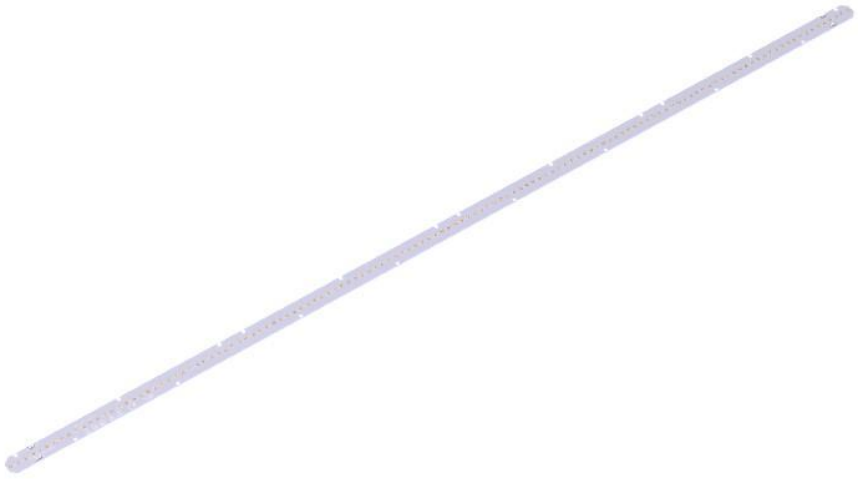
CREE LED® High Efficacy
LED Module MOD-128R1120x24mm JB2835B family

DK250922

LED Modules MOD-128R1120x24mm are constant current LED module based on the CREE LED® J Series® 2835 optimized for cost effective and high efficacy. LED Modules MOD-128R1120x24mm are providing optimized and easy integration by four connectors for series and parallel system, with excellent quality, reliability and precision, low nominal power

- High efficacy **201 lm/W** and up to **27716 lm**.
- LM-80 lifetime projections (IEC 62717) **> 100,000 (L70)**[1]
- Quick and effective heat dissipation due to the using MCPCB 1.0mm or standard FR-4 1.0mm, Lead Free HASL.
- EPREL registered product.
- Available CCT 2700K, 3000K, 3500K, 4000K, 5000K, 5700K, 6500K.
- Available CRI 80 or 90.



➢ SPECIFICATION

LED FAMILY	MOD-128R1120x24mm JB2835 SERIES						
CCT/SDCM	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]	J class CRI 80						
	4360 lm	4532 lm	4688 lm	4828 lm	4828 lm	4828 lm	4828 lm
	J class CRI 90						
	3688 lm	3860 lm	3984 lm	4124 lm	4124 lm	4124 lm	4124 lm
Nominal Efficacy[2]	J class CRI 80						
	182 lm/W	189 lm/W	196 lm/W	201 lm/W	201 lm/W	201 lm/W	201 lm/W
	J class CRI 90						
	154 lm/W	161 lm/W	166 lm/W	172 lm/W	172 lm/W	172 lm/W	172 lm/W
CRI	80; 90						
Nominal Driving Current	560 mA						
Voltage DC (typ.)[2]	48 V						
Power Consumption[2]	25.4 W						
Max. LED module working current[3]	**3840 mA / module**						
Voltage DC (max)[3]	**50.1 V**						
Max power[3]	**193 W**						
Max. LED module lumen output[3]	**J class CRI 80**						
	25034	**26018**	**26912**	**27716**	**27716**	**27716**	**27716**
	J class CRI 90						
	21190	**22173**	**22888**	**23693**	**23693**	**23693**	**23693**
Number of LEDs	128						
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	**J class CRI 80**						
	B	**B**	**B**	**B**	**B**	**B**	**B**
	J class CRI 90						
	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, 560 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

