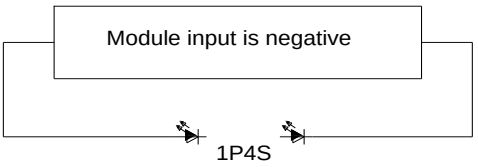
1. LED Module Description

2.2 LED Module Schematic And Interface Definition

Fig.2-2ED Moduleconnection



2.3 LED Module rule of naming :

RF–MTU402T04–D1

1

Refond version number (1: the first version)

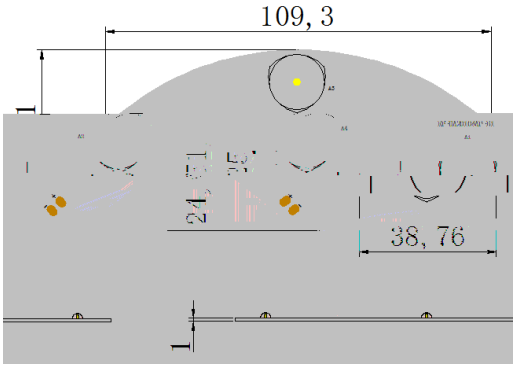
D

module emitting light way ÄD ÖTop view Å

04 4W

3. Product Specification

3.1 Outline Dimension



	Dimension Specification Tolerance
L	Module Length 109.3±0.3
W	Module Widht 51.01±0.3
H1	PCB Thickness PCB 1. ±0.1

4.LED Module Reliability Test

Tab 4-1 Light Bar Reliability Test

Test Item/	Test Conditions/	Test Time/	Number Of Test/	Judgement Criterions/
Operating Life At Room Temperature/	T_A=25 I_F=300mA Tj<110	500Hrs	0/6	1. 90-) Vf<110%, CIE x/ y<0.015 2.No catastrophic failure
Operating Life At High Temperature/	T_A=60 I_F=300mA T_J<110	500Hrs	0/6	
Operating Life At High Temperature And Humidity/	60 R_H=90% I_F=300mA Tj<110	500Hrs	0/6	
Thermal Shock/	-40 15min . - P 85 15min	100 cycle	0/6	No DeadLED

Notes

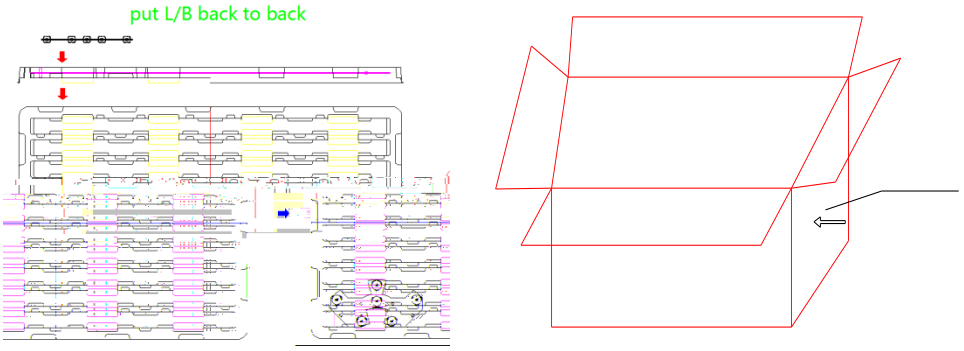
Thermal shock do not guarantee lens such as visual performance,transform an crack..

voltage distribution, heat dissipation and others.

6.Packing Criterion

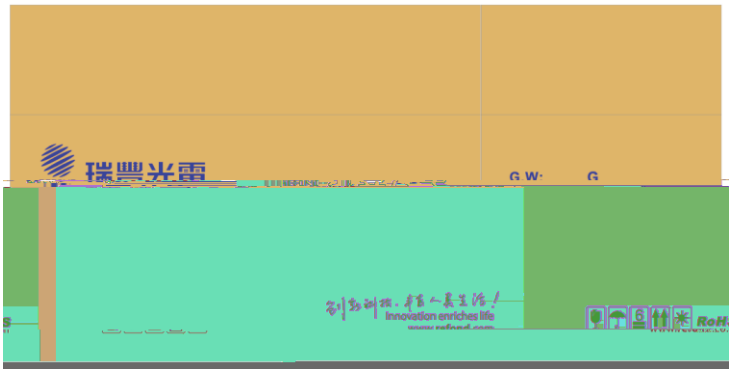
6.1 Package Diagram /

Fig 8-1Package Diagram /



6.2 Carton silk printing/

REFOND LOGOPay attention to identify

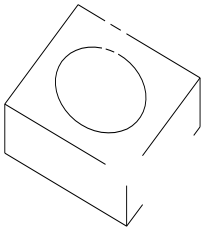


6.3Label Form Specification/

深圳市瑞豐光電子股份有限公司
REFOND SHENZHEN REFOND OPTOELECTRONICS CO.,LTD.

/customer PN			
/P.N			
/BIN CODE		/LM	
/VF		/CCT	
		/QTY	
/N.W		/DATE	

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



(5) In designing a circuit,the current through each LED cannot be exceed 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.

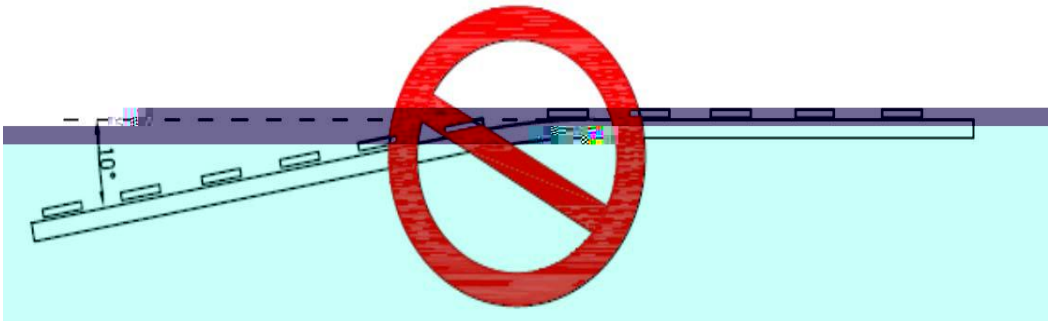
(6) Thermal Design is paramount importance because heat generation may result in the Characteristics decline,such as brightness decreased,Color change and so on.Please consider the heat generation of the LEDs when making the system design.LED

(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.

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

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



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

www.refond.com

Declare

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