

SPECIFICATION



REFOND P/N

RF-MTD**2T06-C1

R & D

Mass Product

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1. LED Module Description/

LED Module designed according to the market mainstream of lamps and lanterns, easy to match, assembly is convenient;

LED Module with high reliability and high safety;

LED Module use 2835 LED Package, high lighting efficiency, low heat, without Mercury, belong to the environmental protection cold light source;

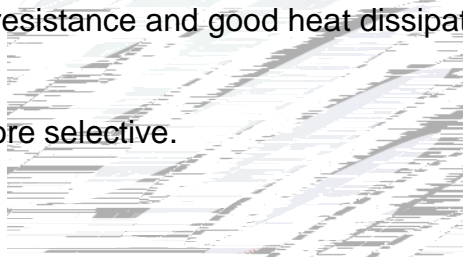
2835LED

LED Module electrical parameter design in line with the market mainstream LED power supply, easy to match, the assembly is convenient

LED

LED Module with lower thermal resistance and good heat dissipation;

High CRI , Color temperature more selective.



2.LED Module Specification /

2.1 Optical-electrical Characteristics(Absolute Maximum Ratings At Ts=25)/

Tab.2-1Optical-electrical Characteristics

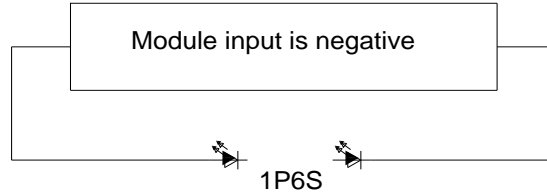
Refond PN	Module Characteristics						
	Current mA	Voltage(V)		Power(W)		Module LM	
	Typ	Min	Max	Min	Max	Min	Max
RF-MTD302T06-C1 2870-3220K	150	30	45	4.5	6.75	570	660
RF-MTD402T06-C1 3700-4275K)	150	30	45	4.5	6.75	630	720
RF-MTD652T06-C1 5925-7150K)	150	30	45	4.5	6.75	630	720
(I mA)Test condition		olor Rendering Index			Min	Max	Typ
150		80			80	82	84
(MacAdamElipsis)					5		

Tab.2-2 Absolute Maximum Ratings at Ts=25°C

Parameter	Symbol	Rating	Units
Forward Current	I _F	150	mA
Peak Forward Current	I _{FP}	155	mA
Reverse Voltage	V _R	5	V
Electrostatic Discharge	E _{SD}	2000	V
Operating Temperature	T _{OPR}	-40 ~ +85	
Storage Temperature	T _{STG}	-40 ~ +100	
unction temperature LED	T _J	≤110	

