

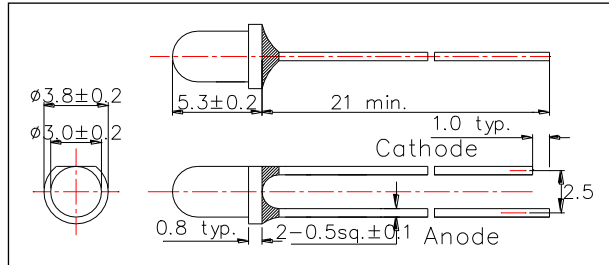
## L850-33UP Infrared LED Lamp

L850-33UP(LN850-33UP) 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 850nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L850-33UP
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 850nm typ.
4. Package
  - Type: Φ3mm 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
Junction Temperature	Tj	100	°C
Thermal Resistance**	Rthja	250	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	IF=50mA DC		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 DC	18	24		mW
		IF=100mA, tp=20ms		48		
Radiant Intensity**	IE	IF=50mA DC		50		mW/sr
		IF=100mA, tp=20ms		100		
Peak wavelength	λP	IF=50mA DC	835	850	865	nm
Half Width	Δλ	IF=50mA DC		45		nm
Viewing Half Angle	θ1/2	IF=50mA DC		±15		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

