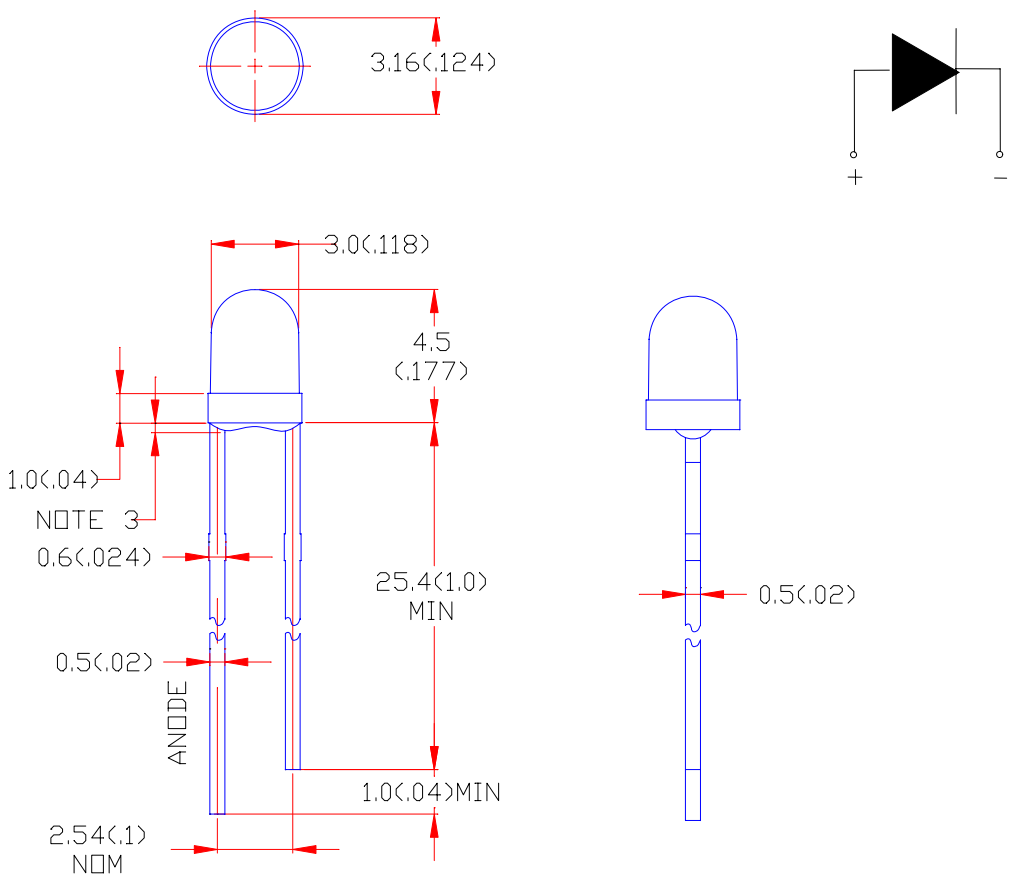
SPECIFICATION FOR APPROVAL

Part No.：YL-3MM-NW40DC6VJZ



Part NO.	Chip Material	Lens Color	Emission Color
YL-3MM-NW40DC6VJZ	InGaN	Water Clear	White

6. Precautions for ESD:

Static electricity and surge can damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

SPECIFICATION FOR APPROVAL

Absolute Maximum Ratings at TA=25℃

Parameter	Maximum Rating	Unit
Power Dissipation	195	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Reverse Voltage	5	V
Electrostatic Discharge (ESD)	2000	V
Operating Temperature Range	-20℃ to + 80℃	
Storage Temperature Range	-30℃ to + 100℃	
Lead Soldering Temperature [4mm(.157") From Body]	260℃ for 3 Seconds	
Wave Soldering Temperature	Peak Temperature 245℃~260℃ for 10 Seconds	
Reflow Soldering	NO	