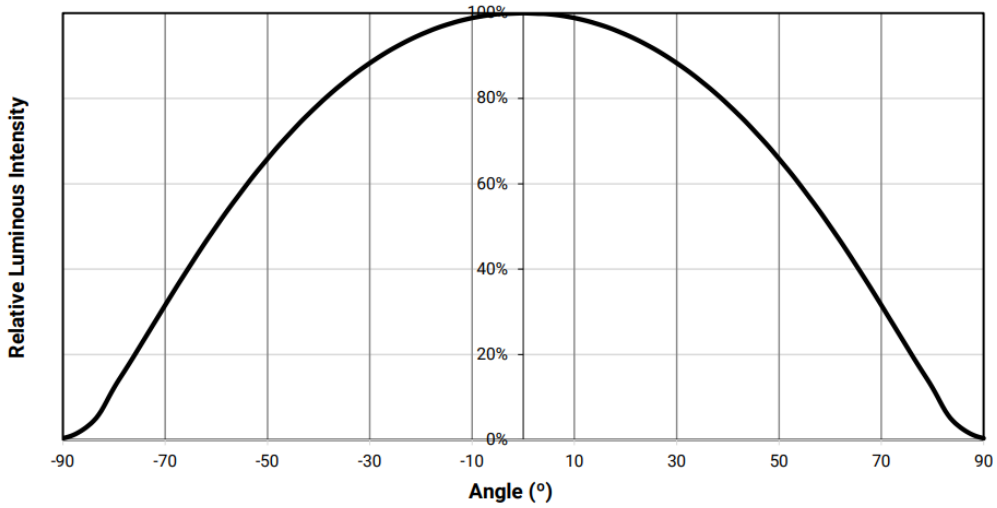
2700K 80CRI 3000K 80CRI 3500K 80CRI 4000K 80CRI

5000K 80CRI 5700K 80CRI 6500K 80CRI

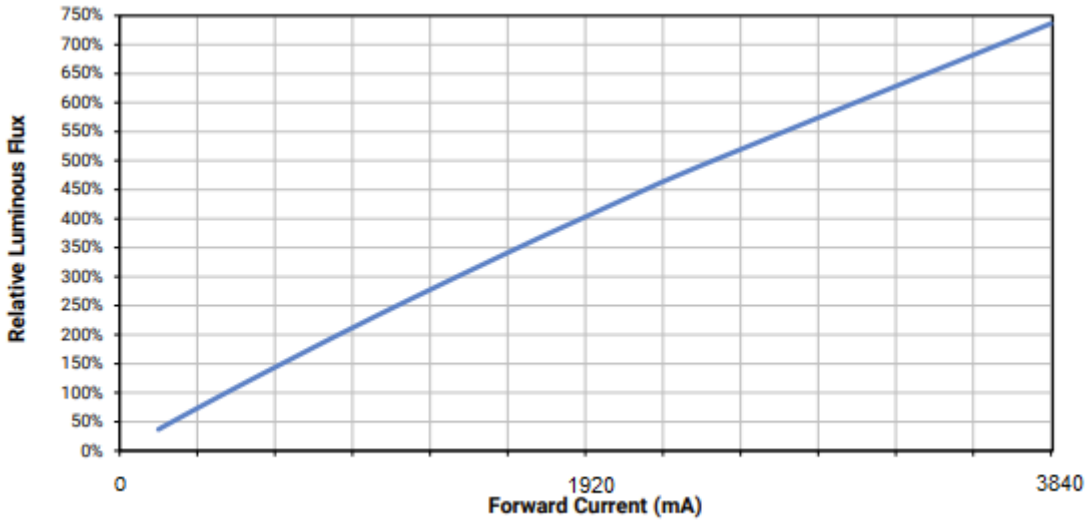
2700K 90CRI 3000K 90CRI 3500K 90CRI 4000K 90CRI

