

# PRODUCT SPECIFICATION

**Model No.: FYL-48D2SURC1A**

Descriptions:
<ul style="list-style-type: none"> <li>■ Dice material: AlGaInP.</li> <li>■ Emitting Color: Super Bright Red.</li> <li>■ Device Outline: <math>\Phi</math>4.8mm round type.</li> <li>■ Lens Type: Water clear.</li> </ul>



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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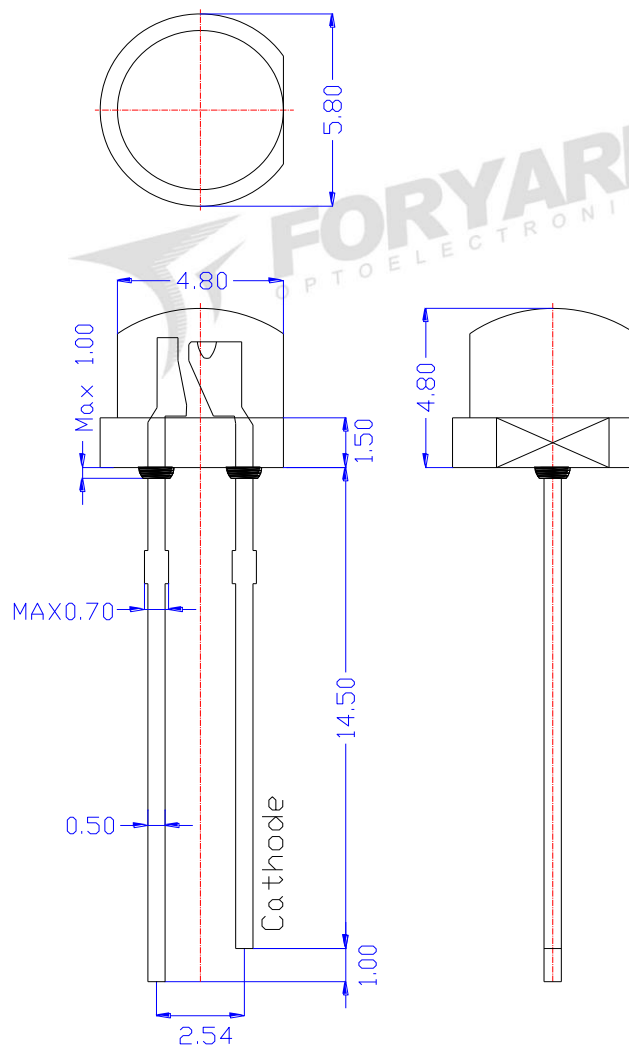
**E-mail:**Sales@foryard.com (General)

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### ■ Features

- 1.Low power consumption.
- 2.High efficiency.
- 3.General purpose leads.
- 4.High intensity.
- 5.RoHs compliant.

### ■ Package configuration



### Notes:

1. All dimensions are millimeters (inches)
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The drawing is different from the actual one, please refer to the sample.

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### ■ Absolute Maximum Ratings(Ta=25°C)

Parameter	MAX.	Unit
Power Dissipation	75	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature[4mm(.157") From Body]	260°C for 5 Seconds	

### ■ Typical Electrical & Optical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_V$	350	700	1380	mcd	IF=20mA
Viewing Angle	$2\theta_{1/2}$	---	50	---	Deg	
Peak Emission Wavelength	$\lambda_p$	---	630	--	nm	
Dominant Wavelength	$\lambda_d$	618	625	630	nm	
Spectral Line Half-Width	$\Delta\lambda$	---	20	--	nm	
Forward Voltage	$V_F$	1.8	2.1	2.4	V	VR=5V
Reverse Current	$I_R$	---	---	10	$\mu$ A	

Note:

- 1.Luminous Intensity is based on the Foryard standards.
- 2.Pay attention about static for InGaN

