



# 新僑光電

Xin Qiao Optoelectronics

## 样品承认书

客户编号: \_\_\_\_\_

规格型号: **1B54PD-B160Q465**

样品编号: \_\_\_\_\_

认定盖章 <b>Approved Signatures</b>	
工 程	审 核

承认单位: \_\_\_\_\_

客户反馈意见: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

认定盖章 <b>Approved Signatures</b>			
核 准	品 管	工 程	采 购

地址: 广东江门市高新区金瓯路 330 号

电话: **0750-3839388**

邮编: **529000**

传真: **0750-3839311**



## Features

- ◆ Low power consumption
- ◆ High efficiency
- ◆ Low current requirement
- ◆ Choice of various viewing angles
- ◆ Versatile mounting on P.C. Board or panel
- ◆ Reliable and robust
- ◆ Pb free
- ◆ The product itself will remain within RoHS compliant version

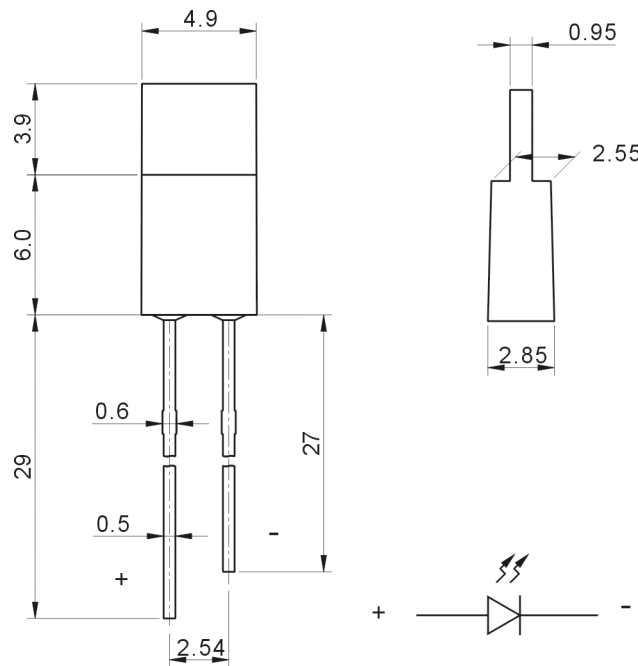
## Descriptions

- ◆ The series is specially designed for applications requiring higher brightness.
- ◆ The led lamps are available with different colors, intensities.

## Applications

- ◆ TV set
- ◆ Monitor
- ◆ Telephone
- ◆ Computer
- ◆ Circuit board.

## Package Dimension:



NOTE: TOLERANCE  $\pm 0.5\text{mm}$

Part NO.	Material	Lens Color	Source Color
1B54PD-B160Q465	AlGaAs/GaAs	Blue Diffused	Hyper Blue

## Notes:

1. All dimensions are in millimeters(inches).
2. Tolerances unless Dimension  $\pm 0.25\text{mm}$ .
3. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.



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### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	MAX.	Unit
Power Dissipation	$P_d$	100	mW
Peak Forward Current(1/10 Duty Cycle,0.1ms Pulse Width)	$I_{FP}$	200	mA
Continuous Forward Current	$I_F$	30	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature Range	$T_{opr}$	-40°C to +80°C	
Storage Temperature Range	$T_{stg}$	-40°C to +85°C	
Lead Soldering Temperature [4mm(.157") From Body]	$T_{sol}$	260°C for 5 Seconds	

### Electrical Optical Characteristics: at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	$V_F$	2.9	3.1		V	$I_F=20mA$
Luminous Intensity	$I_V$	8	13		mcd	$I_F=20mA$
Dominant Wavelength	$\lambda_d$	460	465		nm	$I_F=20mA$
Peak Emission Wavelength	$\lambda_p$		463		nm	$I_F=20mA$
Spectral Line Half-Width	$\Delta\lambda$		30		nm	$I_F=20mA$
Reverse Current	$I_R$			10	$\mu A$	$V_R=5V$
Viewing Angle	$\theta$		160		deg	$I_F=20mA$

