

L610-30K42

Stem Type LED with Unspherical Lens

L610-30K42 is an 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.

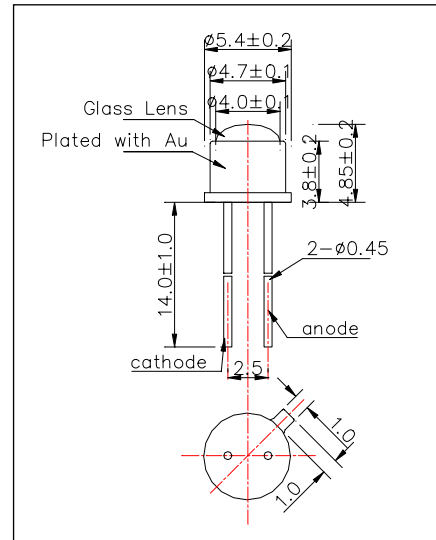
<Features>

- High Power
- High Reliability

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L610-30K42
3. Chip:
 - Chip material: InGaAlP/GaAs
 - Peak Wavelength: 610nm
4. Package
 - Stem: TO-46 Stem
 - Lens: Unspherical Glass Lens

Outer Dimension (Unit:mm)



| Absolute Maximum Ratings | | | | |
|--------------------------|--------|---------------------|------|---------------------|
| Item | Symbol | Maximum Rated Value | Unit | Ambient Temperature |
| Power Dissipation | PD | 110 | mW | Ta=25°C |
| Forward Current | IF | 50 | mA | Ta=25°C |
| Pulse Forward Current* | IFP | 100 | mA | Ta=25°C |
| Reverse Voltage | VR | 5 | V | Ta=25°C |
| Operating Temperature | TOPR | -30 ~ +85 | °C | |
| Storage Temperature | TSTG | -30 ~ +100 | °C | |
| Soldering Temperature** | TSOL | 260 | °C | |

* Duty=1% and Pulse Width=10μs

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

| Electro-Optical Characteristics[Ta=25°C] | | | | | | |
|--|--------|-----------|------|------|------|-------|
| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
| Forward Voltage | VF | IF=20mA | | 2.0 | 2.3 | V |
| Reverse Current | IR | VR=5V | | | 10 | uA |
| Total Radiated Power* | PO | IF=20mA | 0.7 | 1.2 | | mW |
| Radiant Intensity** | IE | IF=20mA | | 8 | | mW/sr |
| Brightness | IV | IF=20mA | | 4000 | | mcd |
| Peak Wavelength | λP | IF=20mA | 600 | 610 | 620 | nm |
| Half Width | Δλ | IF=20mA | | 15 | | nm |
| Viewing Half Angle | θ1/2 | IF=20mA | | ±10 | | deg |

* Measured by Photodyne #500

** Measured by Tektronix J-6512

