L850F-09U

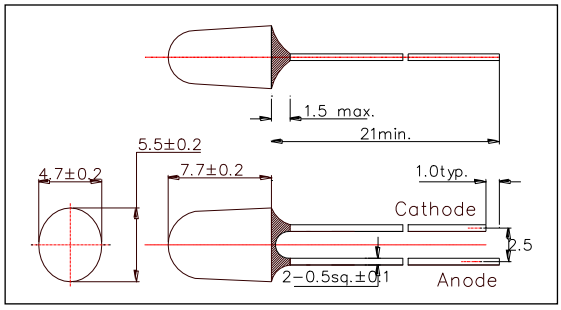
Oval Type Infrared LED Lamp

L850F-09U 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 for stable long life.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L850F-09U
3. Chip:
   - Chip material: AlGaAs
   - Dimension: 400um x 400um
   - Peak Wavelength: 850nm typ.
4. Package
   - Type: Φ5mm Clear Molding
   - Resin Material: Epoxy Resin
   - Lead Frame: Soldered

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25℃]			
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	℃
Storage Temperature	TSTG	-30 ~ +100	℃
Soldering Temperature**	TSOL	265	℃

* Duty=1% and Pulse Width=10us.
** Soldering condition must be completed within 3 second at 265 ℃.

Electro-Optical Characteristics [Ta=25℃]							
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		75		mW/sr
Peak Wavelength		λP	IF=50mA	835	850	865	nm
Half Width		Δλ	IF=50mA		40		nm
Viewing Half Angle	Long	θ1/2	IF=50mA		±25		deg
	Short				±15		
Rise Time		tr	IF=50mA		15		ns
Fall Time		tf	IF=50mA		10		ns

* Measured by Photodyne #500
** Measured by Tektronix J-6512

RoHS Compliant