



BNZ LED STRIP

6.5MM - 120 LED

Model Number: 2835-120-S

2835 S-TYPE CURVE FLEX STRIP

SIGNAGE | CURVED CHANNEL LETTERS

Providing Brighter Solutions



Product Overview

BNZ 2835 6.5mm S-Type LED Strips are specially designed for **curved and irregular shapes**, making them ideal for channel letters, logos, and signage with tight bends.

The unique S-shaped **FPCB design** allows lateral flexibility without stressing the circuit, ensuring easy installation and long-term reliability.

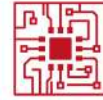
Key Features



High brightness output **2835 SMD LEDs** with copper bracket



Easy installation in **round, curved and irregular letters**



S-type flexible PCB for smooth curves and sharp bends



IP20 suitable for indoor & covered applications



2 Years Warranty



Stable output with low light decay



2 oz thick double-layer copper PCB for superior heat dissipation



Energy-efficient design with long operating life



Ideal for **signage, channel letters, decorative lighting**

Available Colors



10000K



4000K








3000K

*Other CCT and colors available on request.

Technical Specifications

Electrical Specifications	
Model Name	BNZ 2835 S-Type 6.5mm LED Strip
Model No.	2835-120-S
Input Voltage	12V DC
Power Type	Constant Voltage
Power Consumption	15W / Meter
LED Type	SMD 2835
LEDs per Meter	120 PCS
Operating Mode	Continuous
IP Rating	IP20
Optical Specifications	
Luminous Flux	3120-3360 LM / M
Beam Angle	120° (Typical)
Color Temperature (CCT)	10000K, 4000K, 3000K
Light Output	High Brightness, Uniform
Light Distribution	Continuous Linear Illumination
Mechanical Specifications	
Strip Type	S-Type (Curve Flexible)
Strip Length	1000 MM / 1 Meter
Copper Thickness	2 oz
PCB Type	Flexible PCB
Flexibility Type	Horizontal bending for curves
Cutting Unit	As per marked cut points
Mounting Type	Adhesive Backing

Installation Advantages (S-Type)

-  Easily follows curved letter shapes.
-  Reduces LED dark spots at bends.
-  No PCB cracking during installation.
-  Faster installation with cleaner layout.
-  Ideal replacement for standard strips in curves.

Applications

Channel Letters (curved and round fonts)

Logo Backlighting

Signage Boards

Decorative and Architectural Lighting

Commercial Lighting Applications

Power Supply Recommendation (20% Safety Margin)

Formula:

Total Length (m) x 15W x 1.2 = Required PSU Wattage

Example: If 3 meters strip is used,

3 x 15W x 1.2 = **54W**

Use minimum **60W 12V DC** power supply.

Luminous Intensity Distribution Analysis

1. STRIP DIMENSIONS

Unit: mm

2. BENDING DIAMETER

R ≥ 30.0mm

3. ROLL DIMENSIONS

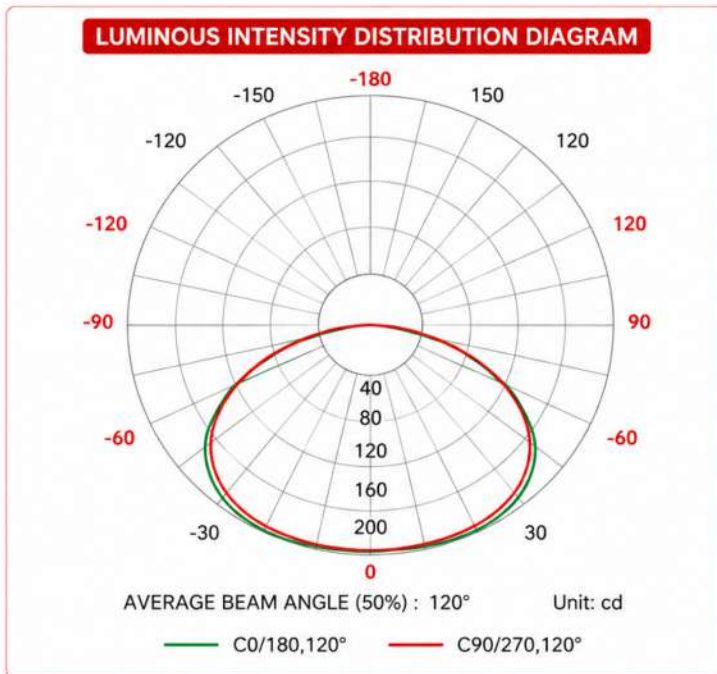
4. POLARITY

✂ Cutting Length
25mm

📐 Beam Angle
120°

🌀 Roll Length
1 Meter

🛡 IP Rating
IP20



AVERAGE ILLUMINATION

CCT = 6500K

Distance (m)	Average Illuminance (lx)	Beam Diameter (cm)
0.2	127	46.2
0.4	32	92.4
0.6	14	138.6
0.8	8	184.8
1.0	5	231.0
1.2	4	277.2
1.4	3	323.4
1.6	2	369.6
1.8	1.5	415.8
2.0	1.3	462.0

Beam Angle : 120°

Power Consumption
15W / Meter

Beam Angle
120°

Luminous Efficiency
26 – 28 lm / LED

Note: The above data is tested with BNZ S-Type LED Strip 6.5mm at 12V DC. Actual performance may vary depending on installation conditions.

Packaging Details

Packaging Type	Quantity
Packing Form	Roll
Standard Length	1 Meter
Protection Type	Anti-static and moisture-safe packaging

Attention before installation

- Before installation, check that the product parameters are consistent with the requirements. (Seeing product specifications or product labels)
- Load voltage, current power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the LEDs do not turn on.
- Make sure the power cord firmly screwed into the terminal and a should not be pulled out by hands.
- The terminal should have insulation waterproof and anti-corrosive treatment.
- After installation, the fabric light box must be covered with cloth within 48 hours.
- Please avoid leaving the light box idle for a long time.

Important Installation Notes

- Use only 12V DC constant voltage power supply.
- For continuous runs, use aluminum profile for heat dissipation.
- Avoid sharp vertical bending.
- Do not overload power supplies.
- IP20 rated, suitable for indoor & covered signage applications.

Warnings

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation especially for high voltage product.
- Do not use any organic chemical solvents Use neutral glass adhesive to fix this product and it needs to be dried 24 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation, waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm² cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the maximum run.
- The length of the power cable between the power supply and the led strip should not exceed 2m. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Statements

- Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.
- The parameters given in this manual are typical values and for reference only.
- All illustrations and drawings in this manual are for reference.
- This product is subject to change without notice.

Recycling

- LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light ON	No electric supply	Fix the short circuit problem
	Automatic power protection from the open or short circuit in output of the power supply	
	Wrong connection of power supply	
LEDs can not light on partly	Some switching mode power supplies are not powered	Correctly connection
	Power supply line error	
	Mistaken wire connection of some of products	
Brightness of LED is inconsistent or insufficient	Power overloaded	Replace with more powerful power
	Power supply circuit excessive consumption	Make sure the working voltage of the product within 25% of standard voltage, or keep balance by circuit power consumption
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement
LED flicker	Connection point fault	Remove bad connection point
	Switching power supply failure	Replace a new power supply
	Wrong Installation or use of products	Please follow the instructions



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