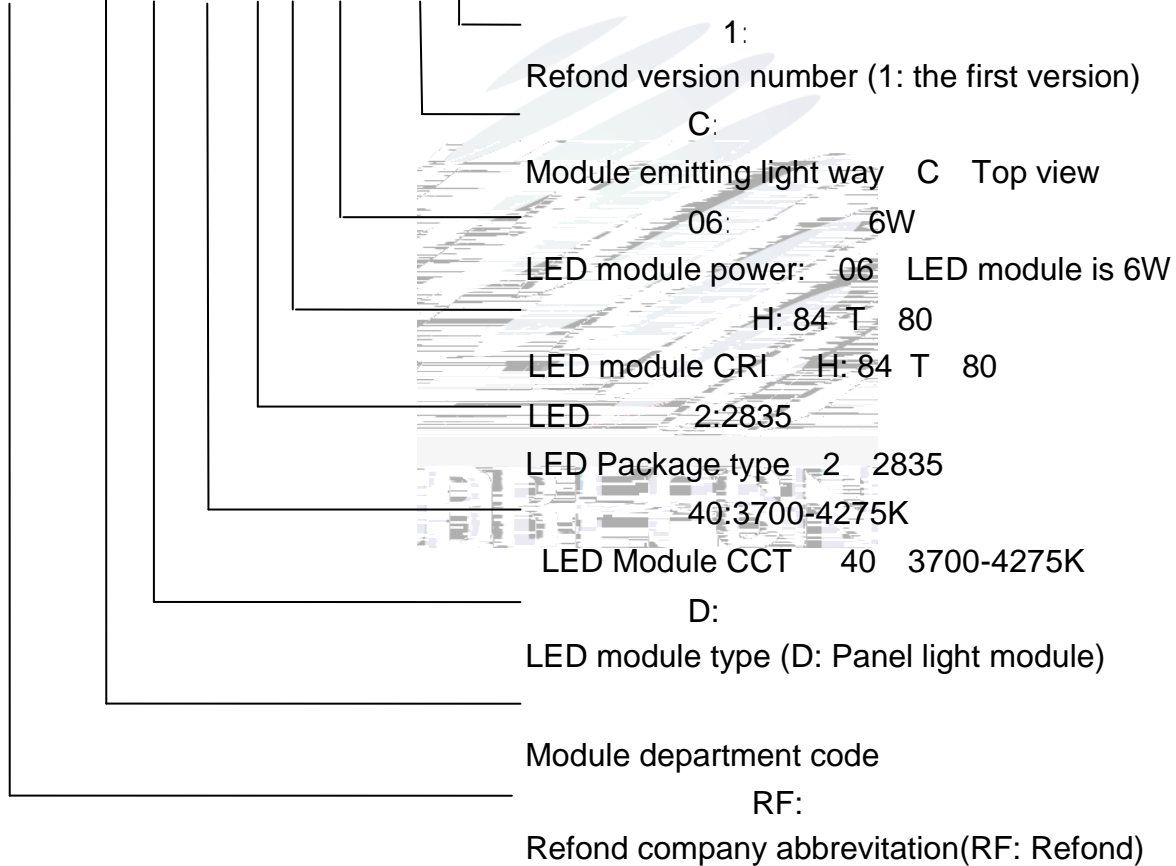
2.2 LED Module Schematic And Interface Definition/

Fig.2-2ED Moduleconnection



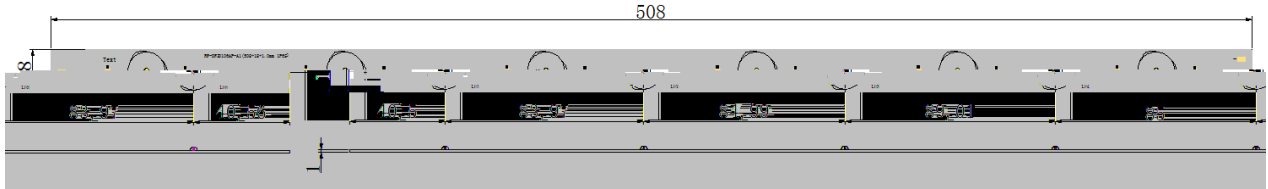
2.3 LED Module rule of naming :

RF - MT D 40 2 T 06 - C 1

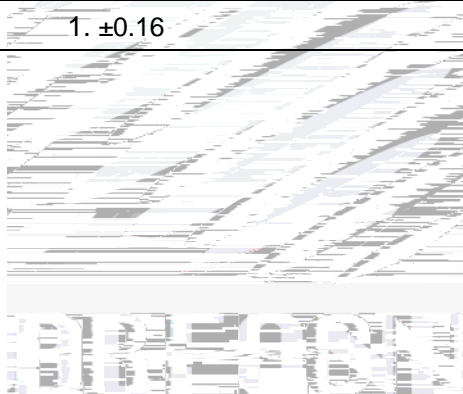


3. Product Specification /

3.1 Outline Dimension /



	Dimension	Specification	Tolerance
L	Module Length	508±0.3	
W	Module Width	18±0.3	
H	PCB Thickness	PCB 1. ±0.16	





