

# 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

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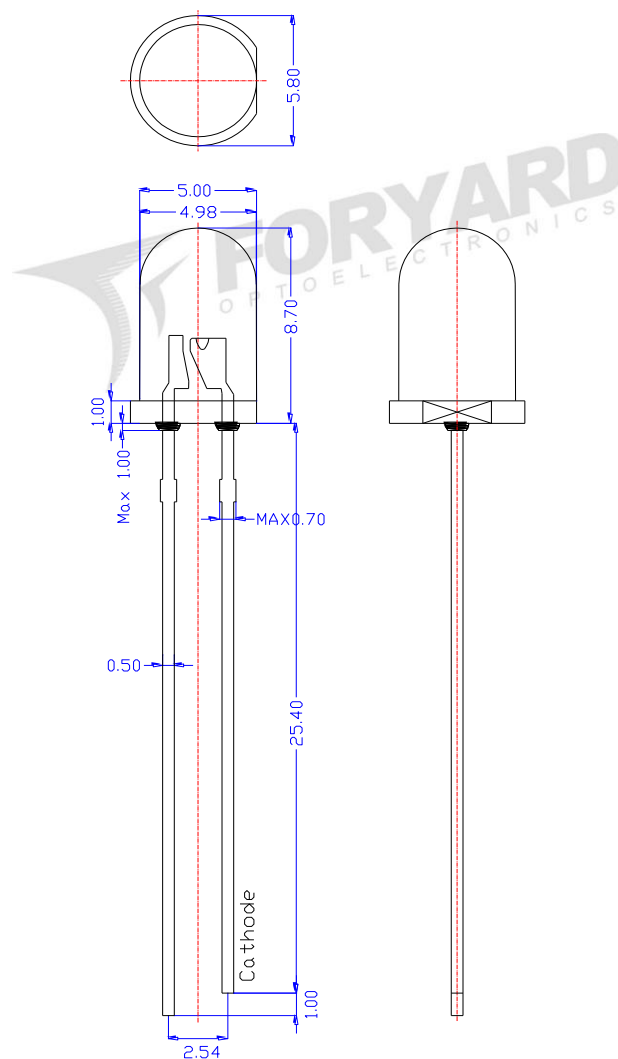
**E-mail:**Sales@foryard.com (General)

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

**■ 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	$I_V$	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  $\pm 1\text{nm}$

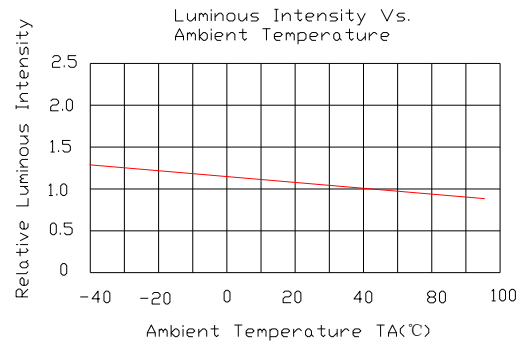
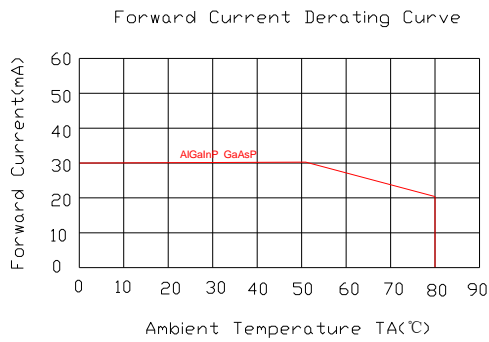
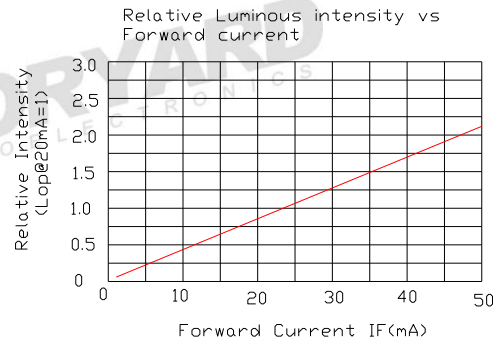
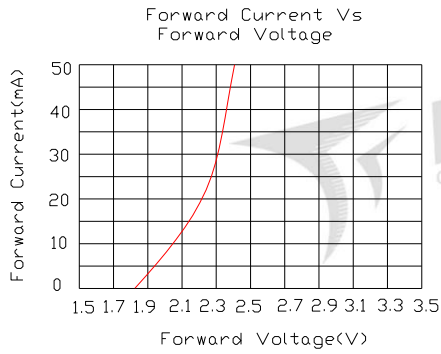
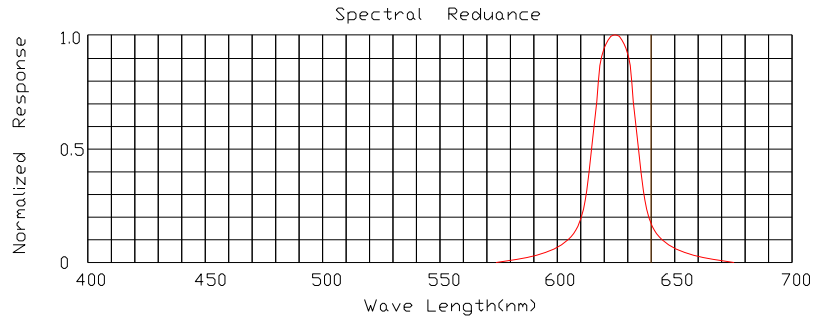
#### ■ Forward Voltage Guide (Unit: V) @IF=20mA

