

**3X6MM  
SIDE BEND  
MICRO  
NEON  
IP54**

///ArcLED



# ARC-3X6-24

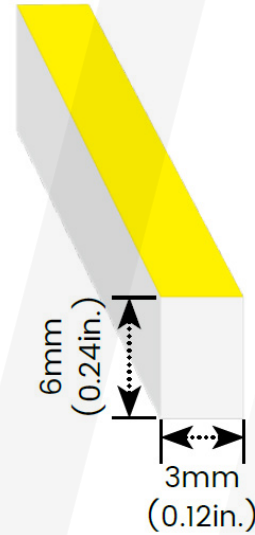
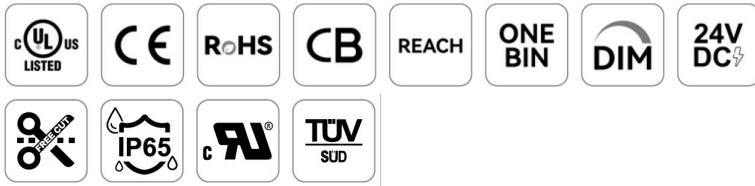
# ///ArcLED

## 3x6mm Side Bend Micro Neon



### Advantages :

- 3mm ultra slim form factor, easily fits into extremely tight spaces
- IP65 rated, ideal for damp location and sheltered exterior
- Free cut with smooth surface
- 5 years warranty



### Technical Details

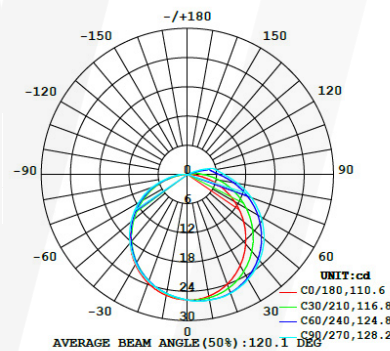
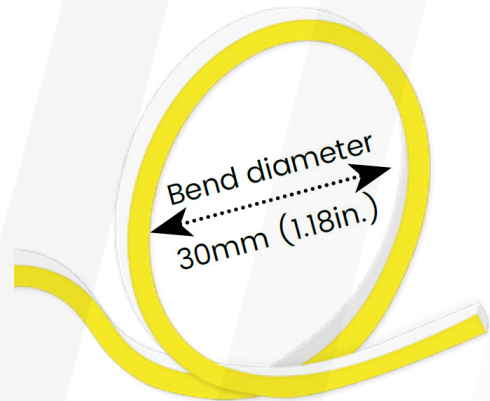
Efficacy	14.5lm/W @3000K 6W
CRI	Ra≥90
Beam Angle	110°
Average Life (L80B10)	>47,000 hours
Storage Temperature	-40°C ~ 60°C
Operating Temperature	-40°C ~ 55°C

### Applications

Under cabinets, niches, shelves, closets, millwork, furnitures, etc

### Lumen Output (lm/m)

CCT	6W/M
2200K	74
2700K	79
3000K	87
4000K	92
Max. Run Length 5m	5M



Zone	Lumen	% Fixture
0-30	20.25	23.2%
0-40	33.43	38.2%
0-60	60.66	69.4%
0-90	83.65	95.7%
0-180	87.41	100.0%

## ADDITIONAL PRODUCT INFORMATION

- IPC 6013C: LED strips are designed for static installations in accordance with IPC 6013C – Use A. Take material vibrations, repetitive torsion, and elongation/compression into account.
- Operating environment: If the operating environment covers a broad temperature range (such as outdoors applications) and the operating length is longer than 2 meters, the use of adequate mounting surfaces is required. Assure enough space for strip expansion and heat dissipation with increasing temperature.
- Power control and supply: Use only ARcLED drivers in accordance with applicable lighting standards and LED strip ratings. In order to safely operate ArcLED strips it is necessary to supply them with an electronically stabilized power supply providing protection against short circuits, overload and overheating. Please select a power control device that meets international certification requirements to ensure the installation and operation of the product.
- Hydrogen sulfide: The manufacturer is not responsible for damage due to chemical corrosion. The user must provide suitable protection against corrosive agents such as moisture and condensation and any other harmful elements/compounds. Make certain to avoid corrosive atmospheres. According to the current state of LED technology, hydrogen sulfide (H<sub>2</sub>S) causes accelerated corrosion which leads to shortened lifetime or premature failure. Sources of H<sub>2</sub>S may be rubber, foam rubber, soft-foam tapes, rubber -based sealing, natural sources (e.g. sulfur springs), etc. To avoid H<sub>2</sub>S from sulfur -vulcanized rubber use silicon -based materials or peroxide -crosslinked rubber instead. Follow the recommendations in the material datasheet of the rubber supplier.
- Humidity and dust: For applications involving exposure to humidity and dust, the strip must be protected by a fixture or housing with a suitable IP protection class.
- Electrical isolation: Always ensure electrical isolation between the LED strip and the mounting surface, especially in the vicinity of connections or cut ends.
- Lifetime: Exceeding maximum operating and storage temperature ratings can reduce the expected lifetime or even destroy the LED strip. The temperature of the LED strip must be measured at the T<sub>c</sub>-point in accordance with EN 60598 -1 under steady -state conditions, considering the worst case; drive all channels at 100 % power. Refer to the product drawing for the exact location of the T<sub>c</sub>-point.

