BRIGHT LED ELECTRONICS CORP.

SINCE 1981

DATA SHEET

●DEVICE NUMBER：BL-B3141-AT

SHEET / DATE	1	2	3								CONTENTS
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佰鴻工業股份有限公司

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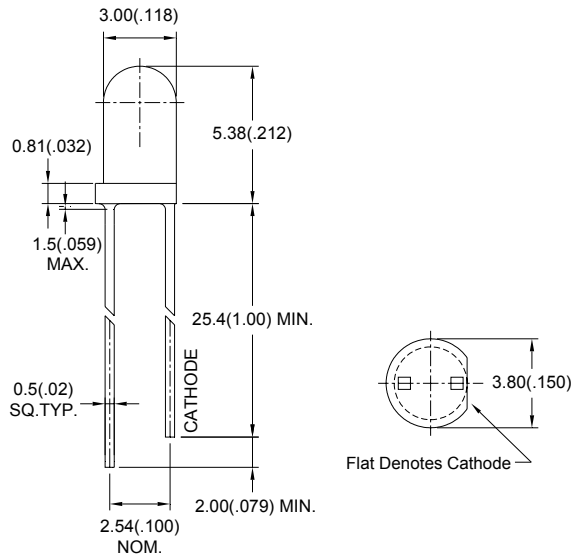
● Features:

1. Chip material: GaAsP/GaP
2. Emitted color : Yellow
3. Lens Appearance : Yellow Diffused
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 3mm diameter package
9. This product don't contained restriction substance, compliance ROHS standard.

● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● Package dimensions:



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (0.01") unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

● Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I_F	30	mA
Peak Forward Current*[1]	I_{FP}	150	mA
Reverse Voltage	V_R	5	V
Operating Temperature	Topr	-40℃~85℃	
Storage Temperature	Tstg	-40℃~100℃	
Soldering Temperature	Tsol	260℃max(for 5 seconds)	
Hand Soldering Temperature	Tsol	350℃max(for 3 seconds)	

*[1]Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

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● Electrical and optical characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF=20mA	-	2.1	2.6	V
Luminous Intensity	Iv	IF=20mA	-	30	-	mcd
Reverse Current	IR	VR=5V	-	-	100	μA
Peak Wave Length	λp	IF=20mA	-	589	-	nm
Dominant Wave Length	λd	IF=20mA	580	-	593	nm
Spectral Line Half-width	Δλ	IF=20mA	-	35	-	nm
Viewing Angle	2θ1/2	IF=20mA	-	35	-	deg

● Typical Electro-Optical Characteristics Curves

Fig.1 Relative intensity vs. Wavelength

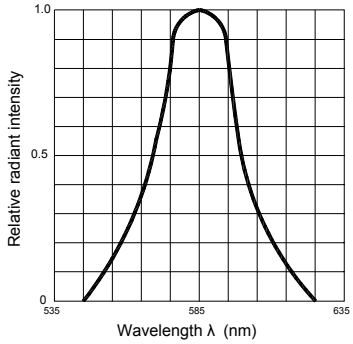


Fig.2 Forward current derating curve vs. Ambient temperature

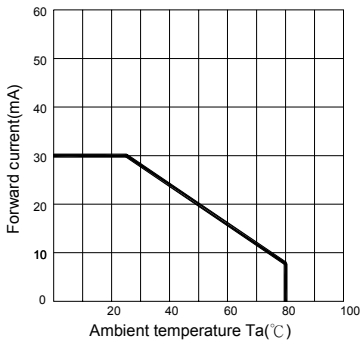


Fig.3 Forward current vs. Forward voltage

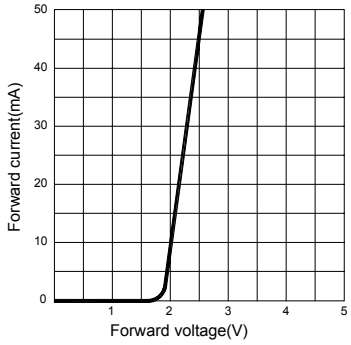


Fig.4 Relative luminous intensity vs. Ambient temperature

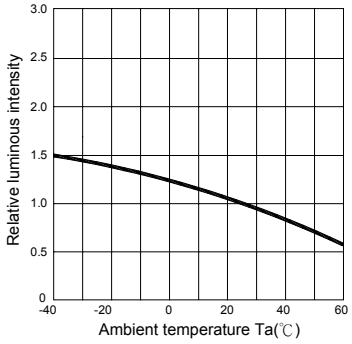


Fig.5 Relative luminous intensity vs. Forward current

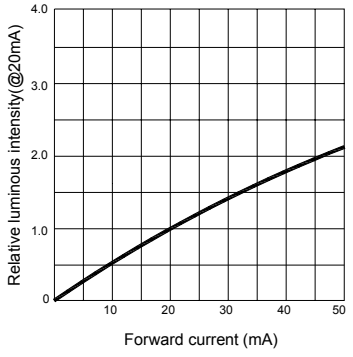
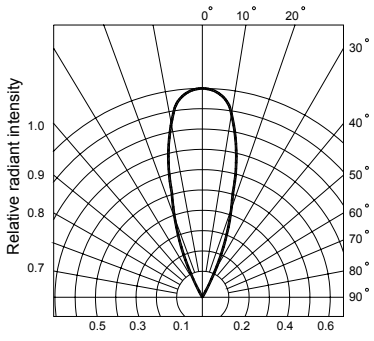


Fig.6 Radiation diagram



● Bin Limits

1. Intensity Bin Limits (At I_F= 20mA)

Bin Code	Min. (mcd)	Max. (mcd)
K	12.3	18.5
L	18.5	28
M	28	42
N	42	63
P	63	94

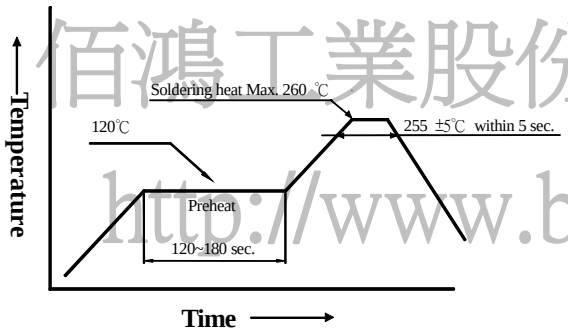
● Bin : x

Intensity Bin Code

NOTES:1.Tolerance of measurement of luminous intensity. :±15%

●DIP soldering (Wave Soldering)

Preheating : 120℃,within 120~180 sec.
Operation heating : 255℃±5℃ within 5 sec.260℃ (Max)
Gradual Cooling (Avoid quenching).



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