



### END-LOOK PACKAGE LIGHT EMITTING DIODE

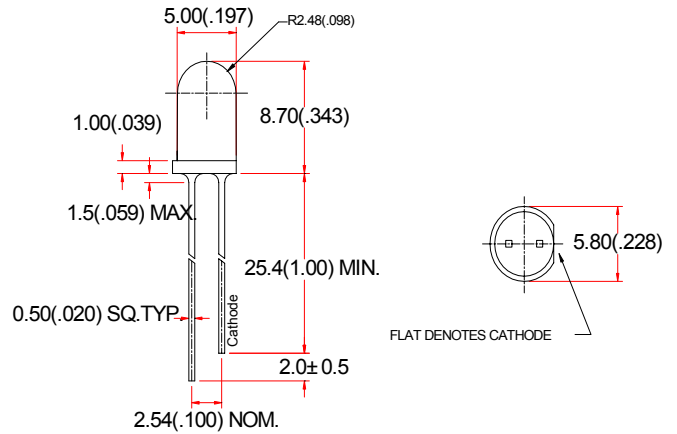
#### ● Features:

1. High radiant power and high radiant intensity.
2. Standard T-1 package.
3. Peak wavelength  $\lambda_p=940\text{nm}$ .
4. Good spectral matching to si-photodetector.
5. Radiant angle:  $30^\circ$
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	$P_d$	200	mW
Continuous Forward Current	$I_F$	200	mA
Peak Forward Current <sup>*1</sup>	$I_{FP}$	2.0	A
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	-45 ~85	-
Storage Temperature	$T_{stg}$	-45 ~100	-
Soldering Temperature	$T_{sol}$	260 (for 5 seconds)	-

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



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

Parameter	Symbol	Test Conditions	Min	TYP	Max	Unit
Radiant Intensity	$I_e$	$I_F=50\text{mA}$		50	-	mW/sr
Forward Voltage	$V_F$	$I_F=50\text{mA}$	1.0-	1.3	1.5	V
Reverse Current	$I_R$	$V_R=5\text{V}$	-	-	100	$\mu\text{A}$
Peak Wavelength	$\lambda_p$	$I_F=20\text{mA}$	-	940	-	nm
Spectral Line Half- Width	$\Delta$	$I_F=20\text{mA}$	-	50	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	30	-	deg

● **Typical Optical-Electrical Characteristic Curves**

Fig.1 Spectral Distribution

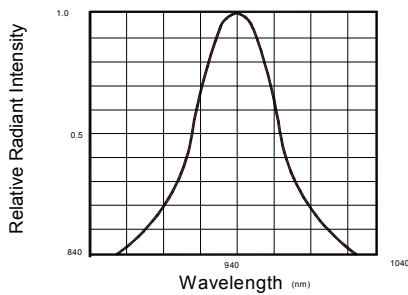


Fig.2 Forward Current Vs Ambient Temperature

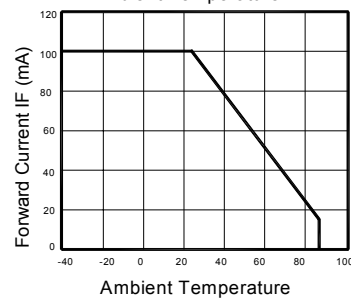


Fig.3 Forward Current Vs

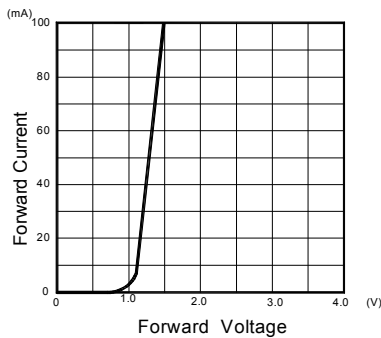


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

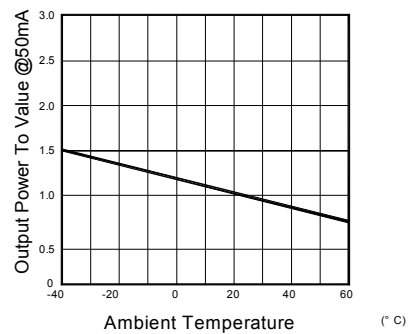


Fig.5 Relative Radiant Intensity Vs Forward Current

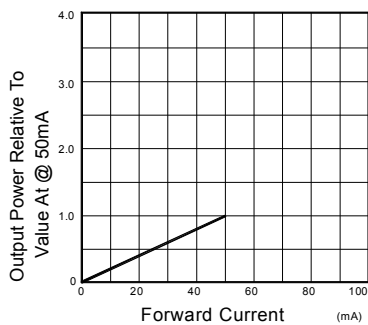
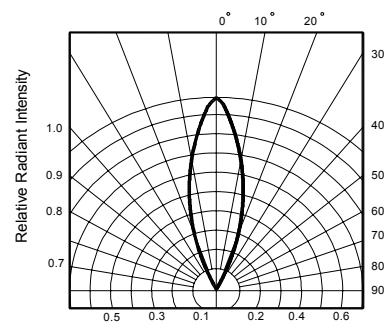


FIG.6 Radiant Diagram





### Infrared Emitting Diode Specification

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

BIN CODE	Min.(mW/sr)	Max.( mW/sr)
15	38.08	53.31
16	53.31	74.63