

PRODUCT SPECIFICATION

Model No.: FYL-48D4UWC1A

Descriptions:
<ul style="list-style-type: none"> ■ Dice material: InGaN. ■ Emitting Color: Super Bright Cool White. ■ Device Outline: Φ4.8mm helmet type. ■ Lens Type: Water clear.



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

NINGBO FORYARD OPTOELECTRONICS CO.,LTD.

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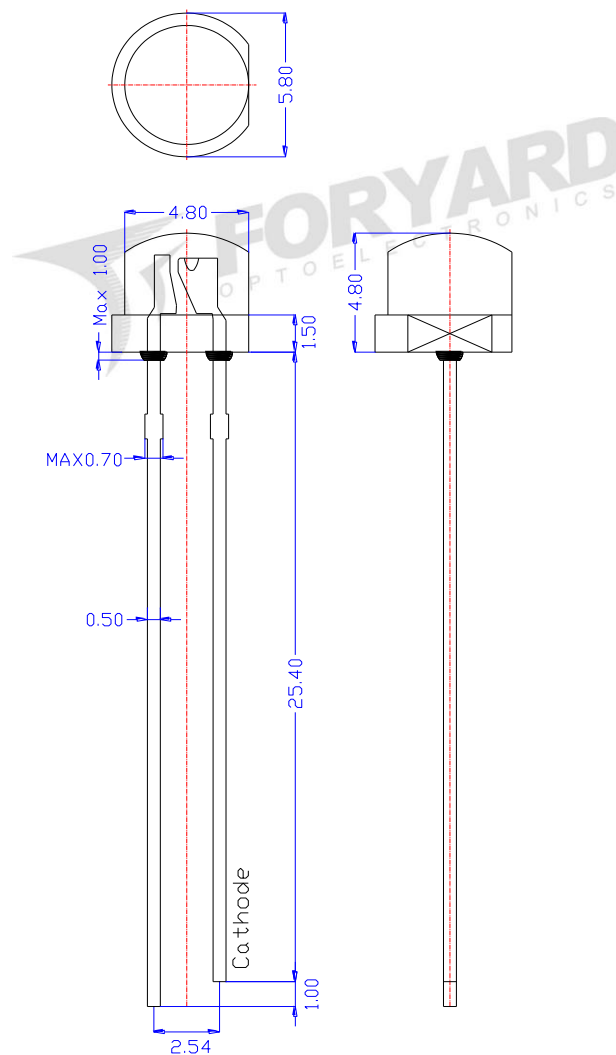
E-mail:Sales@foryard.com (General)

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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	100	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	1200	1800	3000	mcd	IF=20mA
Viewing Angle	$2\theta_{1/2}$	---	130	---	Deg	
Color temperature	CCT	6000	9500	---	---	
Chromaticity coordinates	X	0.32	0.285	---	---	
	Y	0.32	0.285	---	---	
Forward Voltage	V_F	2.6	3	3.4	V	VR=5V
Reverse Current	I_R	---	---	10	μ 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	W8	W9	W10	W11
Luminous Intensity(mcd)	1200~1500	1500~1800	1800~2200	2200~3000