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

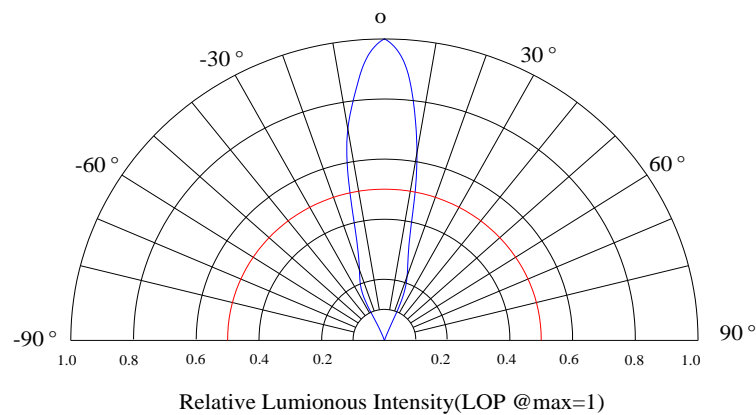
Tolerance of measurement of forward voltage is  $\pm 0.1\text{V}$

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



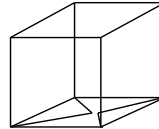
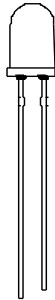
**Radiation pattern**



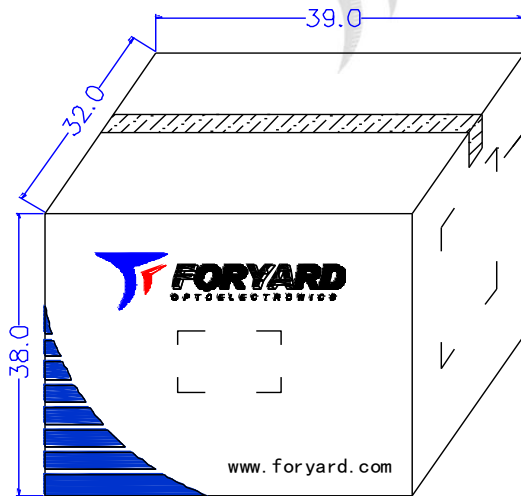
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Date / Rev.	2020.04.17 / A

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■ LAMP PACKING.

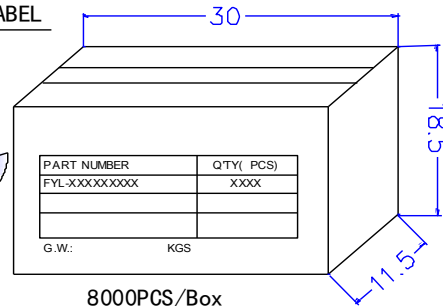


5mm 1000PCS/Polybag

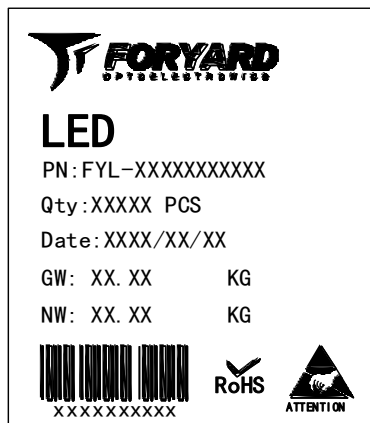


48000PCS/Carton

OUTSIDE LABEL



8000PCS/Box



OUTSIDE LABEL

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