

# Specification

## ML883TA

**2835**  
SMD

**3**  
LEDS

Injection  
**Lens**

DC  
**12V**

IP  
**65**

**2**  
Years

**Model:** ☉ ML883TA

3pcs 2835 SMD LEDs, 70\*13.6\*5.2mm, white shell, equipped with optical devices, injection series, 12Vdc, constant voltage, LED module.

**Figure:**



**Features:**

- ☉ 2835 SMD LED with low attenuation and long life;
- ☉ Standard cascading qty up to 20pcs;
- ☉ Beam angle: 150°;
- ☉ Can be cut between every unit;

**Applications:**

- ☉ Optimal for 6-20cm depth channel letter.

**Warranty:**

- ☉ 3 years or 13,000 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)
ML883TA	white	3000	≥80	--	150	102	102	12	83	1
	White	4000	≥80	--	150	107	107	12	83	1
	white	5000	≥80	--	150	111	111	12	83	1
	white	7500	≥75	--	150	109	109	12	83	1
	White	9000	≥75	--	150	108	108	12	83	1
	White	14000	≥75	--	150	101	101	12	83	1
	Red	620-625	--	--	150	30	30	12	60	0.72

**Others:**

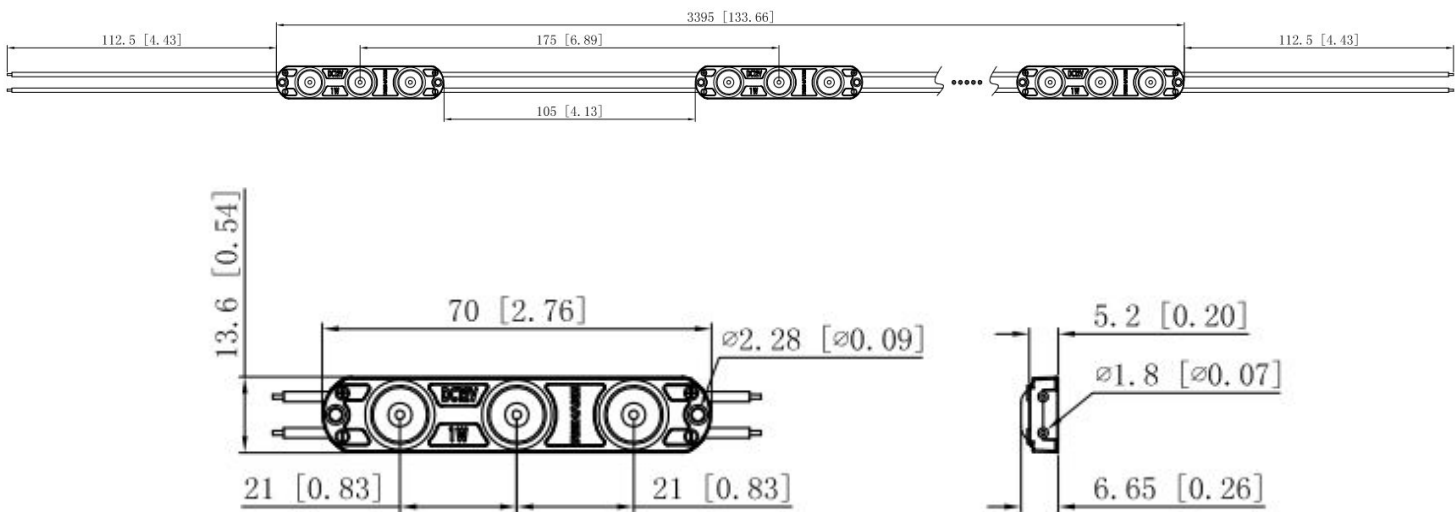
P/N	IP Grade	Operating Temp (°C)	Storage Temp (°C)	Standard cascading qty (pcs)	Single-ended max. cascading qty (pcs)	Double-ended max. cascading qty (pcs)	Weight	
							(g/piece)	(lb/piece)
ML883TA	IP65	-25~+60	-25~+70	20	20	40	7.5	0.02

Notes:

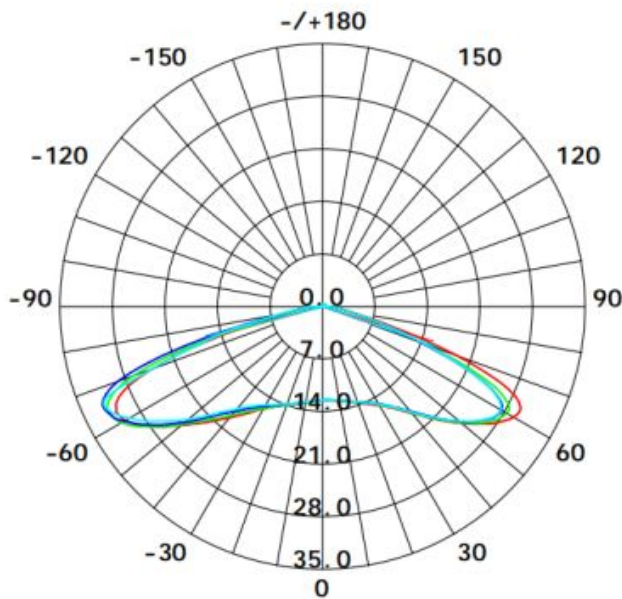
- (1)Testing environment temperature: 25±2℃;
- (2)The actual data of each single product may differ from above typical data which are subject to change without prior notice;
- (3)The above “--” means the parameters are not required temporarily.