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

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

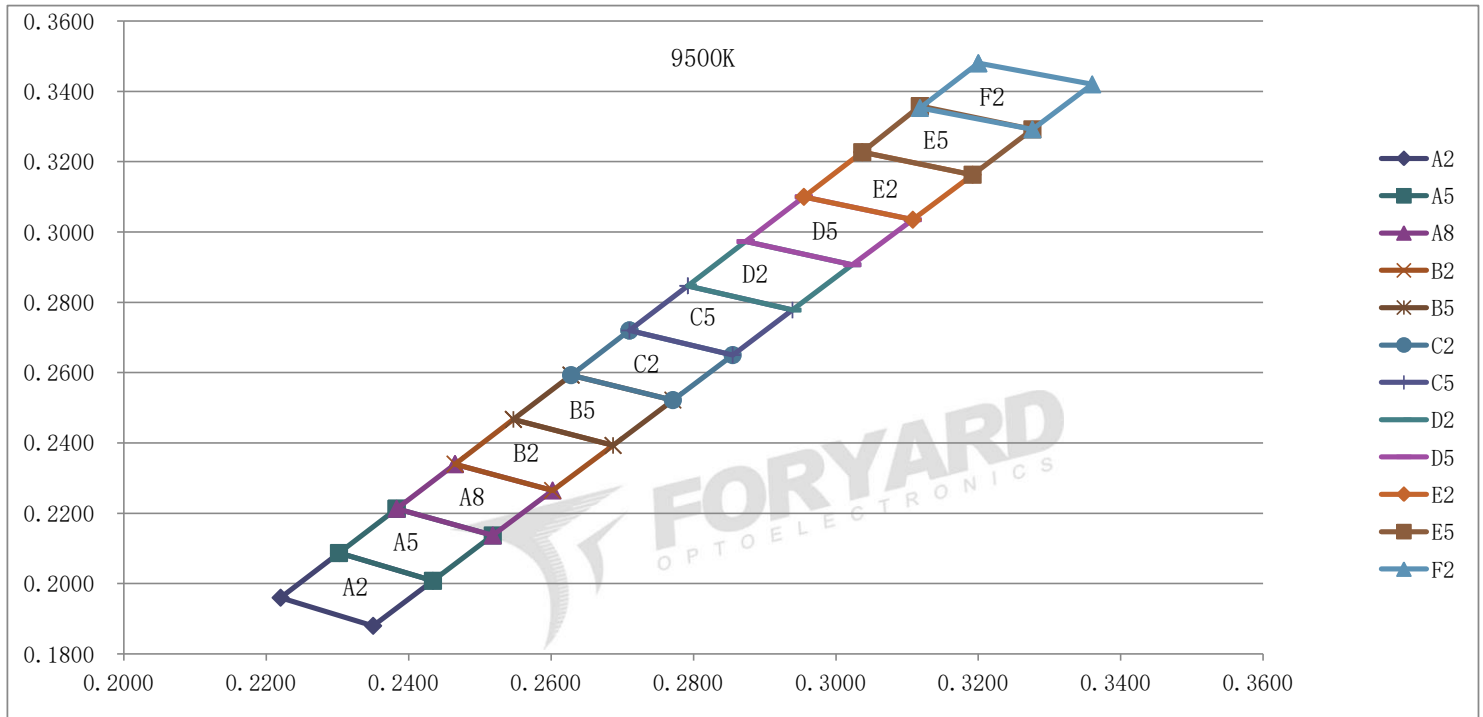
Code	V6	V7	V8	V9
Forward Voltage(V)	2.6~2.8	2.8~3.0	3.0~3.2	3.2~3.4

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

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Chromaticity Coordinate Grade of White Chip-LED Products

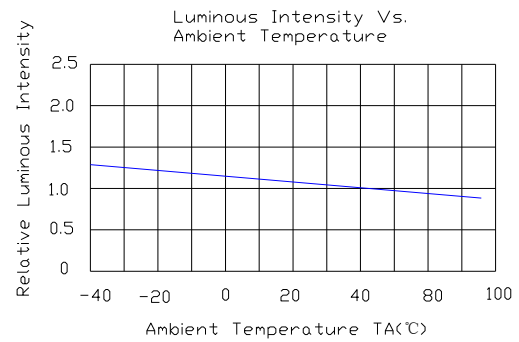
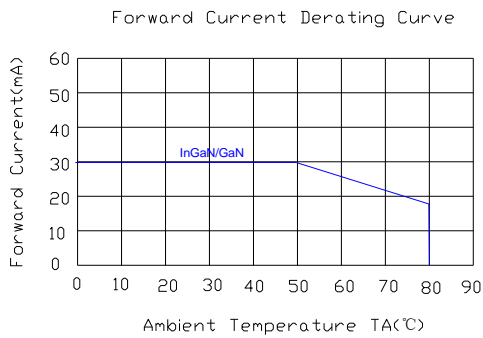
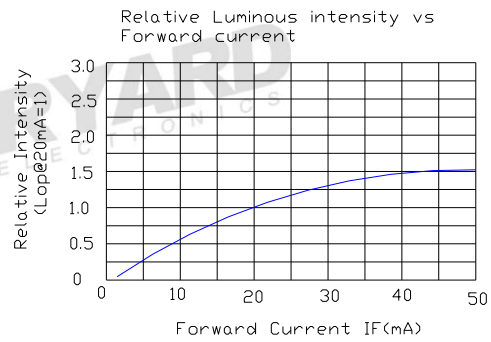
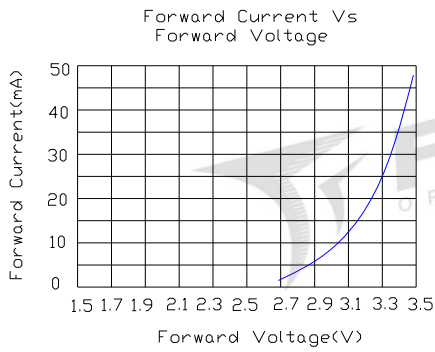
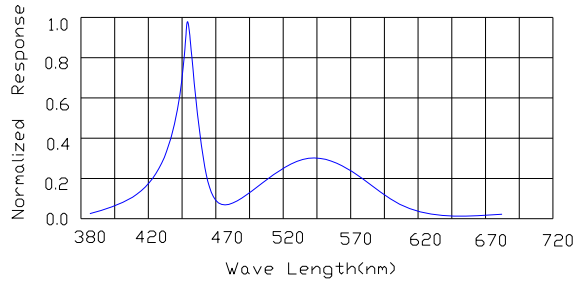
Test Condition: $I_f=20\text{mA}$, $T_a=25^\circ\text{C}$