Electrical / Optical Characteristics at TA=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	6000	8000		mcd	IF = 20mA
Viewing Angle	2θ1/2		30		deg	IF = 20mA
	X		0.30			IF = 20mA
	Y		0.31			IF = 20mA
Forward Voltage	VF	5.5	6.0	6.5	V	IF = 20mA
Reverse Current	IR			100	μA	VR = 5V

SPECIFICATION FOR APPROVAL

Characteristic Curves(Ta=25°C Unless Otherwise Noted)

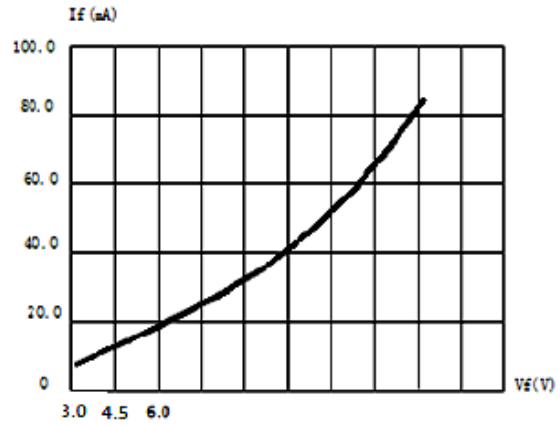


Fig.1 Forward Current vs. Forward Voltage