### Notes:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.



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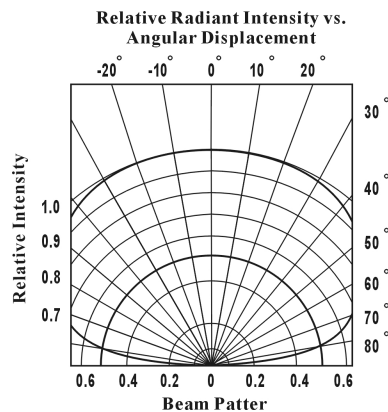
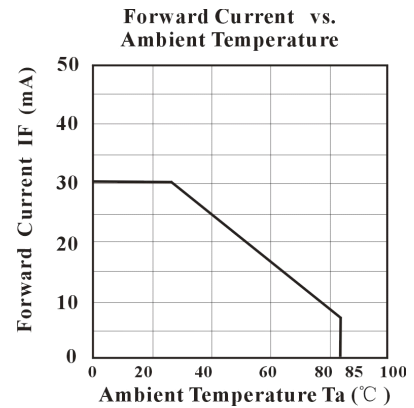
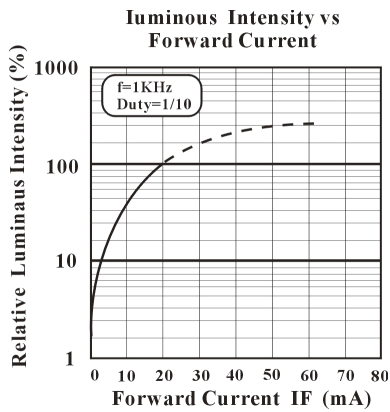
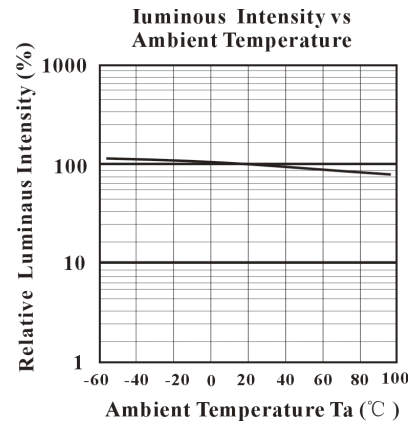
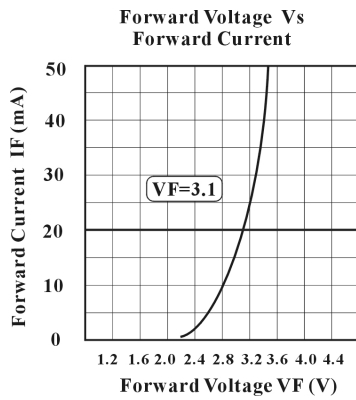
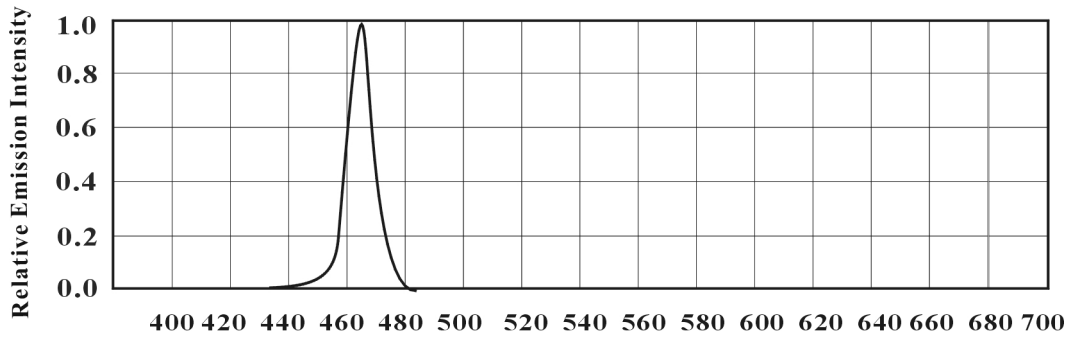


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## Typical Electrical/Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

### Wave Length(nm) Hyper Blue @ $\lambda_p = 463$





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