5000K 90CRI 5700K 90CRI 6500K 90CRI

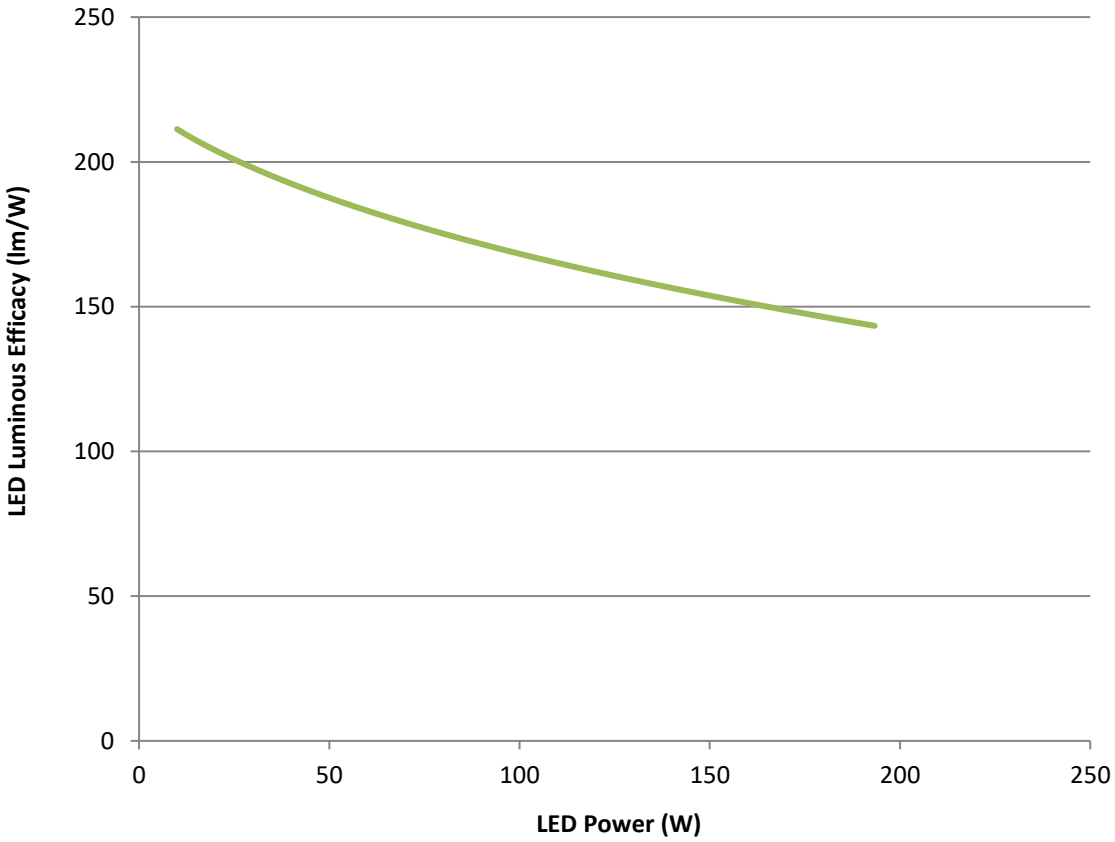
➢ TYPICAL SPATIAL DISTRIBUTION



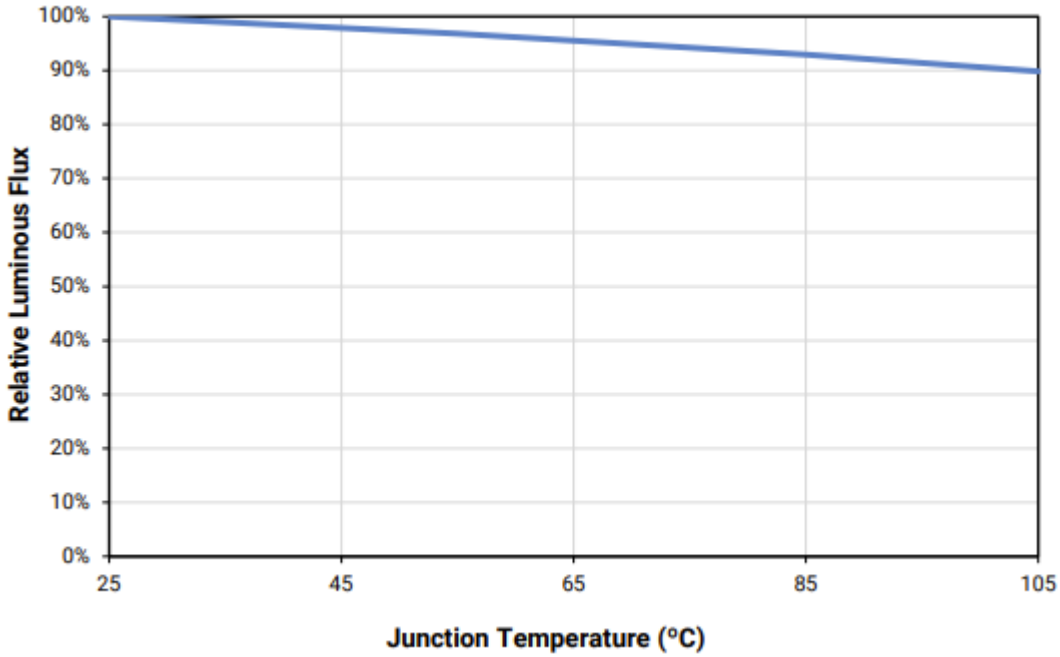
- **RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT (mA)**



