



**Approval Sheet**  
**( 確 認 書 )**

編號 Ref. No.	LD-YL1503007 A01
日期 Issued Date	2015/3/18

**公司名稱** : 大赫  
 Company Name \_\_\_\_\_

**產品編號** : 33G4UC01  
 Part No. \_\_\_\_\_

**產品種類** : LIGHT EMITTING DIODES  
 Category \_\_\_\_\_

**產品描述** : 3 mm Ultra Bright Water Clear LED  
 Description \_\_\_\_\_

**客戶產品編號** :  
 Your Part No. \_\_\_\_\_

**備注** :  
 Remarks \_\_\_\_\_

**審核結果 (Comments)**

Authorized Signature 客戶簽字				
部 門 Department				
簽 字 Signature				

- 1) 當審批程序完成時，懇請貴客簽字回傳
- 1) Please SIGN and RETURN once the item is approved
- 2) 規格書會作出相應變更而不作另行通知
- 2) Specifications are subject to change without notice
- 3) 版權所有
- 3) All rights reserved.

ISSUER	CHECKER	ENGINEER
刘松湛		



PART NO. : 33G4UC01

DATE : 18 March 2015

3 mm Ultra Bright Water Clear LED

## SPECIFICATION

### ABSOLUTE MAXIMUM RATING (Ta=25°C)

Item	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	48	mW
Forward Current	I <sub>F</sub>	20	mA
Peak Forward Current (1/10 Duty Cycle, 0.1 ms Pulse Width)	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-40~+80	°C
Storage Temperature	T <sub>stg</sub>	-40~+80	°C

### ELECTRICAL/OPTICAL CHARACTERISTICS RATING (Ta=25°C)

Item	Symbol	Test Condition	Rating			Unit
			Min.	Typ.	Max.	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	2.7	---	3.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	---	---	10	μA
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> =20mA	5000	---	8000	mcd
Dominant Wave Length	λ <sub>d</sub>	I <sub>F</sub> =20mA	520	---	530	nm
Viewing Angle 2θ <sub>1/2</sub>	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	40°			deg.

#### Notes:-

1) θ<sub>1/2</sub> is the off-axis angle where the luminous intensity is half the optical centerline value.

**Soldering Conditions** : Soldering Temp. ≤ 260°C

Soldering Time ≤ 5 Sec.



#### Caution

: ESD protection measures shall be considered and taken in the initial design stage, because static electricity and surge could damage the LED. A wrist band or an anti-electrostatic glove should be used when handling Electrostatic Sensitive Devices.

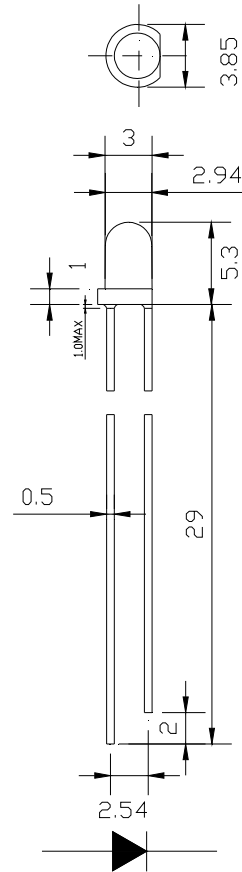
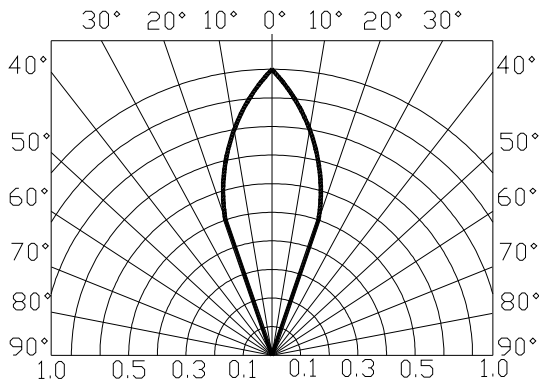


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**3 mm Ultra Bright Water Clear LED**

**PACKAGE DIMENSION**



Item	Materials
Resin(Mold)	Epoxy Resin
Lead Frame	Copper Alloy

**Colloid Tolerance:  $\pm 0.25$**

**Pin :  $\pm 1.0$**

**Unit: mm**

Part Number	Emitting Color	Lens Type
33G4UC01	Green	Water Clear

**NOTE :**

1. All dimensions are in millimeter Unit : mm.
2. Soldering Conditions : Soldering Temp:**260°C** 1/16 Inch below Seating place for 5 seconds.
3. ESD Bag : **1000**pcs/bag



