

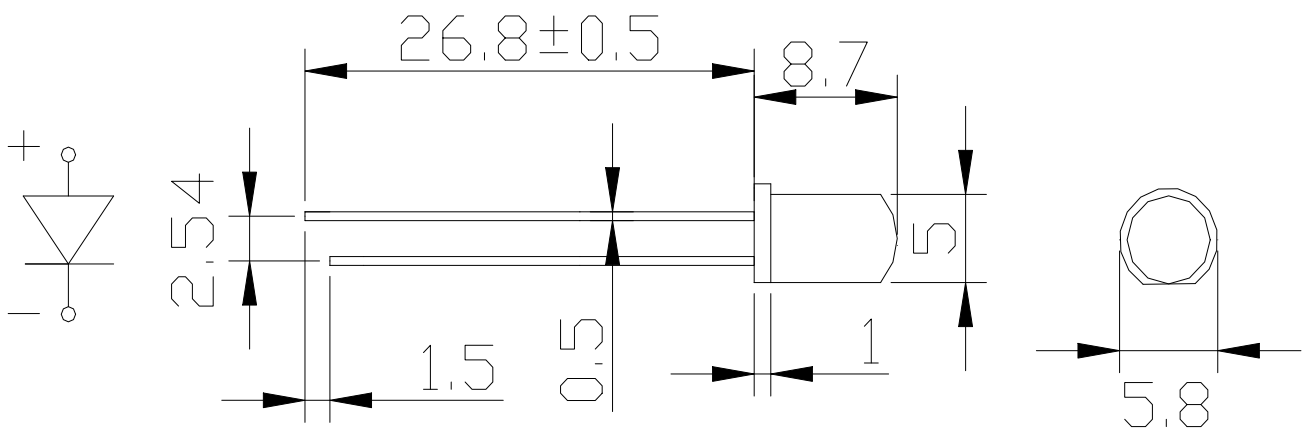
# 直插式 LED 产品规格书

Model No. CBI-IRLED-3904B-S

## Description 产品描述:

- |                  |   |
|------------------|---|
| ■ 5mm Round Lamp | 5 mm 圆灯   |
| ■ Lens Color     | 胶体颜色 Tint Transparent ( 有色透明 )<br>Halogen free ( 无卤 ) |
| ■ Emission Color | 发光颜色: Infrared Emitting Diodes (红外发射管)                |
| ■ Viewing Angle  | 半功率视角: 20°  |
| ■ Stopper        | 无卡位 (No bar)  |

## Outline Drawing 外形图:



## NOTES 备注:

1. All dimensions area in mm tolerance is  $\pm 0.25$ mm unless otherwise noted. 所有尺寸单位为 mm, 如无特殊说明误差范围为  $\pm 0.25$  mm.
2. An epoxy meniscus may extend about 0.25mm down the leads. 胶体沿支架延伸不可超过 0.25mm.
3. Burr around bottom of epoxy may be 0.25mm max. 多胶不超过 0.25mm.



### Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )最大限度性能参数( $T_a=25^\circ\text{C}$ )

Items 项目	Symbol 符号	Absolute maximum Rating 最大限度	Unit 单位
Power Dissipation 功率	$P_d$	100	mW
DC Forward Current 正向电流*	$I_F$	100	mA
Peak Forward Current*正向峰值电流	$I_{FP}$	1000	mA
Reverse Voltage 反向电压	$V_R$	5	V
Operation Temperature 工作温度	$T_{opr}$	-40~+85	$^\circ\text{C}$
Storage Temperature 储存温度	$T_{stg}$	-40~+100	$^\circ\text{C}$
Lead Soldering Temperature 焊锡温度	$T_{sol}$	Max. 260 $^\circ\text{C}$ for 5 sec Max. (3mm from the base of the epoxy bulb) 最大 260 $^\circ\text{C}$ 5 秒钟以内. (自胶体底部 3mm 以下)	

\*pulse width $\leq 0.1\text{msec}$  duty $\leq 1/10$  脉冲宽度 $\leq 0.1\text{msec}$  占空比 $\leq 1/10$

### Typical Electrical & Optical Characteristics( $T_a=25^\circ\text{C}$ ) 产品光电特性( $T_a=25^\circ\text{C}$ )

Items 项目	Symbol 符号	Condition 条件	Min. 最小值	Typ. 平均值	Max. 最大值	Unit 单位
Forward Voltage 正向电压	$V_F$	$I_F=20\text{mA}$	---	1.21	1.25	V
Reverse Current 反向电流	$I_R$	$V_R=5\text{V}$	---	---	10	$\mu\text{A}$
Peak Wavelength 波长	$\lambda_p$	$I_F=20\text{mA}$	---	940	---	nm
Luminous Intensity 发光强度	$I_v$	$I_F=20\text{mA}$	---	120	---	mW/sr
50% power Angle 半功率角度	201/2H-H	$I_F=20\text{mA}$	---	20	---	deg
	201/2V-V	$I_F=20\text{mA}$	---	20	---	deg

