



END-LOOK PACKAGE LIGHT EMITTING DIODE

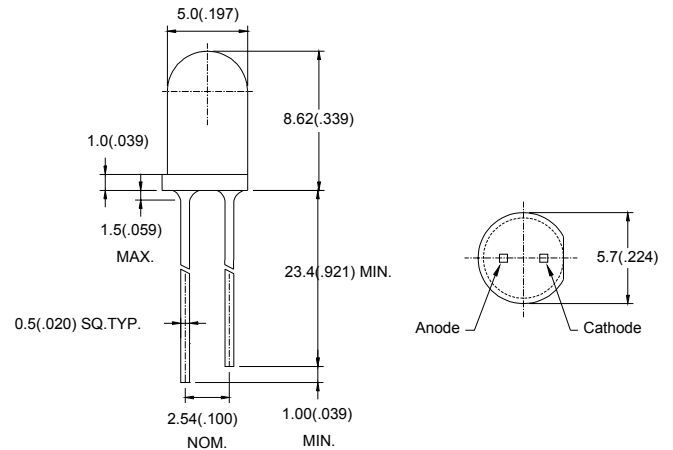
● Features:

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: 25°
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 ^{*1} | 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°C (for 5 seconds) | - |

*1 Condition for is I_{FP} pulse of 1/10 duty and 0.1 msec width.



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

| Parameter | Symbol | Test Conditions | Min | TYP | Max | Unit |
|---------------------------|------------------|-------------------|-------|-------|-----|---------------|
| Radiant Intensity | I_e | $I_F=50\text{mA}$ | 32.36 | 91.79 | - | mW/sr |
| Forward Voltage | V_F | $I_F=50\text{mA}$ | - | 1.5 | 1.8 | V |
| Reverse Current | I_R | $V_R=5\text{V}$ | - | - | 100 | μA |
| Peak Wavelength | λ_p | $I_F=20\text{mA}$ | - | 850 | - | nm |
| Spectral Line Half- Width | $\Delta \lambda$ | $I_F=20\text{mA}$ | - | 50 | - | nm |
| Viewing Angle | $2\theta_{1/2}$ | $I_F=20\text{mA}$ | - | 25 | - | deg |

● **Typical Optical-Electrical Characteristic Curves**

Fig.1 Spectral Distribution

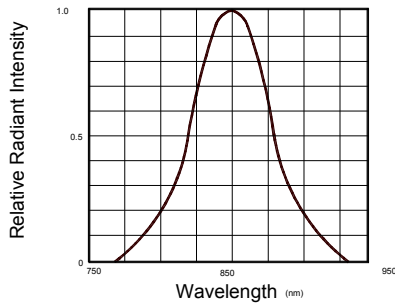


Fig.2 Forward Current Vs Ambient Temperature

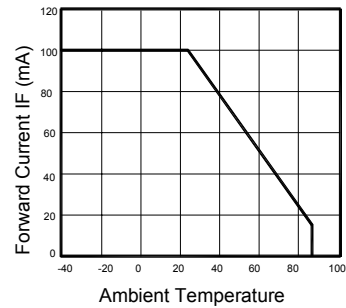


Fig.3 Forward Current Vs

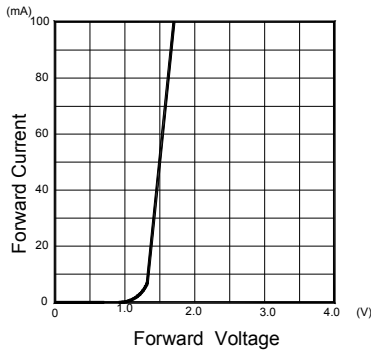


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

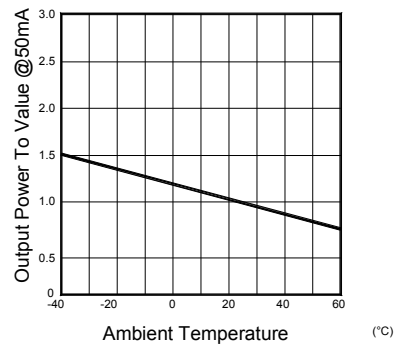


Fig.5 Relative Radiant Intensity Vs Forward Current

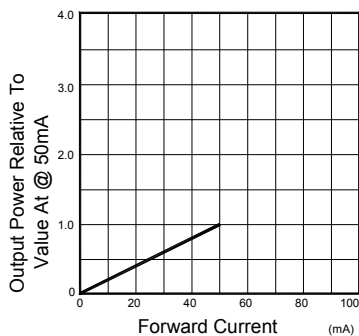


FIG.5 Radiant Diagram

