

# L1050-35K32

Stem type LED with high output power

L1050-35K32 is an InGaAsP LED mounted on a TO-46 stem

with a spherical glass lens being designed for high output power uses.

On forward bias, it emits a spectral band of radiation, which peaks at 1050nm.

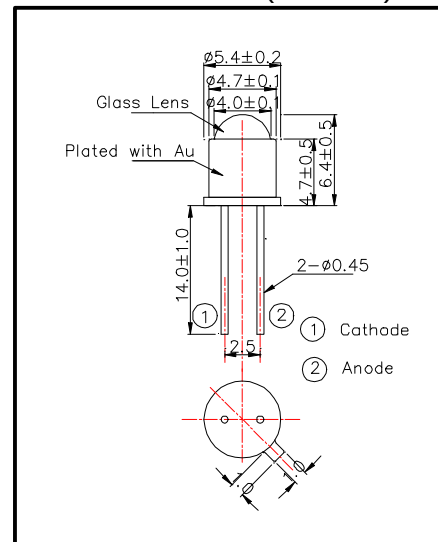
## Features

- 1) High radiated intensity
- 2) High Reliability

## Specifications

- 1) Product Name NIR LED Lamp
- 2) Type No. L1050-35K32
- 3) Chip Spec.
  - (1) Material InGaAs/InP
  - (2) Peak Wavelength 1050nm
- 4) Package
  - (1) Type TO-46 stem
  - (2) Lens Spherical glass lens
  - (3) Cap Gold plated

Outer dimension(Unit:mm)



## Absolute Maximum Ratings

| Item                  | Symbol    | Maximum Rated Value | Unit             | Ambient Temperature    |
|-----------------------|-----------|---------------------|------------------|------------------------|
| Power Dissipation     | $P_D$     | 140                 | mW               | $T_a=25^\circ\text{C}$ |
| Forward Current       | $I_F$     | 100                 | mA               | $T_a=25^\circ\text{C}$ |
| Pulse Forward Current | $I_{FP}$  | 1000                | mA               | $T_a=25^\circ\text{C}$ |
| Reverse Voltage       | $V_R$     | 3                   | V                | $T_a=25^\circ\text{C}$ |
| Operating Temperature | $T_{OPR}$ | $-20 \sim +90$      | $^\circ\text{C}$ |                        |
| Storage Temperature   | $T_{STG}$ | $-30 \sim +100$     | $^\circ\text{C}$ |                        |
| 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      | $V_F$           | $I_F=20\text{mA}$ |         | 1.1      | 1.5     | V             |
| Reverse Current      | $I_R$           | $V_R=3\text{V}$   |         |          | 10      | $\mu\text{A}$ |
| Total Radiated Power | $P_O$           | $I_F=20\text{mA}$ | 0.4     | 0.7      |         | mW            |
| Peak Wavelength      | $\lambda_P$     | $I_F=20\text{mA}$ | 1000    | 1050     | 1100    | nm            |
| Half Width           | $\Delta\lambda$ | $I_F=20\text{mA}$ |         | 100      |         | nm            |
| Viewing Half Angle   | $Q_{1/2}$       | $I_F=20\text{mA}$ |         | $\pm 15$ |         | deg.          |
| Rise Time            | $t_r$           | $I_F=20\text{mA}$ |         | 10       |         | ns            |
| Fall Time            | $t_f$           | $I_F=20\text{mA}$ |         | 10       |         | ns            |

‡ Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2742

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