

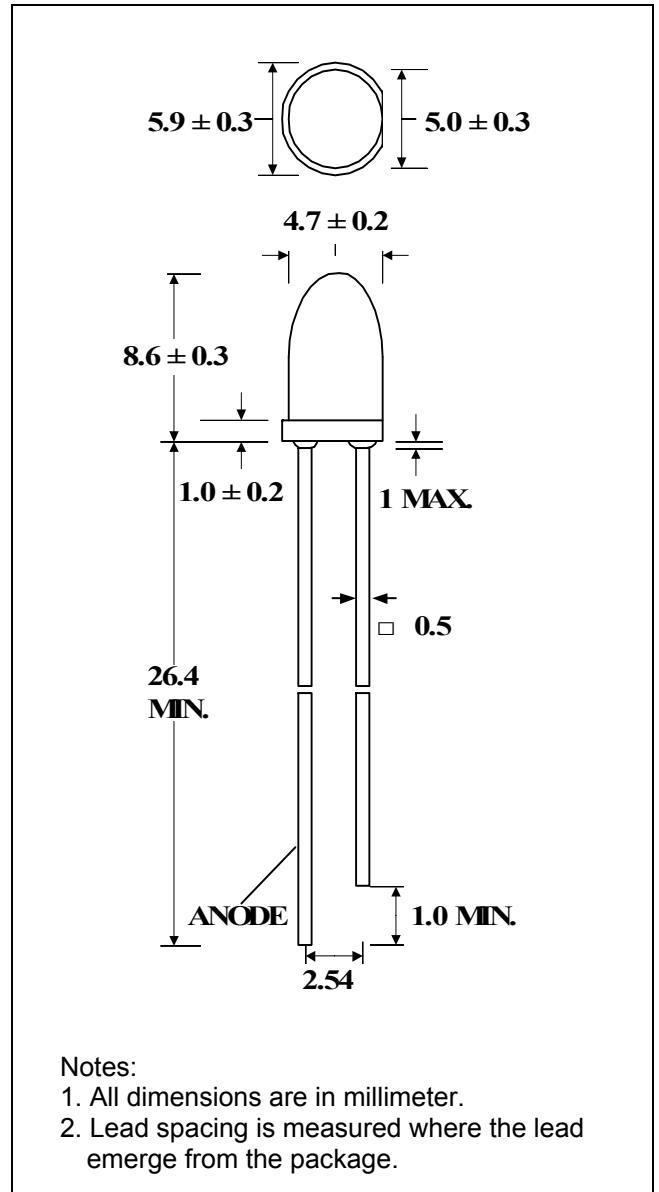
**B5b-436-30**

**DESCRIPTION**

- Super bright LED Lamp
- Round type
- T1-3/4 (5mm) diameter
- Lens color: Water Clear
- With Flange
- Solder leads without stand-off

**FEATURES**

- Emitted color: Super Red
- High Luminous intensity
- Technology: GaAlAs
- Peak wavelength  $\lambda_p = 660 \text{ nm}$
- Viewing angle:  $8^\circ$



**SELECTION GUIDE**

| Chip Material | Chip Emitted | Lens Color  | Viewing Angle |
|---------------|--------------|-------------|---------------|
| GaAlAs        | Super Red    | Water Clear | $8^\circ$     |

**B5b-436-30**

**ABSOLUTE MAXIMUM RATINGS**

(Ta=25 °C)

| PARAMETER                                     | SYMBOL    | MAX. RATING | Unit |
|---|-----------|-------------|------|
| Power Dissipation                             | $P_D$     | 80          | mW   |
| Peak Forward Current (1/10 Duty Cycle @1KHz ) | $I_{PF}$  | 50          | mA   |
| Continuous Forward Current                    | $I_{AF}$  | 30          | mA   |
| Reverse Voltage                               | $V_R$     | 5.0         | V    |
| Operating Temperature Range                   | $T_{OPR}$ | -40~+85     | °C   |
| Storage Temperature Range                     | $T_{STG}$ | -40~+85     | °C   |

