Specification

Prepared	Checked	Approved

Accepted	Confirmed	Approved

CE

RoHS

2835 SMD

2 LEDS Injection Lens

DC **12V** _Р

5 Years



Model: 0 M9Y2TB

2pcs 2835 SMD LEDs, 50*14*8, equipped with integrated optical

devices, injection series, 12Vdc, constant current, LED module

Figure



Features

- 2835 SMD LED with low attenuation and long life;
- Standard cascading qty up to 50pcs;
- □ Beam angle: 160°;
- Can be cut between every unit;

Applications

□ Suitable for 6~20cm depth backlighting light box

Warranty

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

Optical and Electrical Parameters:

P/N	LED Color	CCT (K) WL (nm)	CRI	SDCM	Beam Angle (°)	Luminous Flux (Im)	Luminous Efficacy (Im/W)	Working voltage (VDC)	Working current (mA)	Power (W/piece)
	Cold White	9000	≥70	-	160	70	97	12	60	0.72
м9Ү2ТВ	Pure White	6000	≥70	-	160	70	97	12	60	0.72
	Warm White	3000	≥70		160	70	97	12	60	0.72

Others:

	IP	Operating Temp S		Storag	e Temp	Standard cascading	Single-ended max.	Double-ended max.	Weight	
P/N	Grade	(□)	(D)	(□)	(□)	qty (pcs)	cascading qty (pcs)	cascading qty (pcs)	(g/piece)	(lb/piece)
MOVOTO	IDAS	-25~	-13~	-25~	-13~		05	50	0.70	0.044
M9Y2TB	IP65	+60	+140	+70	+158	50	25	25 50	6.72	0.014

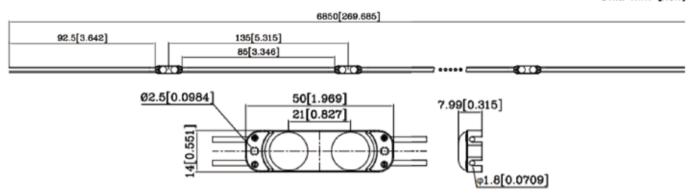
Notes:

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

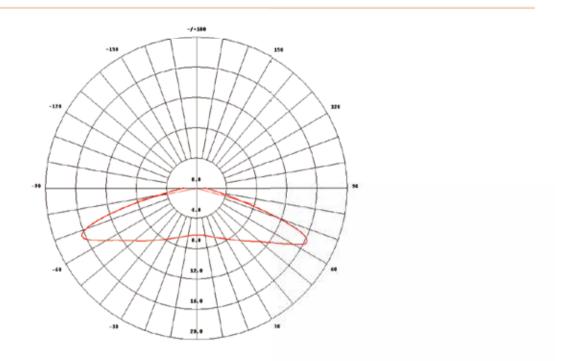


Profile Drawings:

Unit: mm [nch]



Light Distribution:



Layout Data:

Light box depth (mm)	Space between every unit (mm)	Installing density (PCS/m²)	Surface illuminance range (lux)		
dz=60	dx=70 dy=60	238	6300-6700		
dz=120	dx=130 dy=120	64	1800-2100		
dz=180	dx=130 dy=180	43	1200-1300		



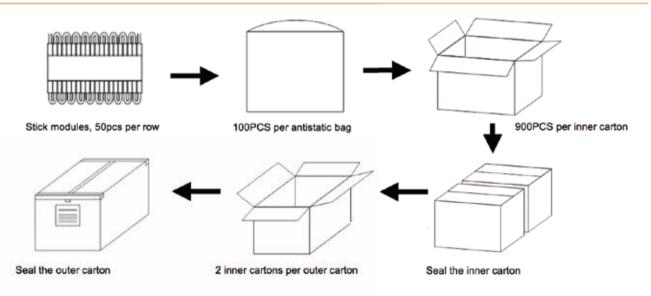
- 1. The above data is tested from the modules with color temperature of 6,000K
- 2, The above light box uses acrylic white board with 3mm depth and 54.4% light transmittance
- 3. The above illuminance is the minimum value tested on the even surface.



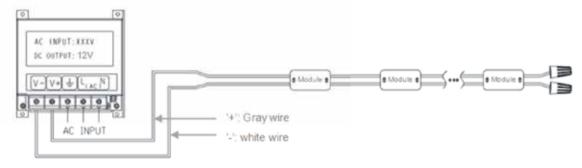
Packaging Information:

		04-	-	Total	Total		Outer carton					
	P/N (PCS/h		Qty (bag/carton)	Qty	weight		length		Width		Height	
		(PCS/bag)	(bag/carton)	(PCS)	(Kg)	(lb)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
1	м9Ү2ТВ	100	18	1800	14.0	30.86	528	20.78	376	14.8	272	10.7

Packaging Diagram:



Connection Instruction:



(Notes: Please connect the '+' and '-' of modules to those of power supply output correctly)

Parts & Tools:

Product Spare Parts



Self-provided Tools







Installation Steps:



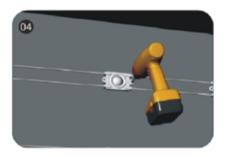
Clean the mounting surface



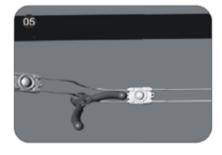
 Determine the installing position for modules and the needed qty.
 Make sure to install it in the middle.



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

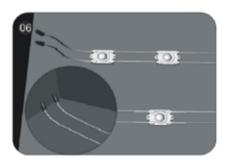


 Adjust the modules to the best position, press the double-sided tape tightly and then fix by screws

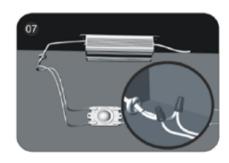


 Cut off the modules to the desired qty, and peel off the insulation skin of wires about 10mm

Note: Please cut from the middle of wires between modules.



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



Please ensure that the "+" & "-" of the wires of modules are connected with those of power supply correctly, and dispose



Troubleshooting:

Malfunctions	Possible Causes	Solutions		
	The power supply did not connect to power grid.	Power on		
All LEDs don't work	No electricity due to short-circuit of external power supply	Remove the malfunction caused by short-circuit, power on again		
	The wires of module connect to power supply output reversely.	Check the connecting and ensure the wires are connected correctly.		
	Part of power supplies do not have output.	Charlette annual content		
Part of LEDs don't work	Part of module wires have malfunction.	Check the power supply system.		
	Particular module connected reversely.	Correct connection		
	Overloaded power supply	Replace it with higher power supply		
Brightness of LEDs is weak or uneven	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 ±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.)		
	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	Poor contacted in the joints.	Find out and tackle malfunction immediately.		
LLD3 are billining	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.
- O 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.

