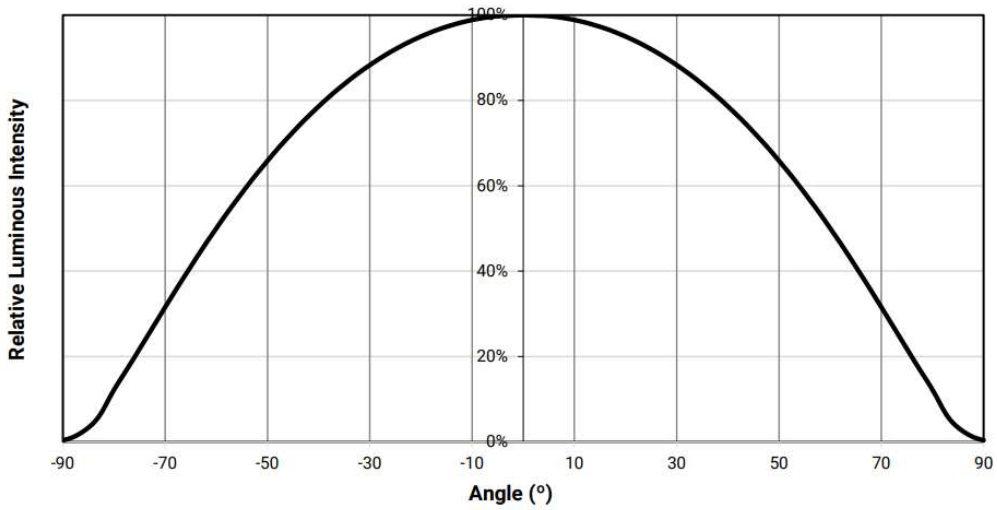
Features:

