

1. Descriptions

The KB1611Y60 (KLB-11Y) is a very small-sized chip LED which makes right angle mounting available..

2. Features

- ◆ Small Footprint Surface Mount Package (1.6L×0.55W×1.15H [mm])
- ◆ Forward Voltage(V_F) from 1.6 to 2.4V @ Forward Current(I_F)=20mA
- ◆ Operation Temperature from -20℃ to +85℃
- ◆ High Electric Static Discharge(ESD) Voltage above than 1,000V for HBM
- ◆ High Luminous Intensity(I_V) is typical 85mcd @ I_F =20mA

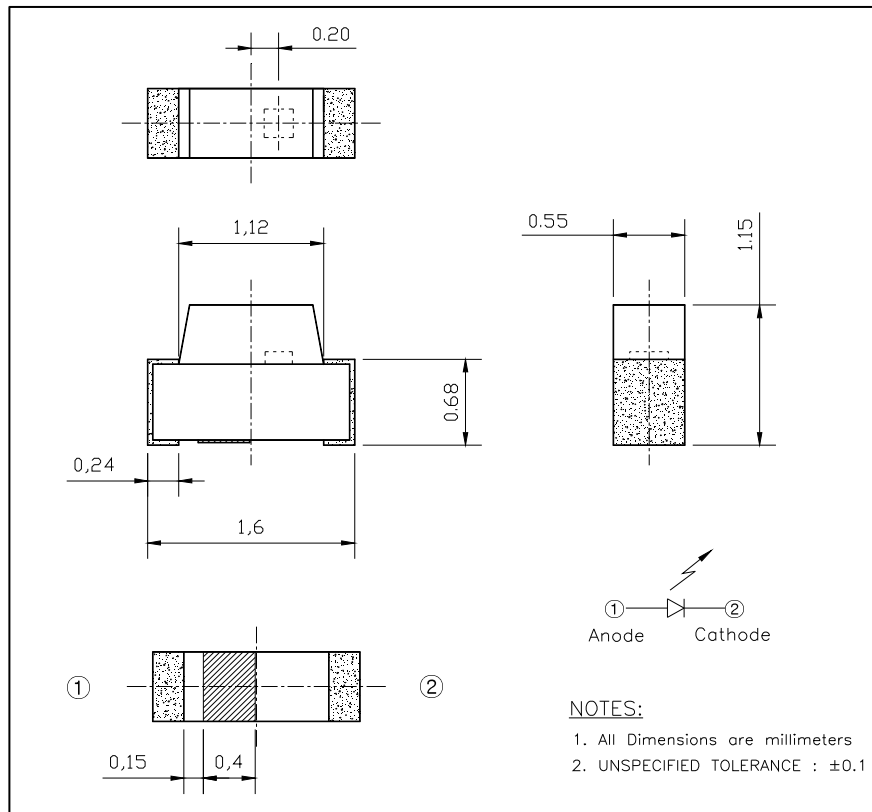
3. Application

- ◆ Cellular Phone Key Pad Back Light
- ◆ Indoor Display Modules
- ◆ Indicators for Electrical Appliances

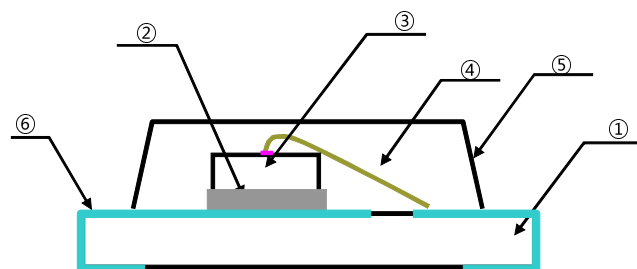
The contents of this data sheet are subject to change without advance notice for the purpose of improvement.
When using this product, would you please refer to the latest specifications.

4. Outline Dimensions and Material Descriptions

◆ Outline Dimensions



◆ Material Descriptions



| No. | ITEM | Material |
|-----|-------------|--------------|
| ① | PCB | BT Resin |
| ② | Paste | Ag Epoxy |
| ③ | LED Chip | AlInGaP |
| ④ | Wire | Au |
| ⑤ | Encapsulant | Clear Epoxy |
| ⑥ | Electrode | Au Plated Cu |

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

5. Absolute Maximums

| ITEM | Symbol | MIN | MAX | Unit | Conditions |
|-----------------------|-----------|-----|-----|------|------------|
| Forward Current | I_F | - | 20 | mA | |
| Peak Forward Current* | I_{FP} | - | 40 | mA | |
| Power Dissipation | P_D | - | 120 | mW | |
| Reverse Voltage | V_R | - | 5 | V | |
| Operating Temperature | T_{OP} | -20 | 85 | °C | |
| Storage Temperature | T_{st} | -30 | 100 | °C | |
| Soldering Temperature | T_{sol} | | 260 | °C | 5 Sec |

