

**L810-40M00**

Stem Type LED with Epoxy Resin Lens

L810-40M00 is an AlGaAs LED mounted on a TO-18 stem with an epoxy resin lens. It is designed for wide viewing angle.

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

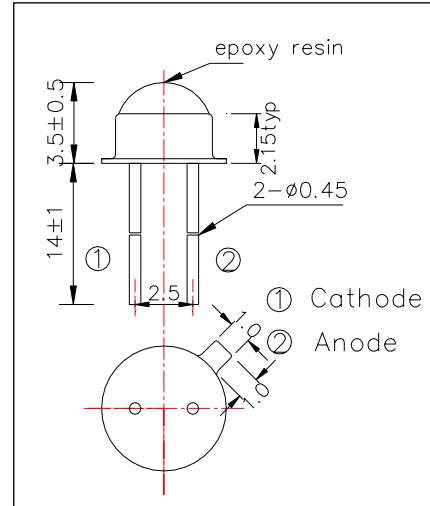
<Features>

- Wide Viewing Angle
- High Reliability

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L810-40M00
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 810nm
4. Package
  - Type: TO-18 Stem
  - Lens: Epoxy Resin Lens

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	170	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 ~ +90	°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=50mA		1.60	1.80	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	11	18		mW
Radiant Intensity**	IE	IF=50mA		10		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		±30		deg
Rise Time	tr	IF=50mA		60		ns
Fall Time	tf	IF=50mA		40		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

