

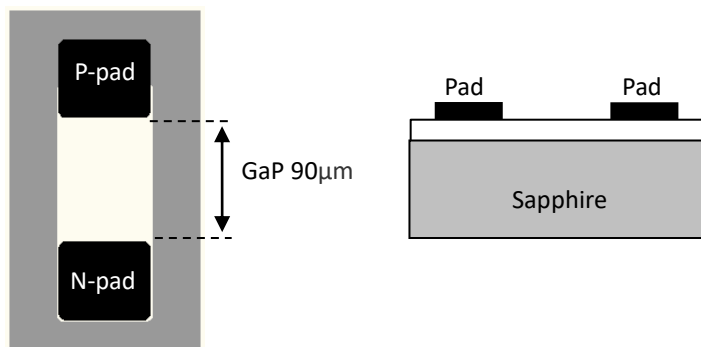
> Mechanical Specification:

(1) Dimension

- Chip size: 5 mil x 10 mil ($138\pm 25\ \mu\text{m}$ x $244\pm 25\ \mu\text{m}$)
- Thickness: 3.1 mil ($80\pm 10\ \mu\text{m}$)
- P pad: $66\pm 10\ \mu\text{m}$ x $56\pm 10\ \mu\text{m}$
- N pad: $66\pm 10\ \mu\text{m}$ x $56\pm 10\ \mu\text{m}$

(2) Metallization

- Electrode pad: Au



Features:

- Compatible with solder process
- Low Rth and Long life time

Applications:

- Keypad
- Indicator

> Electro-optical Characteristics at 25°C:

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------------------------|-----------------|-----------|------|------|------|------|
| Forward Voltage | Vf1 | If = 10µA | 1.3 | - | - | V |
| | Vf2 | If = 5mA | - | 2.0 | 2.4 | V |
| Reverse Current | Ir | Vr = 10V | - | - | 0.5 | µA |
| Peak Wavelength | λ_p | If = 5mA | - | 629 | - | nm |
| Dominant Wavelength ⁽¹⁾ | λ_d | If = 5mA | 619 | - | 629 | nm |
| Spectra Half-width | $\Delta\lambda$ | If = 5mA | - | 15 | - | nm |
| Luminous Intensity ⁽²⁾⁽³⁾ | Iv | If = 5mA | 100 | - | 110 | mcd |
| | | | 110 | - | 120 | |
| | | | 120 | - | 130 | |
| | | | 130 | - | 140 | |

Note:

(1) Basically, the wavelength span is 10nm; however, customers' special requirements are also welcome.

(2) Customers' special requirements are also welcome.

(3) Luminous intensity is measured by EPISTAR's equipment on bare chips.

> Absolute Maximum Ratings:

| Parameter | Symbol | Condition | Rating | Unit |
|----------------------|--------|-----------------------------|-----------|------|
| Forward DC Current | If | Ta = 25°C | ≤ 20 | mA |
| Reverse Voltage | Vr | Ta = 25°C | ≤ 10 | V |
| Junction Temperature | Tj | - | ≤ 115 | °C |
| Storage Temperature | Tstg | Chip | -40 ~ +85 | °C |
| | | Chip-on-tape/storage | 5 ~ 35 | °C |
| | | Chip-on-tape/transportation | -20 ~ +65 | °C |

Note: Maximum ratings are package dependent. The above maximum ratings were determined using by EPISTAR standard. Stresses in excess of the absolute maximum ratings such as forward current and junction temperature may cause damage to the LED.

> Characteristic Curves:

Fig.1 –Relative luminous Intensity vs. Forward Current

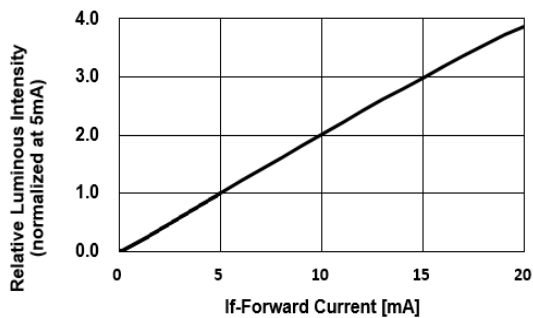


Fig.2 – Forward Current vs. Forward Voltage

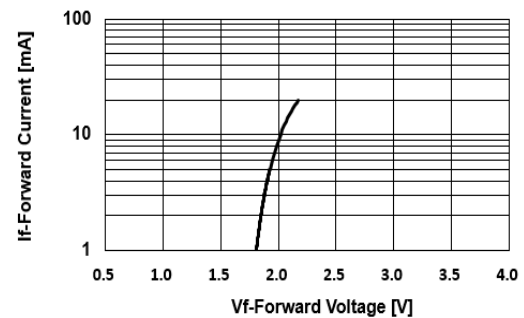


Fig.3 –Relative Intensity (@5mA) vs. Ambient Temperature

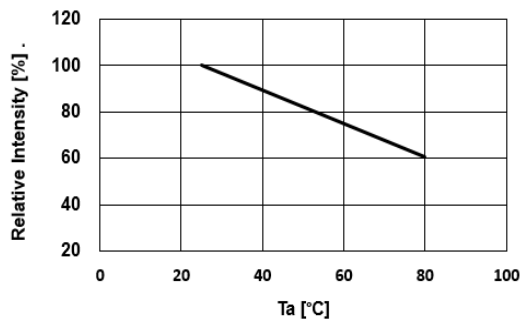


Fig.4 – Forward Voltage (@5mA) vs. Ambient Temperature

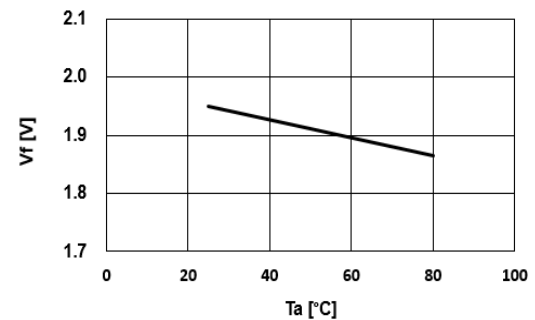


Fig.5 – Dominant Wavelength (@5mA) vs. Ambient Temperature

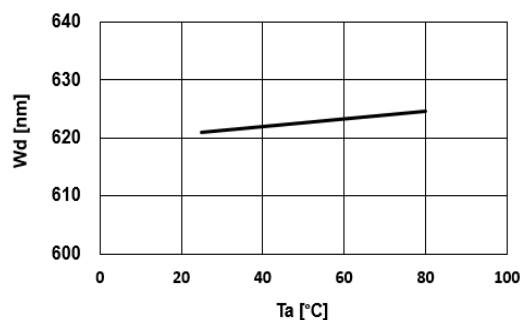


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 115°C)

