

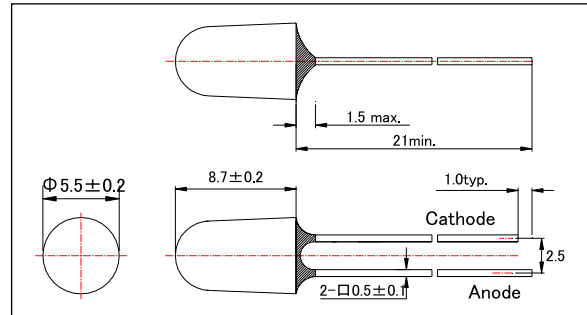
**L870F-06-55****Infrared LED Lamp for High Current Drive**

L870F-06-55 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

## &lt;Specifications&gt;

1. Product Name: Infrared LED Lamp
2. Type Number: L870F-06-55
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	155	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	2000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance**	Rthja	220	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.

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

\*\*\* 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=100mA		1.45	1.55	V
	VFP	IFP=2A		2.8	4.0	
Total Radiated Power*	PO	IF=100mA	36	46		mW
	POP	IFP=2A		920		
Radiant Intensity**	IE	IF=100mA		200		mW/sr
	IEP	IFP=2A		4000		
Peak wavelength	$\lambda P$	IF=50mA	860	870	880	nm
Half Width	$\Delta\lambda$	IF=50mA		40		nm
Viewing Half Angle	$\theta_{1/2}$	IF=50mA		$\pm 10$		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