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

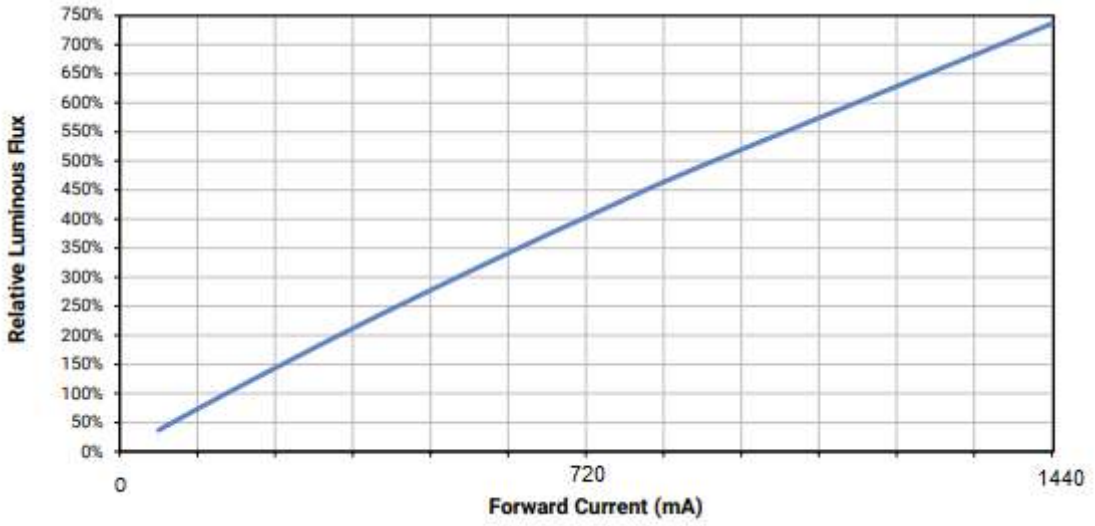
EPREL Database link

QR CODE

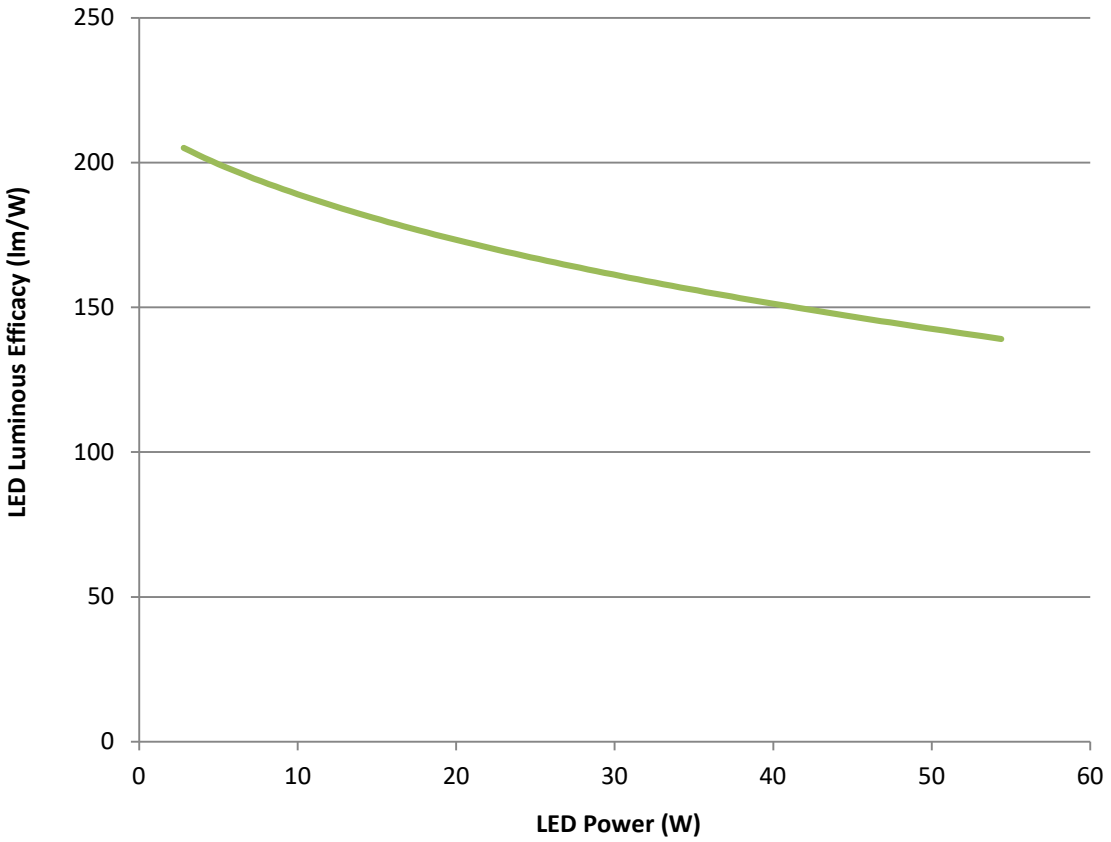
➢ TYPICAL SPATIAL DISTRIBUTION



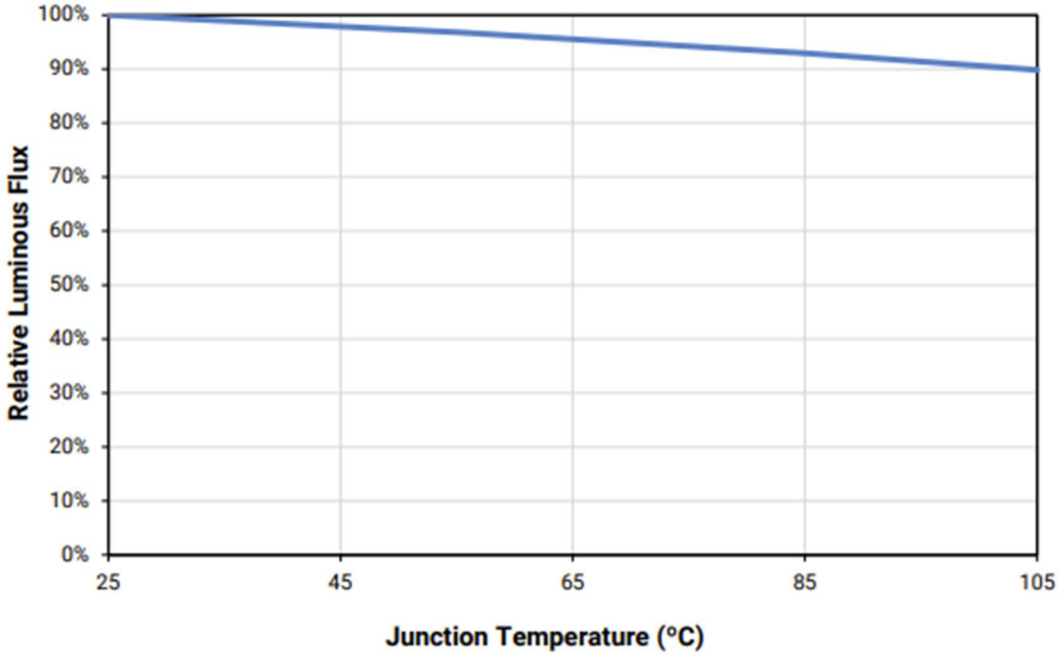
- **RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT (mA)**



