





Drawing No.	*Rev.	Date	Page
BF5H20G-YIR	B	2017/03/22	1/3

# APPROVAL SHEET

Part No: **BF5H20G-YIR**

NOTE : **Green Part**

MAKER			CUSTOMER	
				
R&D	QA	Sales	Checked	Approved
				

Prepared	Checked	Approved
Rachel Lee	Hann Chiu	Kenneth Wu

## LED LAMP Technical Data

### DESCRIPTION:

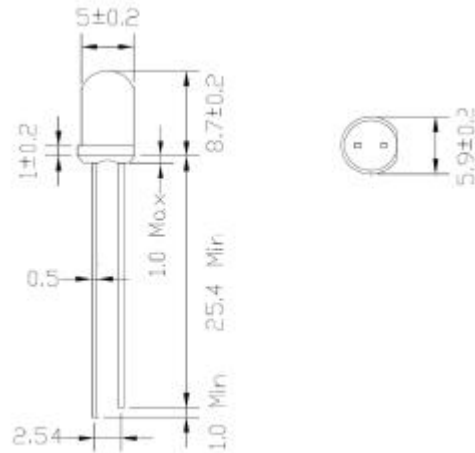
Device Type : BF5H20G-YIR

Dice Material : AlGaAs

Light Color : InfraRed 850nm

Lens Color : Water Clear

Lens Dimension : 5 mm



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

Parameter	Max.	Unit
DC Forward Current	100	mA
Reverse Voltage	5	V
Power Dissipation	120	mW
Operating Temperature	Topr : -30 ~ +80	°C
Storage Temperature	Tstr : -30 ~ +100	°C
Solder DIP (MAX. 5 seconds, 1.6mm from body) Temperature 260°C		

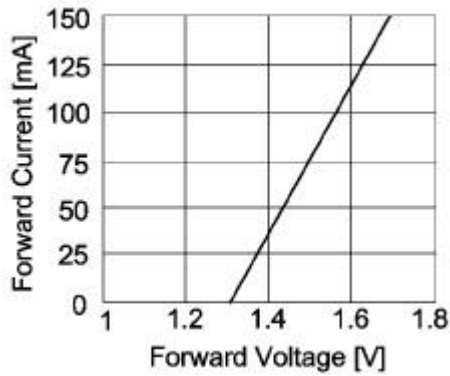
### Electrical and Optical Characteristics at Ta=25°C

Symbol	Description	Test Condition	Min.	Typ.	Max.	Unit
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 50mA	-	1.6	2.0	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 5V	-	-	10	μA
λ <sub>P</sub>	Peak Emission Wavelength	I <sub>F</sub> = 50mA	-	850	-	nm
Δλ	Spectral Line Halfwidth	I <sub>F</sub> = 50mA	-	40	-	nm
2θ <sub>1/2</sub>	Viewing Angle	I <sub>F</sub> = 50mA	-	20	-	Deg.
I <sub>e</sub>	Radiant Intensity	I <sub>F</sub> = 50mA	80	-	110	mW/sr

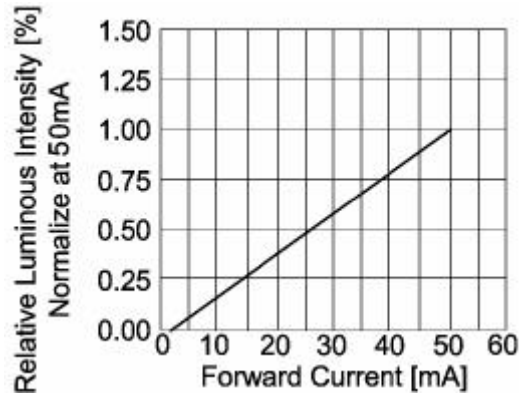
- Note:
- 1.The lead should be formed up to 5mm from the body of device without forming stress.
  2. Soldering shall be performed after lead forming.
  3. All dimensions are in millimeters
  4. Suggest: the better current for this device is less than 60mA

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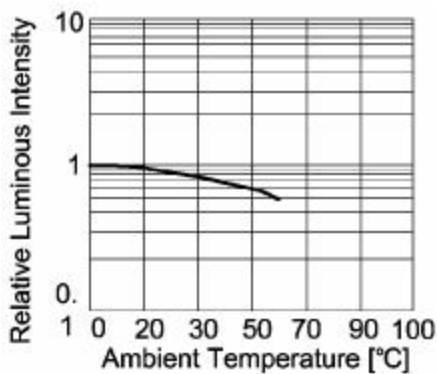
### Typical Optical-Electrical Characteristic Curves



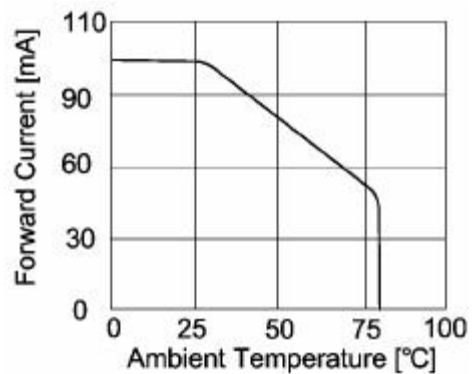
**Forward Current  
Vs. Forward Voltage**



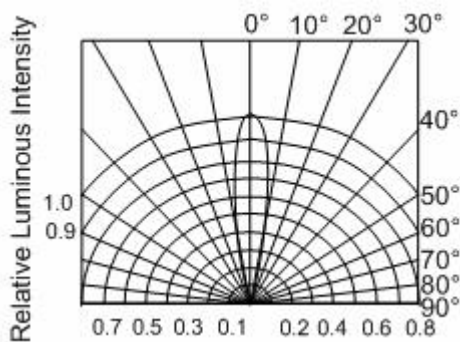
**Luminous Intensity  
Vs. Forward Current**



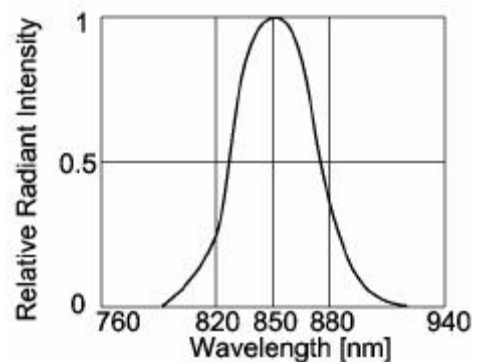
**Luminous Intensity  
Vs. Ambient Temperature**



**Forward Current  
Vs. Ambient Temperature**



**Radiation Pattern**



**Relative Luminous Intensity  
Vs. Wavelength**