5.LED Module Materials Performance Test And Method At Ta=25 /

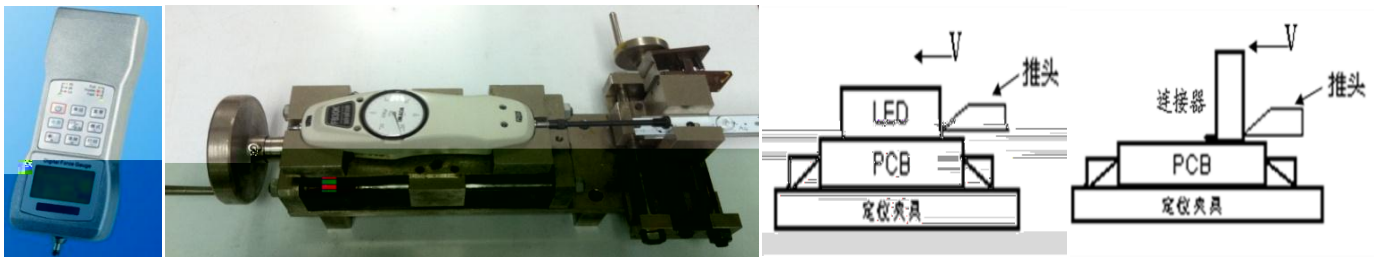
Tab 5-1Light Bar Materials Performance Test And Method Ta=25

Test Item/	Test Conditions/	Test Methods/
LED Optical-electrical Characteristics/LED	Compliance With Specifications/	Integrating Sphere/
Connector Pull Force/		Notes/
LED Push & Pull Force/ LED		
LED Welding Standards/ LED	Offset Specifications/ X Shift /X Y Shift/ Y Angle/	

Notes

Fig 5-1Push &Pull Test Equipment

Fig 7-2Push &Pull Test Method



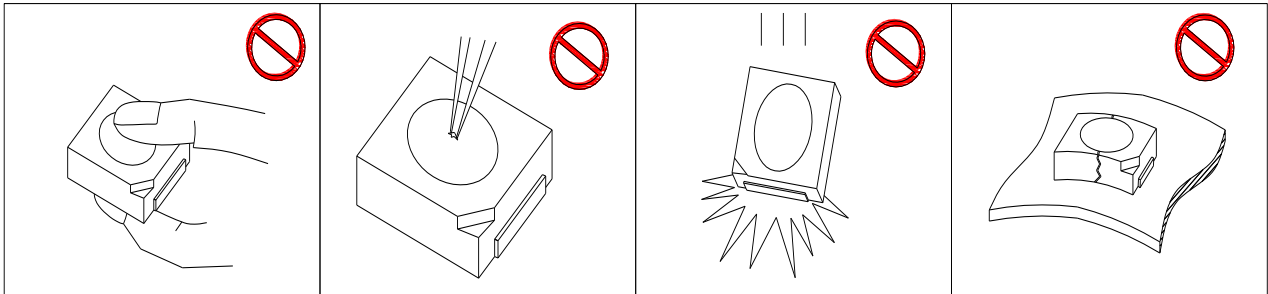
6.Packing Criterion/

6.1 Package Diagram /

Fig 8-1Package Diagram /

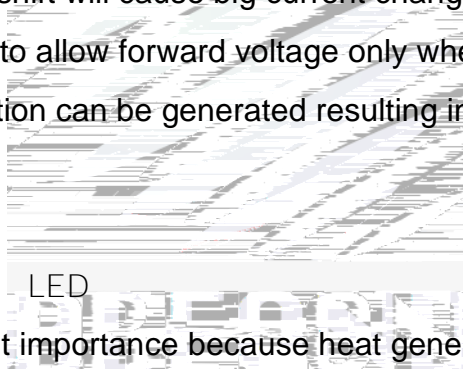


(4) Handle the component along the side surface by using forceps or appropriate tools; do not directly touch or Handle the silicone lens surface, it may damage the internal circuitry.



