



MODEL NO: BLA-7019A(B)-YG

Device Number: DEA-815-002 REV: 1.1

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■ Features

- High Performance
- Free Design
- Longer Life and Low Power Consumption
- Various Color : Blue, Green, Yellow Green (Standard), Orange, Amber, Red

■ Descriptions

LED back light provides uniform , high output backlighting with low power than CCFL and EL's. There are two back light method are available :

- (1) Bottom Backlight
- (2) Edge Backlight

■ Applications

- LCD Backlight:

Medical Instruments

Cellular Phone

Viedo, Audio Equipment

PDA

- Office Automation Equipment
- Measuring Device Illumination

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.2\text{mm}$ unless otherwise noted.

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■ Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating	Unit
Forward Current	I _F	240	mA
Reverse Voltage	V _R	8	V
Power Dissipation	P _D	1.1	W
Operating Temperature	T _{opr}	-20 to + 70	℃
Storage Temperature	T _{stg}	-30 to + 80	℃
Soldering Temperature	*1T _{sol}	260	℃

*1: One Circuit Operated

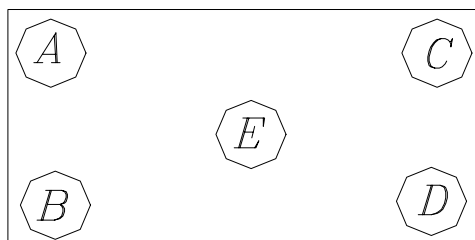
*2: Soldering time ≤ 5seconds.

■ Electro-Optical Characteristics (Ta=25℃)

Emitting Color : Yellow Green

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Remark
Forward Voltage	V _F	I _F =120mA	--	4.2	4.6	V	
Reverse Current	I _R	V _R =8V	--	--	0.2	mA	
Luminous Intensity	I _v	I _F =120mA	50	80	--	cd/m ²	* 1,2
Emission Wavelength	λ _p	I _F =120mA	569	--	575	nm	* 2
Spectral Line Half Width	Δ λ	I _F =120mA	--	30	--	nm	
Illuminance Power Deviation	Δ EH	I _F =120mA	--	--	25	%	* 3

- 1.The test position of luminous intensity is Fig1.
- 2.The test equipment is Photo Research PR650.
- 3.The defination of luminous intensity deviation.



$$\Delta EH\% = \frac{B(MAX) - B(MIN)}{B(MAX)} * 100\%$$


 Measuring Method: (Ta=25℃, 65%RH)
 (Measured by our equipment)

Figure 1 :Point for testing deviation→A,B,C,D,E



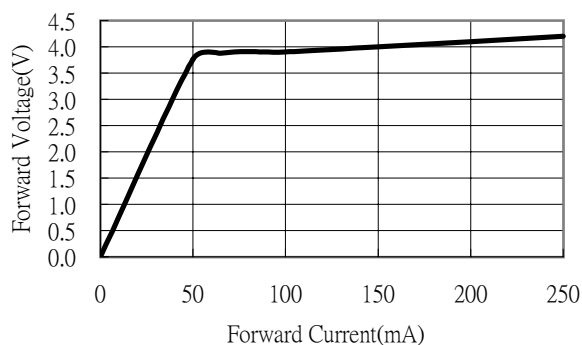
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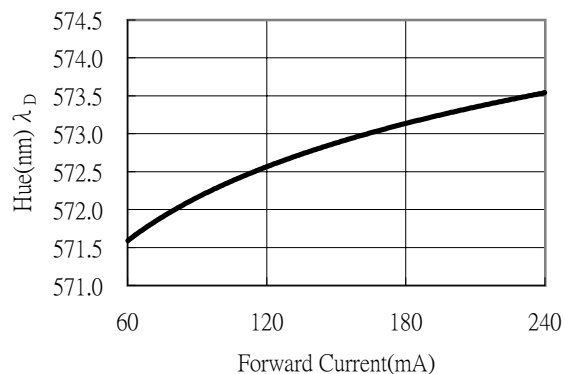
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■ Typical Electro-Optical Characteristics Curves

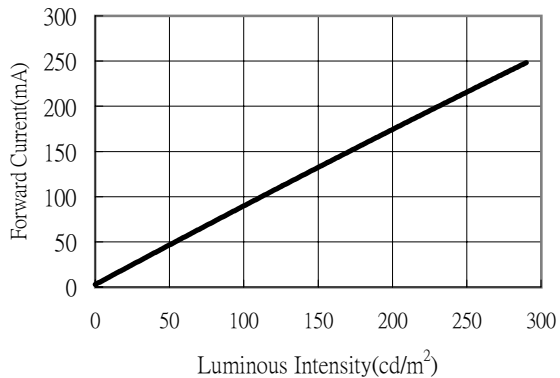
● Forward Voltage vs. Forward Current (Ta=25°C)



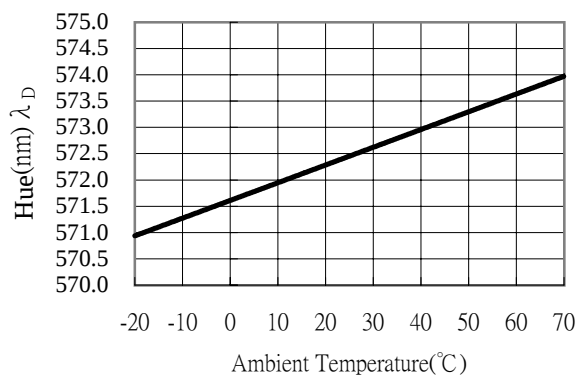
● Emission Wavelength vs. Forward Current (Ta=25°C)



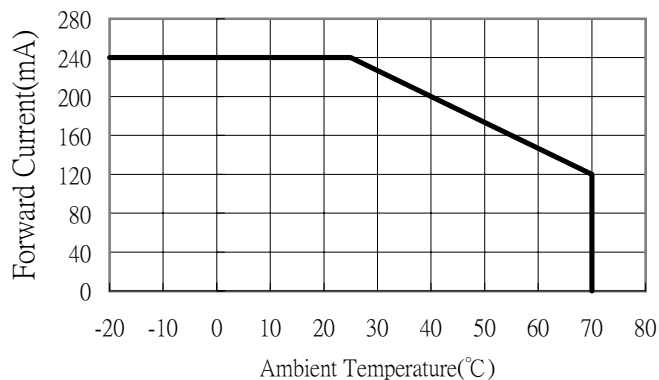
● Forward Current vs. Luminous Intensity (Ta=25°C)



● Wavelength vs. Ambient Temperature (If=120mA)



● Forward Current vs. Ambient Temperature





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■ Reliability Test

Items	Conditions	Jusification Criteria	Quantity
High Temperature/ High Humidity Test	85℃,85%RH,1000hr	A,B,C	24dies*4pcs =96dies
High Temperature Storage	85℃,1000hr	A,B,C	24dies*4pcs =96dies
Low Temperature Storage	-30℃,1000hr	A,B,C	24dies*4pcs =96dies
Room Temperature DC Operating Life	25℃,60±10%RH, 1000hr/120mA	A,B,C	24dies*4pcs =96dies

* Justification criteria:

A: Not one of LED is failed.

B: Not allowed to have warpage, scraping, discoloration, distortion, separation.

C: The variation of brightness must not to be over 30% of initial value luminous intensity.

■ Circuit Diagram

