

## L780-40K42

### Stem Type LED with High Beam

L780-40K42 is an AlGaAs LED mounted on a TO-46 stem with an unspherical glass lens. It is designed for high beam use.

On forward bias, it emits a spectral band of radiation which peaks at 780nm.

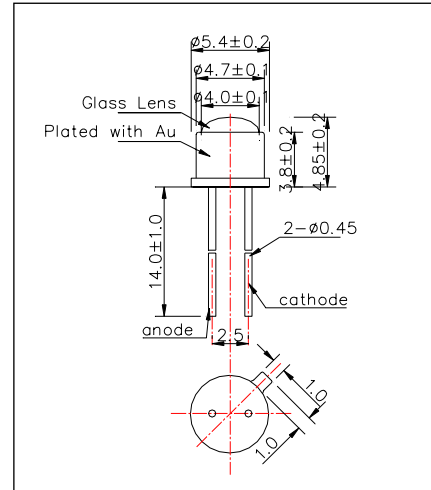
<Features>

- High Radiated Intensity
- High Reliability

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L780-40K42
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 780nm
4. Package
  - Type: TO-46 Stem
  - Lens: Unspherical Glass Lens
  - Cap: Gold Plated

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	200	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current*	IFP	500	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +80	°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 second at 260 °C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.85	2.00	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	6	10		mW
Radiant Intensity**	IE	IF=50mA		60		mW/sr
Peak Wavelength	λP	IF=50mA	760	780	800	nm
Half Width	Δλ	IF=50mA		30		nm
Viewing Half Angle	θ1/2	IF=50mA		±6		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		80		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

