



深圳市绿色半导体照明有限公司
Light Green International Co.,Ltd.

SPECIFICATIONS FOR LIGHT GREEN SURFACE MOUNT LED

Model: **LGI-W3FMF48JA-A40**

Company Name: _____

Confirmed By
Customer: _____

DATE: _____

深圳市绿色半导体照明有限公司

SHENZHEN Light Green International CO. , LTD

深圳市南山区松白路百旺信工业园二区第 6 栋

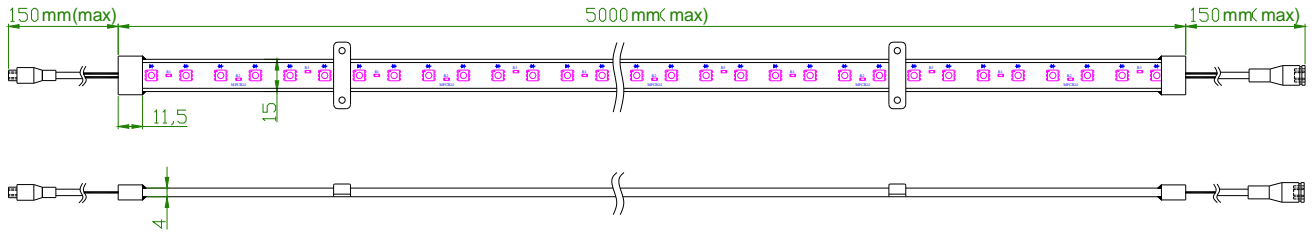
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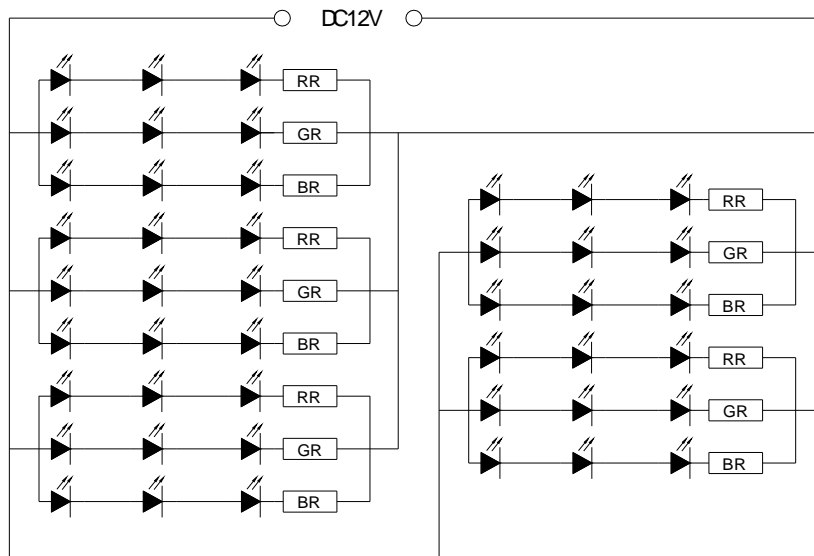
[Http://www.light-green.cn](http://www.light-green.cn)



Technical Features

Size of the strip(L x W x H)

5000mm x17mm x4.5mm (tube)



Technical Operating Data

Product	Color	Number of LEDs/M	Votagle [V DC]	Power [W]/M	Current [MA]/M	Viewing angle [°]	Wave length[nm] Color temp[°]	Lum.[lm] IV[mcd]
LGI-W3FMF48JA-A40	R	30	12	7.2	600	120	625	18lm
	G						565	71lm
	B						465	23lm

All Data are related to one meter

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily

correspond to the actual parameters of each single product which could differ from the typical data.

Technic Features

- 1、 With 95% of light transmission rate materials, greatly improved the photosynthetic efficiency
- 2、 With excellent structural design, the waterproof properties reach IP68
- 3、 With connector at both ends, you can connect in any length