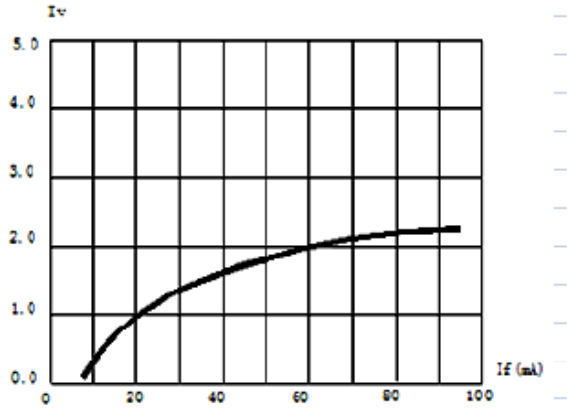


Fig.2 Relative Luminous Intensity vs. Forward Current

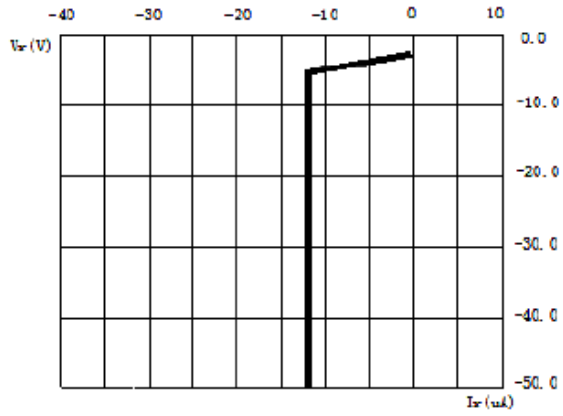


Fig.3 Reverse Current vs.Reverse Voltage

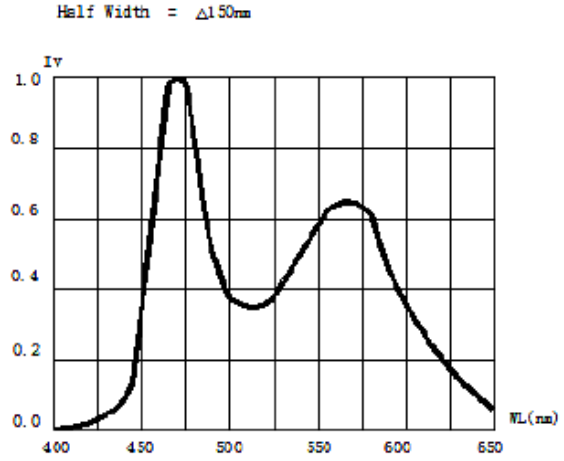


Fig.4 Relative Luminous Intensity vs. Wavelength

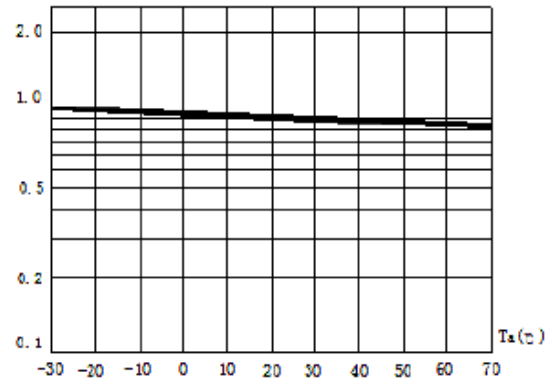


Fig.5 Relative Luminous Intensity vs. Ambient Temperature

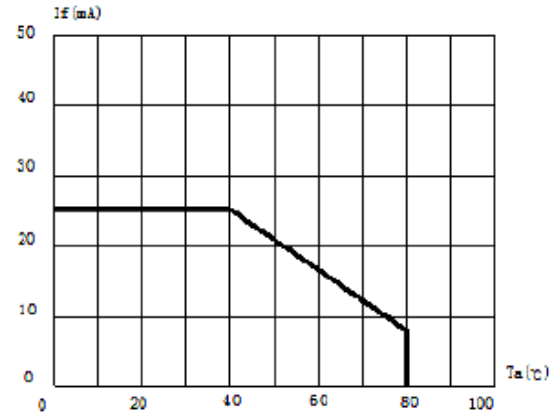
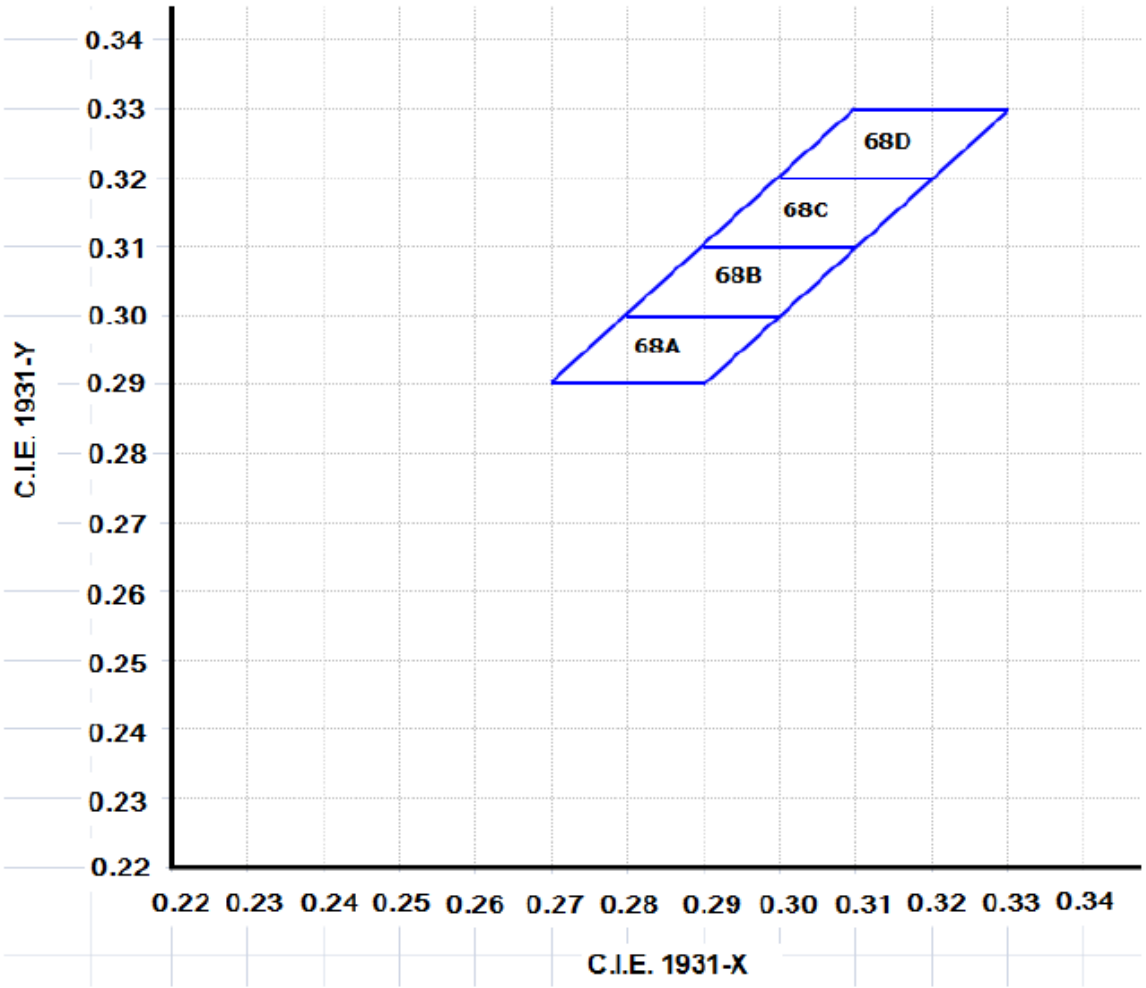


