





Drawing No.	*Rev.	Date	Page
BF5H80GA-RNH-020mA	A	2022/11/08	1/3

APPROVAL SHEET

Part No: **BF5H80GA-RNH-020mA**

NOTE : Green Part

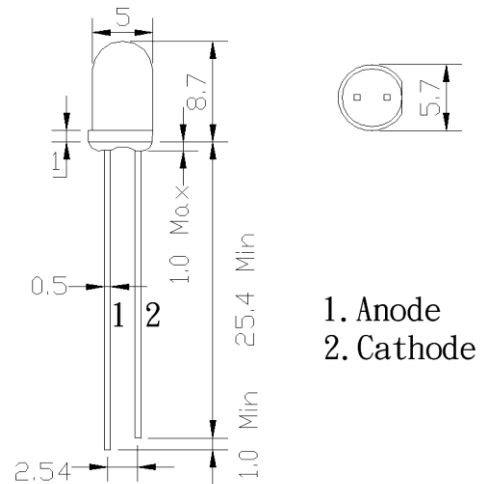
MAKER			CUSTOMER	
				
R&D	QA	Sales	Checked	Approved
				

Prepared	Checked	Approved
Rachel Lee	Sky Lin	Kenneth Wu

LED LAMP Technical Data

DESCRIPTION:

Device Type	: BF5H80GA-RNH-020mA
Dice Material	: AlGaAs/GaAs
Light Color	: Red
Lens Color	: Red Diffused
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	20	mA
Reverse Voltage	5	V
Power Dissipation	50	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		

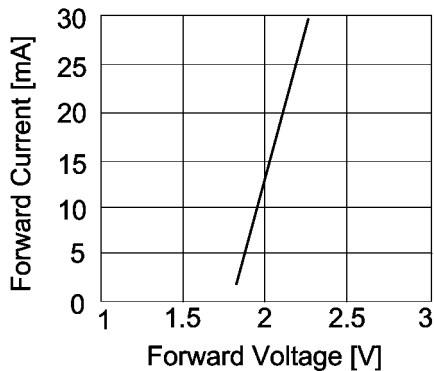
Electrical and Optical Characteristics at $T_a=25^\circ\text{C}$

Symbol	Description	Test Condition	Min.	Typ.	Max.	Unit
V_F	Forward Voltage	$I_F = 20\text{mA}$	-	2.0	2.5	V
I_R	Reverse Current	$V_R = 5\text{V}$	-	-	10	μA
λ_D	Dom. Emission Wavelength	$I_F = 20\text{mA}$	-	640	-	nm
$\Delta\lambda$	Spectral Line Halfwidth	$I_F = 20\text{mA}$	-	20	-	nm
$2\theta_{1/2}$	Viewing Angle	$I_F = 20\text{mA}$	-	80	-	Deg.
I_v	Luminous Intensity	$I_F = 20\text{mA}$	-	170	-	mcd

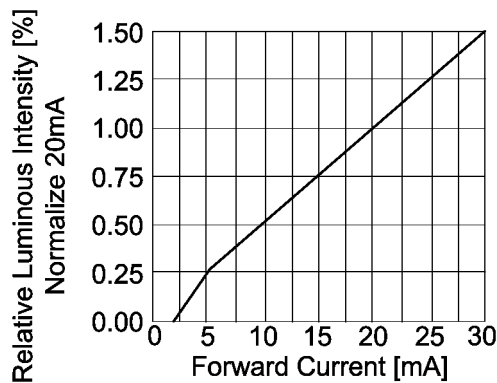
- Note:
- 1.The lead should be formed up to 5mm from the body of device without forming stress.
 2. Soldering shall be performed after lead forming.
 3. All dimensions are in millimeters

LED LAMP Technical Data

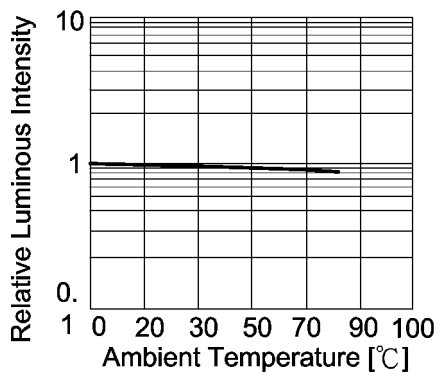
Typical Optical-Electrical Characteristic Curves



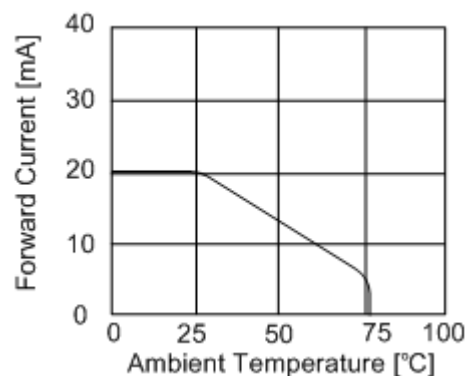
**Forward Current
Vs. Forward Voltage**



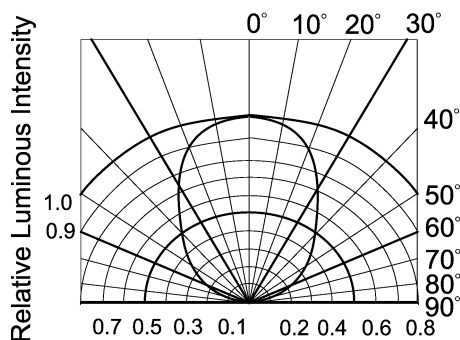
**Luminous Intensity
Vs. Forward Current**



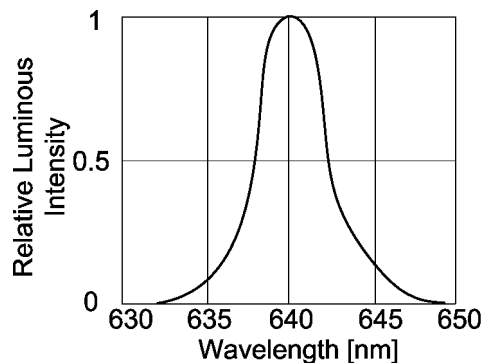
**Luminous Intensity
Vs. Ambient Temperature**



**Forward Current
Vs. Ambient Temperature**



Radiation Pattern



**Relative Luminous Intensity
Vs. Wavelength**