### Rank Combination ( $I_F=20\text{mA}$ ) 档次分类( $I_F=20\text{mA}$ )

Luminous Rank 亮度分类	90-120	120-150		
	√	√		

Unit单位: mW/sr

Forward Voltage Rank 工作电压分类	1.18-1.21	1.21-1.25		
			√	

Unit单位:V

Wavelength Rank 主波长分类	940			
	√			

Unit单位:nm

PART NO: **CBI-IRLED-3904B-S**

DESP:5mm round, Water Clear Transparent IRED

**Typical Electro-Optical Characteristic Curves光电特性曲线图**

Fig 1.Relative Intensity vs.Wavelength

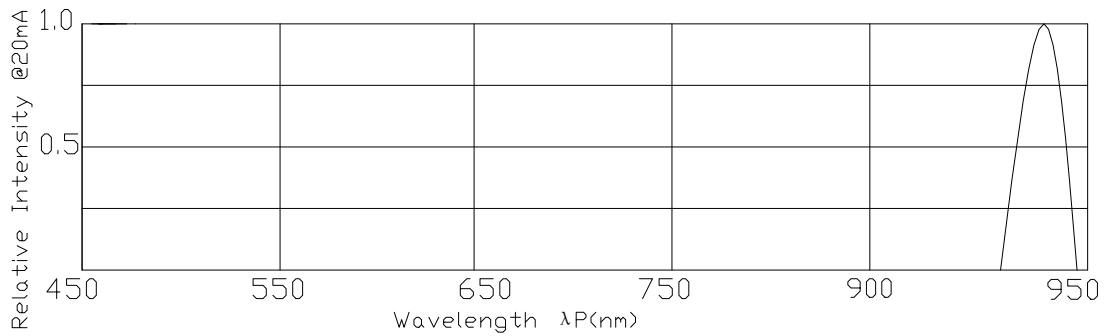


Fig 2.Forward Currnt VS. Forward Voltage

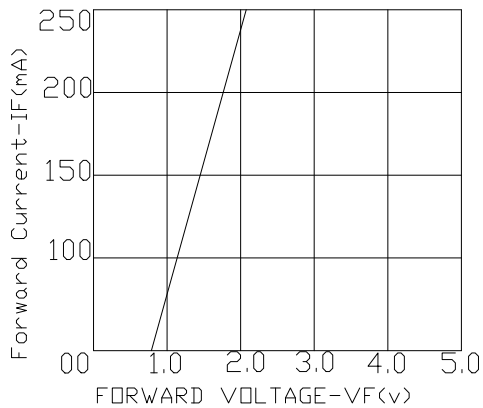


Fig 4.Forward Current vs. Temperature