Fig.6 Maximum Forward Current vs.Ambient Temperature

Hue Bin Specification for White

BIN					
68A	X	0.2800	0.3000	0.2900	0.2700
	Y	0.3000	0.3000	0.2900	0.2900
68B	X	0.2900	0.3100	0.3000	0.2800
	Y	0.3100	0.3100	0.3000	0.3000
68C	X	0.3000	0.3200	0.3100	0.2900
	Y	0.3200	0.3200	0.3100	0.3100
68D	X	0.3100	0.3300	0.3200	0.3000
	Y	0.3300	0.3300	0.3200	0.3200

CIE 1931 Diagram Hue Bin Specification for white



Reliability

- **Test Items And Results**

Classi-fication	Test Item	Standard Test Method	Test Conditions	Duration	Units Tested	Number of Damaged
Life Test	Operating Life Test	JIS7021: B4 MIL-STD-202: 107D MIL-STD-750: 1026	T_A=25℃±5℃，IF=20mA	1000 Hrs	22	0/22
Environment Test	High Temperature Storage	JIS7021: B10 MIL-STD-202: 210A MIL-STD-750: 2031	T_A=100℃±5℃	1000 Hrs	22	0/22
	Low Temperature Storage	JIS7021: B12	T_A=－55℃±5℃	1000 Hrs	22	0/22
	Temp. & Humidity Test	JIS7021: B11 MIL-STD-202: 103D	T_A=85℃±5℃， RH=85%±5%RH	1000 Hrs	22	0/22
	Thermal Shock Test	JIS7021B4 MIL-STD-202: 107D MIL-STD-750: 1026	-10°±5℃ ((100℃±5℃ 5min 5 min	50 Cycles	22	0/22
	Temperature Cycling Test	JIS7021: A3 MIL-STD-202: 107D MIL-STD-750: 1051	-55℃~25℃~85℃~25℃ 30min 5min 30min 5min	50 Cycles	22	0/22
Mechanical Test	Resistance to Soldering Heat	JIS7021: A1 MIL-STD-202: 210A MIL-STD-750: 2031	260±5℃，10 (1 sec	1 time	22	0/22
	Lead Integrity	MIL-STD-750D Method 2036.3	Load 2.5N（0.25 kgf） 0(~ 90(~ 0(	3 times	22	0/22

- **Criteria for Judging The Damage**

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min.	Max.
Forward Voltage	V_F	I_F =20 mA	---	Initial Data ×1.1
Luminous Intensity	I_V	I_F =20 mA	Initial Data × 0.7	---
Reverse Current	I_R	V_R = 5V	---	100μA