* Remark : Duty Ratio : 1/10, Pulse Width : 10ms

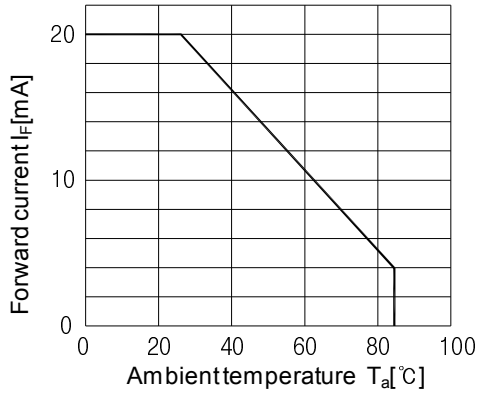
6. Electro-Optical Characteristics ($T_A = 25\text{ }^\circ\text{C}$)

| ITEM | Symbol | MIN | TYP | MAX | Unit | Conditions |
|---------------------|-----------------|-----|-----|-----|---------------|-------------------|
| Forward Voltage | V_F | 1.6 | - | 2.4 | V | $I_F=20\text{mA}$ |
| Intensity | I_V | 59 | - | - | mcd | $I_F=20\text{mA}$ |
| Dominant Wavelength | W_D | 599 | - | 611 | nm | $I_F=20\text{mA}$ |
| Reverse Current | I_R | - | - | 10 | μA | $V_R=5\text{V}$ |
| FWHM | $\Delta\lambda$ | - | 20 | - | nm | $I_F=20\text{mA}$ |

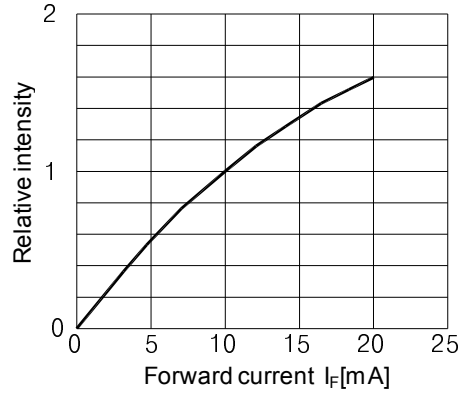
The contents of this data sheet are subject to change without advance notice for the purpose of improvement.
When using this product, would you please refer to the latest specifications.

8. Characteristic Graphs

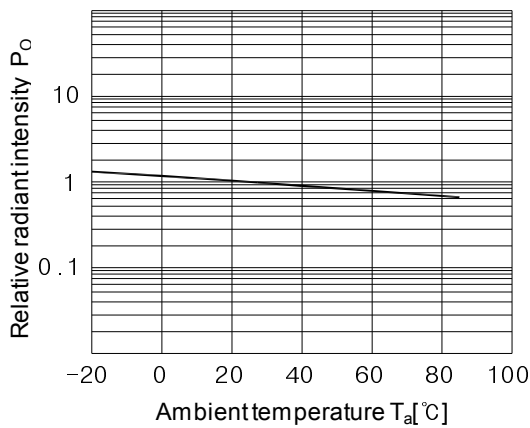
Forward current vs. Ambient temperature



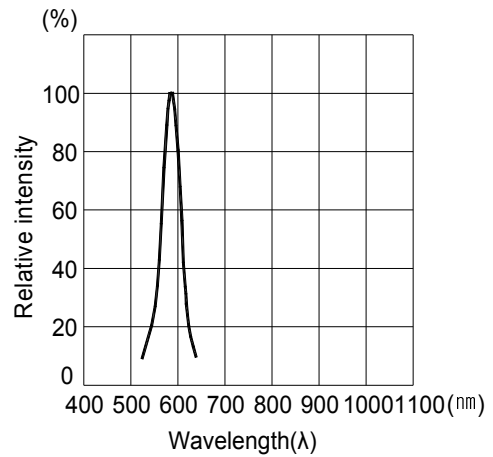
Radiant Intensity vs. Forward current



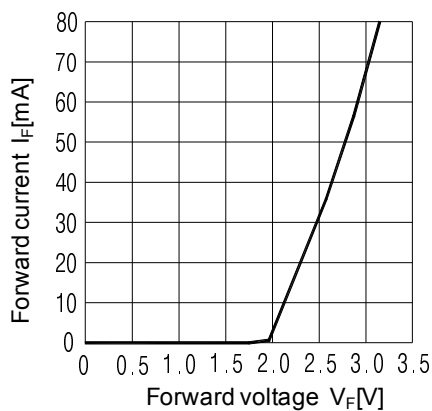
Relative radiant intensity vs. Ambient temperature



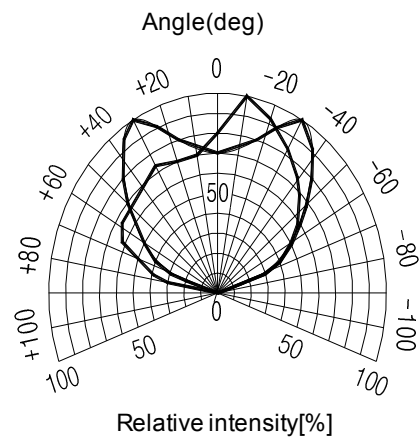
Relative intensity vs. Wavelength $I_F = 10\text{mA}$ ($T_a = 25^\circ\text{C}$)



Forward current vs. Forward voltage



Radiant Pattern



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.