

# PRODUCT SPECIFICATION

**Model No.: FYL-5013SURD1C**

Descriptions:
<ul style="list-style-type: none"> <li>■ Dice material: AlGaInP.</li> <li>■ Emitting Color: Super Bright Red.</li> <li>■ Device Outline: Φ5mm round type.</li> <li>■ Lens Type: Red Diffused.</li> </ul>



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

**NINGBO FORYARD OPTOELECTRONICS CO.,LTD.**

**Add:**No. 666 Jinghua Road, Hi-tech Park, Ningbo, Zhejiang, China

**Zip:**315103

**Tel:** 0086-574-87933652 87922206 87927870

**Fax:** 0086-574-87927917

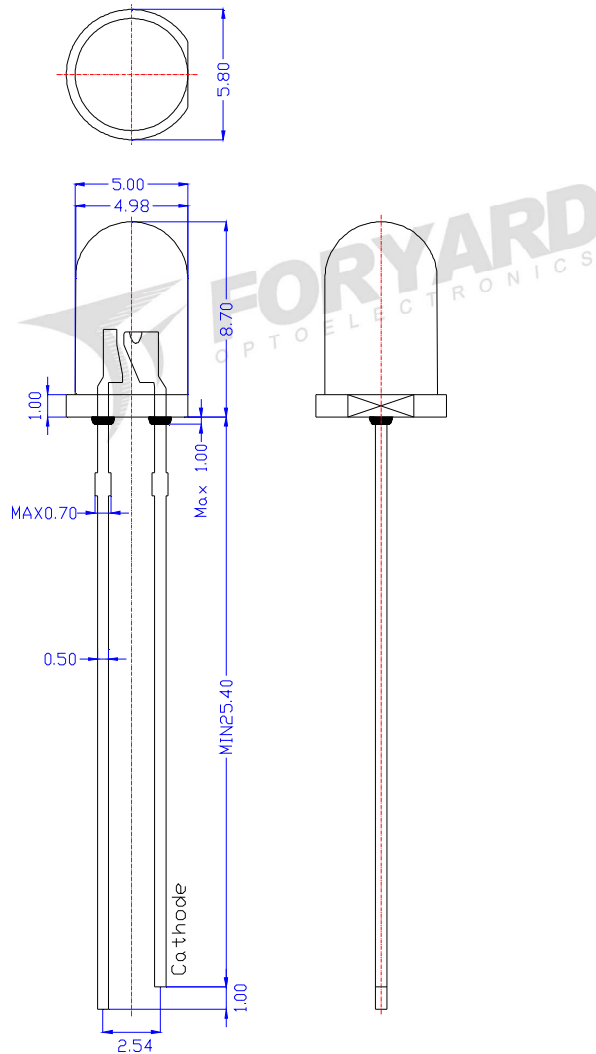
**E-mail:**Sales@foryard.com (General)

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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 Maximun 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 Charcteristics(Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$	500	1000	1800	mcd	IF=20mA
Viewing Angle	$2\theta_{1/2}$	---	25	---	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	N14	N15	N16	N17
Luminous Intensity(mcd)	500~700	700~1000	1000~1380	1380~1800

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  $\pm 1nm$

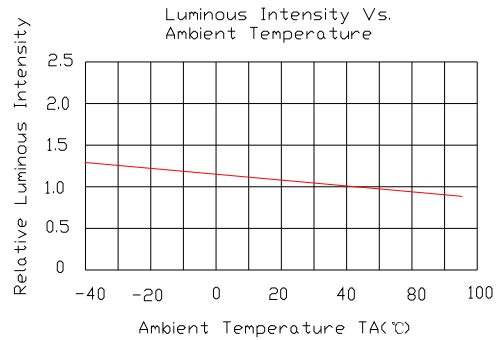
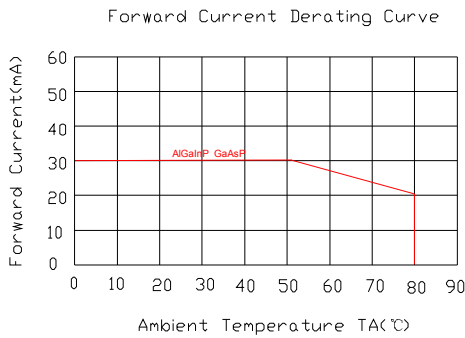
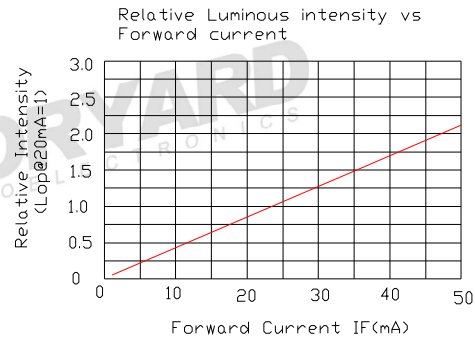
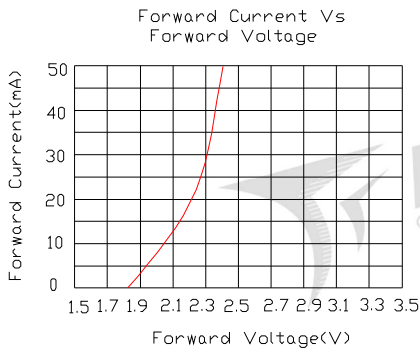
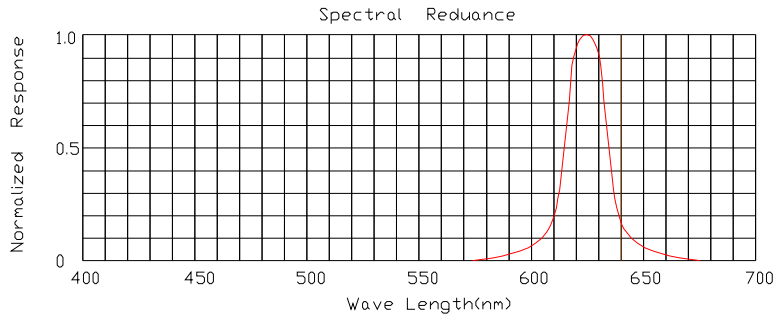
**■ Forward Voltage Guide (Unit: V) @IF=20mA**