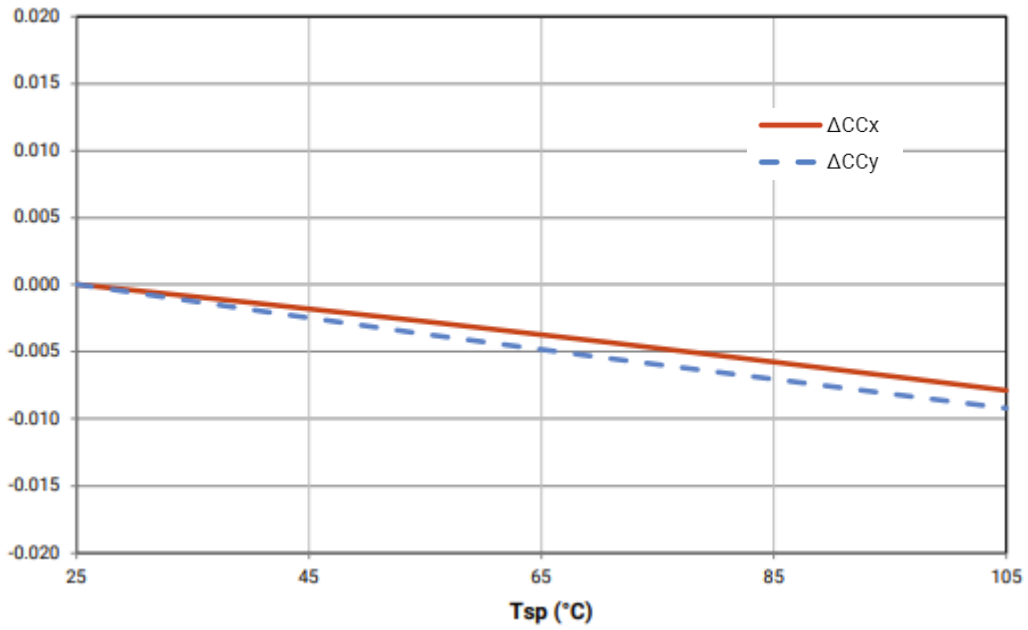
- **LUMINOUS EFFICACY (lm/W) VS. MODULE LED POWER (W)**



