



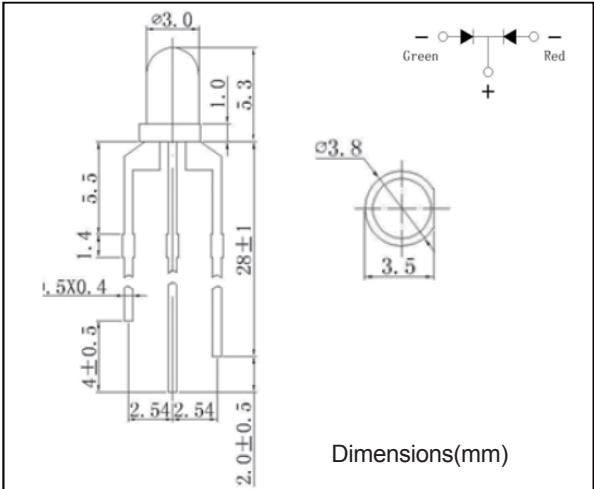
HFZT

3ARG9HWB

### Light Emitting Diode

#### Product Characteristics:

- Ultra Bright Brightness
- 3mm Round Type Bi-Color LED Lamp
- Package General Purpose Lead
- Highly Reliable
- Water Diffused Lens



#### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Typical Electrical & Optical Characteristics (Ta = 25°C) |                     |        |                          |      |      |      |      |
|--|---------------------|--------|--------------------------|------|------|------|------|
| Emitting Color   | ITEMS               | SYMBOL | CONDITION                | MIN. | TYP. | MAX. | UNIT |
| Red  | Forward Voltage     | VF     | IF = 20mA                | ---  | 2.2  | 2.6  | V    |
|  | Luminous Intensity  | IV     | IF = 20mA                | ---  | 36   | 60   | mcd  |
|  | Dominant Wavelength | λ D    | IF = 20mA                | ---  | 572  | ---  | nm   |
| Green  | Forward Voltage     | VF     | IF = 20mA                | ---  | 2.2  | 2.6  | V    |
|  | Luminous Intensity  | IV     | IF = 20mA                | ---  | 36   | 60   | mcd  |
|  | Dominant Wavelength | λ D    | IF = 20mA                | ---  | 572  | ---  | nm   |
| Reverse Current  |                     | IR     | VR = 5V                  | ---  | ---  | 30   | mA   |
| 50% Power Viewing Angle                                  |                     | 20½    | IF = 20mA                | ---  | 60   | ---  | deg  |
| Absolute Maximum Ratings at (Ta = 25°C)                  |                     |        |                          |      |      |      |      |
| ITEMS  |                     | SYMBOL | ABSOLUTE MAXIMUM RATING  |      |      |      | UNIT |
| Peak Forward Current                                     |                     | IFP    | 200                      |      |      |      | mA   |
| Continuous Forward Current                               |                     | IL     | 20                       |      |      |      | mA   |
| Reverse Voltage  |                     | VR     | 5                        |      |      |      | V    |
| Power Dissipation  |                     | PD     | 115                      |      |      |      | mW   |
| Operation Temperature                                    |                     | Topr   | -40 ~ +80                |      |      |      | °C   |
| Storage Temperature                                      |                     | Tstg   | -40 ~ +80                |      |      |      | °C   |
| Lead Soldering Temperature                               |                     | Tsol   | Max.260°C for 5 sec Max. |      |      |      |      |

