

## DATA SHEET

**DEVICE NUMBER: BL-R213P** 

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2008.8.20	1.0	1.0	1.0				Original Released

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	2008.8.20	2008.8.20
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BL-R213P

#### Features:

Chip material: GaP/GaP
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.

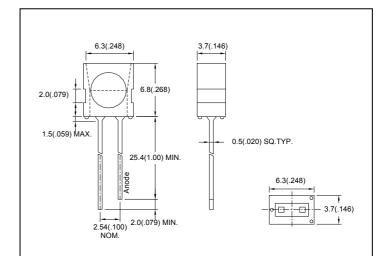
8. Compatible.

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:



#### 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°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	l <sub>F</sub>	30	mA
Peak Forward Current*1	丁墨识	/分有150月/八言	mA
Reverse Voltage	V <sub>R</sub>	177 17151	V
Operating Temperature	Topr	-40℃~85℃	
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 )	

<sup>\*1</sup>Condition for I<sub>EP</sub> is pulse of 1/10 duty and 0.1msec width.



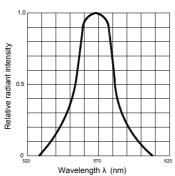
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#### ■ Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Forward Voltage	$V_{F}$	I <sub>F</sub> =20mA	-	2.2	2.6	V
Luminous Intensity	lv	I <sub>F</sub> =20mA	-	8	-	mcd
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	100	μA
Peak Wave Length	λр	I <sub>F</sub> =20mA	-	568	-	nm
Dominant Wave Length	λd	I <sub>F</sub> =20mA	560	-	576	nm
Spectral Line Half-width	Δλ	I <sub>F</sub> =20mA	-	30	-	nm
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	-	120	-	deg

#### Typical electro-optical characteristics curves





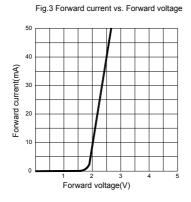


Fig.5 Relative luminous intensity vs. Forward current

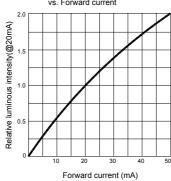


Fig.2 Forward current derating curve vs. Ambient temperature

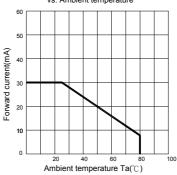


Fig.4 Relative luminous intensity

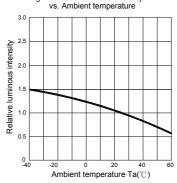
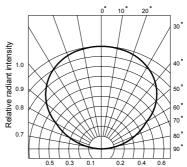


Fig.6 Radiation diagram





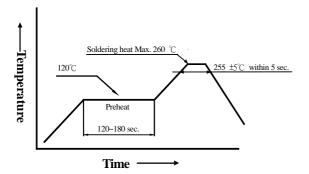
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#### DIP soldering (Wave Soldering)

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

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

Gradual Cooling (Avoid quenching).



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