Code	V2a	V2b	V3a	V3b	V4a	V4b
Forward Voltage(V)	1.8~1.9	1.9~2.0	2.0~2.1	2.1~2.2	2.2~2.3	2.3~2.4

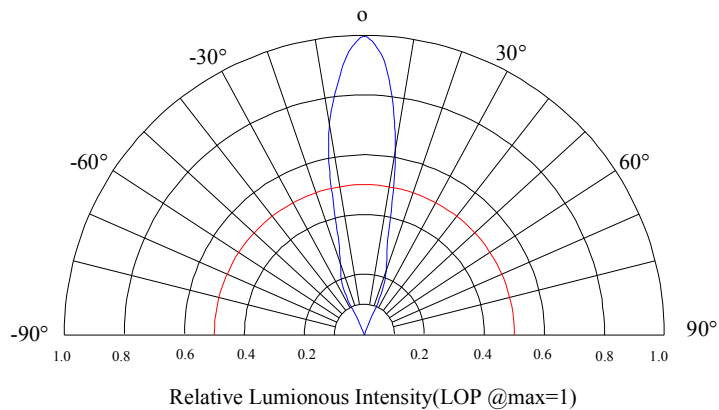
Tolerance of measurement of forward voltage is  $\pm 0.1V$

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

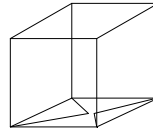
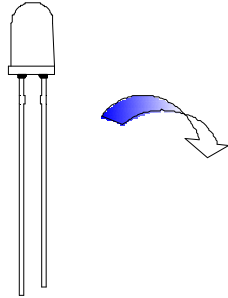


**Radiation pattern**

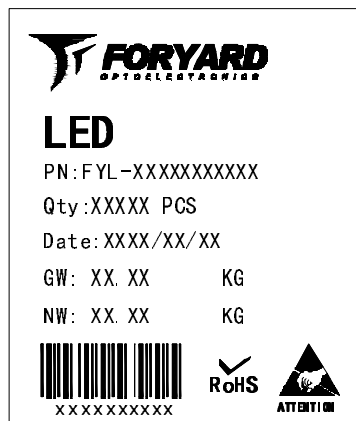
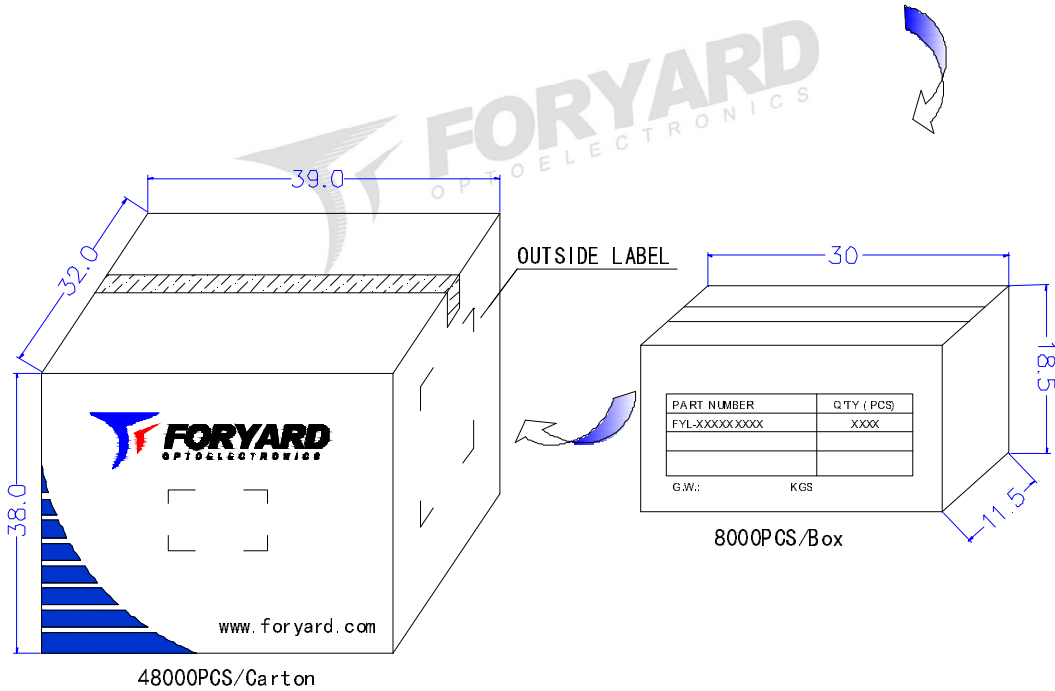


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■ LAMP PACKING.



5mm 1000PCS/Polybag



OUTSIDE LABEL

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