

## END-LOOK PACKAGE LIGHT EMITTING DIODE

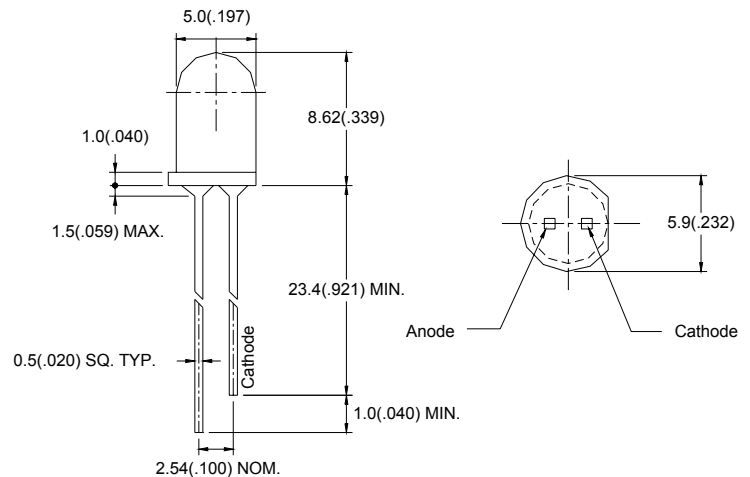
### ● Features:

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:  $20^\circ$
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>	$I_{FP}$	100	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)	-

\*1 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	$I_e$	$I_F=50mA$	45.31	128.5	-	mW/sr
Forward Voltage	$V_F$	$I_F=50mA$	-	1.5	1.8	V
Reverse Current	$I_R$	$V_R=5V$	-	-	10	$\mu A$
Peak Wavelength	$\lambda_p$	$I_F=20mA$	-	850	-	nm
Spectral Line Half- Width	$\Delta \lambda$	$I_F=20mA$	-	50	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	20	-	deg

● **Typical Optical-Electrical Characteristic Curves**

Fig.1 Spectral Distribution

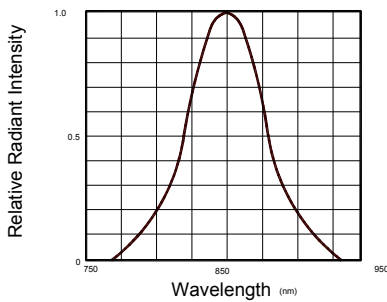


Fig.2 Forward Current Vs Ambient Temperature

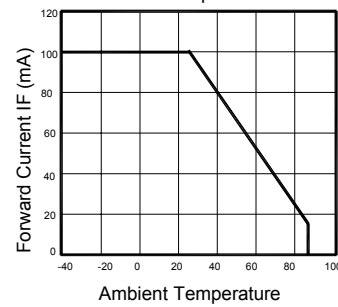


Fig.3 Forward Current Vs

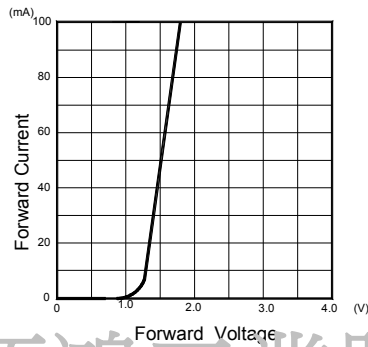


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

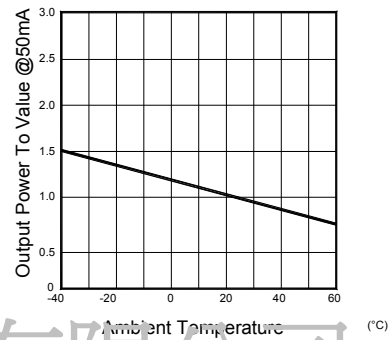


Fig.5 Relative Radiant Intensity Vs Forward Current

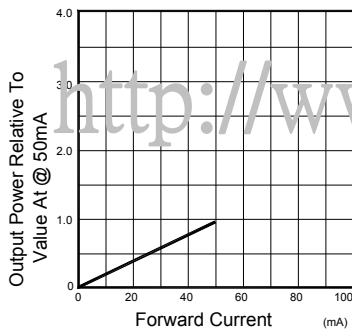
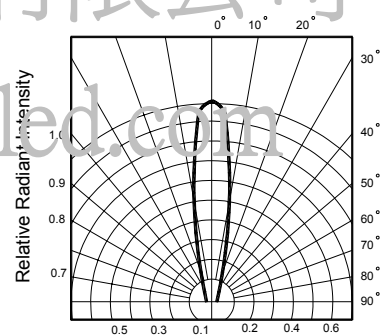
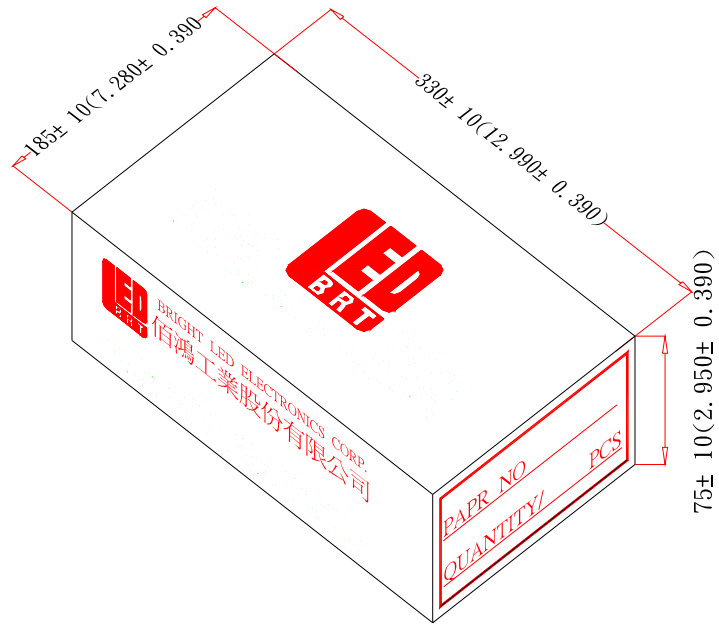


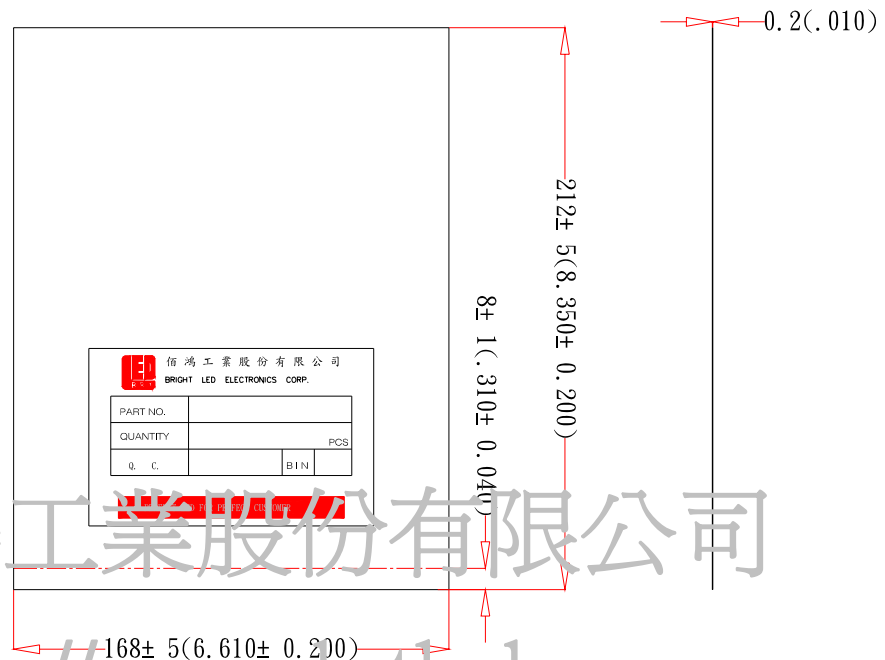
Fig.6 Radiant Diagram



● 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.

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## **Infrared Emitting Diode Specification**

- Commodity: Infrared emitting diode
- Intensity Bin Limits (At 50mA)

<b>BIN CODE</b>	<b>Min.(mW/sr)</b>	<b>Max.( mW/sr)</b>
14	23.12	43.79
15	32.36	61.30
16	45.31	85.82
17	63.43	120.15
18	88.80	168.21
19	124.32	235.48

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