



LED BACKLIGHT
MODEL NO: BLB-4938J-YG

Device Number: DEA-863-001 REV: 1.0

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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

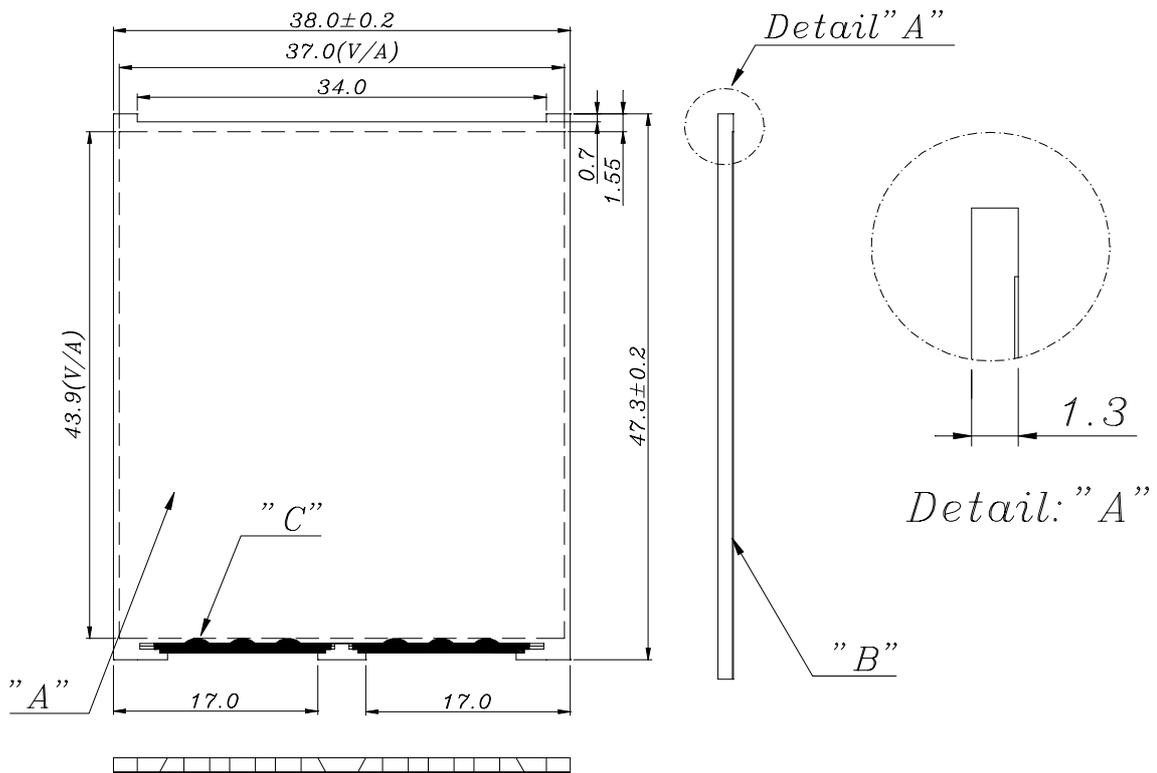


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■ Package Dimensions:



NO	Name	Material
A	Light guide	PC
B	Reflective film	PE
C	LED	96-22VGC

NOTES:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.15 mm unless otherwise noted.



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■ **Absolute Maximum Ratings(Ta=25°C):**

Parameter	Symbol	Rating	Unit
Forward Current	I _F	25	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	0.1	W
Operating Temperature	T _{opr}	-20 to + 70	°C
Storage Temperature	T _{stg}	-30 to + 80	°C
Soldering Temperature * ¹	* ¹ T _{sol}	260	°C

*1: Soldering time ≤ 5seconds.

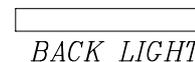
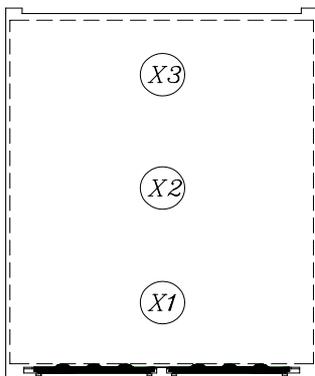
■ **Electro-Optical Characteristics (Ta=25°C):**

Emitting Color : Yellow Green

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Remark
Forward Voltage	V _F	I _F =20mA	--	4.0	4.4	V	
Reverse Current	I _R	V _R =5V	--	--	10	μA	
Luminous Intensity	I _V	I _F =20mA	6.0	8.0	--	cd/m ²	* 1,2
Peak Emission Wavelength	λ _p	I _F =20mA	--	570	--	nm	
Spectral Line Half Width	Δ λ	I _F =20mA	--	30	--	nm	

1. The test equipment is Photo detector UDT:Model #2153.

2. The test method of luminous intensity is :



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

Measuring Method: (Ta=25°C, 65%RH)

(Measured by our equipment)

Figure 1 :Point for testing deviation→X1,X2,X3



EVERLIGHT ELECTRONICS CO., LTD.

Backlight

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■ Reliability Test:

Items	Conditions	Jusification Criteria	Quantity
High Temperature/ High Humidity Test	70°C, 85%RH, 1000hrs	A,B,C	4dies*3PCS =12dies
High Temperature Storage	70°C, 1000hrs	A,B,C	4dies*3PCS =12dies
Low Temperature Storage	-30°C, 1000hrs	A,B,C	4dies*3PCS =12dies
Room Temperature DC Operating Life	25°C, 60±10%RH, 1000hrs/20mA	A,B,C	4dies*3PCS =12dies

* 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:

