

L200CWIR851

Infrared

5mm, Flanged Cylindrical, 8.6mm Height
17° viewing angle

DWG BY:

BL/ GP

08-28-06

CHK BY:

PL

10-17-06

QA:

10-__-06

MFG:

__-__-__

REVISION LTR: -

10-17-06

END-LOOK PACKAGE LIGHT EMITTING DIODE

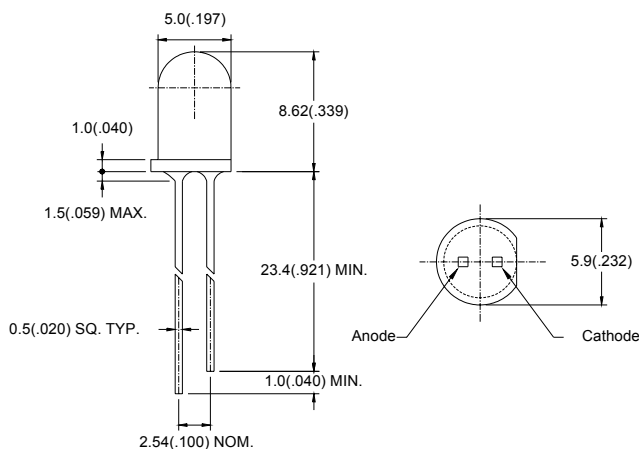
● Features:

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°
6. Lens Appearance: Water Clear.
7. This product is RoHS compliant.

● 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°C)**

Parameter	Symbol	Test Conditions	Min	TYP	Max	Unit
Radiant Intensity	I _e	I _F =50mA	45.3	90	-	mW/sr
Forward Voltage	V _F	I _F =50mA	-	1.6	1.8	V
Reverse Current	I _R	V _R =5V	-	-	100	μA
Peak Wavelength	λ _p	I _F =20mA	-	846	-	nm
Spectral Line Half- Width	Δλ	I _F =20mA	-	41	-	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	-	17	-	deg

● **Typical Optical-Electrical Characteristic Curves**

Fig.1 Spectral Distribution

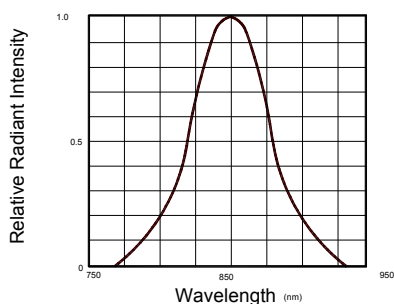


Fig.2 Forward Current Vs Ambient Temperature

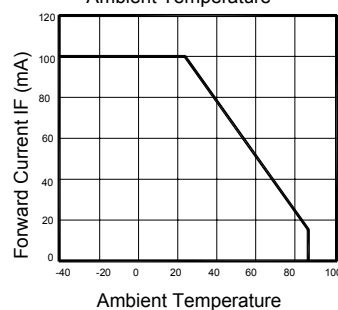


Fig.3 Forward Current Vs

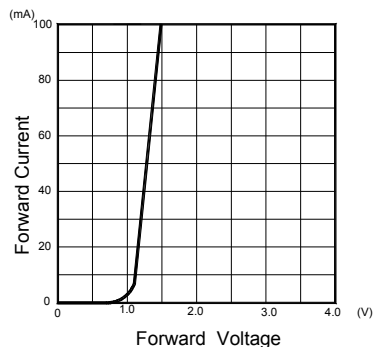


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

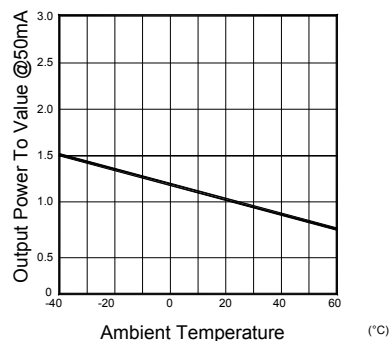


Fig.5 Relative Radiant Intensity Vs Forward Current

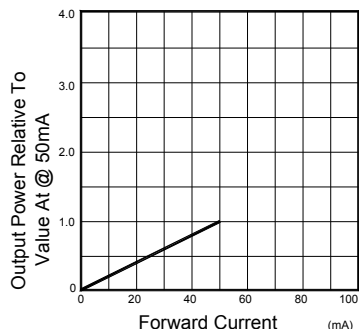


Fig.6 Radiation Diagram