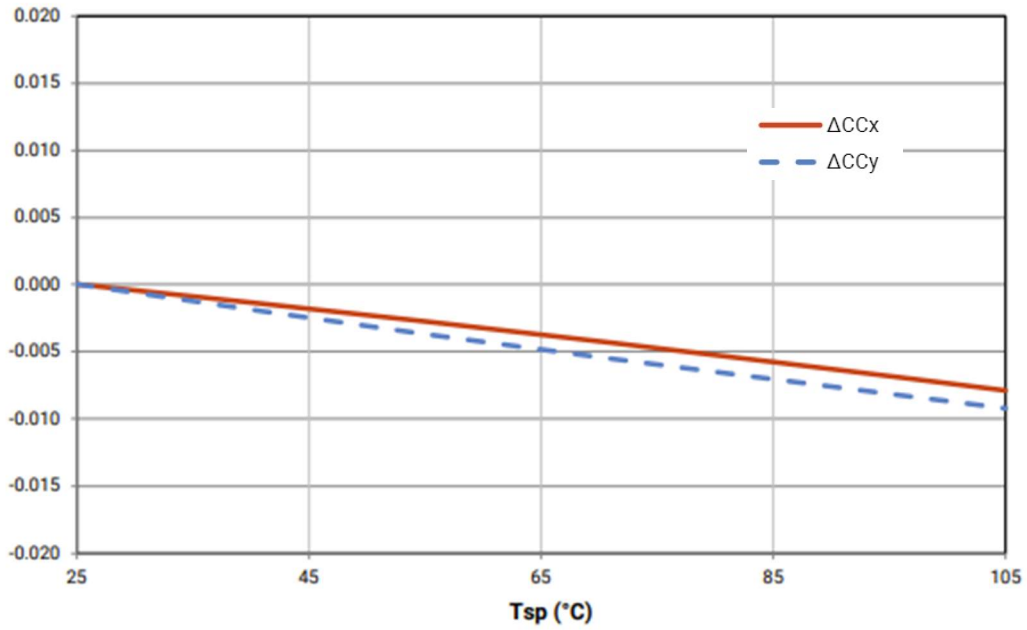
- **LUMINOUS EFFICACY (lm/W) VS. MODULE LED POWER (W)**



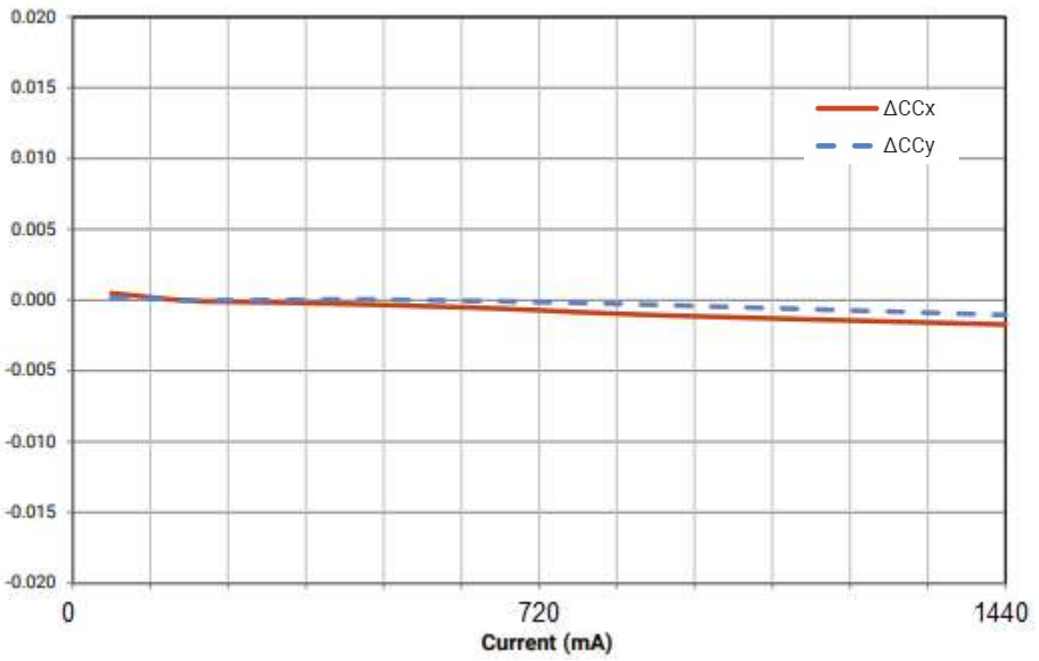
- **LUMINOUS FLUX VS. JUNCTION TEMPERATURE**



