

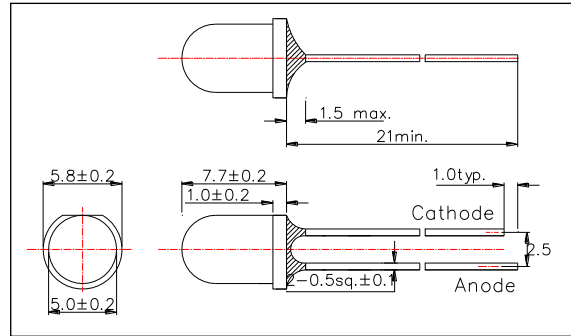
L870F-04-55**Infrared LED Lamp for High Current Drive**

L870F-04-55 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. These devices are intended to be operated at pulsed current of 2A under max. 4.0V.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L870F-04-55
3. Chip:
 - Chip material: AlGaAs
 - Dimension: 550um x 550um
 - 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	150	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 ~ +85	°C
Storage Temperature	TSTG	-30 ~ +100	°C
Soldering Temperature***	TSOL	265	°C

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

** Junction - ambient, leads 7mm, soldered on PCB

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.38	1.45	V
	VFP	IFP=2A		3.4	4.0	
Total Radiated Power*	PO	IF=50mA	20	25		mW
Radiant Intensity**	IE	IF=50mA	30	45		mW/sr
	IEP	IFP=2A		1800		
Peak wavelength	λP	IF=50mA	860	870	880	nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	θ1/2	IF=50mA		±22		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512