Solder temperature 1.6 mm from body for 3 seconds at 260 °C

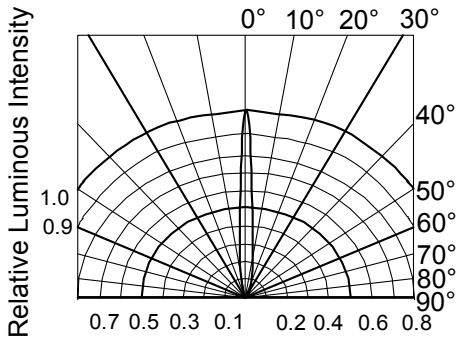
**OPTICAL-ELECTRICAL CHARACTERISTICS**

| PARAMETER                    | SYMBOL          | TEST CONDITION | MIN  | TYP  | MAX | UNIT |
|------------------------------|-----------------|----------------|------|------|-----|------|
| Luminous Intensity           | $I_V$           | $I_F = 20mA$   | 2300 | 3500 |     | mcd  |
| Forward Voltage              | $V_F$           | $I_F = 20mA$   |      | 1.9  | 2.4 | V    |
| Reverse Current              | $I_R$           | $V_R = 5V$     |      |      | 10  | uA   |
| Viewing Angle                | $2\theta_{1/2}$ | $I_F = 20mA$   |      | 8    |     | deg. |
| Peak Wavelength              | $\lambda_P$     | $I_F = 20mA$   |      | 660  |     | nm   |
| Dominant Wavelength          | $\lambda_D$     | $I_F = 20mA$   |      | 645  |     | nm   |
| Spectrum Radiation Bandwidth | $\Delta\lambda$ | $I_F = 20mA$   |      | 25   |     | nm   |

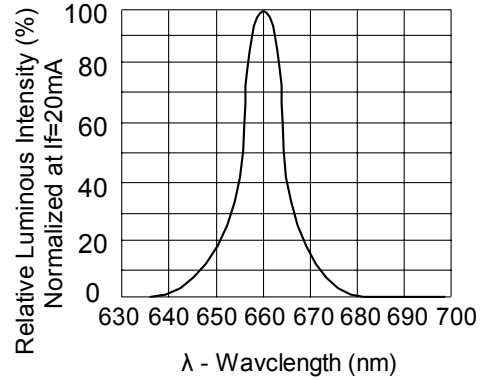
\*Tolerance of Viewing Angle: -10 / +5 deg.

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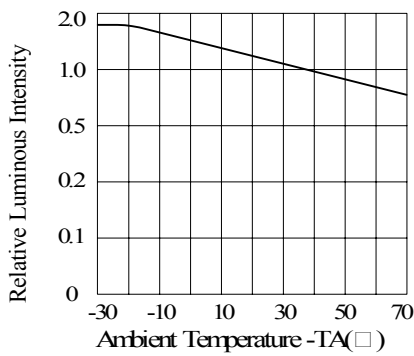
TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



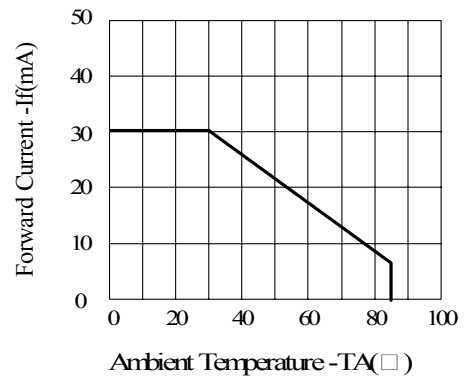
RADIATION DIAGRAM



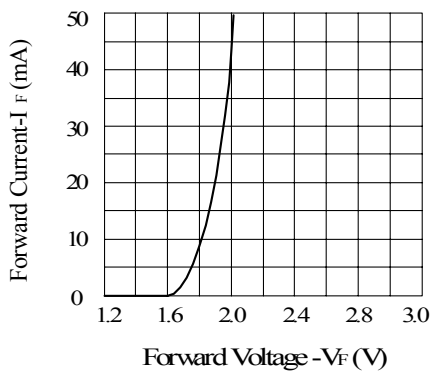
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



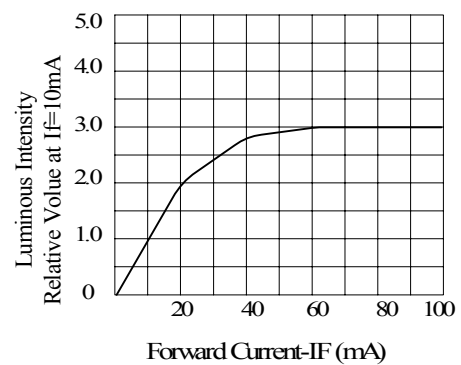
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

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