

DATA SHEET

● DEVICE NUMBER : BL-R2130-AT

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2010.3.10	1.0	1.0	1.0								Original Released

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APPROVED	DRAWER
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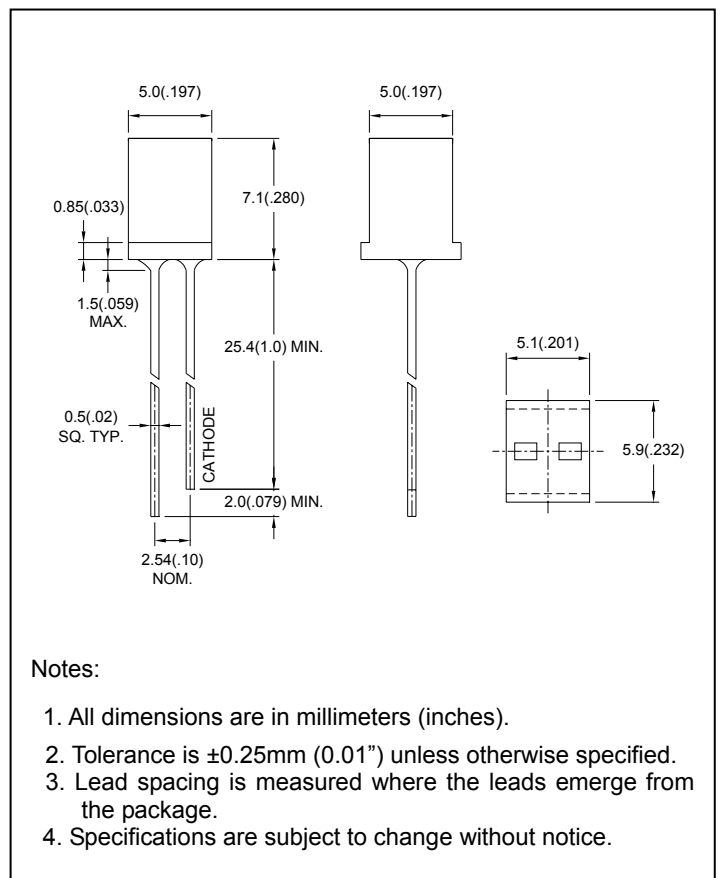
● Features:

1. Chip material: GaP/GaP
2. Emitted color : Green
3. Lens Appearance : Green Diffused
4. Low power consumption.
5. Most suitable for use like level indicator.
6. Excellent uniformity of light emittance.
7. Long life solid state reliability.
8. Compatible.
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:



● Absolute maximum ratings(Ta=25°C)

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°C~85°C	
Storage Temperature	Tstg	-40°C~100°C	
Soldering Temperature	Tsol	260°C max (for 5 seconds)	
Hand Soldering Temperature	Tsol	350°C max(for 3 seconds)	

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

Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	-	2.2	2.6	V
Luminous Intensity	I_v	$I_F=20\text{mA}$	-	7.0	-	mcd
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	μA
Peak Wave Length	λ_p	$I_F=20\text{mA}$	-	568	-	nm
Dominant Wave Length	λ_d	$I_F=20\text{mA}$	560	-	576	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	-	30	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	150	-	deg

Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

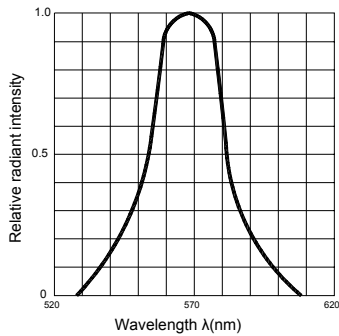


Fig.2 Forward current derating curve vs. Ambient temperature

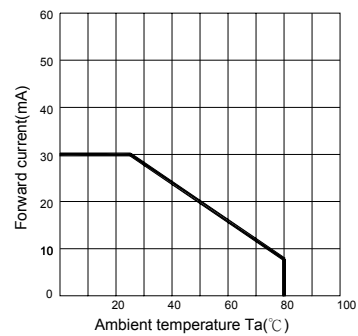


Fig.3 Forward current vs. Forward voltage

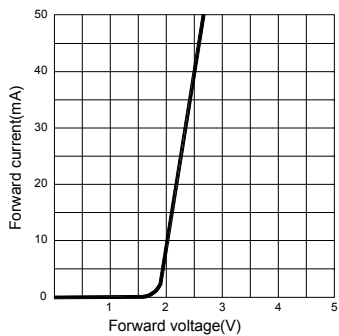


Fig.4 Relative luminous intensity vs. Ambient temperature

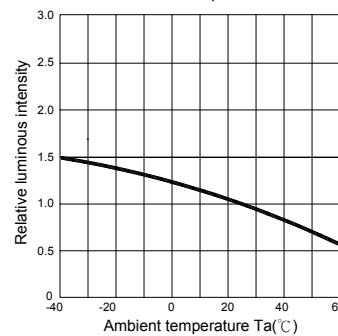


Fig.5 Relative luminous intensity vs. Forward current

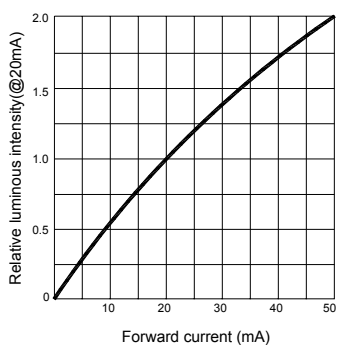
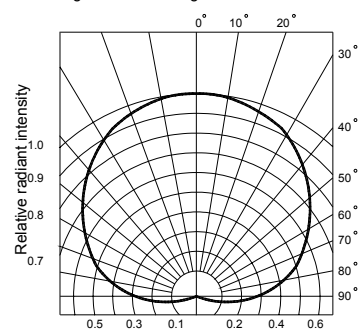


Fig.6 Radiation diagram



● Bin Limits

1. Intensity Bin Limits (At $I_F = 20\text{mA}$)

Bin Code	Min. (mcd)	Max. (mcd)
F	2.4	3.7
G	3.7	5.5
H	5.5	8.2
J	8.2	12.3
K	12.3	18.5

● Bin : x



NOTES: 1. Tolerance of measurement of luminous intensity.

: $\pm 15\%$

● DIP soldering (Wave Soldering)

Preheating : 120°C , within 120~180 sec.

Operation heating : $255^\circ\text{C} \pm 5^\circ\text{C}$ within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching).

