

## L680-40K42

### Stem Type LED with High Beam

L680-40K42 is an AlGaAs LED mounted on a TO-46 stem with an undpherical glass lens. It is designed for high beam use.

On forward bias, it emits a spectral band of radiation which peaks at 680nm.

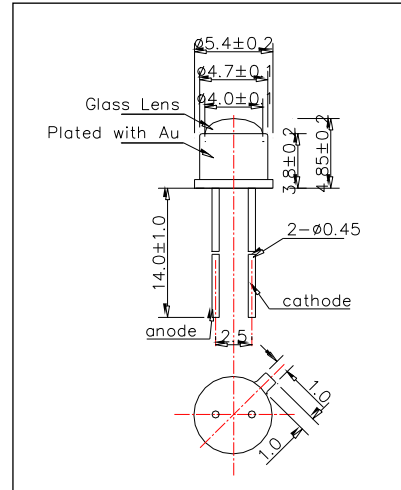
**<Features>**

- High Radiated Intensity
- High Reliability

**<Specifications>**

1. Product Name: Infrared LED Lamp
2. Type Number: L680-40K42
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 680nm
4. Package
  - Type: TO-46 Stem
  - Lens: Undpherical Glass Lens
  - Cap: Gold Plated

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	200	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						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		1.90	2.30	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=20mA		2.5		mW
Radiant Intensity**	IE	IF=20mA		18		mW/sr
Peak Wavelength	λP	IF=20mA	660	680	700	nm
Half Width	Δλ	IF=20mA		20		nm
Viewing Half Angle	θ1/2	IF=20mA		±6		deg
Rise Time	tr	IF=20mA		80		ns
Fall Time	tf	IF=20mA		80		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

