

# LED760-40K42 stem type LED with high beam

LED760-40K42 is AlGaAs LED mounted on TO-46 stem with unspherical glass lens, being designed for high beam uses.

On forward bias, it emits a spectral band of radiation, which peaks at 760nm.

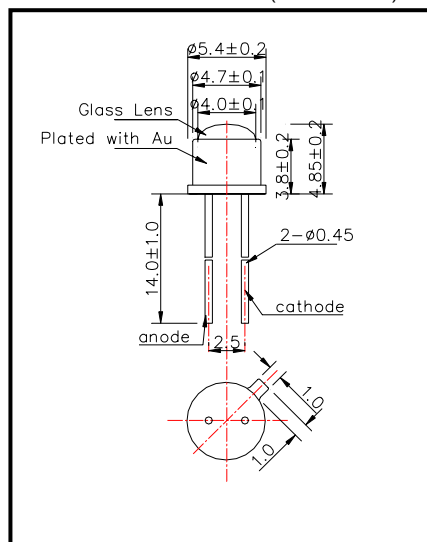
◆ Outer dimension (Unit:mm)

## ◆ Features

- 1) High radiated intensity
- 2) High Reliability

## ◆ Specifications

- 1) Product Name            Infrared LED Lamp
- 2) Type No.                LED760-40K42
- 3) Chip Spec.
  - (1) Material                AlGaAs
  - (2) Peak Wavelength    760nm
- 4) Package
  - (1) Type                    TO-46 stem
  - (2) Lens                    Unspherical glass lens
  - (3) Cap                     Gold plated



## ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	200	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	100	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	500	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	5	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-30 ~ +80	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	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 <sub>F</sub>	I <sub>F</sub> =50mA		1.85	2.00	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Total Radiated Power	P <sub>O</sub>	I <sub>F</sub> =50mA	6	10		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =50mA		60.0		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	740	760	780	nm
Half Width	Δλ	I <sub>F</sub> =50mA		30		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =50mA		±6		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		80		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		80		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.