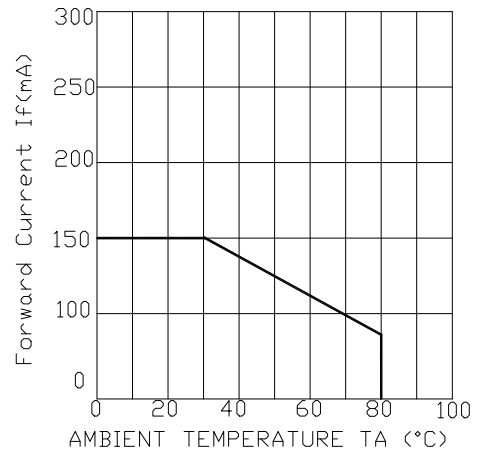
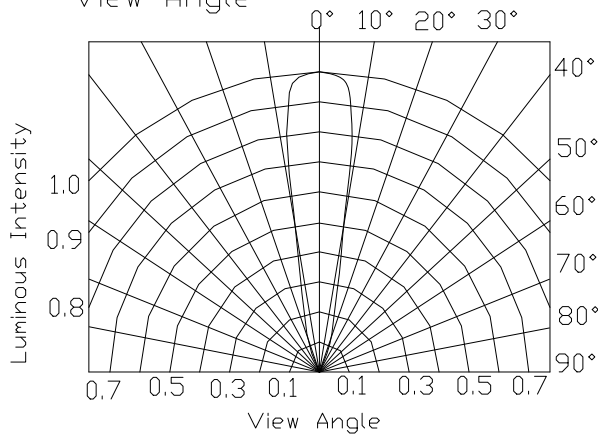
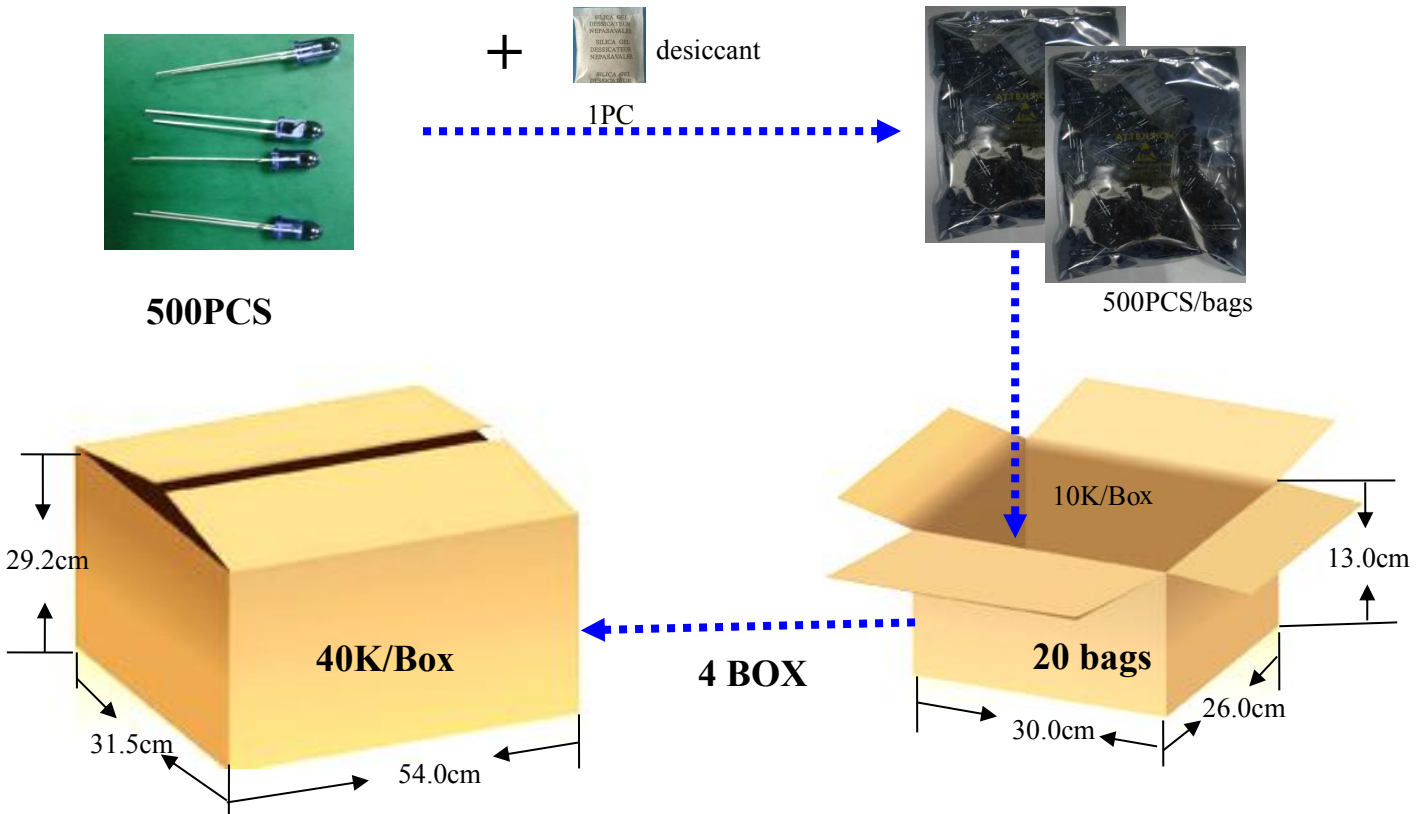


Fig 5.Luminous Intensity vs. View Angle



**Packaging Specifications of Bulk Pack for LED** (include IR LightEmitting Diodes)



Tolerance:  $\pm 0.5\text{cm}$ . 误差范围为  $\pm 0.5\text{cm}$ .



**Caution**

: **ESD** protection measures shall be considered and taken in the initial design stage, because static electricity and surge could damage the LED.

A wrist band or an anti-electrostatic glove should be used when handling **Electrostatic Sensitive Devices**.