


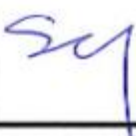


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APPROVAL SHEET

Part No: **BF3H45GA-BNH-020mA**

NOTE : Green Part

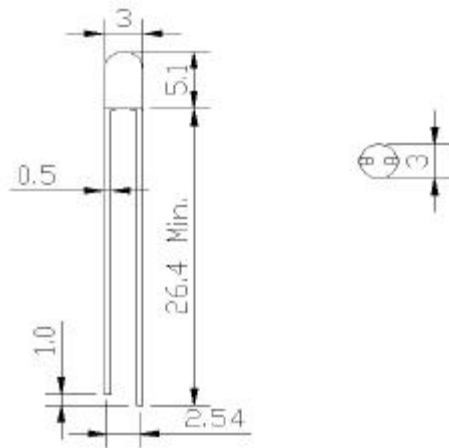
MAKER			CUSTOMER	
				
R&D	QA	Sales	Checked	Approved
				

Prepared	Checked	Approved
Rachel Lee	Sky Lin	Kenneth Wu

LED LAMP Technical Data

DESCRIPTION:

Device Type	: BF3H45GA-BNH-020mA
Dice Material	: InGaN
Light Color	: Blue
Lens Color	: Water Clear
Lens Dimension	: 3mm



Absolute Maximum Ratings at Ta=25°C

Parameter	Max.	Unit
DC Forward Current	30	mA
Reverse Voltage	5	V
Power Dissipation	120	mW
Operating Temperature	Topr : -40 ~ +100	°C
Storage Temperature	Tstr : -40 ~ +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 _F	Forward Voltage	I _F = 20mA	2.6	-	4.0	V
I _R	Reverse Current	V _R = 5V	-	-	10	μA
λ _D	Dom. Emission Wavelength	I _F = 20mA	-	465	-	nm
Δλ	Spectral Line Halfwidth	I _F = 20mA	-	20	-	nm
2θ _{1/2}	Viewing Angle	I _F = 20mA	-	45	-	Deg.
I _v	Luminous Intensity	I _F = 20mA	2500	3300	-	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
 4. Static Electricity and surge damage the LED lamps.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LED lamp..



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BIN: - -

I II III

I - Color II - Luminous Intensity III - Voltage

DOMINANT WAVELENGTH GUIDE (unit : nm)

CODE	DOMINANT WAVELENGTH	
	MIN	MAX
B3F	460	463
B3G	463	466
B3H	466	469
B3I	469	472
B3J	472	475

*Tolerance of measurement of Dominant Wavelength is ± 1 nm

LUMINOUS INTENSITY GUIDE (unit : mcd)

CODE	IV CODE(mcd)	
	MIN	MAX
N0	2350	2700
P0	2700	3250
Q0	3250	3600
R0	3600	4300

*Tolerance of measurement of luminous intensity $\pm 10\%$

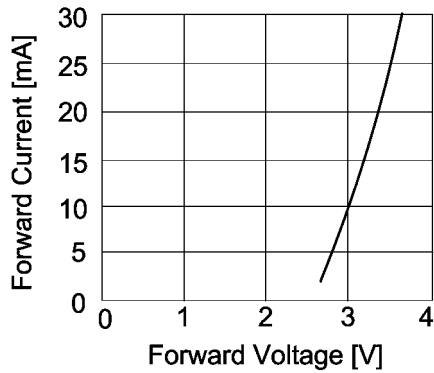
FORWARD VOLTAGE GUID (unit : V)

CODE	VF CODE(V)	
	MIN	MAX
PQ0	2.6	2.8
RS0	2.8	3.0
TU0	3.0	3.2
VW0	3.2	3.4
XY0	3.4	3.6

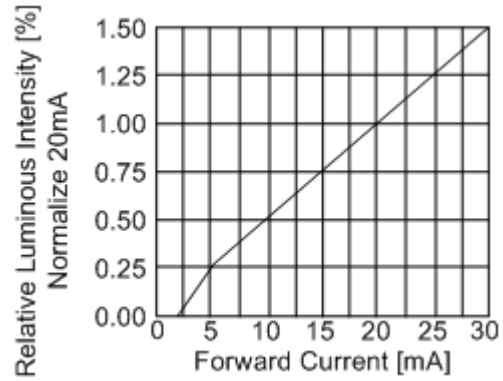
*Tolerance of measurement of forward voltage is $\pm 0.05V$

LED LAMP Technical Data

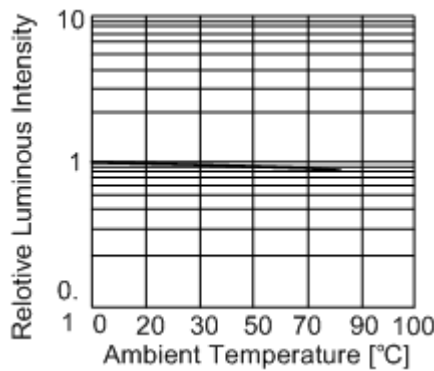
Typical Optical-Electrical Characteristic Curves



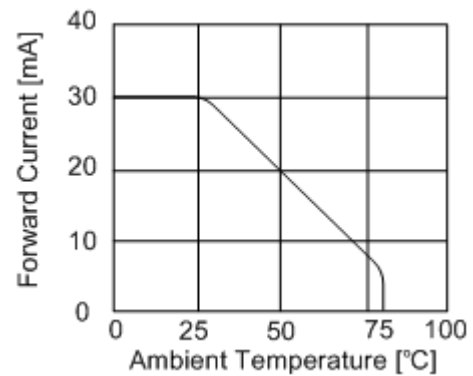
**Forward Current
Vs. Forward Voltage**



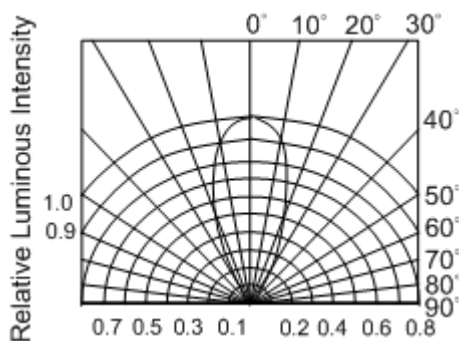
**Luminous Intensity
Vs. Forward Current**



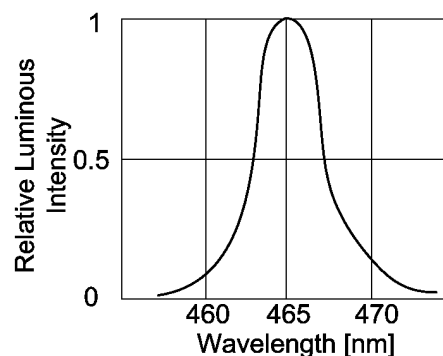
**Luminous Intensity
Vs. Ambient Temperature**



**Forward Current
Vs. Ambient Temperature**



Radiation Pattern



**Relative Luminous Intensity
Vs. Wavelength**