

L810N-40K59

Stem Type LED with Wide Beam

L810N-40K59 is an AlGaAs LED mounted on a TO-46 stem and hermetically sealed with flat glass lens.

On forward bias, it emits a spectral band of radiation which peaks at 810nm.

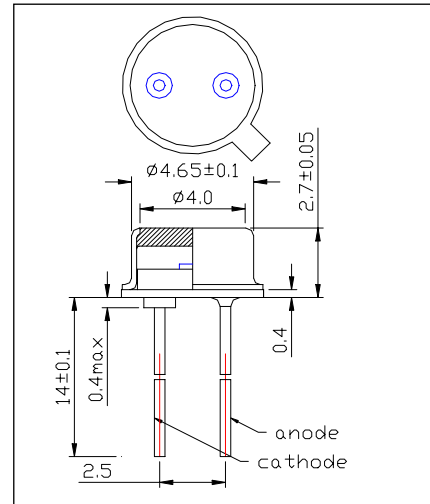
<Features>

- Wide Viewing Angle
- High Reliability
- Thin Package and Wide Aperture

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L810N-40K59
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 810nm
4. Package
 - Type: TO-46 Stem
 - Lens: Φ4.0 Flat Glass Lens
 - Cap: Ni-Plated

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	190	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current*	IFP	1000	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	265	°C	

* Duty=1% and Pulse Width=10μs.

** Soldering condition must be completed within 3 second at 265 °C.

Electro-Optical Characteristics						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.55	1.70	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	12	16		mW
Radiant Intensity**	IE	IF=50mA		10		mW/sr
Peak Wavelength	λP	IF=50mA	800	810	820	nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	θ1/2	IF=50mA		±50		deg
Rise Time	tr	IF=50mA		25		ns
Fall Time	tf	IF=50mA		20		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