Profile Drawings:

Unit: mm[inch]



Light Distribution:

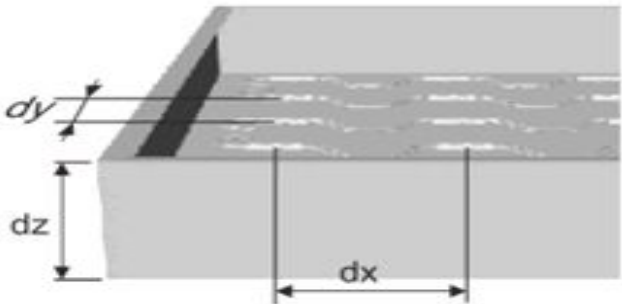


Layout Data:

Light box depth (mm)	Space between every unit (mm)	Installing density (PCS/m²)	Surface illuminance range (lux)
dz=60	dx=100 dy=60	167	8100-9400
dz=80	dx=120 dy=80	104	5400-6300
dz=120	dx=175 dy=120	48	2600-3000

Notes:

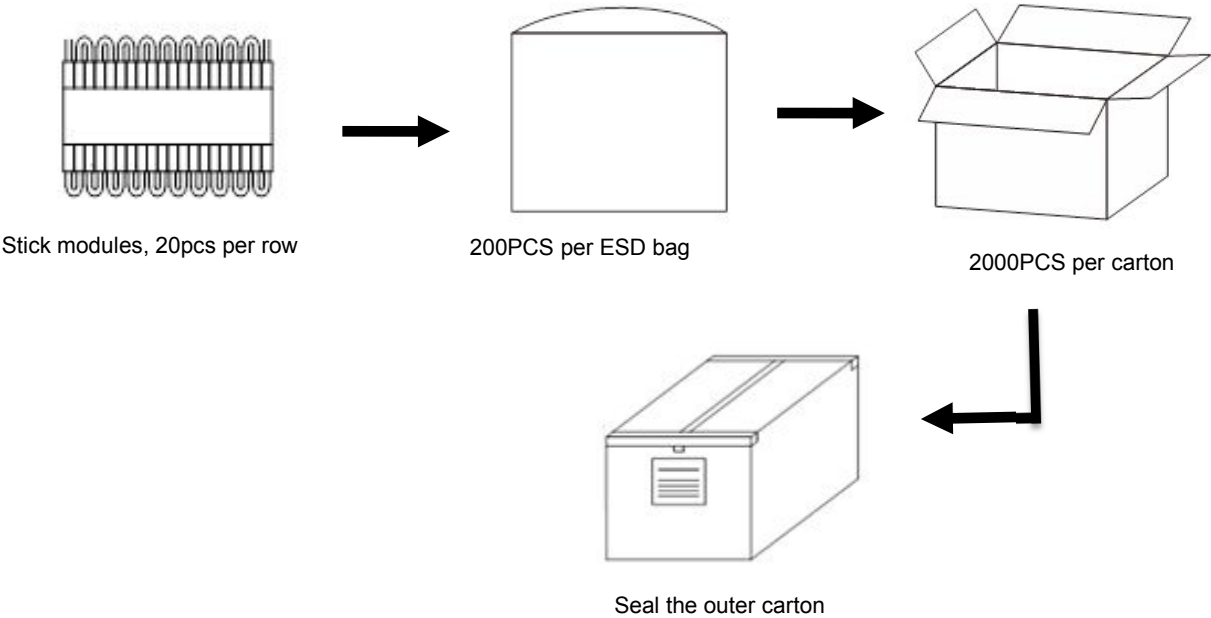
- 1. The above data is tested from the modules with color temperature of 7,000K
- 2. The above light box uses acrylic white board with 3mm depth and 54.4% light transmittance
- 3. The above illuminance is the minimum value tested on the even surface.
- 4. The above data is for reference only.