(5) In designing a circuit, the current through each LED cannot be exceeded the absolute maximum rating specified for each LED. In the meanwhile, resistors for protection should be applied, otherwise slight voltage shift will cause big current change, burn out may happen. The driving circuit must be designed to allow forward voltage only when it is ON or OFF. If the reverse voltage is applied to LED, migration can be generated resulting in LED damage.

LED



LED

(6) Thermal Design is paramount importance because heat generation may result in the Characteristics decline, such as brightness decreased, Color change and so on. Please consider the heat generation of the LEDs when making the system design. LED

LED

(7) Compared to standard encapsulants, silicone is generally softer, and the surface is more likely to attract dust, requiring special care during processing. In cases where a minimal level of dirt and dust particles cannot be guaranteed, a suitable cleaning solution must be applied to the surface after the soldering of components. Refond suggests using isopropyl alcohol for cleaning. In case other solvents are used, it must be assured that these solvents do not dissolve the package or resin. Ultrasonic cleaning is not recommended. Ultrasonic cleaning may cause

damage to the LED.

LED

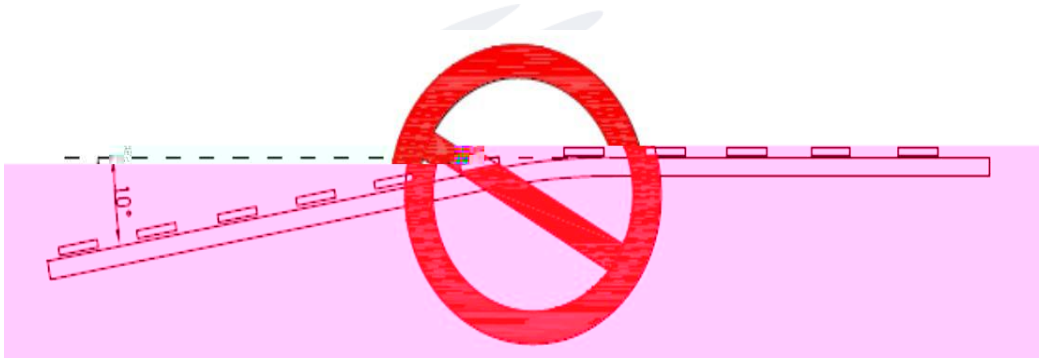
(8) Similar to most Solid state devices; LEDs are sensitive to Electro-Static Discharge (ESD) and Electrical Over Stress (EOS).

LED

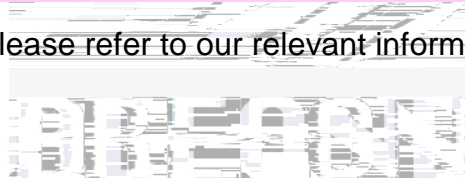
9>.NO warping or twisting the Light Bar more than 10°. Forbidding holding the LED part or connector part when handling.

10°

LED

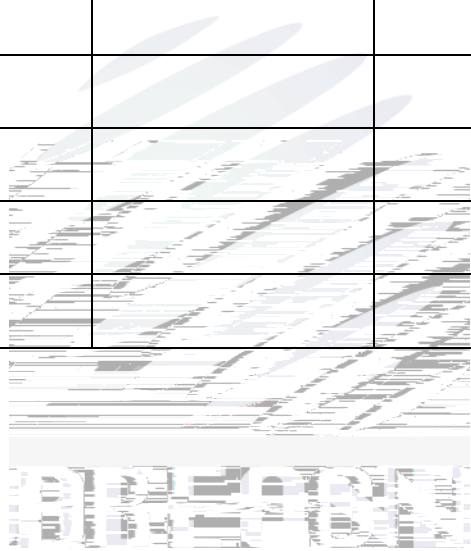


(10) Other points for attention, please refer to our relevant information.



Version History/

Date	Revisor	Version	Verifier	Remarks
2021-8-16		E/0		The first edition





Declare

This specification is written both in English and in Chinese and the latter is formal.