Feature

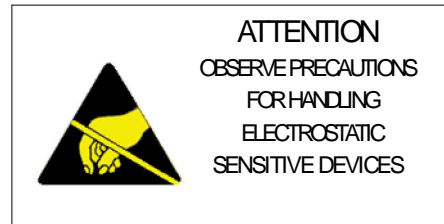
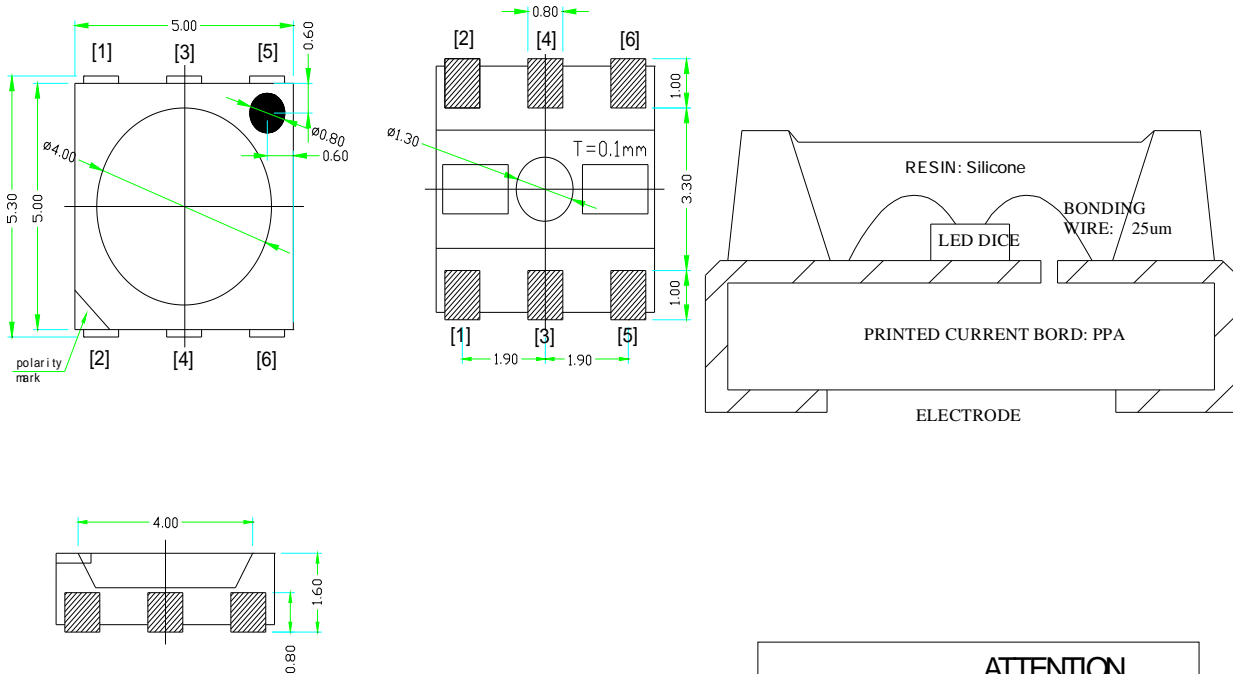
Viewing angle:120 deg

The materials of the LED dice is InGaN

5.3mm×5.0mm×1.5mm SMT-LED

RoHS compliant lead-free soldering compatible

Package Outline



NOTES:

1. All dimensions are in millimeters (inches);
2. Tolerances are $\pm 0.2\text{mm}$ (0.008inch) unless otherwise noted.



Reflow profile

n Soldering condition

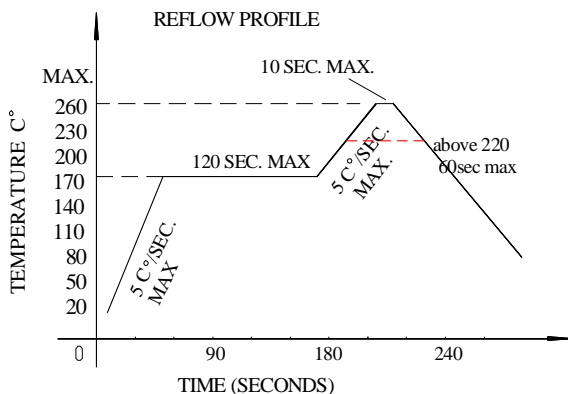
- Recommended soldering conditions

Reflow Soldering		Hand Soldering	
Pre-heat	160 ~ 180	Temperature	300 Max.
Pre-heat time	120 seconds Max.	Soldering time	3 second Max. (one time only)
Peak temperature	260 Max.		
Soldering time	10 seconds Max.		
Condition	Refer to Temperature-profile		

- After reflow soldering rapid cooling should be avoided

n Temperature-profile (Surface of circuit board)

Use the following conditions shown in the figure.



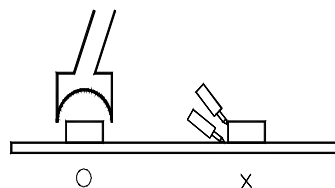
1. Reflow soldering should not be done more than two times
2. When soldering ,do not put stress on the LEDs during heating

n Soldering iron

1. When hand soldering, keep the temperature of the iron under 300 , and at that temperature keep the time under 3 sec.
2. The hand soldering should be done only a time
3. The basic spec is 5 sec. when the temperature of 260 , do not contact the resin when hand soldering

n Rework

1. Customer must finish rework within 5 sec und
2. The head of iron can not touch the resin
3. Twin-head type is preferred.



n CAUTIONS

The encapsulated material of the LEDs is silicone . Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when using the picking up nozzle, the pressure on the silicone resin should be proper



