

L850-05UP Infrared LED Lamp

L850-05UP is lower forward voltage and higher output power LED.

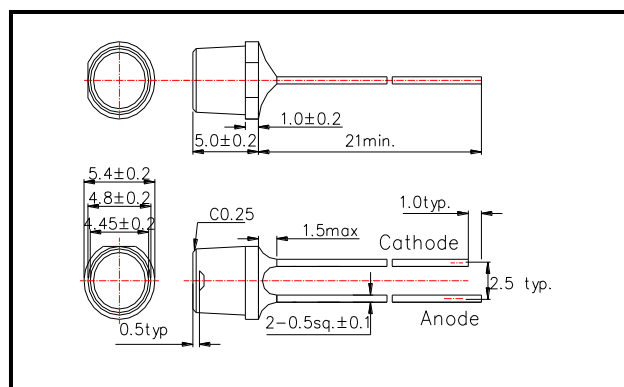
It consists an AlGaAs LED 400 micron square and mounted on a lead frame with a clear epoxy lens.

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

◆ Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L850-05UP
- 3) Chip
 - (1) Chip Material AlGaAs
 - (2) Chip Dimension 400um*400um
 - (3) Peak Wavelength 850nm typ.
- 4) Package
 - (1) Type Φ5mm clear molding
 - (2) Resin Material Epoxy Resin
 - (3) Lead Frame Soldered

◆ Outer dimension (Unit : mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	160	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	1000	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	265	°C	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.50	1.70	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA	18.0	22.0		mW
Radiant Intensity	I _E	I _F =50mA		16		mW/sr
Peak Wavelength	λ _P	I _F =50mA	840	850	860	nm
Half Width	Δλ	I _F =50mA		40		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±40		deg.
Rise Time	t _r	I _F =50mA		15		ns
Fall Time	t _f	I _F =50mA		10		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512

Marubeni America Corporation

3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054

408-330-0650 (Ext. 323), 408-330-0655 (Fax), sales@tech-led.com