

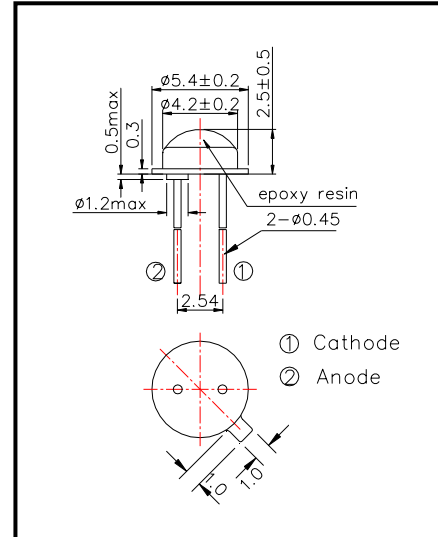
# L910-40K00

 stem type LED with epoxy resin lens

L910-40K00 is an AlGaAs LED mounted on TO-46 stem with epoxy resin lens, being designed for wide viewing angle.

On forward bias it emits a spectral band of radiation, which peaks at 910nm.

◆ Outer dimension (Unit: mm)



◆ Features

- 1) Wide viewing angle
- 2) High Reliability

◆ Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L910-40K00
- 3) Chip Spec.
  - (1) Material AlGaAs
  - (2) Peak Wavelength 910nm
- 4) Package
  - (1) Type TO-46 stem
  - (2) Lens Epoxy resin lens
  - (3) Cap Gold plated

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	$P_D$	160	mW	$T_a=25^\circ\text{C}$
Forward Current	$I_F$	100	mA	$T_a=25^\circ\text{C}$
Pulse Forward Current	$I_{FP}$	500	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	$V_R$	5	V	$T_a=25^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-30 ~ +80	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	-30 ~ +100	$^\circ\text{C}$	
Soldering Temperature	$T_{SOL}$	260	$^\circ\text{C}$	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at  $260^\circ\text{C}$

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	$V_F$	$I_F=50\text{mA}$		1.45	1.70	V
Reverse Current	$I_R$	$V_R=5\text{V}$			10	$\mu\text{A}$
Total Radiated Power	$P_O$	$I_F=50\text{mA}$	5	8		mW
Radiant Intensity	$I_E$	$I_F=50\text{mA}$		2.0		mW/sr
Peak Wavelength	$\lambda_P$	$I_F=50\text{mA}$	900	910	925	nm
Half Width	$\Delta\lambda$	$I_F=50\text{mA}$		60		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=50\text{mA}$		$\pm 40$		deg.
Rise Time	$t_r$	$I_F=50\text{mA}$		1000		ns
Fall Time	$t_f$	$I_F=50\text{mA}$		400		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.