Reliability

(1) TEST ITEMS AND RESULTS

Type	Test Item	Test Conditions	Note	Number of Damaged
Environmental Sequence	Resistance to Soldering Heat(Reflow Soldering)	Tsld=260 ,10sec	2 times	0/22
	Temperature Cycle	-40 30min 5min 80 30min	100 cycle	0/100
	Thermal Shock	-40 15min 80 15min	100 cycle	0/100
	High Temperature Storage	T _a =80	1000 hrs	0/100
	Temperature Humidity Storage	T _a =60 RH=90%	1000 hrs	0/100
	Low Temperature Storage	T _a =-30	1000 hrs	0/100
	Power On/off Cycle Test IF=20mA	On 2 hours Off 10min	100 cycle	0/100
Operation Sequence	Life Test	T _a =25 I _F =20mA	1000 hrs	0/100
	High Humidity Heat Life Test	60 RH=90% I _F =20mA	500 hrs	0/100
	Low Temperature Life Test	T _a =-20 I _F =20mA	1000 hrs	0/100
	Drop	75cm	3 times	0/10

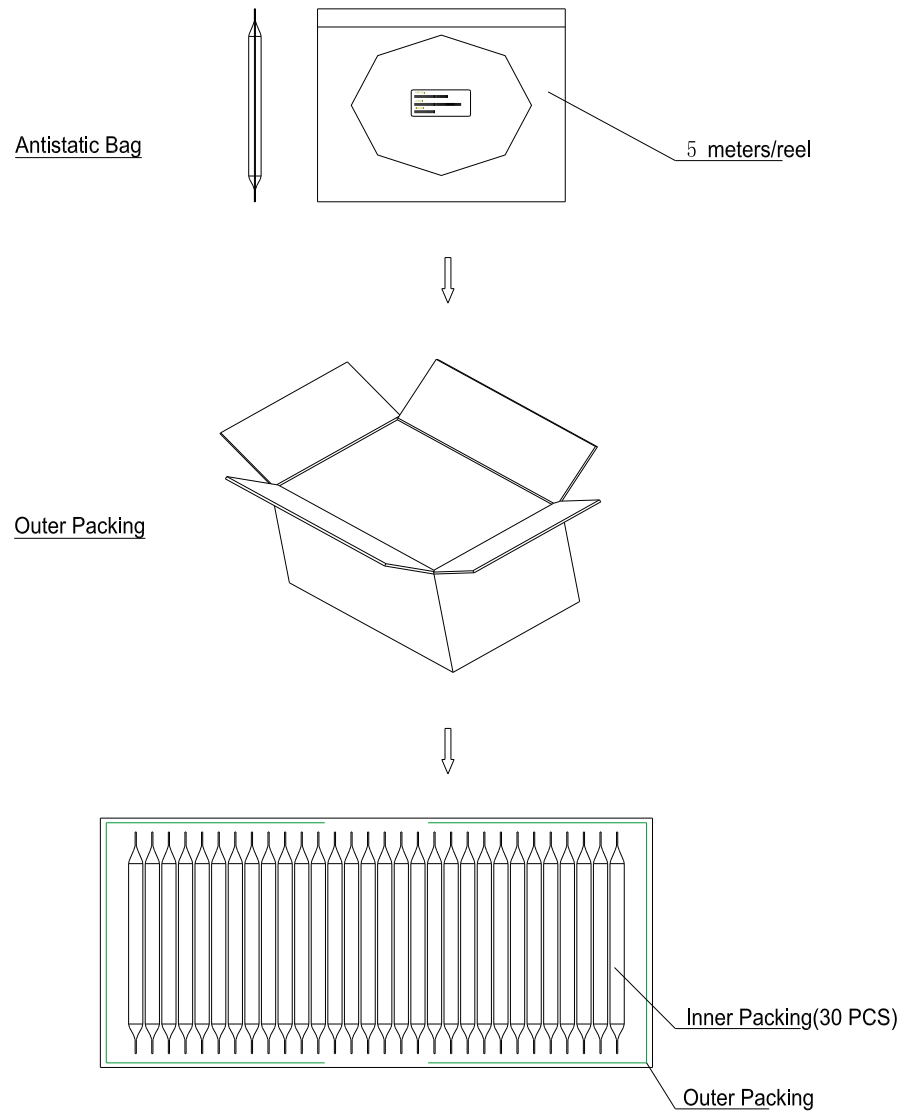
(2)CRITERIA FOR JUDGING THE DAMAGE

Item	Symbol	Test Conditions	Criteria for Judgement	
			Min.	Max.
Forward Voltage	VF	IF=10mA	—	U.S.L*)x1.1
Reverse Current	IR	VR=5V	—	U.S.L*)x2.0
Luminous Intensity	IV	IF=10mA.	L.S.L**)x0.7	—

U.S.L.: Upper Standard Level

L.S.L.: Lower Standard Level

Package :



APPROVED BY:		CHECKED BY:		PREPARED BY:	
DATE:		DATE:		DATE:	