#### ■ Luminous Intensity Guide (Unit: mcd) @IF=20mA

Code	N13	N14	N15	N16
Luminous Intensity(mcd)	350~500	500~700	700~1000	1000~1380

Tolerance of measurement of luminous intensity is  $\pm 15\%$

#### ■ Dominate Wavelength Guide (Unit: nm) @IF=20mA

Code	R1	R2	R3	R4
Dominate Wavelength(nm)	618~621	621~624	624~627	627~630

Tolerance for each Dominate Wavelength bin is  $\pm 1$ nm

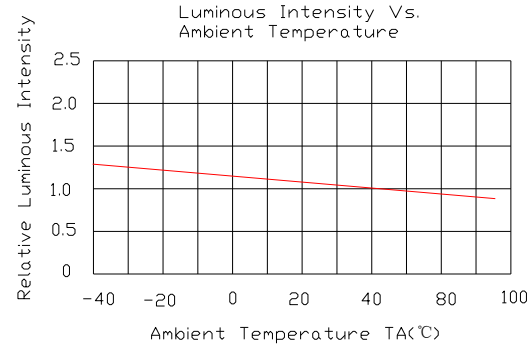
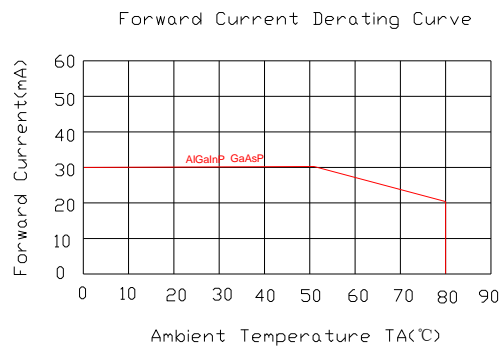
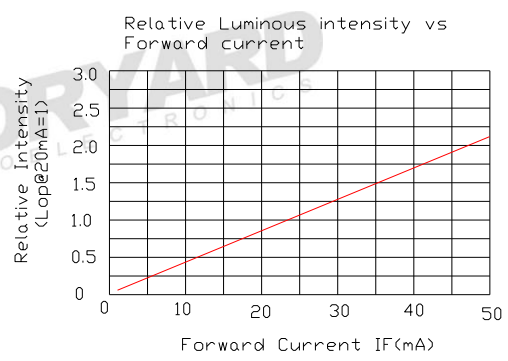
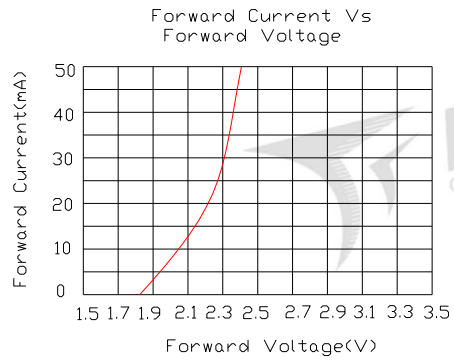
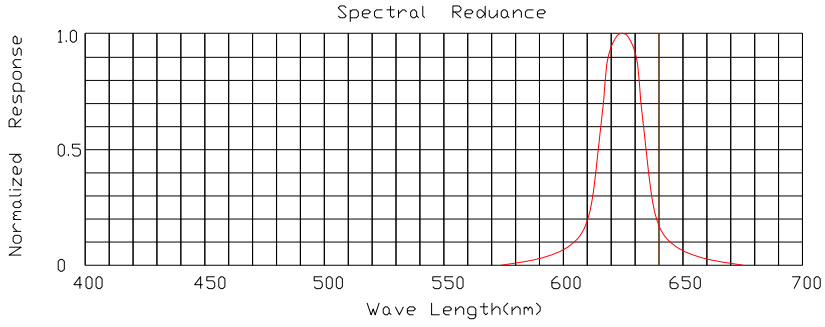
#### ■ Forward Voltage Guide (Unit: V) @IF=20mA

Code	V2	V3a	V3b	V4
Forward Voltage(V)	1.8~2.0	2.0~2.1	2.1~2.2	2.2~2.4

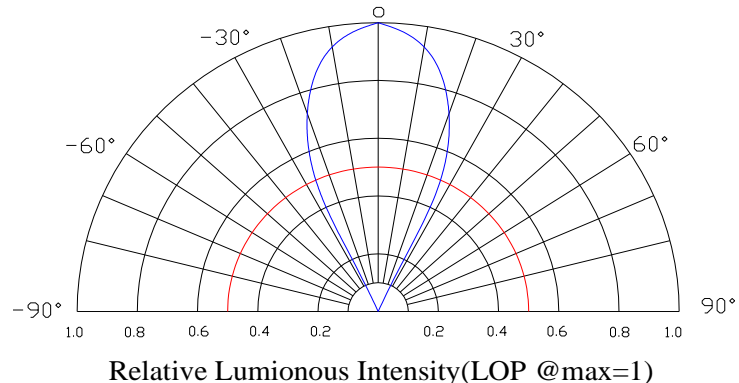
Tolerance of measurement of forward voltage is  $\pm 0.1$ V

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**Typical Electrical/Optical Characteristics Curves(Ta=25°C Unless Otherwise Noted)**

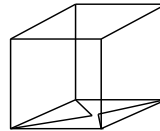
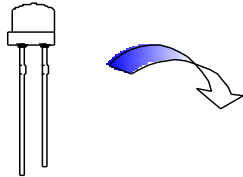


**Radiation pattern**

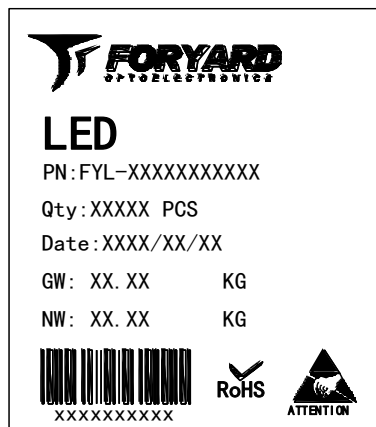
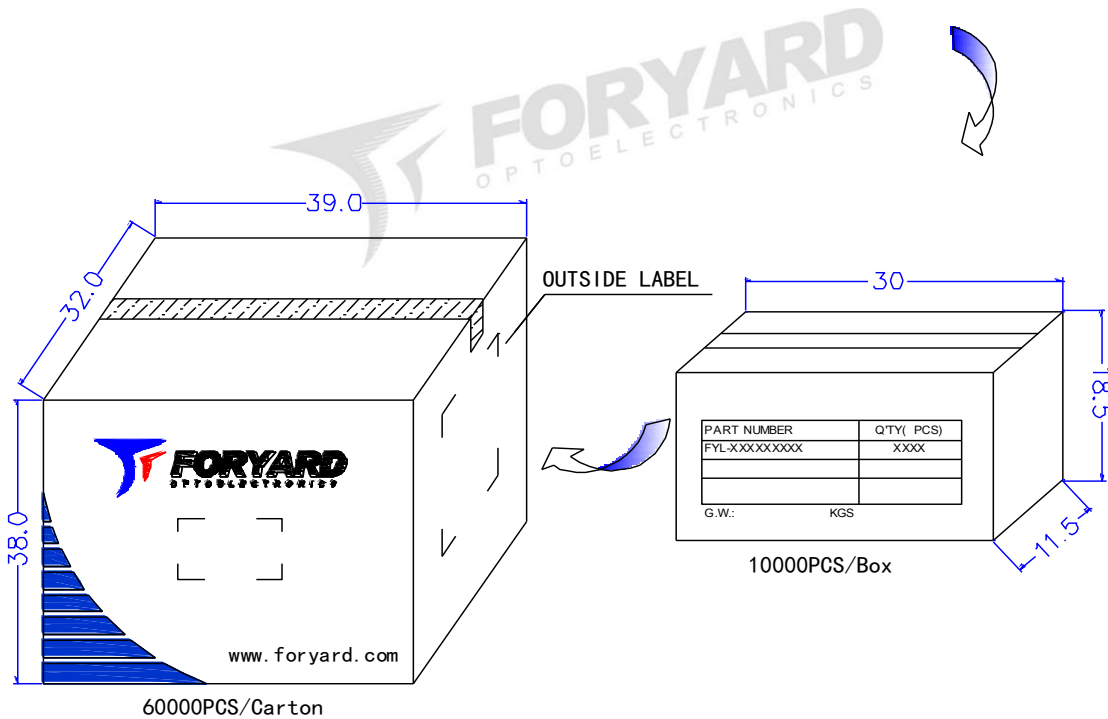


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■ LAMP PACKING.



4.8mm 1000PCS/Polybag



OUTSIDE LABEL

Note: The specifications are subject to change without notice. Please contact us for updated information.