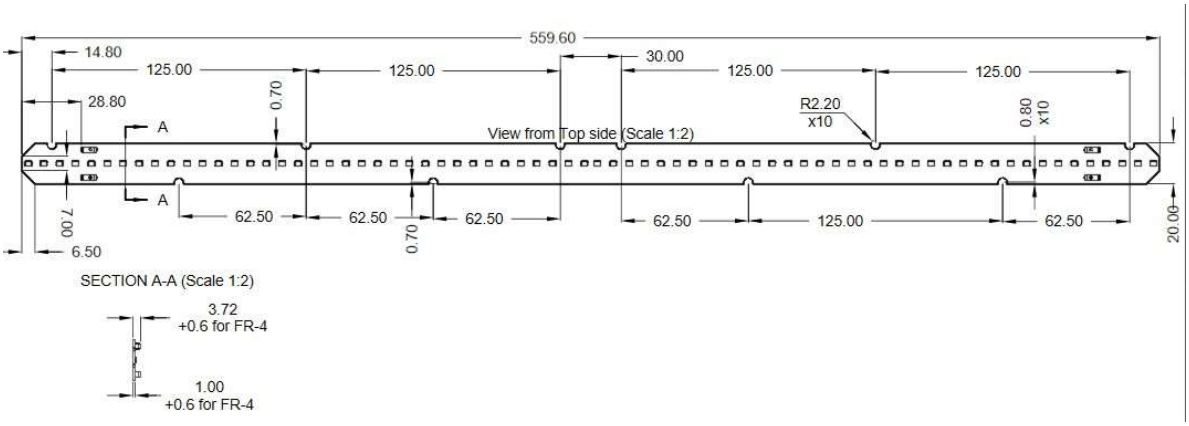
- **RELATIVE CHROMATICITY VS. TEMPERATURE**



➢ RELATIVE CHROMATICITY VS. CURRENT



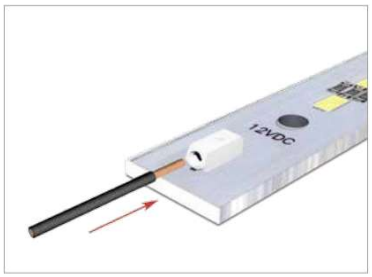
➢ DIMENSIONS



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

MECHANICAL SPECIFICATION		
Dimensions	559.6 x 20 mm	
Board Thickness	1.0 mm	1.6 mm
Board Material	MCPCB, 3003 Alloy, 1.3W/(m*K); high reflectivity white soldermask	FR-4, white soldermask
Shape	Rectangular	

