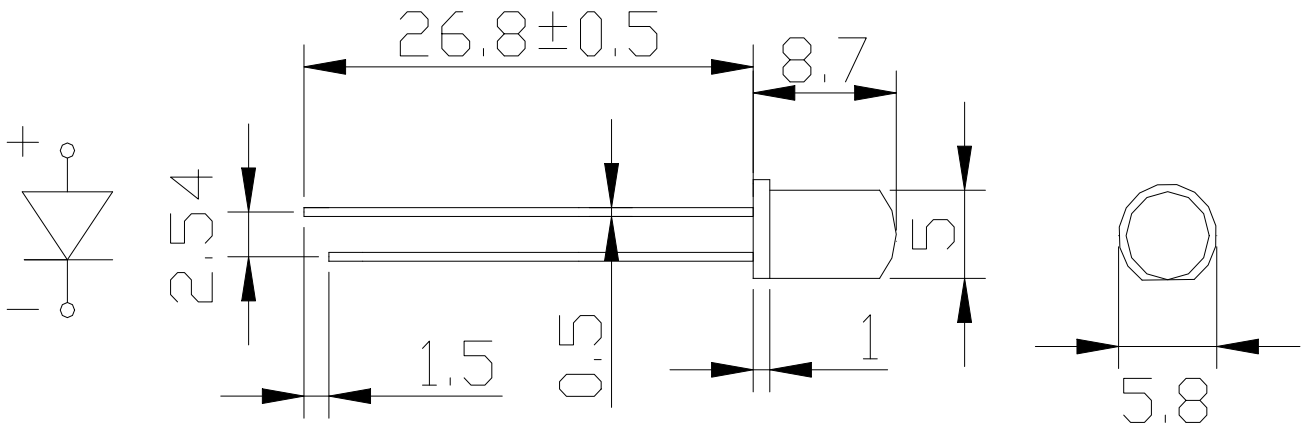


Model No. CBI-IRLED-3904B-S

Description 产品描述:

■ 5mm Round Lamp	5mm 圆头灯
■ Lens Color	胶体颜色: Tint transparent (有色透明)
	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: 40°
■ No Stopper	无卡位 (No bar)
■ Dice Material	晶片材质: ALGaAs

Outline Drawing 外形图:



NOTES 备注:

1. All dimensions area in mm tolerance is ± 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 ± 0.25 mm.
2. An epoxy meniscus may extend about 0.5mm down the leads. 胶体沿支架延伸不可超过 0.5mm.
3. Burr around bottom of epoxy may be 0.5mm max. 多胶不超过 0.5mm.



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	μA
Peak Wavelength 波长	λ_p	$I_F=20\text{mA}$	---	940	---	nm
Luminous Intensity 发光强度	I_v	$I_F=20\text{mA}$	---	100	---	mW/sr
50% power Angle 半功率角度	201/2H-H	$I_F=20\text{mA}$	---	40	---	deg
	201/2V-V	$I_F=20\text{mA}$	---	40	---	deg

