

L880-40K00

Stem type LED with epoxy lens

L880-40K00 is AlGaAs LED mounted on TO-46 stem with epoxy resin lens, being designed for wide viewing angle.

On forward bias it emits a spectral band of radiation, which peaks at 885nm.

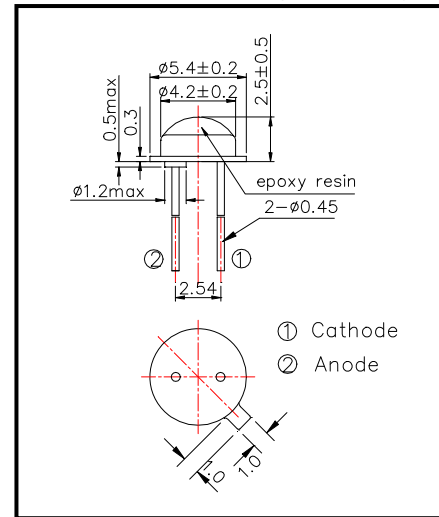
◆Features

- 1) High radiated intensity
- 2) High Reliability

◆Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L880-40K00
- 3) Chip Spec.
- (1) Material AlGaAs
- (2) Peak Wavelength 885nm
- 4) Package
- (1) Type TO-46 stem
- (2) Lens Epoxy resin

◆Outer dimension (Unit: mm)



◆Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	150	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	1000	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Junction Temperature	T _J	100	°C	
Thermal Resistance	R _{thja}	280	K/W	
Operating Temperature	T _{OPR}	-30 ~ +80	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	265	°C	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal resistance: junction – ambient, leads 7mm, soldered on PCB.

◆Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.45	1.60	V
	V _{FP}	I _F =1000mA		3.40	4.00	
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA	18	24		mW
Radiant Intensity	I _E	I _F =50mA		12		mW/sr
Peak Wavelength	λ _P	I _F =50mA	875	885	895	nm
Half Width	Δλ	I _F =50mA		45		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±65		deg.
Rise Time	t _r	I _F =50mA		15		ns
Fall Time	t _f	I _F =50mA		10		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.