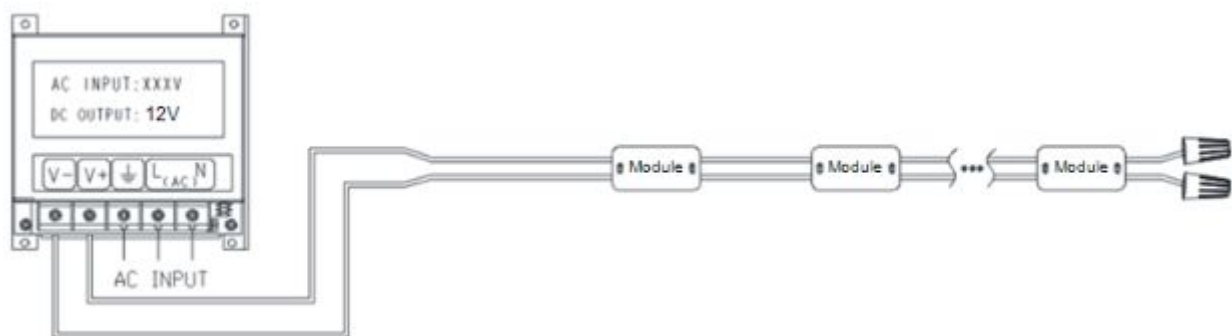
Packaging Information:

P/N	Qty (pcs/bag)	Qty (bag/carton)	Total Qty (pcs)	Total weight		Outer carton					
						length		Width		Height	
				(kg)	(lb)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
ML883TA	200	10	2000	16.9	37.26	410	16.14	320	12.6	315	12.4

Packaging Diagram:



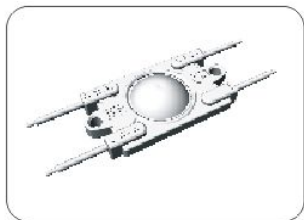
Connection Instruction:



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

Parts & Tools:

Product Spare Parts



Module

Self-provided Tools



Cutting nipper, Electrical Drill & Drilling bit

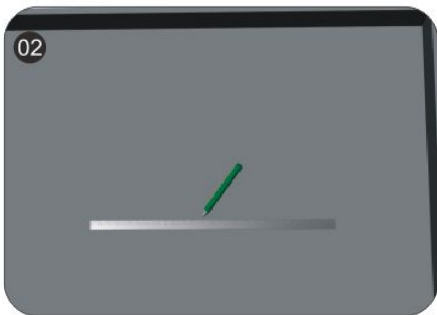


Screw

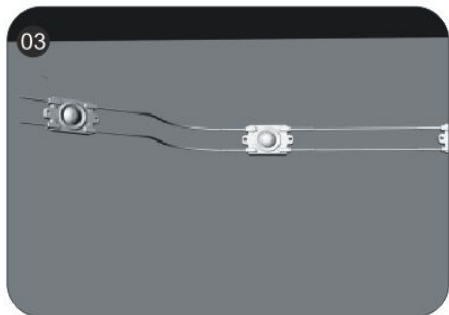
Installation Steps:



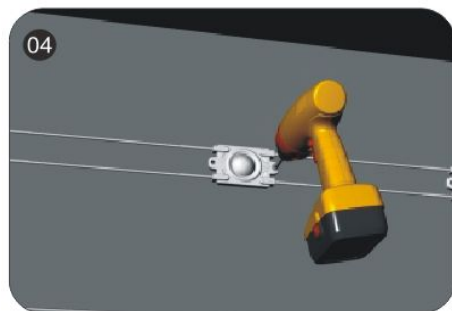
Clean the mounting surface



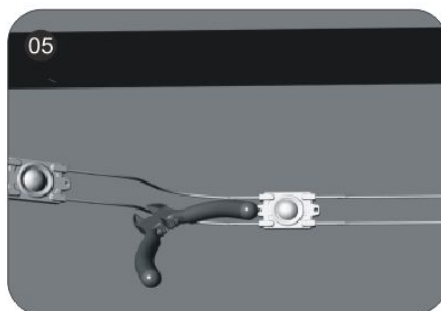
Determine the installing position for modules and the needed qty. Make sure to install it in the middle.



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

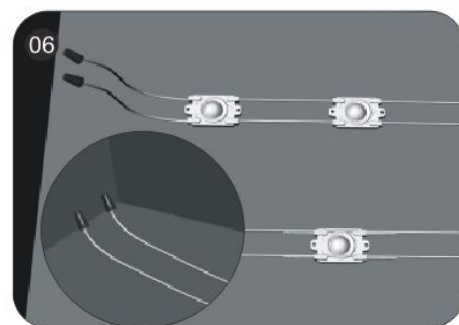


- Adjust the modules to the best position, press the double-sided tape tightly and then fix by screws

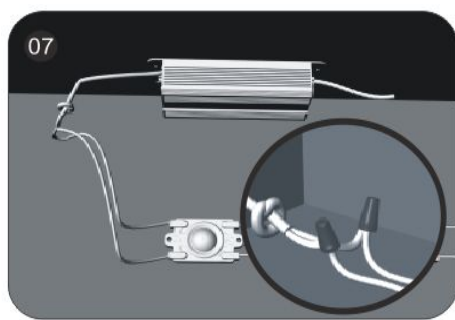


- Cut off the modules to the desired qty, and peel off the insulation skin of wires about 10mm

△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 with waterproof, insulation, anti- circuit and anti-corrosion protection.

## Troubleshooting:

Malfunctions	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.