

## END-LOOK PACKAGE LIGHT EMITTING DIODE

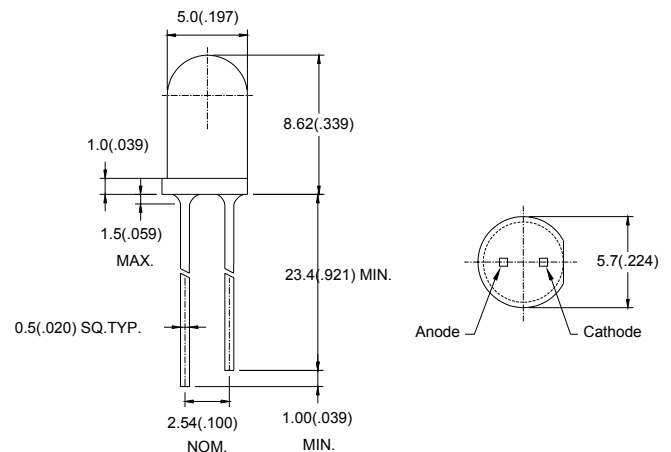
### ● Features:

1. High radiant power and high radiant intensity.
2. Standard T-1 3/4(5mm)package.
3. Peak wavelength  $\lambda_p=850\text{nm}$ .
4. Good spectral matching to si-photodetector.
5. Radiant angle:  $40^\circ$
6. Lens Appearance: Water Clear.
7. This product doesn't contain restriction substance, comply ROHS standard

### ● Applications:

1. Remote Control.
2. Automatic Control System.

### ● Package Dimensions:



### NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  ( $0.01''$ ) unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

### ● Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

| Parameter                          | Symbol    | Rating                                     | Unit |
|------------------------------------|-----------|--|------|
| Power Dissipation                  | $P_d$     | 100  | mW   |
| Continuous Forward Current         | $I_F$     | 100  | mA   |
| Peak Forward Current <sup>*1</sup> | $I_{FP}$  | 1.0  | A    |
| Reverse Voltage                    | $V_R$     | 5  | V    |
| Operating Temperature              | $T_{opr}$ | $-45^\circ\text{C} \sim 85^\circ\text{C}$  | -    |
| Storage Temperature                | $T_{stg}$ | $-45^\circ\text{C} \sim 100^\circ\text{C}$ | -    |
| Soldering Temperature              | $T_{sol}$ | $260^\circ\text{C}$ (for 5 seconds)        | -    |

<sup>\*1</sup> Condition for is  $I_{FP}$  pulse of 1/10 duty and 0.1 msec width.

● **Optical- Electrical Characteristics (@ $T_A=25^{\circ}C$ )**

| Parameter                 | Symbol           | Test Conditions | Min  | TYP  | Max | Unit    |
|---------------------------|------------------|-----------------|------|------|-----|---------|
| Radiant Intensity         | $I_e$            | $I_F=50mA$      | 23.1 | 65.5 | -   | mW/sr   |
| Forward Voltage           | $V_F$            | $I_F=50mA$      | -    | 1.5  | 1.8 | V       |
| Reverse Current           | $I_R$            | $V_R=5V$        | -    | -    | 100 | $\mu A$ |
| Peak Wavelength           | $\lambda_p$      | $I_F=20mA$      | -    | 850  | -   | nm      |
| Spectral Line Half- Width | $\Delta \lambda$ | $I_F=20mA$      | -    | 50   | -   | nm      |
| Viewing Angle             | $2\theta_{1/2}$  | $I_F=20mA$      | -    | 40   | -   | deg     |