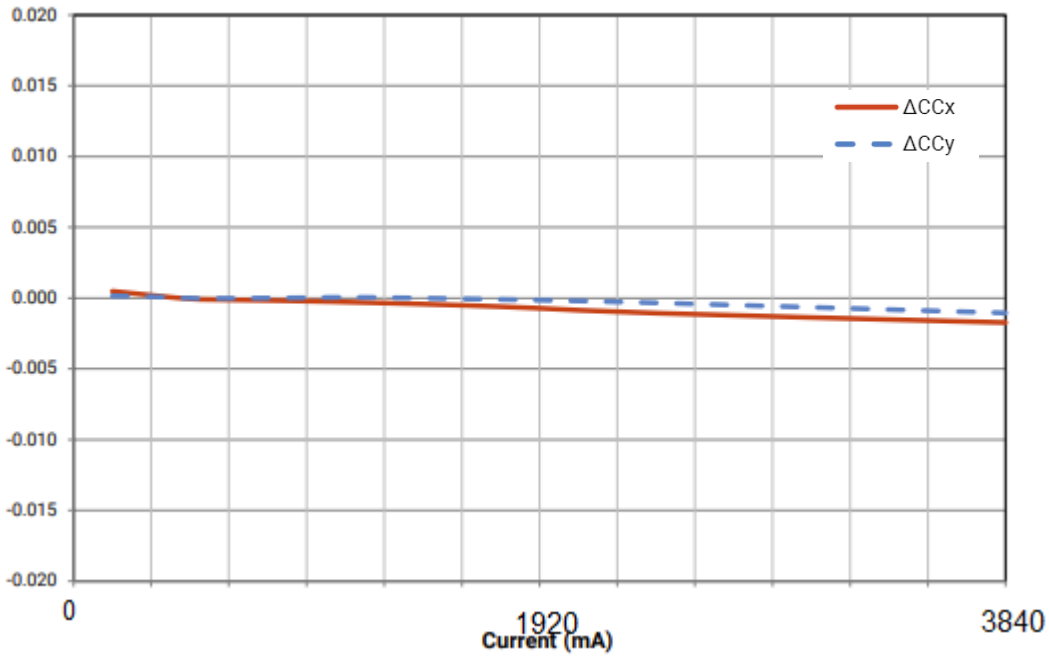
- **LUMINOUS FLUX VS. JUNCTION TEMPERATURE**



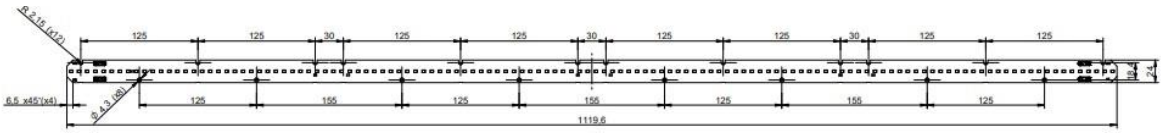
- **RELATIVE CHROMATICITY VS. TEMPERATURE**



➢ RELATIVE CHROMATICITY VS. CURRENT



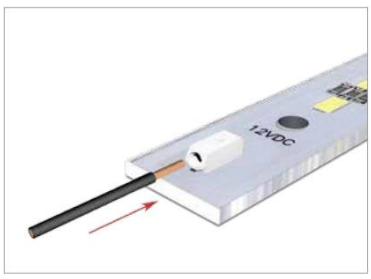
➢ DIMENSIONS



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

MECHANICAL SPECIFICATION		
Dimensions	1119.6 x 24 mm	
Board Thickness	1.0 mm	1.0 mm
Board Material	MCPCB, 3003 Alloy, 1.3W/(m*K); high reflectivity white soldermask	FR-4, white soldermask
Shape	Rectangular	

