

L610-30K42 stem type LED with unspherical lens

L610-30K42 is InGaAlP/GaAs LED mounted on TO-46 stem with unspherical glass lens, being designed for sensing devices.

On forward bias, it emits a spectral band of radiation, which peaks at 610nm.

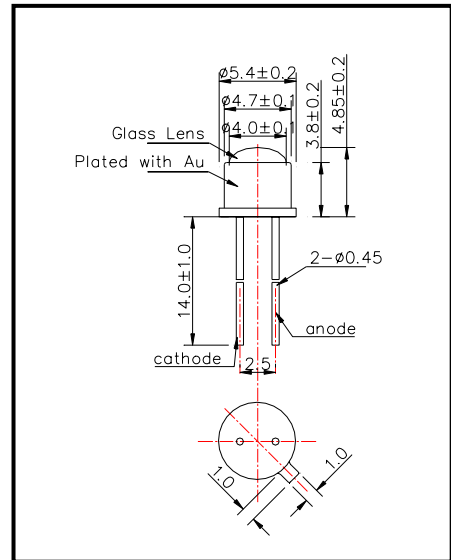
◆ Outer dimension(Unit:mm)

◆ Features

- 1)High Power
- 2)High Reliability

◆ Specifications

- 1)Product Name Infrared LED Lamp
- 2)Type No. L610-30K42
- 3)Chip Spec.
 - (1)Material InGaAlP/GaAs
 - (2)PeakWavelength 610nm
- 4)Package
 - (1)type TO-46 stem
 - (2)Lens Unspherical Glass Lens



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	110	mW	T _a =25°C
Forward Current	I _F	50	mA	T _a =25°C
Pulse Forward Current	I _{FP}	100	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	260	°C	

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

‡Soldering condition : Soldering condition must be completed within 3 seconds at 260°C

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		2.0	2.30	V
Reverse Current	I _R	V _R =5V			10	u A
Total Radiated Power	P _O	I _F =20mA	0.7	1.2		mW
Radiant Intensity	I _E	I _F =20mA		8		mW/sr
Brightness	I _v	I _F =20mA		4000		mcd
Peak Wavelength	λ _P	I _F =20mA	600	610	620	nm
Half Width	Δλ	I _F =20mA		15		nm
Viewing Half Angle	Θ _{1/2}	I _F =20mA		±10		deg.

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512