

# LEDIST OPTOELECTRONICS CO., LTD

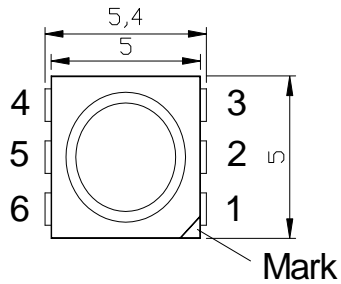
## Data sheet for L-T5050BC

### Features:

- Top view type
- Viewing angle: 120 deg
- Emitting color: Blue, InGaN
- 5.0mm×5.0mm×1.6mm SMT-LED
- Lead-Free Package (According to RoHS)

### Package Dimensions:

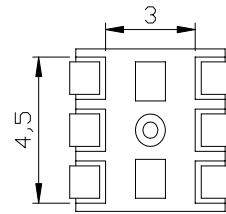
#### Top View



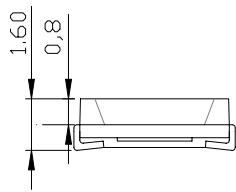
#### Side View



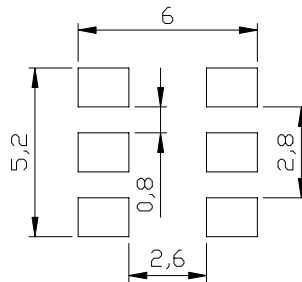
#### Bottom View



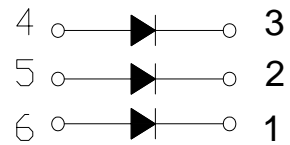
#### Side View



#### IR Reflow Soldering



#### Internal circuit



### NOTES:

1. All dimensions are in millimeters (inches);
2. Tolerances are  $\pm 0.2\text{mm}$  (0.008inch) unless otherwise noted.

**Absolute maximum ratings at Ta = 25°C:**

| Parameter                   | Max          | Unit |
|-----------------------------|--------------|------|
| Power dissipation           | 100*3        | mW   |
| Forward current             | 30*3         | mA   |
| Reverse voltage             | 5            | V    |
| Operating temperature range | -40 ~+100 °C | Top  |
| Storage temperature range   | -40~+100 °C  | Tstg |
| Pulse Forward Current       | 100          | mA   |
| Electrostatic Discharge     | 1000(HBM)    | V    |

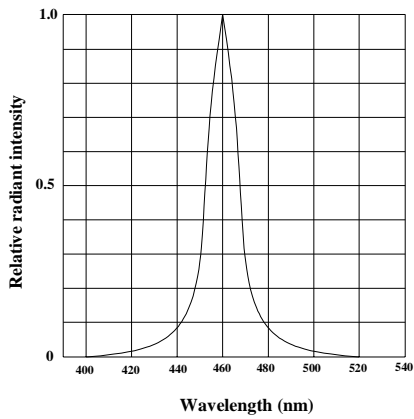
**Electro-optical characteristics at Ta=25°C:**

| Parameter               | Test Condition | Symbol  | Value |      |      | Unit |
|-------------------------|----------------|---------|-------|------|------|------|
|                         |                |         | Min.  | Typ. | Max. |      |
| Forward voltage         | If=20*3mA      | Vf      | --    | 3.2  | 3.5  | V    |
| Luminous intensity      | If=20*3mA      | Iv      | 630   | 1020 | --   | mcd  |
| Viewing angle at 50% Iv | If=20*3mA      | 2 θ 1/2 | --    | 120  | --   | Deg  |
| Reverse current         | Vr=5V          | Ir      | --    | --   | 10   | μA   |
| Dominant wavelength     | If=20*3mA      | λd      | 465   | --   | 475  | nm   |

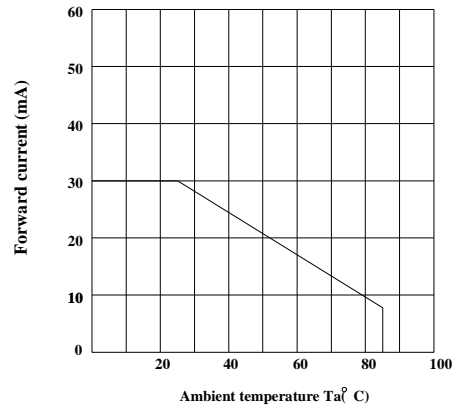
**NOTE:** (Tolerance: Iv ±10%, λd ±2nm, Vf ±0.05V, X, Y ±0.01)  
IFP Conditions: Pulse Width ≅ 10msec. and Duty ≅ 1/10.

# Typical optical characteristics curves:

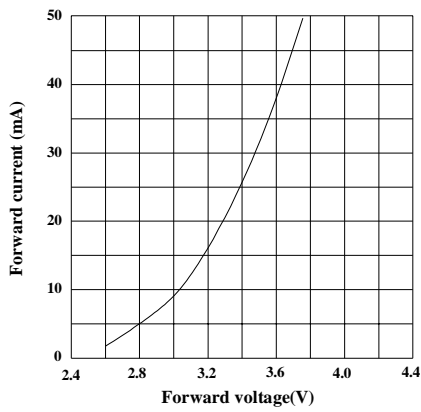
Relative intensity vs. wavelength(Ta=25°C)



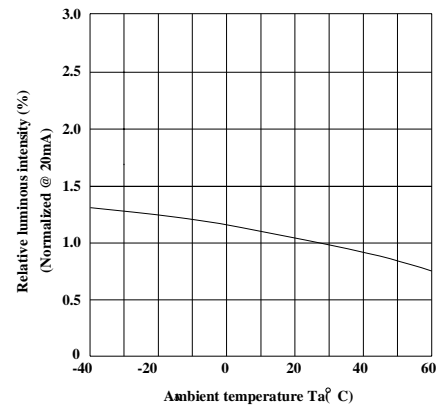
Forward current derating curve vs. ambient temperature



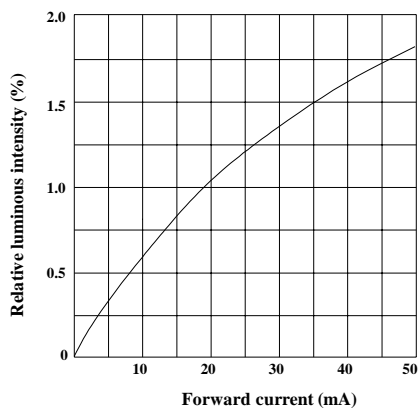
Forward current vs. forward voltage(Ta=25°C)



Luminous intensity vs. ambient temperature



Relative luminous intensity vs. forward current



Radiation diagram

