

L870-40K00

Stem Type LED with Epoxy Resin Lens

L870-40K00 is an AlGaAs LED mounted on a TO-46 stem with an epoxy resin lens. It is designed for wide viewing angle.

It emits a spectral band of radiation at 870nm and 44mW type of output power.

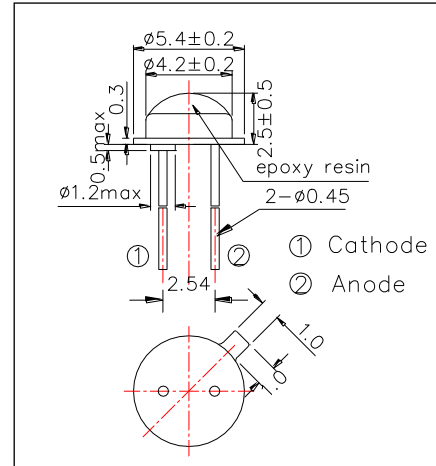
<Features>

- Wide Viewing Angle
- High Reliability

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L870-40K00
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 870nm
4. Package
 - Type: TO-46 Stem with Reflector
 - Lens: Epoxy Resin Lens

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	160	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	1000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance	Rthja	240	K/W
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 [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA DC		1.45	1.60	V
		IF=100mA, tp=20ms		1.50	1.70	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA DC	16.0	22.0		mW
		IF=100mA, tp=20ms		44.0		
Radiant Intensity**	IE	IF=50mA DC		8		mW/sr
		IF=100mA, tp=20ms		16		
Peak Wavelength	λP	IF=50mA DC	860	870	880	nm
Half Width	Δλ	IF=50mA DC		40		nm
Viewing Half Angle	θ1/2	IF=50mA DC		±60		deg
Rise Time	Tr	IF=50mA DC		15		ns
Fall Time	tf	IF=50mA DC		10		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512