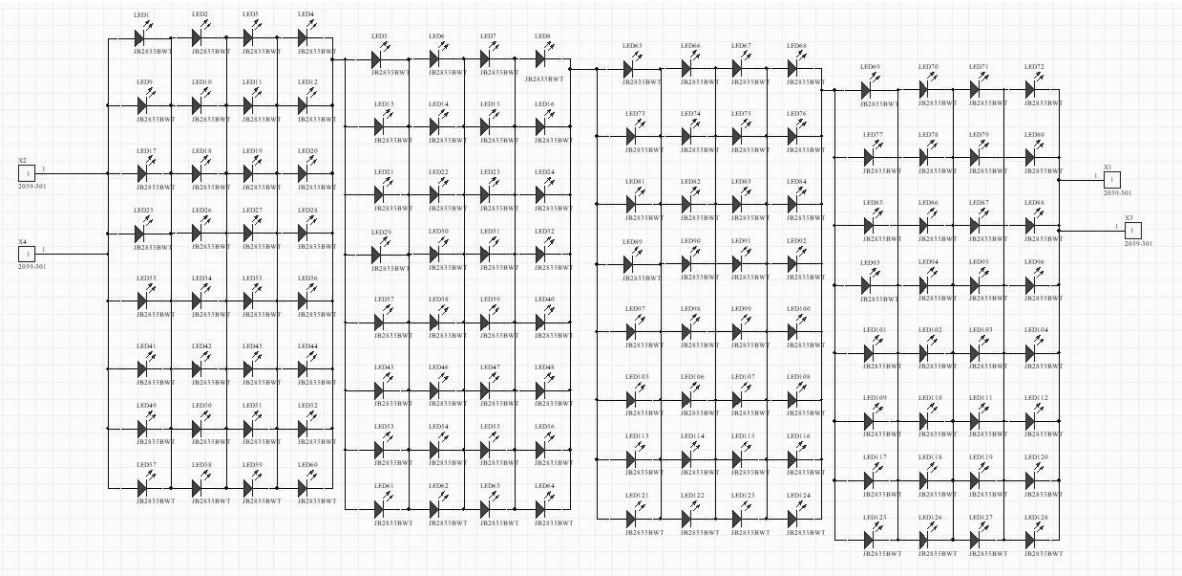
➢ CONNECTION



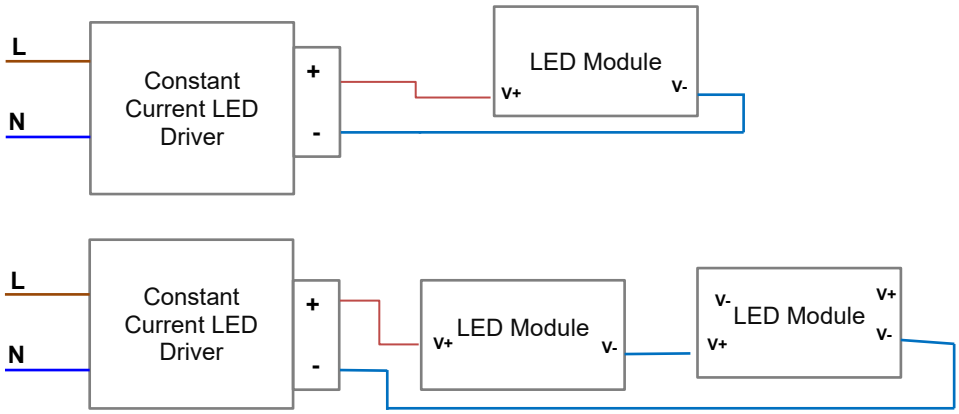
Inserting solid conductors via push-in termination.

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

➢ ELECTRICAL SCHEMA



➢ ELECTRICAL INSTALLATION



➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-128R1120x24-JB2835BJ-2780-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 2700K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-3080-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 3000K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-3580-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 3500K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-4080-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 4000K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-5080-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 5000K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-5780-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 5700K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-6580-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 6500K, CRI 80, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-2790-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 2700K, CRI 90, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-3090-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 3000K, CRI 90, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-3590-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 3500K, CRI 90, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-4090-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 4000K, CRI 90, 1.0 mm FR-4
MOD-128R1120x24-JB2835BJ-5090-VA01	Linear Led Module 4 feet 1120x24mm 12V, High Efficacy, High Reflectivity White Soldermask, 128 LED, JB2835B class J, 5000K, CRI 90, 1.0 mm FR-4
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➢ COMMERCIAL INFORMATION

COMMERCIAL INFORMATION	
Connector	WAGO 2059
Minimum Order Quantity	8 pcs.
Warranty	2 years
Power Supply	PS-929000930706 PS-929002952506 PS-HVGC-100-700A

➢ 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 FILE
- STEP FILE
- EU DECLARATION OF CONFORMITY (CE)