

## L870F-55M00

### Stem Type LED with Epoxy Lens

L870F-55M00(LN870F-55M00) is an AlGaAs LED 550 micron square die mounted on a TO-18 stem and with epoxy resin lens being designed for wide viewing angle. On forward bias, it emits a spectral band of radiation which peaks at 870nm.

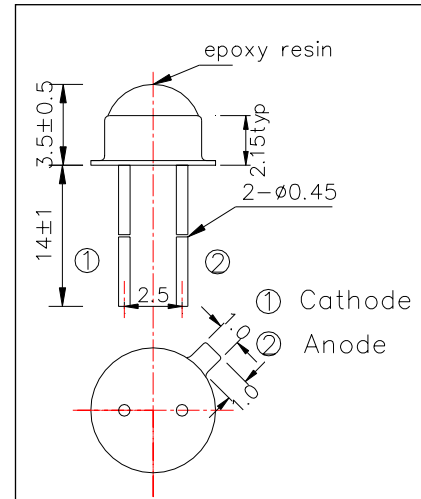
**<Features>**

- 550um sq. Die
- Wide Viewing Angle
- High Reliability

**<Specifications>**

1. Product Name: Infrared LED Lamp
2. Type Number: L870F-55M00
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 870nm
4. Package
  - Type: TO-18 Stem
  - Lens: Epoxy Resin Lens

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
Operating Temperature	TOPR	-30 ~ +80	°C
Storage Temperature	TSTG	-30 ~ +100	°C
Soldering Temperature**	TSOL	260	°C

\* Duty=1% and Pulse Width=10μs.

\*\* Soldering condition must be completed within 3 second at 260 °C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.40	1.55	V
		IF=100mA		1.50	1.60	
		IF=1A		3.0		
Total Radiated Power*	PO	IF=50mA	13	22		mW
Radiant Intensity**	IE	IF=50mA		12		mW/sr
Peak Wavelength	λP	IF=50mA	860	870	880	nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	θ1/2	IF=50mA		±40		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