- Installation: Installation of LED strips and connection to the power supply must comply with all applicable electrical and safety standards.

Observe correct polarity and wiring diagrams! Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.

Only a qualified electrician may install the strip.

Handle with care and ensure that there is no physical product damage, including damage to invisible internal electronics parts.

Exceeding the maximum ratings for the operating voltage causes hazardous overload and will likely destroy the LED strip.

Never exceed the maximum operable length, including other wires.

- IP20 Product: Part IP20 LED strips are equipped with a self-adhesive tape for attaching the LED strip to suitable materials, such as aluminum profiles, which must be clean and free of oil, silicone coatings, or any other dirt/dust particles. The adhesive tape is intended for single use, and if removed may damage the material to which it is stuck and the LED strip itself, which must then be scrapped. After products are equipped, it will take at least 72 hours to complete adhesion.

IP20 LED strips, as manufactured, have no conformal coating and therefore offer no inherent protection against corrosion. Conformal coating treatment (equipped with aluminum profiles) is possible, however materials must be selected properly in order to avoid product damage or impaired performance. The user must also completely seal the cut parts (ends/edges), to ensure the IP level still meet customer requirements.

IP20 LED strips are ESD-sensitive; take adequate precautions during installation and operation of the products.

- Consult ARcLED Technical Service for further advice.

## ELECTRICAL PARAMETER

Power(W/m W/ft)	4.8/1.5	9.6/2.9	14.4/4.4
Voltage (V)	DC24V	DC24V	DC24V
Current(mA/m)	200	400	600
Circuit Type	CV	CV	CV
LED Type	2835	2835	2835
Min. Cutting Length(mm)	25mm	25mm	25mm
Life Span L80B10	>54000H	>54000H	>54000H
Storage Tempt.	-40°C /-40°F <sub>min</sub> 60 °C /140°F <sub>max</sub>	-40°C /-40°F <sub>min</sub> 60 °C /140°F <sub>max</sub>	-40°C /-40°F <sub>min</sub> 60°C /140°F <sub>max</sub>
Ambient Tempt. *	-40°C /-40°F <sub>min</sub> 55 °C /131°F <sub>max</sub>	-40°C /-40°F <sub>min</sub> 45 °C /113°F <sub>max</sub>	-40°C /-40°F <sub>min</sub> 45°C /113°F <sub>max</sub>
Ambient Installation Tempt.	-40°C /-40°F <sub>min</sub> 85 °C /185°F <sub>max</sub>	-40°C /-40°F <sub>min</sub> 85 °C /185°F <sub>max</sub>	-40°C /-40°F <sub>min</sub> 85°C /185°F <sub>max</sub>

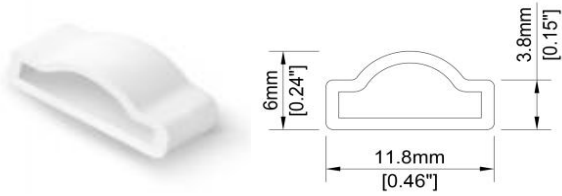
\* Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

## OPTICAL PARAMETER

Item Code	Finished Product				LED		
	Wattage/m	CCT	CRI	Lumen/m	Lumen/ft	Color Tolerance	Bin
ARC-24-48-1800K	4.8W	1800K	Ra≥90	275LM	84LM	<3SDCM	OneBinOnly
ARC-24-48-2200K	4.8W	2200K	Ra≥90	275LM	84LM	<3SDCM	OneBinOnly
ARC-24-48-2700K	4.8W	2700K	Ra≥90	300LM	91LM	<3SDCM	OneBinOnly
ARC-24-48-3000K	4.8W	3000K	Ra≥90	310LM	95LM	<3SDCM	OneBinOnly
ARC-24-48-4000K	4.8W	4000K	Ra≥90	315LM	96LM	<3SDCM	OneBinOnly
ARC-24-96-1800K	9.6W	1800K	Ra≥90	550LM	168LM	<3SDCM	OneBinOnly
ARC-24-96-2200K	9.6W	2200K	Ra≥90	550LM	168LM	<3SDCM	OneBinOnly
ARC-24-96-2700K	9.6W	2700K	Ra≥90	600LM	183LM	<3SDCM	OneBinOnly
ARC-24-96-3000K	9.6W	3000K	Ra≥90	620LM	189LM	<3SDCM	OneBinOnly
ARC-24-96-4000K	9.6W	4000K	Ra≥90	630LM	192LM	<3SDCM	OneBinOnly
ARC-24-144-2700K	14.4W	2700K	Ra≥90	900LM	274LM	<3SDCM	OneBinOnly
ARC-24-144-3000K	14.4W	3000K	Ra≥90	930LM	284LM	<3SDCM	OneBinOnly
ARC-24-144-4000K	14.4W	4000K	Ra≥90	945LM	288LM	<3SDCM	OneBinOnly

## OPTIONAL ACCESSORIES

### Closed End Cap



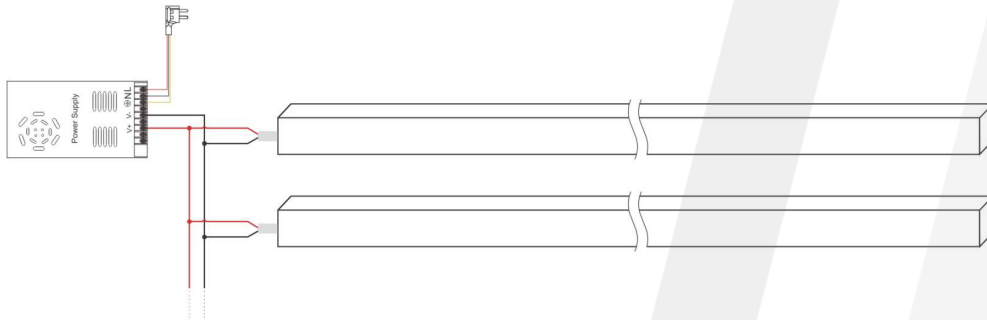
<b>Dimension</b>	11.8x4.5x6mm/ 0.46"x0.18"x0.24"(LxWxH)
<b>Material</b>	silicone
<b>Color</b>	white
1pcs closed endcap	

### Connector



<b>Dimension</b>	11.8x6x15mm/ 0.47"x0.24"x0.59" (LxWxH)
<b>Material</b>	Silicone
<b>Color</b>	white
1pcs cap+20cm cable (Front Cable Entry)	

## Single - End Wiring Diagram



1. Our constant voltage and constant current just means the circuit design, all ArcLED neon flex and led strip use constant voltage drivers.
2. Utilize a constant voltage power supply with appropriate output voltage. The rated wattage of the power supply should be 20% higher than the actual power consumption of the neon flex and led strip to extend its lifespan.
3. Dimming frequency is from 100Hz to 2000Hz. 500Hz is recommended.



- Please ensure the cable length is not more than the table "Max. Cable Length" according to LED strip length and its wire gauge.
- Please ensure the LED strip length is less than the table "Max. Strip Length".

## MAX. CABLE LENGTH

INPUT: DC24V

Item Code	Strip Length (m)	Max. Cable Length							
		0.52mm <sup>2</sup> (Default)		0.81mm <sup>2</sup>		1.31mm <sup>2</sup>		2.08mm <sup>2</sup>	
		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft
ARC-24-48 4.8W	1	32	104.96	45	147.60	77	252.56	110	360.80
	2	25	82.00	35	114.80	65	213.20	90	295.20
	3	22	72.16	30	98.40	55	180.40	68	223.04
	4	18	59.04	25	82.00	45	147.60	60	196.80
	5	15	49.20	20	65.60	38	124.64	55	180.40

## MAX. CABLE LENGTH

INPUT: DC24V

Item Code	Strip Length (m)	Max. Cable Length							
		0.52mm <sup>2</sup> (Default)		0.81mm <sup>2</sup>		1.31mm <sup>2</sup>		2.08mm <sup>2</sup>	
		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft
ARC-24-96 9.6W	1	25	82	35	114.8	65	213.2	90	295.2
	2	18	59.04	25	82	45	147.6	60	196.8
	3	13	42.64	18	59.04	32	104.96	50	164
	4	11	36.08	16	52.48	28	91.84	45	147.6
	5	8	26.24	12	39.36	21	68.88	32	104.96

## MAX. CABLE LENGTH

INPUT: DC24V

Item Code	Strip Length (m)	Max. Cable Length							
		0.52mm <sup>2</sup> (Default)		0.81mm <sup>2</sup>		1.31mm <sup>2</sup>		2.08mm <sup>2</sup>	
		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft
ARC-24-144 14.4W	1	22	72.16	30	98.4	55	180.4	68	223.04
	2	15	49.2	20	65.6	38	124.64	55	180.4
	3	9	29.52	13	42.64	23	75.44	36	118.08
	4	4	13.12	8	26.24	13	42.64	16	52.48
	5	2.5	8.2	6	19.68	9	29.52	12	39.36