

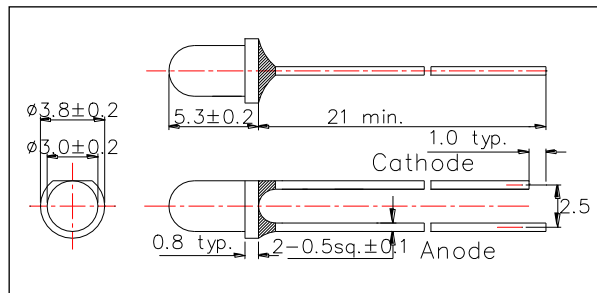
## L850F-33U Infrared LED Lamp

L850F-33U is lower forward voltage and higher output power LED. It consists an AlGaAs LED 400 micron square and mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 850nm. These devices are intended to be operated at pulsed current of 1A under typical 3.5V.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L850F-33U
3. Chip:
  - Chip material: AlGaAs
  - Dimension: 400um x 400um
  - Peak Wavelength: 850nm typ.
4. Package
  - Type: Φ3mm Clear Molding
  - Resin Material: Epoxy Resin
  - Lead Frame: Soldered

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 ~ +85	°C
Storage Temperature	TSTG	-30 ~ +100	°C
Soldering Temperature**	TSOL	260	°C

\* Duty=1% and Pulse Width=10us.

\*\* 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		1.45	1.50	V
Pulsed Forward Voltage	VFP	IFP=1A		3.5	4.0	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	18	24		mW
Radiant Intensity**	IE	IF=50mA	30	55		mW/sr
Peak wavelength	λP	IF=50mA	840	850	860	nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	θ1/2	IF=50mA		±15		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