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

Luminous Rank 亮度分类	80-100	100-140		
	√	√		

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

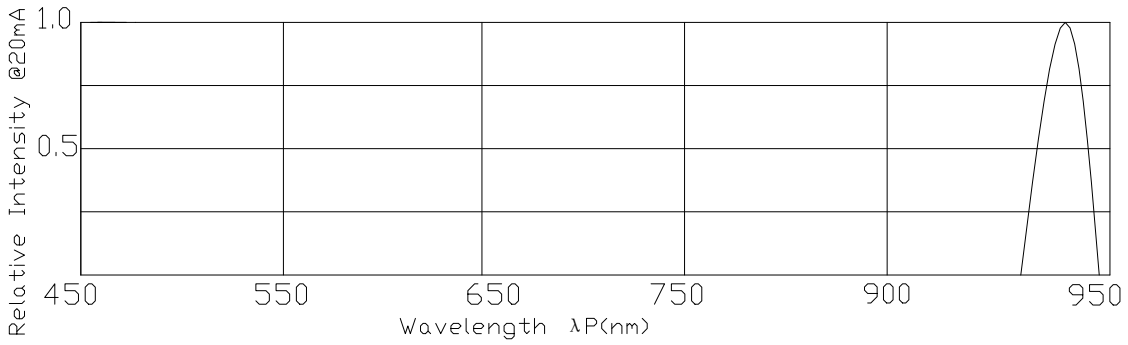


Fig 2.Forward Currnt VS. Forward Voltage

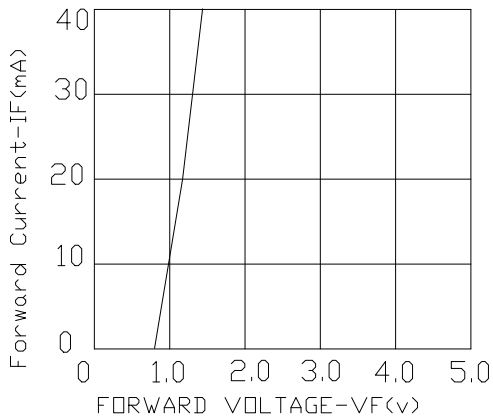


Fig 4.Forward Current vs. Temperature

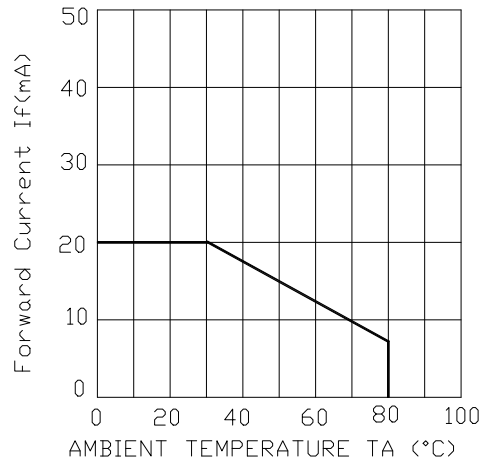
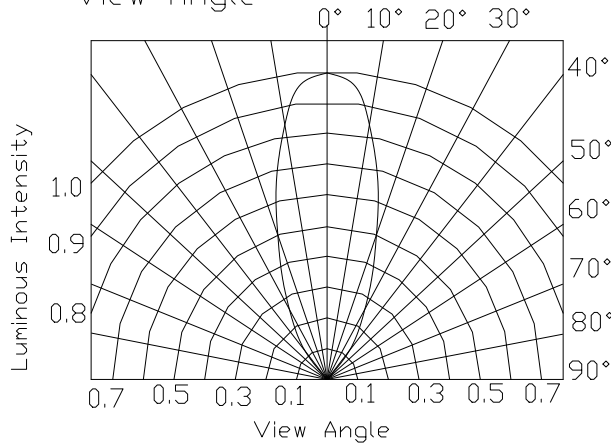
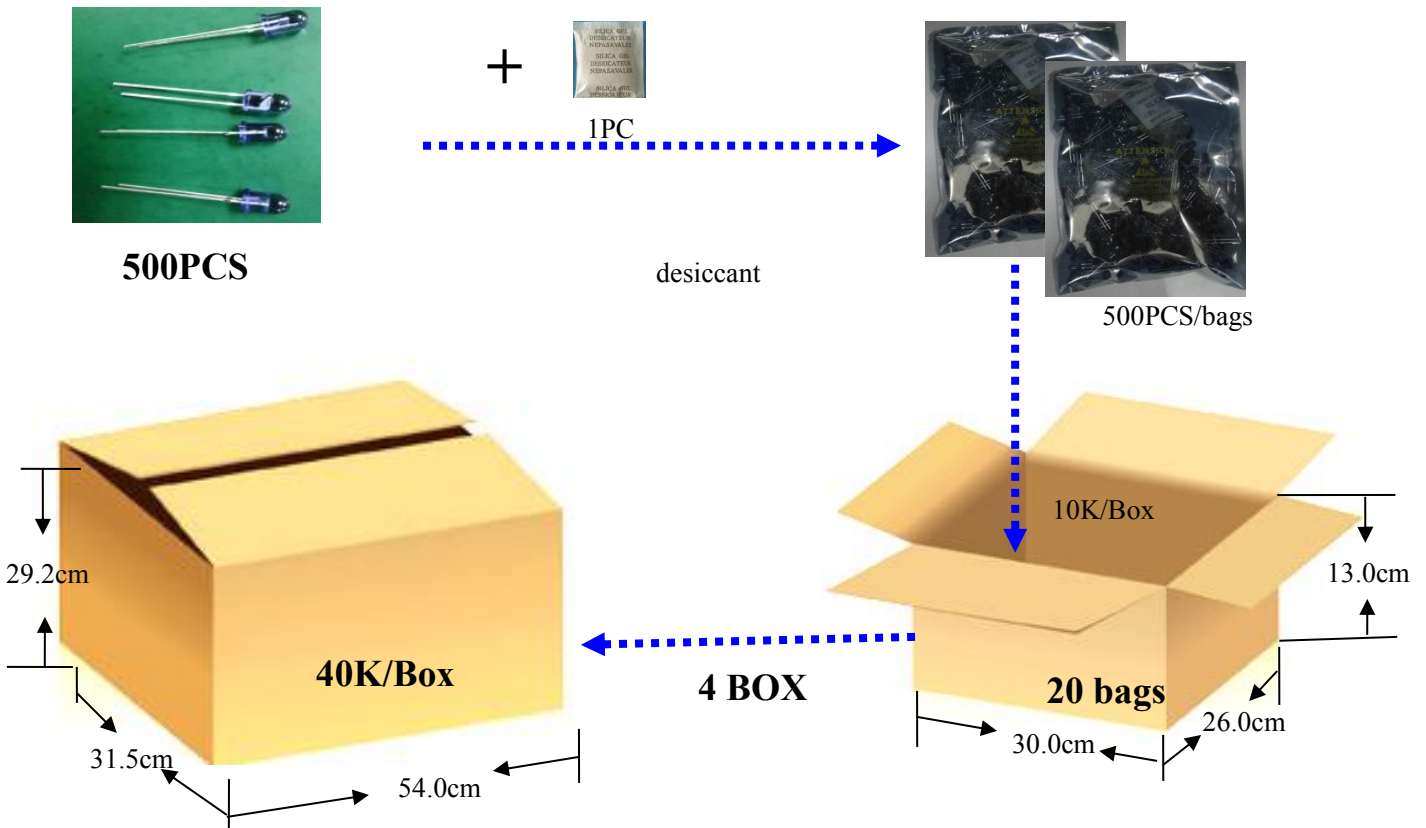


Fig 5.Luminous Intensity vs. View Angle



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.