
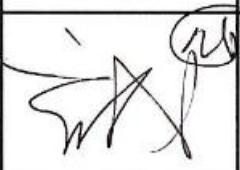




| | | | |
|-------------------|-------|------------|------|
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| BF3H45G-BNH-020mA | A | 2015/05/14 | 1/3 |

APPROVAL SHEET

Part No: **BF3H45G-BNH-020mA**

NOTE : Green Part

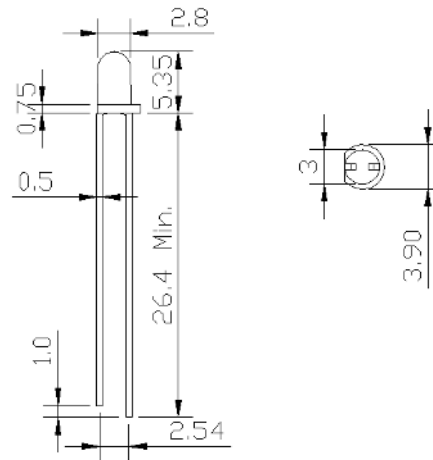
| MAKER | | | CUSTOMER | |
|---|---|---|----------|----------|
|  | | | | |
| R&D | QA | Sales | Checked | Approved |
|  |  |  | | |

| | | |
|------------|---------|------------|
| Prepared | Checked | Approved |
| Rachel Lee | Sky Lin | Kenneth Wu |

LED LAMP Technical Data

DESCRIPTION:

Device Type : BF3H45G-BNH-020mA
 Dice Material : InGaN
 Light Color : Blue
 Lens Color : Blue Diffused
 Lens Dimension : 3 mm



Absolute Maximum Ratings at Ta=25°C

| Parameter | Max. | Unit |
|--|-------------------|------|
| DC Forward Current | 20 | mA |
| Reverse Voltage | 5 | V |
| Power Dissipation | 80 | 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

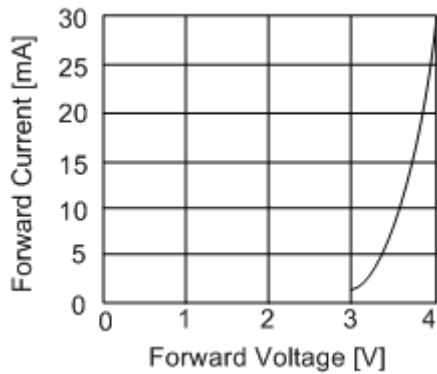
| Symbol | Description | Test Condition | Min. | Typ. | Max. | Unit |
|-------------------|--------------------------|-----------------------|------|------|------|------|
| V _F | Forward Voltage | I _F = 20mA | - | 3.5 | 4.0 | V |
| I _R | Reverse Current | V _R = 5V | - | - | 10 | μA |
| λ _D | Dom. Emission Wavelength | I _F = 20mA | - | 470 | - | nm |
| Δλ | Spectral Line Halfwidth | I _F = 20mA | - | 15 | 20 | nm |
| 2θ _{1/2} | Viewing Angle | I _F = 20mA | - | 45 | - | Deg. |
| I _v | Luminous Intensity | I _F = 20mA | 150 | - | 400 | 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.

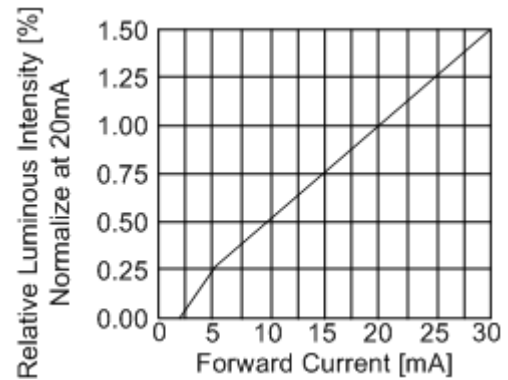
It is recommended to use a wrist band or anti-electrostatic glove when handing the LED lamp

LED LAMP Technical Data

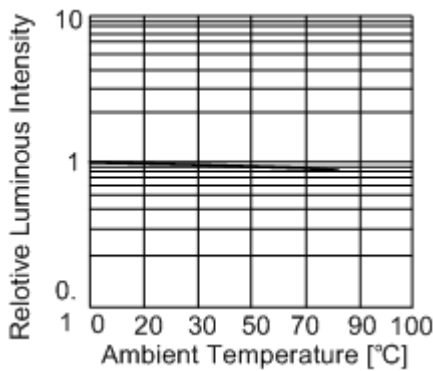
Typical Optical-Electrical Characteristic Curves



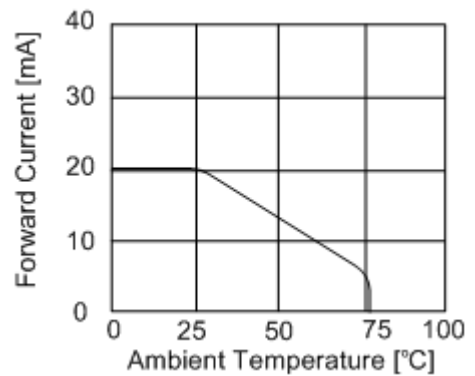
**Forward Current
Vs. Forward Voltage**



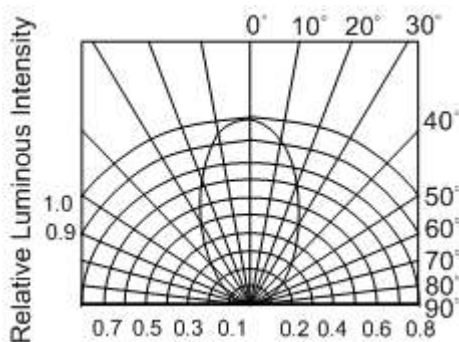
**Luminous Intensity
Vs. Forward Current**



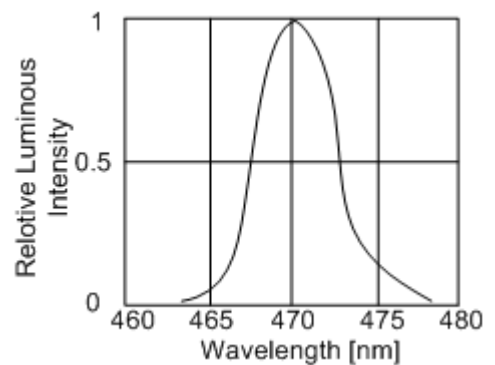
**Luminous Intensity
Vs. Ambient Temperature**



**Forward Current
Vs. Ambient Temperature**



Radiation Pattern



**Relative Luminous Intensity
Vs. Wavelength**