

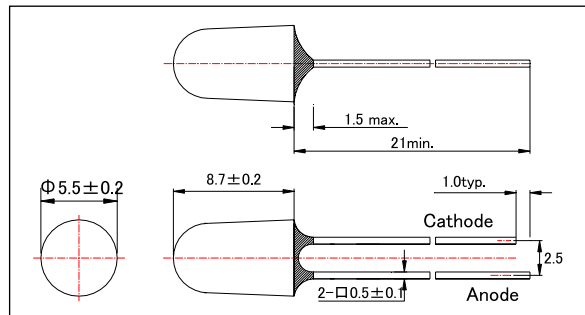
L870F-06-55CU**Infrared LED Lamp for High Current Drive**

L870F-06-55CU is an AlGaAs LED mounted on a copper made 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. 4.3V

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L870F-06-55CU
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: CU Made

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	2000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance**	Rthja	150	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.

*** 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 VFP	IF=50mA DC		1.48	1.60	V
		IF=100mA, tp=20ms		1.50	1.60	
		IFP=2A		3.6	4.3	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA DC	18	22		mW
		IF=100mA, tp=20ms	36	44		
Radiant Intensity**	IE	IF=50mA DC	90	120		mW/sr
		IF=100mA, tp=20ms	180	240		
Peak Wavelength	λ_P	IF=50mA DC	860	870	880	nm
Half Width	$\Delta\lambda$	IF=50mA DC		40		nm
Viewing Half Angle	$\theta_{1/2}$	IF=50mA DC		± 8		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



