


Drawing No.	*Rev.	Date	Page
BF5H80G-ZIR	B	2022/02/23	1/3

# APPROVAL SHEET

Part No: **BF5H80G-ZIR**

NOTE : Green Part

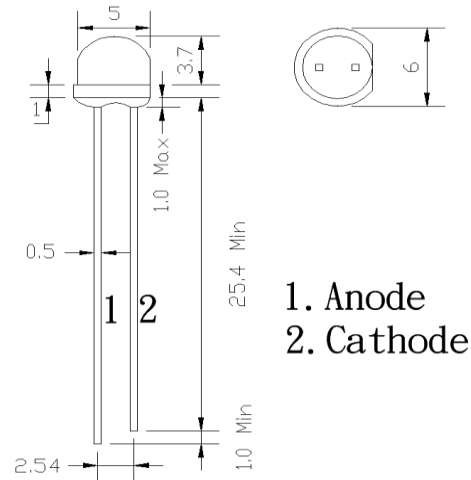
MAKER			CUSTOMER	
				
R&D	QA	Sales	Checked	Approved
<i>Sky</i>	<i>paib</i>	<i>31</i>		

Prepared	Checked	Approved
Rachel Lee	Sky Lin	Kenneth Wu

## LED LAMP Technical Data

### DESCRIPTION:

Device Type	: BF5H80G-ZIR
Dice Material	: AlGaAs
Emitting Wavelength	: InfraRed
Lens Color	: Water Clear
Lens Dimension	: 5 mm



1. Anode  
2. Cathode

All epoxy resin dimension are in millimeter  
tolerance is  $\pm 0.2\text{mm}$

### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Max.	Unit
DC Forward Current	100	mA
Reverse Voltage	5	V
Power Dissipation	180	mW
Operating Temperature	Topr : -40 ~ +80	$^\circ\text{C}$
Storage Temperature	Tstr : -40 ~ +100	$^\circ\text{C}$
Solder DIP (MAX. 5 seconds, 1.6mm from body) Temperature $260^\circ\text{C}$		

### Electrical and Optical Characteristics at $T_a=25^\circ\text{C}$

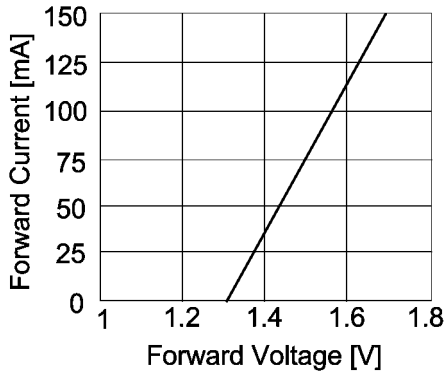
Symbol	Description	Test Condition	Min.	Typ.	Max.	Unit
$V_F$	Forward Voltage	$I_F = 100\text{mA}$	-	1.4	1.8	V
$I_R$	Reverse Current	$V_R = 5\text{V}$	-	-	10	$\mu\text{A}$
$\lambda_p$	Peak Emission Wavelength	$I_F = 100\text{mA}$	-	940	-	nm
$\Delta\lambda$	Spectral Line Halfwidth	$I_F = 100\text{mA}$	-	50	-	nm
$2\theta_{1/2}$	Viewing Angle	$I_F = 100\text{mA}$	-	80	-	Deg.
$I_e$	Radiant Intensity	$I_F = 100\text{mA}$	7	15	-	mW/sr

Note:

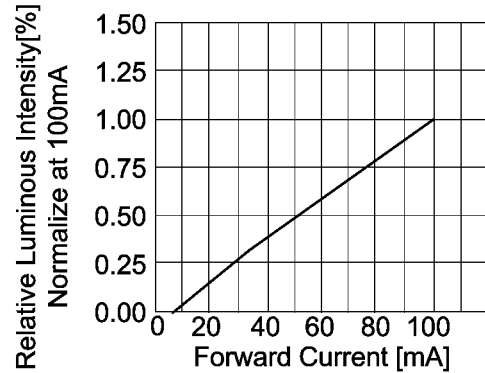
1. The lead should be formed up to 5mm from the body of device without forming stress.
2. Soldering shall be performed after lead forming.
3. All dimensions are in millimeters

## LED LAMP Technical Data

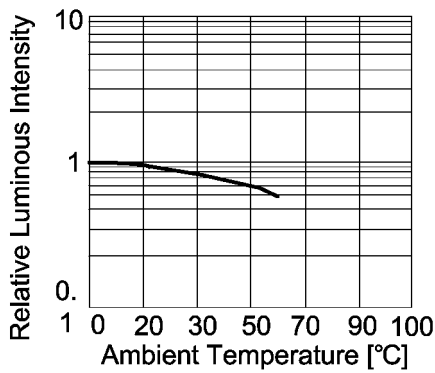
### Typical Optical-Electrical Characteristic Curves



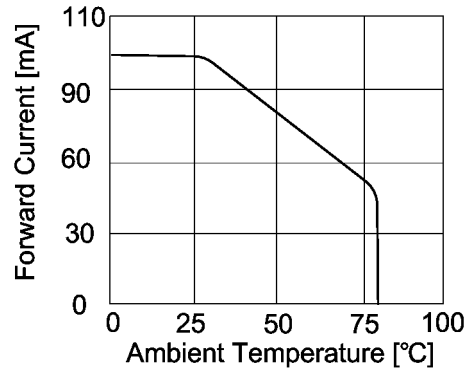
**Forward Current  
Vs. Forward Voltage**



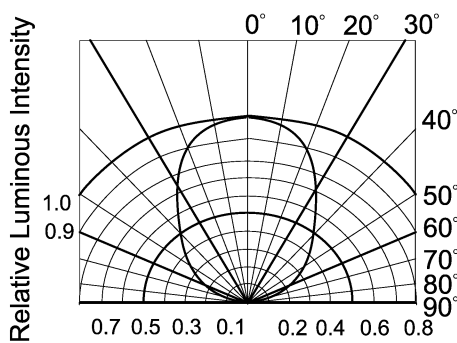
**Luminous Intensity  
Vs. Forward Current**



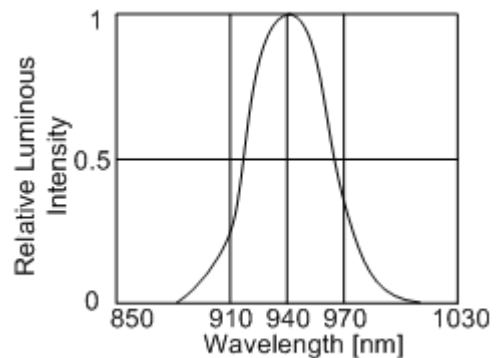
**Luminous Intensity  
Vs. Ambient Temperature**



**Forward Current  
Vs. Ambient Temperature**



**Radiation Pattern**



**Relative Luminous Intensity  
Vs. Wavelength**