


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

APPROVAL SHEET

Part No: **BF5H80G-ZIR**

NOTE : Green Part

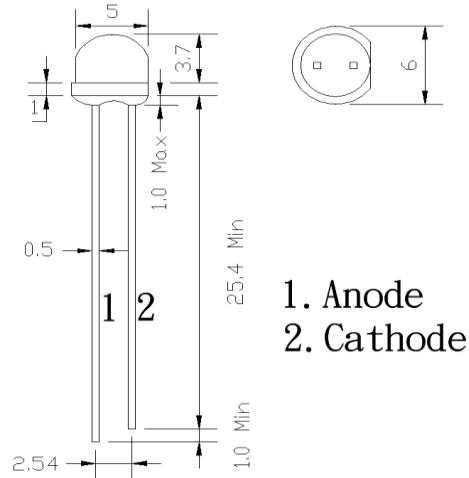
MAKER			CUSTOMER	
				
R&D	QA	Sales	Checked	Approved
<i>Sky</i>	<i>paib</i>	<i>31</i>		

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



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°C		

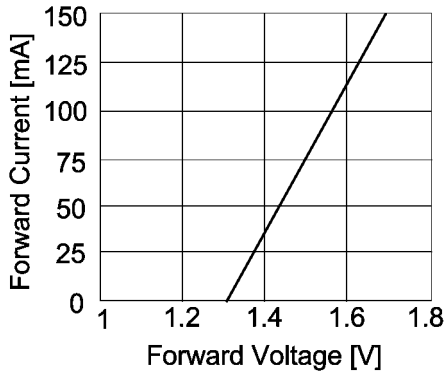
Electrical and Optical Characteristics at $T_a=25^\circ\text{C}$

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	μA
λ_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

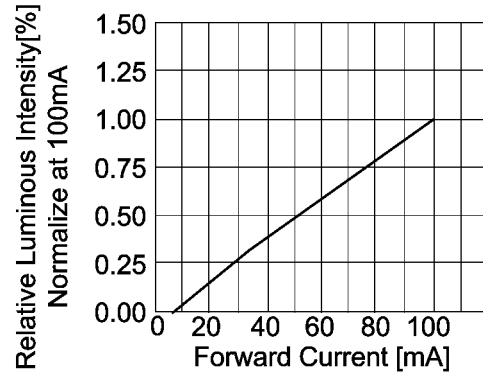
- Note:
1. The lead should be formed up to 5mm from the body of device without forming stress.
 2. Soldering shall be performed after lead forming.
 3. All dimensions are in millimeters

LED LAMP Technical Data

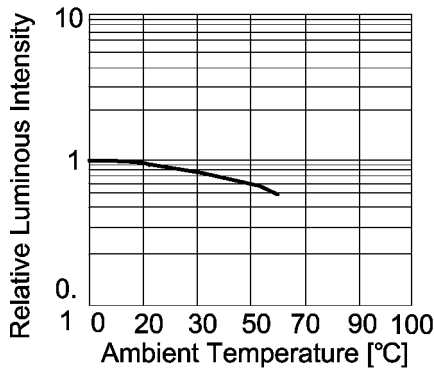
Typical Optical-Electrical Characteristic Curves



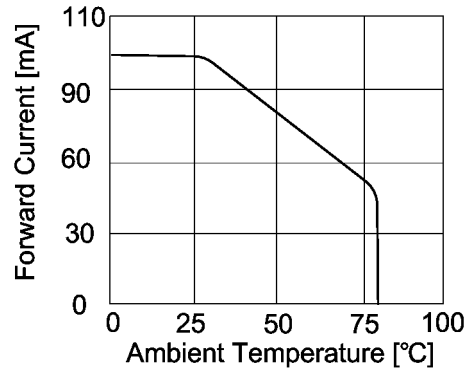
**Forward Current
Vs. Forward Voltage**



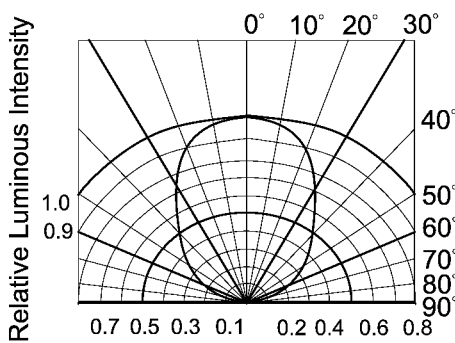
**Luminous Intensity
Vs. Forward Current**



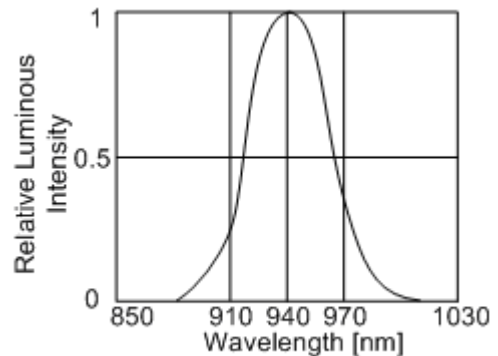
**Luminous Intensity
Vs. Ambient Temperature**



**Forward Current
Vs. Ambient Temperature**



Radiation Pattern



**Relative Luminous Intensity
Vs. Wavelength**