● **Typical Optical-Electrical Characteristic Curves**

Fig.1 Spectral Distribution

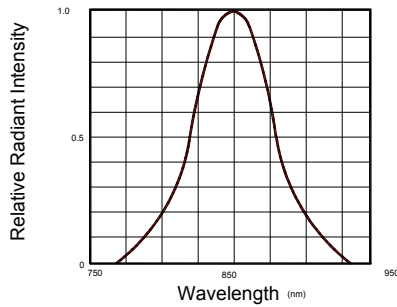


Fig.2 Forward Current Vs Ambient Temperature

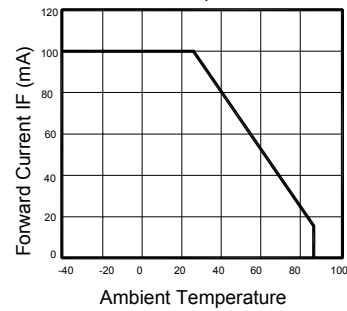


Fig.3 Forward Current Vs

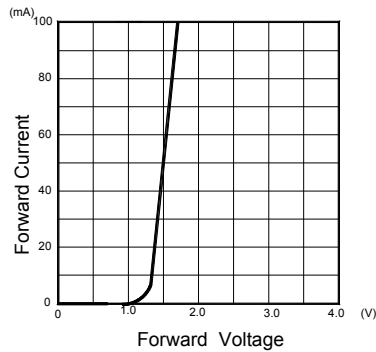


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

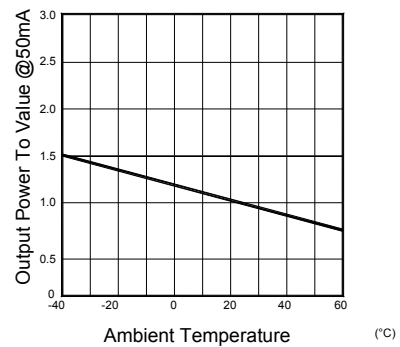


Fig.5 Relative Radiant Intensity Vs Forward Current

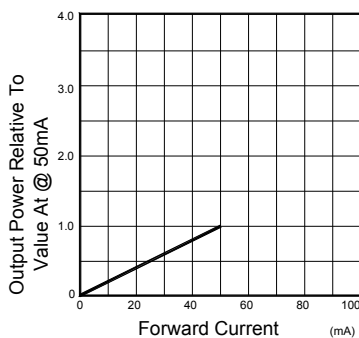
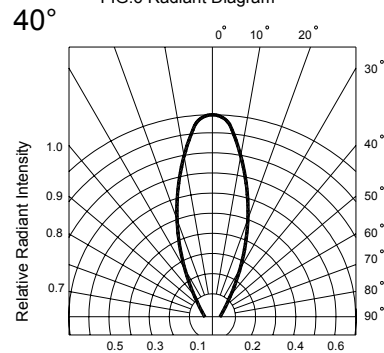
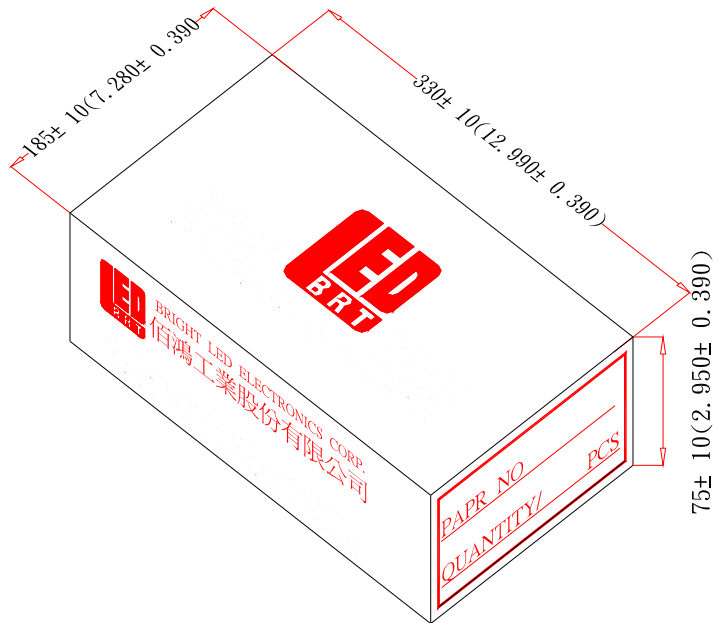


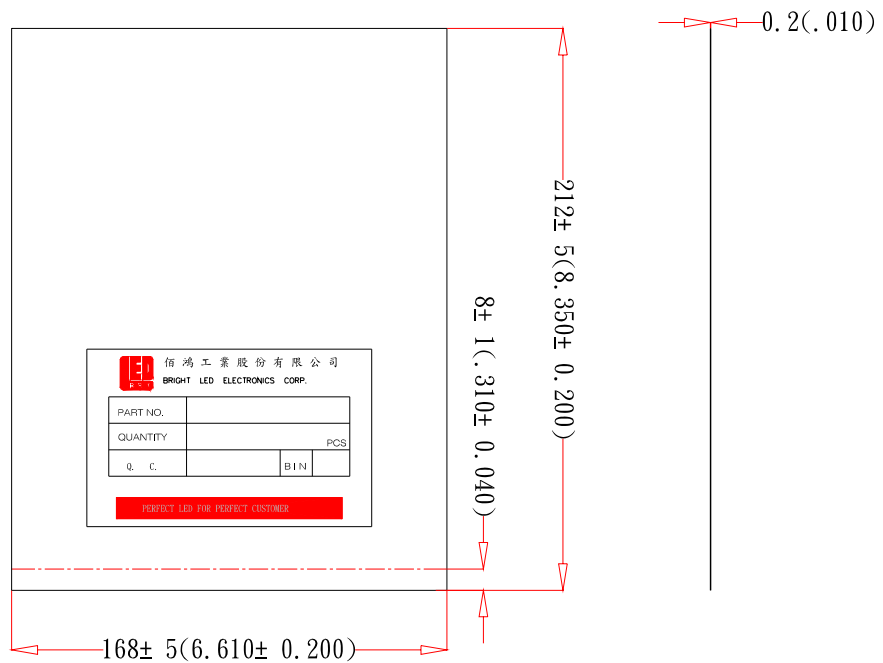
FIG.6 Radiant Diagram



● Tapping and packaging specifications(Units: mm)



● Packaging Bag Dimensions



**Notes:**

- 1、500pcs per bag, 5Kpcs per box.
- 2、All dimensions are in millimeters(inches).
- 3、Specifications are subject to change without notice.