



### END-LOOK PACKAGE LIGHT EMITTING DIODE

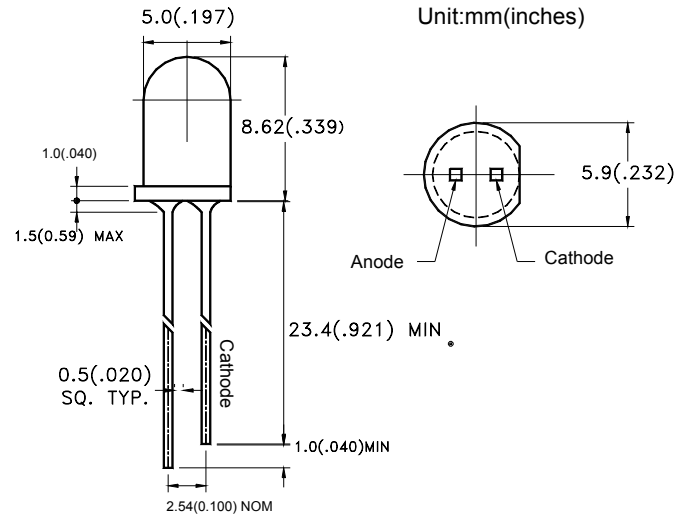
#### ● Features:

1. High radiant power and high radiant intensity.
2. Standard T-1 3/4(5mm)package.
3. Peak wavelength  $\lambda_p=940\text{nm}$ .
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(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	100	mW
Continuous Forward Current	I <sub>F</sub>	100	mA
Peak Forward Current <sup>*1</sup>	I <sub>FP</sub>	1.0	A
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	Topr	-45°C~85°C	-
Storage Temperature	Tstg	-45°C~100°C	-
Soldering Temperature	Tsol	260°C (for 5 seconds)	-

<sup>\*1</sup> Condition for is I<sub>FP</sub> 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	$I_e$	$I_F=50mA$	16.5	46.8	-	mW/sr
Forward Voltage	$V_F$	$I_F=50mA$	-	1.25	1.5	V
Reverse Current	$I_R$	$V_R=5V$	-	-	100	$\mu A$
Peak Wavelength	$\lambda_p$	$I_F=20mA$	-	940	-	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

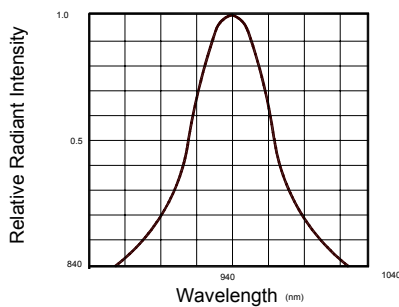


Fig.2 Forward Current Vs Ambient Temperature

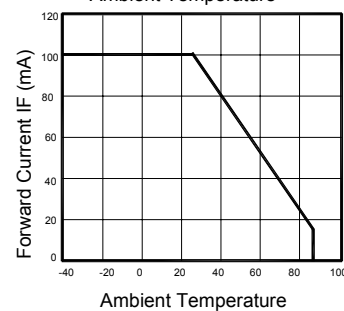


Fig.3 Forward Current Vs

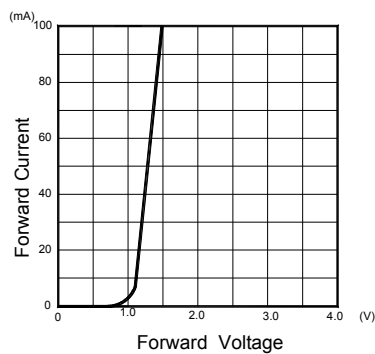


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

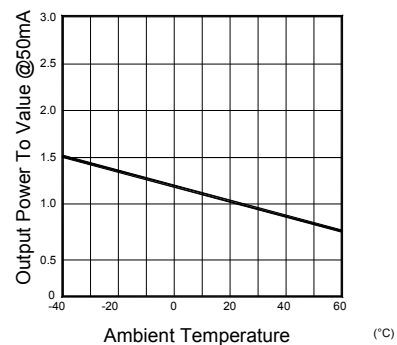


Fig.5 Relative Radiant Intensity Vs Forward Current

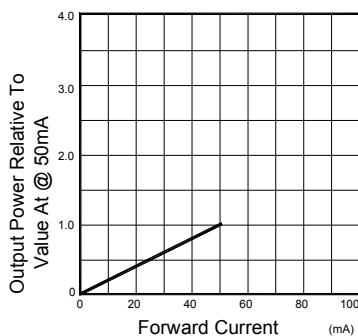


Fig.6 Radiation Diagram

