

# BRIGHT LED ELECTRONICS CORP.

BL-B5134-AT

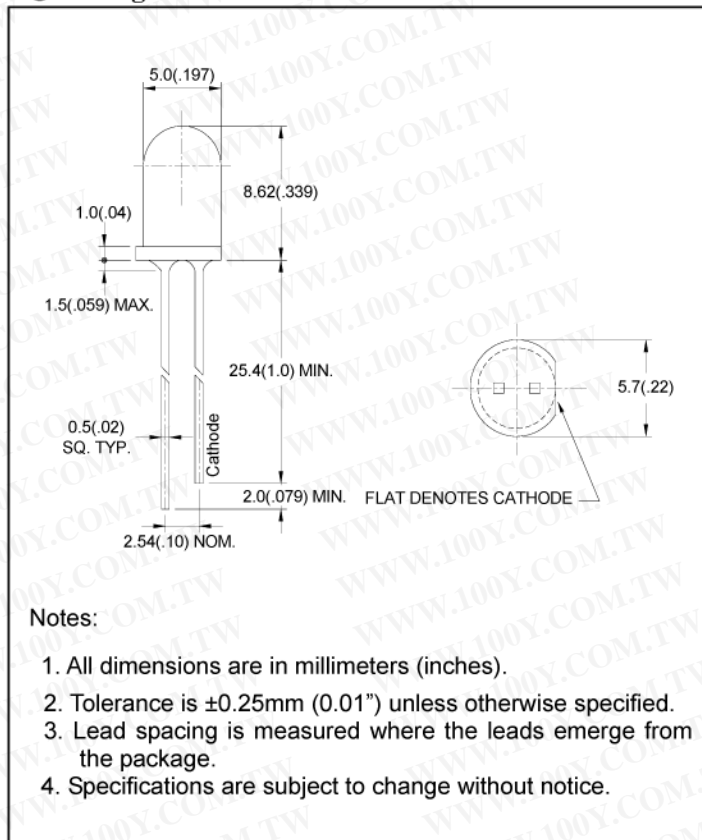
## ● Features:

1. Chip material: GaP/GaP
2. Emitted color : Bright Red
3. Lens Appearance : Red Diffused
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:



勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-34970699  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

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

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_d$	40	mW
Forward Current	$I_F$	30	mA
Peak Forward Current* <sup>1</sup>	$I_{FP}$	50	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 )	

\*<sup>1</sup>Condition for  $I_{FP}$  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.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20mA$	-	2.3	2.6	V
Luminous Intensity	$I_v$	$I_F=20mA$	-	3.0	-	mcd
Reverse Current	$I_R$	$V_R=5V$	-	-	100	$\mu A$
Peak Wave Length	$\lambda_p$	$I_F=20mA$	-	700	-	nm
Dominant Wave Length	$\lambda_d$	$I_F=20mA$	-	650	-	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	100	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	35	-	deg

## ● Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

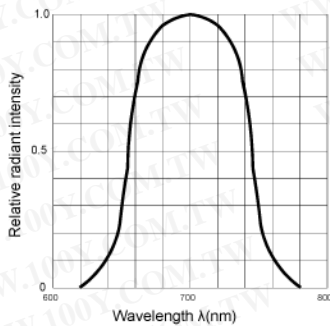


Fig.2 Forward current derating curve vs. Ambient temperature

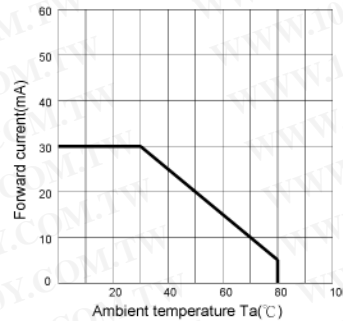


Fig.3 Forward current vs. Forward voltage

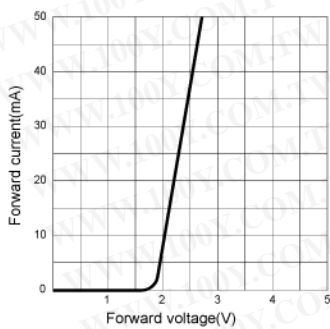


Fig.4 Relative luminous intensity vs. Ambient temperature

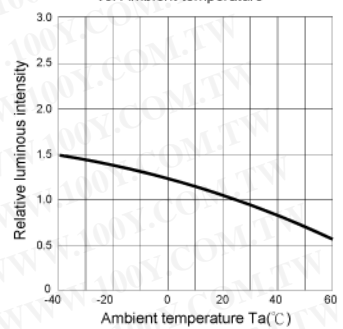


Fig.5 Relative luminous intensity vs. Forward current

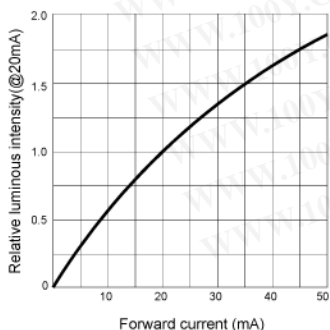
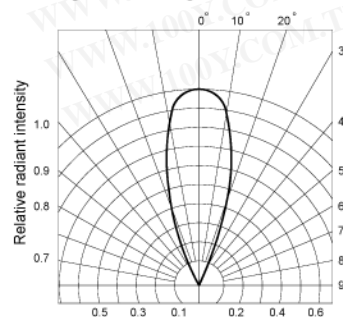


Fig.6 Radiation diagram



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## ● Bin Limits

1. Intensity bin limits (At  $I_F = 20\text{Ma}$ )

Bin Code	Min. (mcd)	Max. (mcd)
D	1.0	1.6
E	1.6	2.4
F	2.4	3.7
G	3.7	5.5
H	5.5	8.2

● Bin :  $x$



NOTES: 1. Tolerance of measurement of luminous intensity.

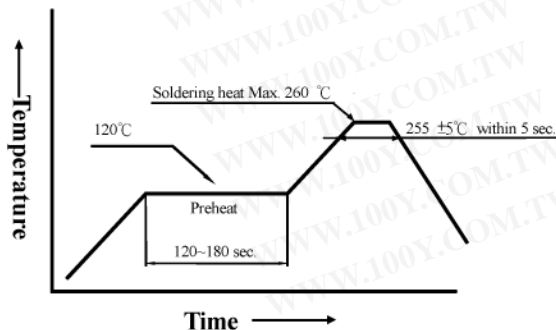
:  $\pm 15\%$

## ● DIP soldering (Wave Soldering)

Preheating :  $120^\circ\text{C}$ , within 120~180 sec.

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

Gradual Cooling (Avoid quenching).



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