

Specification

Prepared	Checked	Approved	Accepted	Confirmed	Approved

CE **RoHS** **2835**
SMD **1**
LED **Injection**
Lens **DC**
12V **IP**
65 **5**
years

Model: ☉ M8B1TB

1pc 2835 SMD LED, 35*16*6mm, white shell, equipped with optical devices, injection series, 12Vdc, constant current, LED module

Figure:



Features:

- ☉ Unique hard-edged shape, high-end and elegant;
- ☉ 2835 SMD LED with low attenuation and long life;
- ☉ Standard cascading qty up to 50pcs;
- ☉ Beam angle: 160°;
- ☉ Can be cut between every unit;
- ☉ CE, RoHS compliant.

Applications:

- ☉ Optimal for 8-12cm depth channel letter.

Warranty:

- ☉ 5 years or 22,000 hours, whichever comes first.

Optical and Electrical Parameters:

P/N	LED Color	CCT (K)	CRI	SDCM	Beam Angle (°)	Luminous Flux (lm)	Luminous Efficacy (lm/W)	Working voltage (VDC)	Working current (mA)	Power (W/piece)
M8B1TB	Cold White	9000	≥75	--	160	37	103	12	30	0.36
	Pure White	6000	≥75	--	160	42	117	12	30	0.36

Others:

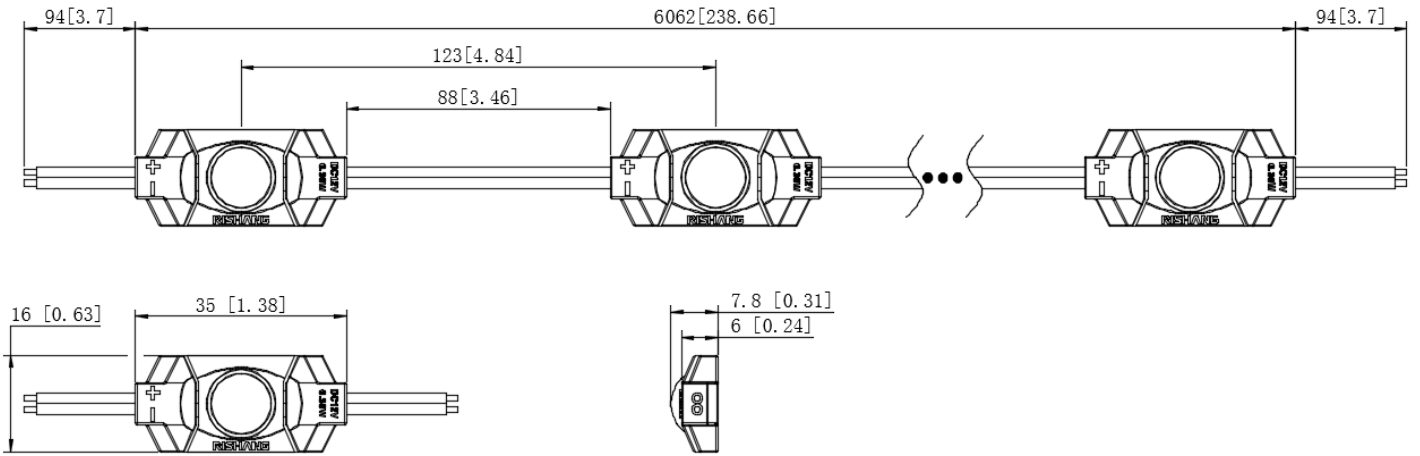
P/N	IP Grade	Operating Temp		Storage Temp		Standard cascading qty (pcs)	Single-ended max. cascading qty (pcs)	Double-ended max. cascading qty (pcs)	Weight	
		(°C)	(°F)	(°C)	(°F)				(g/piece)	(lb/piece)
M8B1TB	IP65	-25~	-13~	-25~	-13~	50	50	100	4.84	0.011
		+60	+140	+70	+158					

Notes:

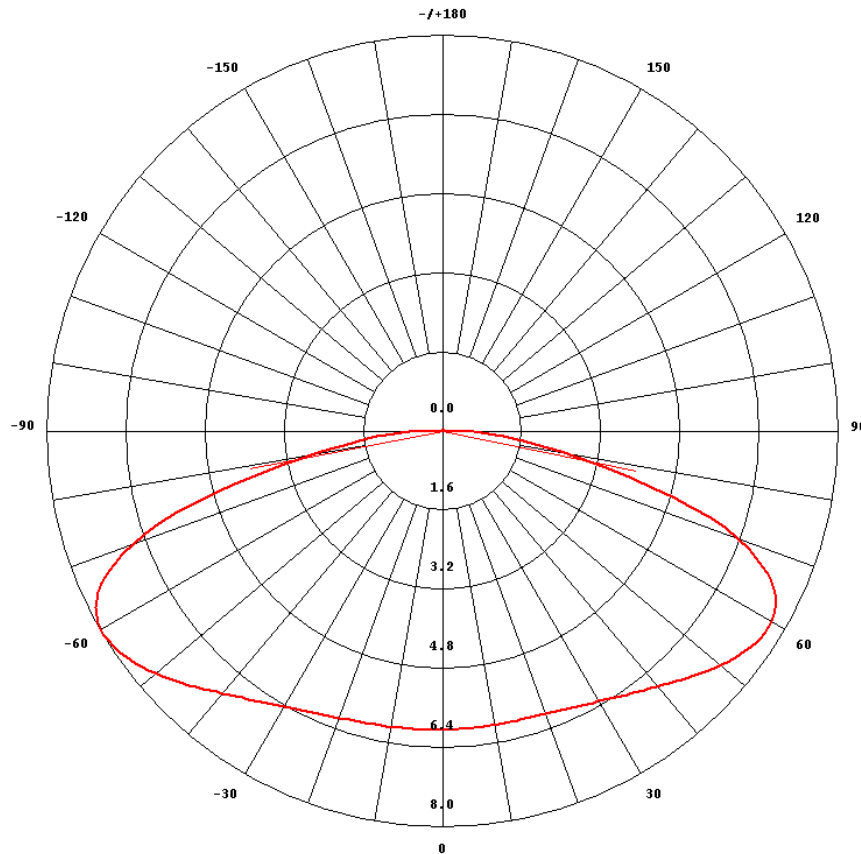
- (1)Testing environment temperature: 25±2°C [77±3.6°F];
- (2)The actual data of each single product may differ from above typical data which are subject to change without prior notice;
- (3)The above "--" means the parameters are not required temporarily.

Profile Drawings:

Unit: mm[inch]

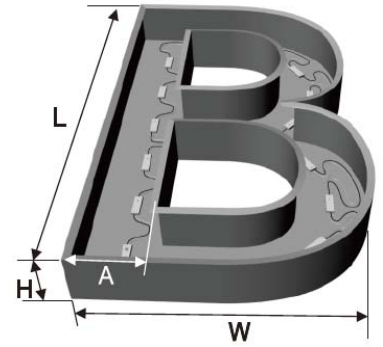


Light Distribution:



Layout Data:

Channel Letter				LED Module			Surface illuminance range (lux)
Main width A (mm)	Net thickness H (mm)	Size L*W (mm)	Area (m ²)	Max. arrangement spacing (mm)	Total qty (pcs)	Installing density (pcs/m ²)	
85	80	650*320	0.14	85	18	129	2200-2600
115	100	850*425	0.25	95	20	80	1600-1700
140	120	1040*505	0.37	105	23	62	1300-1400



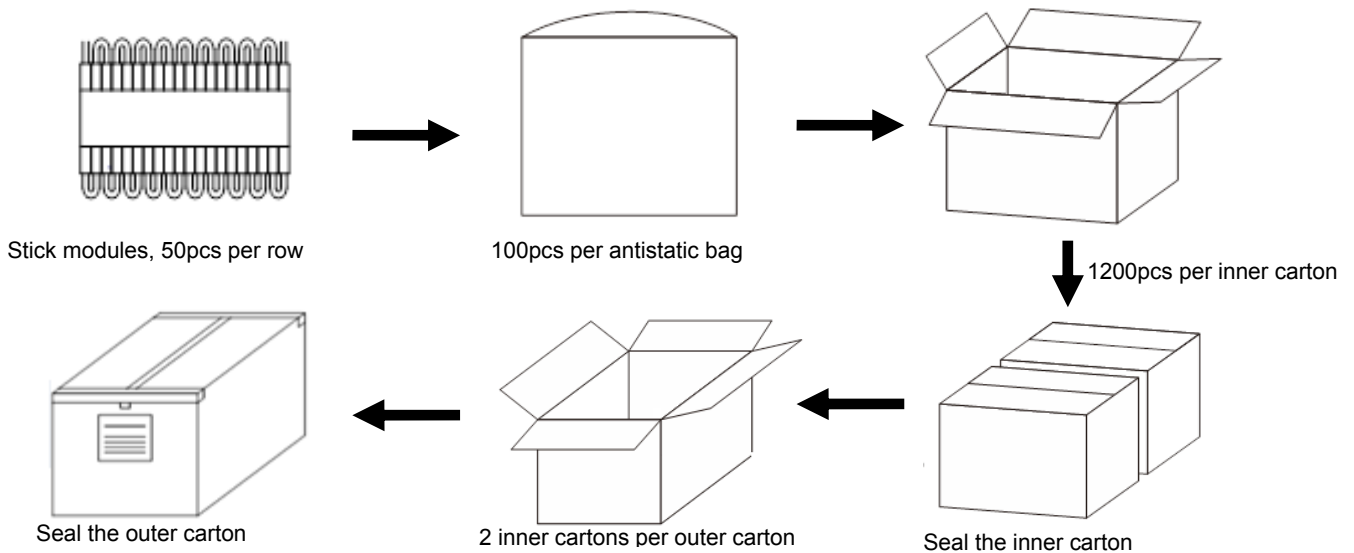
Notes:

1. The above data is tested from the modules with color temperature of 6,500K
2. The above light box uses acrylic white board with 3mm depth and 54.4% light transmittance
3. The above illuminance is the minimum value tested on the even surface.
4. The above data is for reference only.

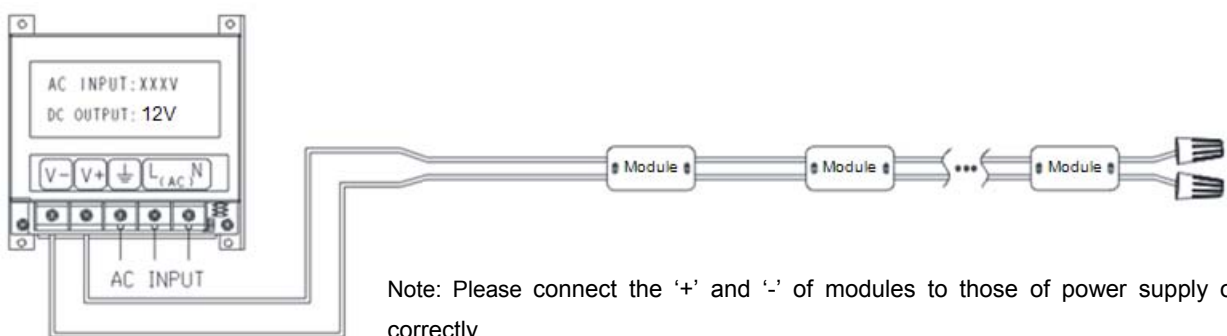
Packaging Information:

P/N	Qty (pcs/bag)	Qty (bag/carton)	Total Qty (pcs)	Total weight		Outer carton					
				(kg)	(lb)	length		Width		Height	
						(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
M8B1TB	200	1200	2400	13.4	29.48	528	20.78	376	14.8	272	10.7

Packaging Diagram:



Connection Instruction:



Parts & Tools:

Product Spare Parts



Module

Self-provided Tools

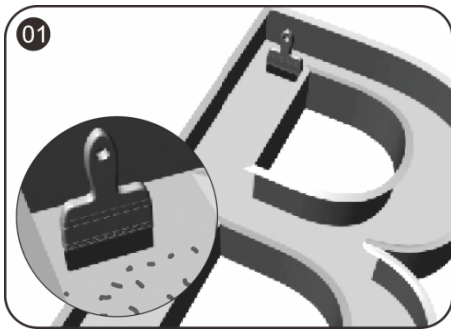


Nippers

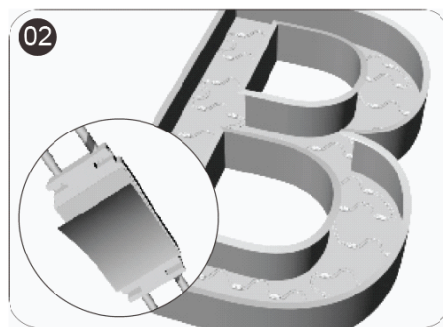


Glue gun

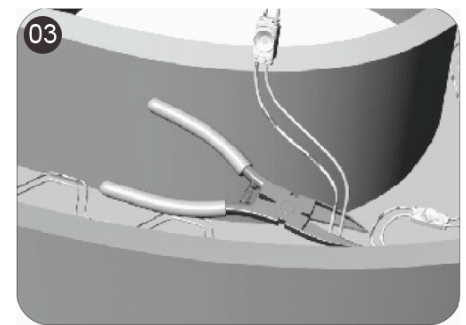
Installation Steps:



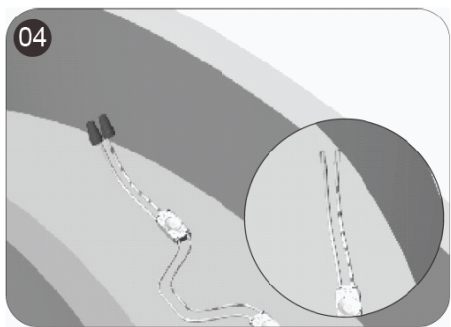
01 Clean the mounting surface



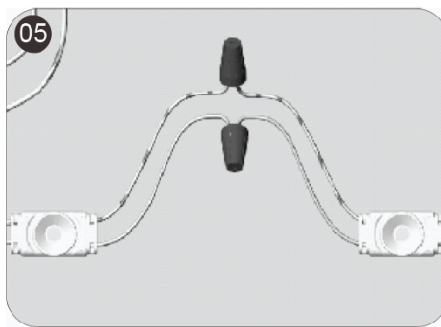
02 Peel off the release paper of double-sided adhesive tapes, then, stick modules on the installing surface for preliminary



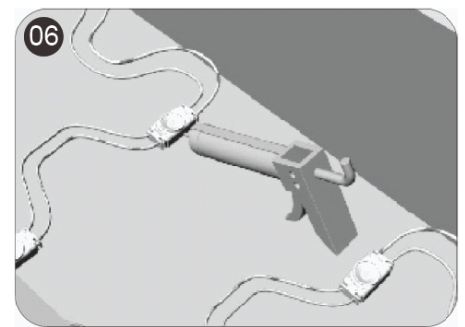
03 Cut off the modules to the desired qty, and peel off the insulation skin of wires about 10mm
Note: Please cut from the middle of wires between modules.



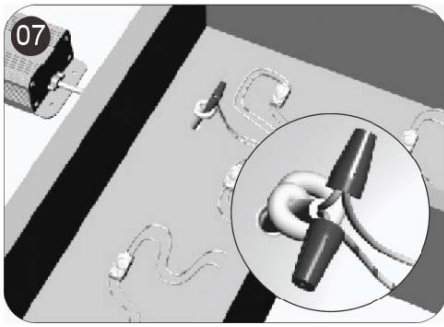
04 When the wires exposed in the last module, please peel off the insulation skin of wires about 10mm each, then, screw in terminals respectively, and dispose with waterproof, insulation protection



05 When connect the modules in series, peel off the insulation skin of wires of "+" and "-" about 10mm each, then, screw in terminals respectively, and dispose with waterproof,insulation,anti-corrosion protection and short-circuit prevention.



06 Adjust the modules to the best position, press the double-sided tape tightly and then fix by neutral glass glue.
Note: The surface of modules, especially the position of LED, can't be covered by the neutral glass glue to avoid affecting product's performance.



- Please ensure that the “+” & “-” of the wires of modules are connected with those of power supply correctly, and dispose with waterproof, insulation, anti-circuit and anti-corrosion protection.

Troubleshooting:

Malfuctions	Possible Causes	Solutions
All LEDs don't work	1. The power supply did not connect to power grid.	Power on
	2. No electricity due to short-circuit of external power supply	Remove the malfunction caused by short-circuit, power on again
	3. The wires of module connect to power supply output reversely.	Check the connecting and ensure the wires are connected correctly.
Part of LEDs don't work	1. Part of power supplies do not have output.	Check the power supply system.
	2. Part of module wires have malfunction.	
	3. Particular module connected reversely.	Correct connection
Brightness of LEDs is weak or uneven	1. Overloaded power supply	Replace it with higher power supply
	2. The power loss of power circuit is huge or the power loss of each circuit existing big difference	Ensure working voltage of modules is within $\pm 5\%V$ of rated voltage. 1. Shorten the length of wires between the first module and power supply or replaced with wires with bigger diameter; 2. Ensure the cascading qty of string is less than or equal to the allowed maximum cascading qty, and each module cascading qty is well-balanced.)
	3. Exceed in qty of modules in series.	Lessen the cascading qty for module and ensure the qty for each electrical circuit is within the maximum cascading qty.
LEDs are blinking	1. Poor contacted in the joints.	Find out and tackle malfunction immediately.
	2. Failures in power supply.	Replace power supply.

Declaration:

- ⊙ If the external flexible cable of light box is damaged, please replace it by its manufacturer or its service agent or qualified person to avoid a hazard.
- ⊙ The specific installation and cautions please refer to the user manual.
- ⊙ The given data in this specification is based on our standard product. There may be existed slight difference compared with actual products.
- ⊙ All Illustrations in this specification are for reference only.
- ⊙ This product is subject to change or modify without prior notice.
- ⊙ RISHANG OPTOELECTRONICS CO., LTD reserves the right of final explanation for this specification.

<End>

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