

## L850-09LH

### Oval Type Infrared LED Lamp

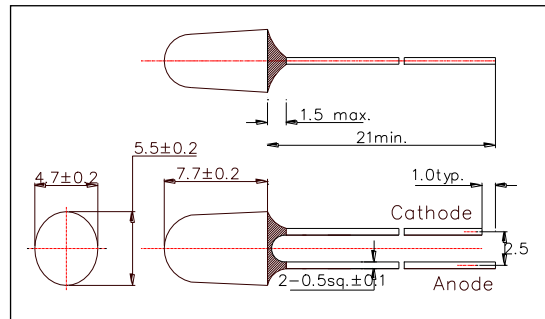
L850-09LH(LN850-09LH) is composed of rectangular AlGaAs die and is mounted on a lead frame with a clear oval type epoxy lens.

On forward bias, it emits a spectral band of radiation that peaks at 850nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L850-09LH
3. Chip:
  - Chip material: AlGaAs
  - Dimension: 680um x 240um
  - Electrode: Bar Shape
  - Peak Wavelength: 850nm 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
Operating Temperature	TOPR	-30 ~ +85	°C
Storage Temperature	TSTG	-30 ~ +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		1.45	1.60	V
		IF=100mA, tp=20ms		1.50	1.80	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	18	24		mW
		IF=100mA, tp=20ms		48		
Radiant Intensity**	IE	IF=50mA		75		mW/sr
		IF=100mA, tp=20ms		150		
Peak wavelength	λP	IF=50mA	840	850	860	nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	Long	θ1/2	IF=50mA	±27		deg
	Short			±13		
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