IFP Conditions: Pulse Width

Transport 10msec duty transport 1/10 Tsol

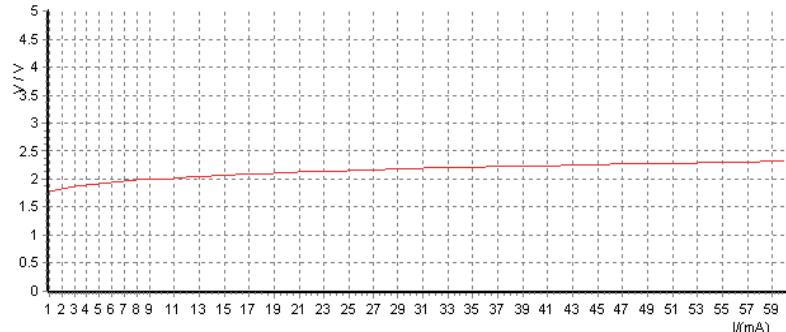
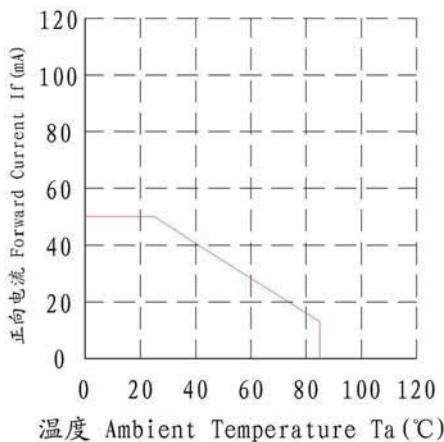
Conditions: 4mm from the bottom of the gel base



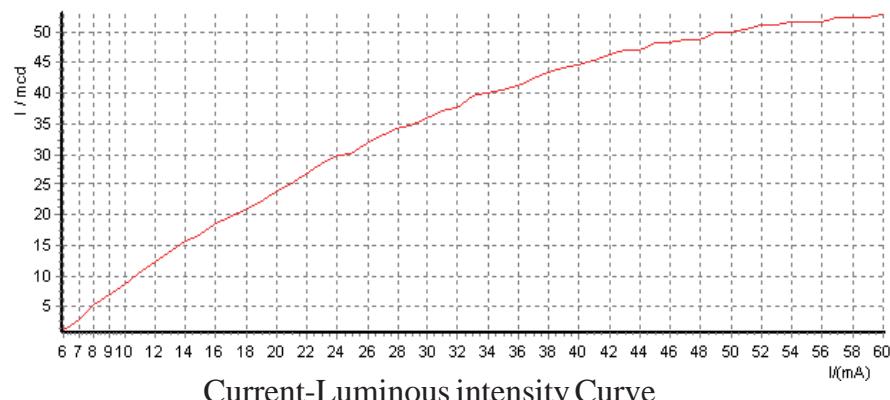
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## RATINGS AND CHARACTERISTIC CURVES

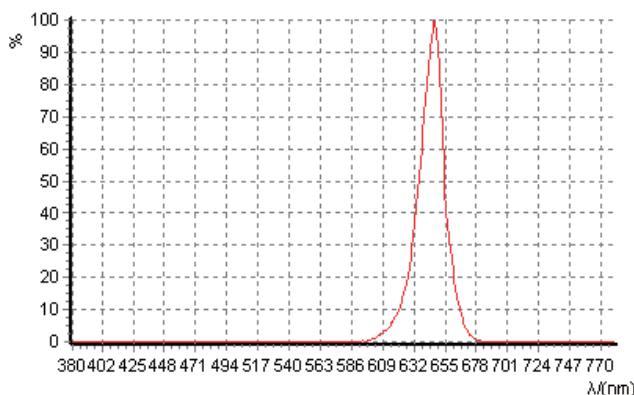
Typical Optical/Electrical Characteristics Curves (Ta=25°C Unless Otherwise Noted)



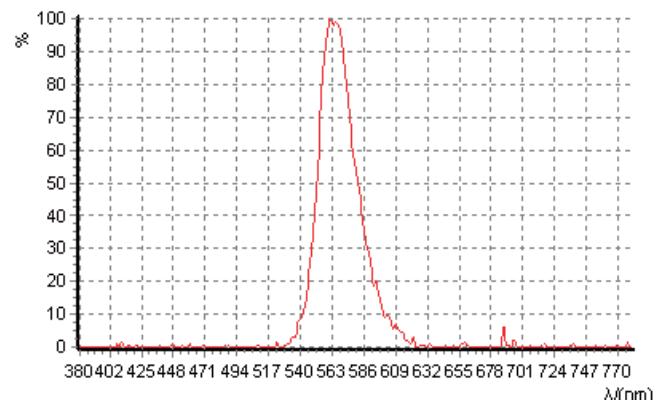
Current-Voltage Curve



Current-Luminous intensity Curve



Relative Spectral Distribution Curve (Red)



Relative Spectral Distribution Curve (Green)