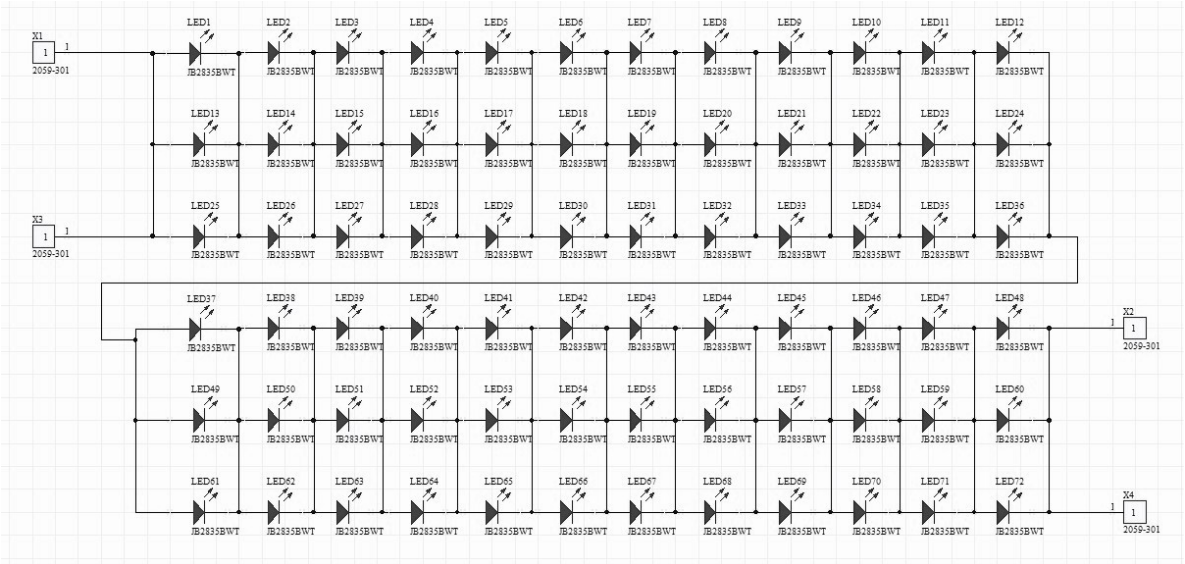
➢ CONNECTION



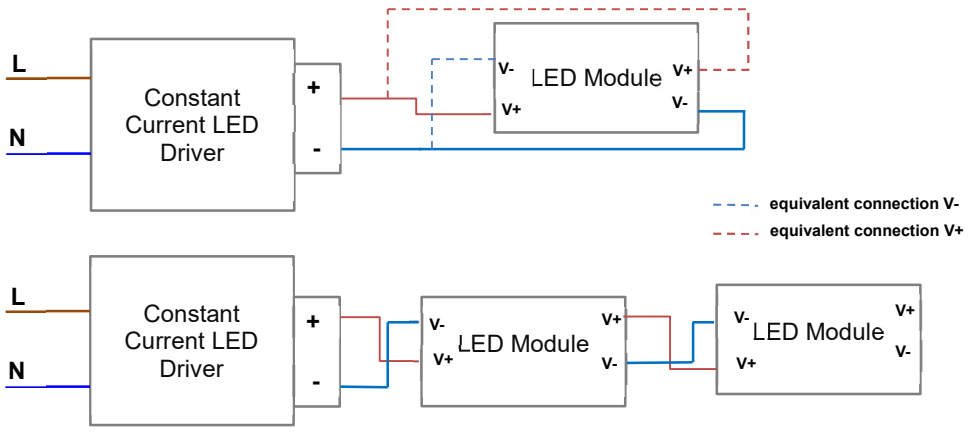
Inserting solid conductors via push-in termination.

Easy conductor removal, e.g., via 206-859 operating tool.

➢ ELECTRICAL SCHEMA



➢ ELECTRICAL INSTALLATION



➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-72R560X20-JB2835BJ-3080-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 3000K, CRI 80, 1.0 mm MCPCB
MOD-72R560X20-JB2835BJ-3580-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 3500K, CRI 80, 1.0 mm MCPCB
MOD-72R560X20-JB2835BJ-4080-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 4000K, CRI 80, 1.0 mm MCPCB
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MOD-72R560X20-JB2835BJ-6580-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 6500K, CRI 80, 1.0 mm MCPCB
MOD-72R560X20-JB2835BJ-3090-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 3000K, CRI 90, 1.0 mm MCPCB
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MOD-4C72R560X20-JB2835BJ-3080-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 3000K, CRI 80, 1.0 mm MCPCB, 4 Connectors
MOD-4C72R560X20-JB2835BJ-3580-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 3500K, CRI 80, 1.0 mm MCPCB, 4 Connectors
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MOD-FR72R560X20-JB2835BJ-3080-N-VA01	LED Module 560x20 mm, High Efficacy, High Reflectivity White Soldermask, 72 LED, JB2835B class J, 3000K, CRI 80, 1.0 mm FR-4
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➢ COMMERCIAL INFORMATION

COMMERCIAL INFORMATION	
Connector	WAGO 2059
Minimum Order Quantity	10 pcs.
Warranty	2 years
Power Supply	PLM-25-500 FLS-25-700DALI2-LA1 EAGLERISE FLS-21-500LD EAGLERISE LCM-25 MEAN-WELL LCM-25DA MEAN-WELL LDC-35 MEAN-WELL LDC-35B MEAN-WELL

➢ 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 from 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, step file, CE declaration are available on webpage https://www.niviss.com.