

L870-02UP

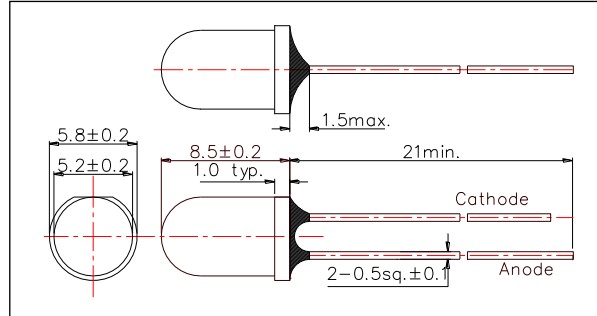
Infrared LED Lamp

L870-02UP is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation that peaks at 870nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L870-02UP
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 870nm typ.
4. Package
 - Type: Φ5mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered(Lead Free)

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	Rthjp	250	K/W
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature***	TSOL	265	°C

* Duty=1% and Pulse Width=10us.

** 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		1.5	1.7	V
Total Radiated Power*	PO	IF=50mA		24		mW
Brightness	Lm	IF=50mA		140		mcd
Radiant Intensity**	IE	IF=50mA		-		mW/sr
Peak wavelength	λP	IF=50mA		870		nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	θ1/2	IF=50mA		±5		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