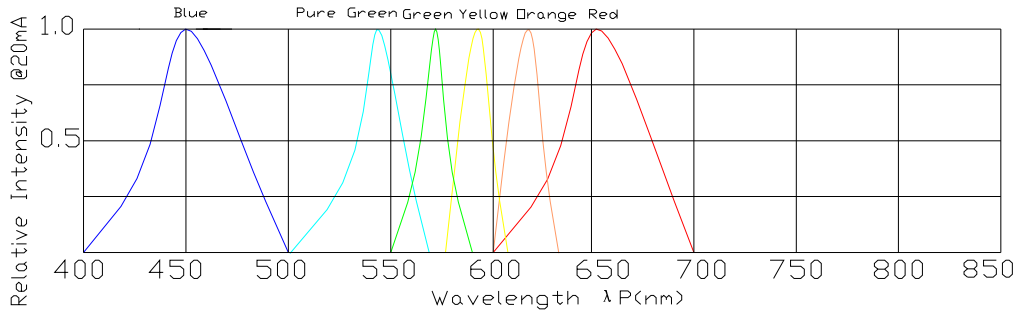
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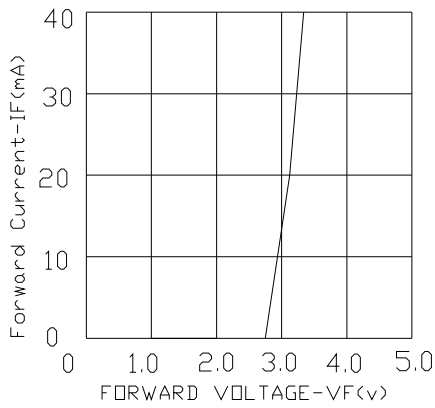
3 mm Ultra Bright Water Clear LED

**Typical Electrical/Optical Characteristics Curves**

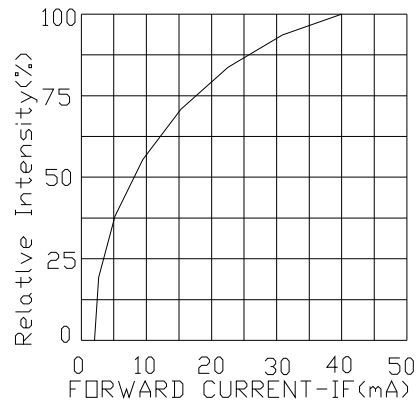
Spectral Distribution



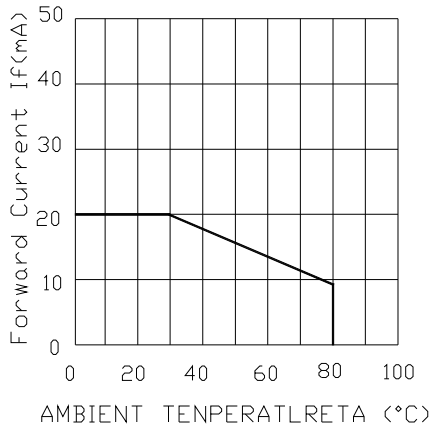
FORWARD CURRENT VS. FORWARD VOLTAGE



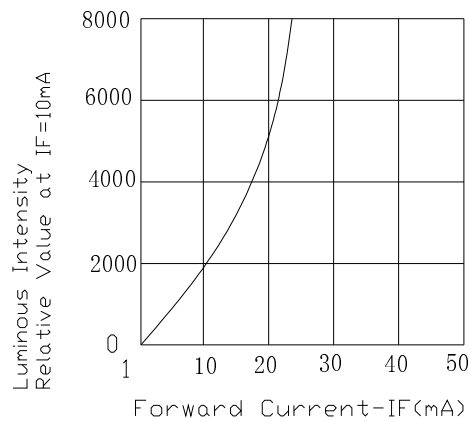
Relative Intensity VS FORWARD CURRENT



AMBIENT TEMPERATURE FORWARD CURRENT VS



Luminous Intensity VS. Forward Current





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3 mm Ultra Bright Water Clear LED

**分档标准**

我司型号: 33G4UC01

测试条件: 20mA

PIN 号	电压(V)	亮度(mcd)	波长(nm)
1	2.7-3.4	4500-5800	522-524
2	2.7-3.4	5800-7000	522-524
3	2.7-3.4	7000-8500	522-524
4	2.7-3.4	4500-5800	524-526
5	2.7-3.4	5800-7000	524-526
6	2.7-3.4	7000-8500	524-526