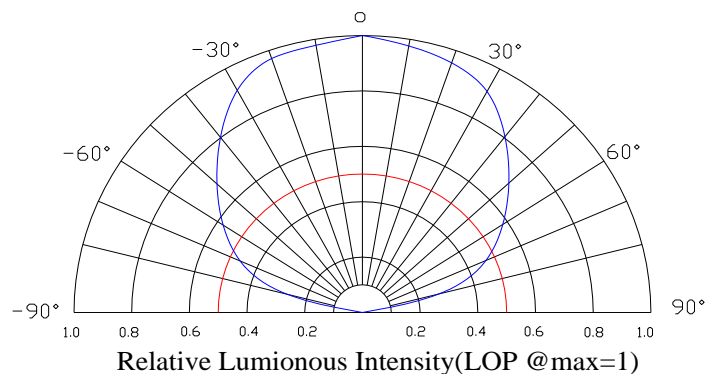
F2	X	0.3200	0.3360	0.3276	0.3118	E5	X	0.3118	0.3276	0.3192	0.3037
	Y	0.3480	0.3420	0.3292	0.3353		Y	0.3358	0.3292	0.3163	0.3227
E2	X	0.3037	0.3192	0.3108	0.2955	D5	X	0.2955	0.3108	0.3023	0.2873
	Y	0.3227	0.3163	0.3035	0.3100		Y	0.3100	0.3035	0.2907	0.2973
D2	X	0.2873	0.3023	0.2939	0.2792	C5	X	0.2792	0.2939	0.2855	0.2710
	Y	0.2973	0.2907	0.2778	0.2847		Y	0.2847	0.2778	0.2650	0.2720
C2	X	0.2710	0.2855	0.2771	0.2628	B5	X	0.2628	0.2771	0.2687	0.2547
	Y	0.2720	0.2650	0.2522	0.2593		Y	0.2593	0.2522	0.2393	0.2467
B2	X	0.2547	0.2687	0.2602	0.2465	A8	X	0.2465	0.2602	0.2518	0.2383
	Y	0.2467	0.2393	0.2265	0.2340		Y	0.2340	0.2265	0.2137	0.2213
A5	X	0.2383	0.2518	0.2434	0.2302	A2	X	0.2302	0.2434	0.2350	0.2220
	Y	0.2213	0.2137	0.2008	0.2087		Y	0.2087	0.2008	0.1880	0.1960

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



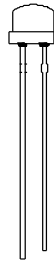
Radiation pattern



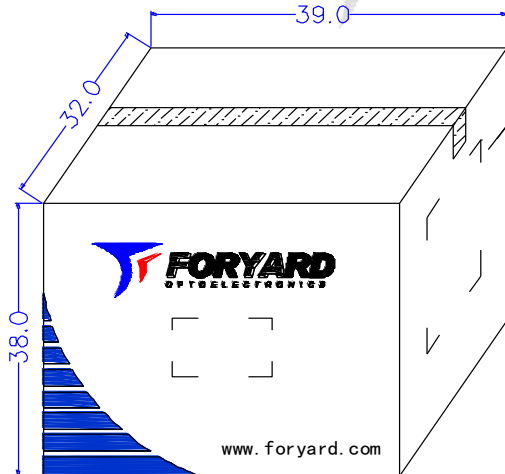
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Date / Rev.	2020.04.14 / A

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LAMP PACKING.

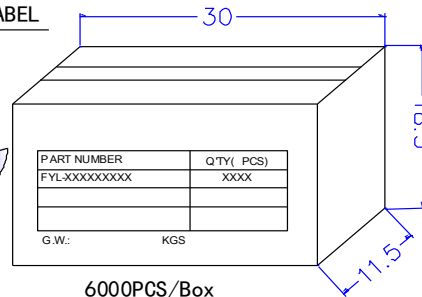


4. 8mm 500PCS/Polybag

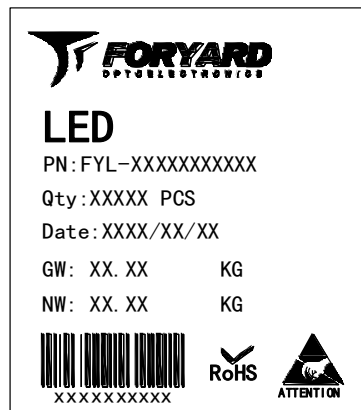


36000PCS/Carton

OUTSIDE LABEL



6000PCS/Box



OUTSIDE LABEL

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