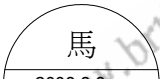
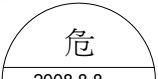




● **DEVICE NUMBER : BL-BD03J4G-1**

佰鴻工業股份有限公司
BRIGHT LED ELECTRONICS CORP.
台北縣板橋市和平路 19 號 3 樓
3F., No. 19, Ho Ping Road, Pan Chiao City,
Taipei, Taiwan, R. O. C.
Tel: 886-2-29591090
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www.brtled.com

APPROVED	DRAWER
 馬 2008.8.8 駿	 危 2008.8.8 燕紅

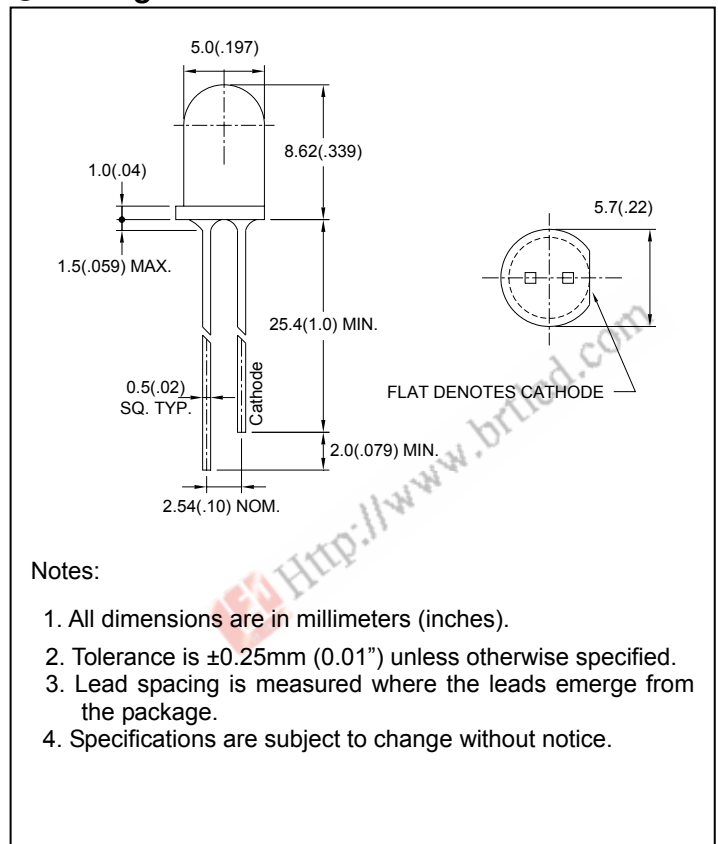
● Features:

1. Chip material: GaAlAs /GaAs
2. Emitted color : Super Red
3. Lens Appearance : Water Clear
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 5mm 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:



● Absolute maximum ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Power Dissipation	P_d	80	mW
Forward Current	I_F	30	mA
Peak Forward Current ^{*1}	I_{FP}	150	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	$-40^\circ\text{C} \sim 85^\circ\text{C}$	
Storage Temperature	T_{stg}	$-40^\circ\text{C} \sim 100^\circ\text{C}$	
Soldering Temperature	T_{sol}	260°C max(for 5 seconds)	
Hand Soldering Temperature	T_{sol}	350°C max(for 3 seconds)	

^{*1}Condition 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	$I_F=20\text{mA}$	-	1.8	2.6	V
Luminous Intensity	I_v	$I_F=20\text{mA}$	-	350	-	mcd
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	μA
Peak Wave Length	λ_p	$I_F=20\text{mA}$	-	660	-	nm
Dominant Wave Length	λ_d	$I_F=20\text{mA}$	-	643	-	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	-	20	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	20	-	deg

Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

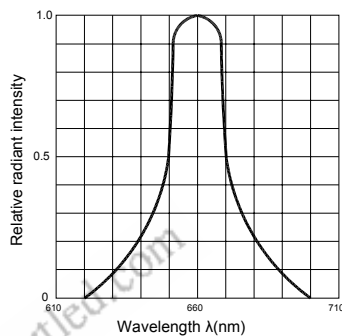


Fig.2 Forward current derating curve vs. Ambient temperature

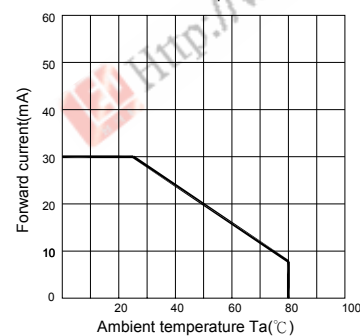


Fig.3 Forward current vs. Forward voltage

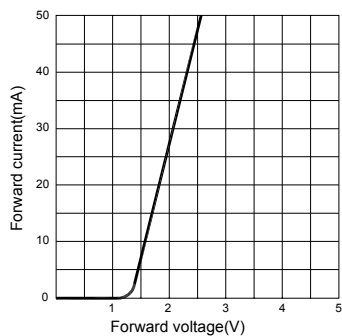


Fig.4 Relative luminous intensity vs. Ambient temperature

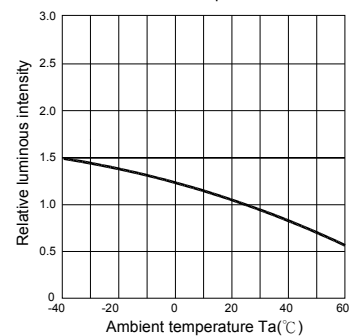


Fig.5 Relative luminous intensity vs. Forward current

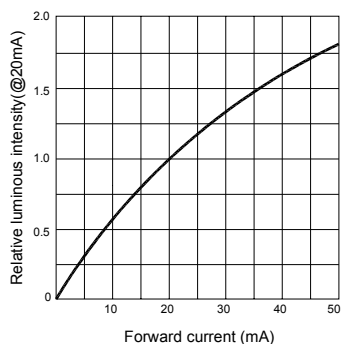
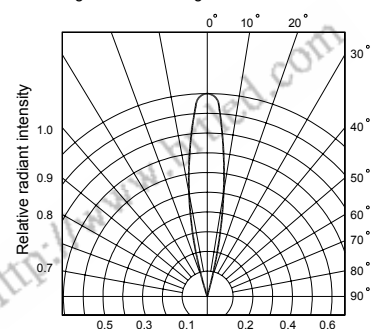


Fig.6 Radiation diagram



●DIP soldering (Wave Soldering)

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

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

Gradual Cooling (Avoid quenching).

