L810-40K42

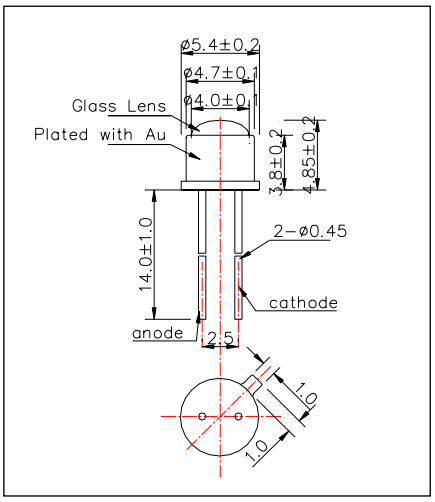
Stem Type LED with High Beam

L810-40K42 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 810nm.

<Features>

- High Radiated Intensity
- High Reliability

Outer Dimension (Unit:mm)



<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L810-40K42
3. Chip:
   - Chip material: AlGaAs
   - Peak Wavelength: 810nm
4. Package
   - Type: TO-46 Stem
   - Lens: Unspherical Glass Lens
   - Cap: Gold Plated

Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	170	mW	Ta=25℃
Forward Current	IF	100	mA	Ta=25℃
Pulse Forward Current*	IFP	500	mA	Ta=25℃
Reverse Voltage	VR	5	V	Ta=25℃
Operating Temperature	TOPR	-40 ~ +80	℃	
Storage Temperature	TSTG	-40 ~ +100	℃	
Soldering Temperature**	TSOL	265	℃	

* Duty=1% and Pulse Width=10μs.
** Soldering condition must be completed within 3 second at 265 ℃.

Electro-Optical Characteristics [Ta=25℃]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.60	1.80	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	7	12		mW
Radiant Intensity**	IE	IF=50mA		60		mW/sr
Peak Wavelength	λP	IF=50mA	790	810	830	nm
Half Width	Δλ	IF=50mA		35		nm
Viewing Half Angle	θ1/2	IF=50mA		±6		deg
Rise Time	tr	IF=50mA		60		ns
Fall Time	tf	IF=50mA		40		ns

* Measured by Photodyne #500
** Measured by Tektronix J-6512

RoHS Compliant

Marubeni America Corporation | 3945 Freedom Circle, Suite 1000, Santa Clara, CA95054
Tel: 408-330-0650 | Fax: 408-330-0655 | Email: sales@tech-led.com