

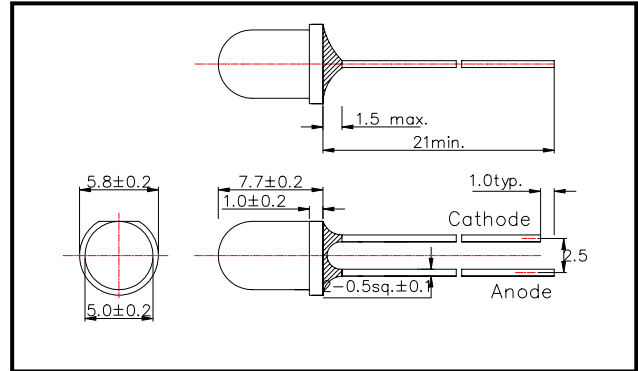
Lead (Pb) Free Product – RoHS Compliant

L850-04L6CU (LN850-04L6CU) Infrared LED Lamp

L850-04L6CU is an AlGaAs LED mounted on a copper made 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. L850-04L6CU
- 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 on Cu made

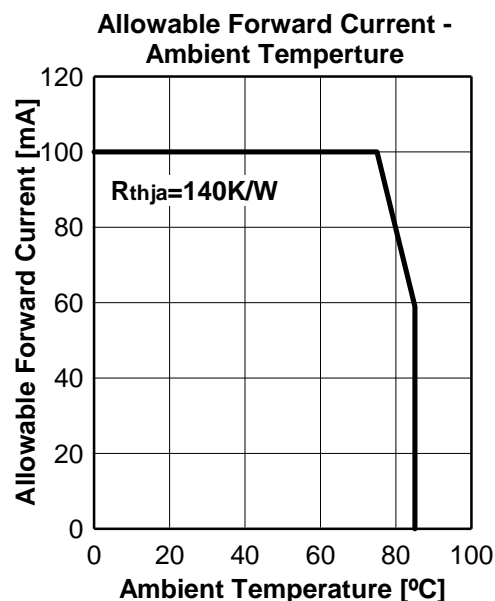
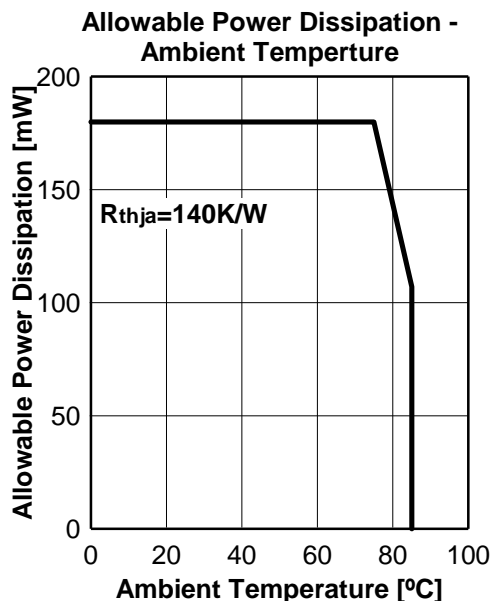
◆ Outer dimension(Unit: mm)

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	180	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
Junction Temperature	T _J	100	°C	
Thermal Resistance	R _{thjp}	140	K/W	
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 5 seconds at 265°C

‡Thermal resistance: junction – ambient, leads 7mm, soldered on PCB.



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◆Electro-Optical Characteristics [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.50	1.70	V
		I _F =100mA, t _p =20ms		1.60	1.80	
		I _F =1A, t _p =10us		3.5	4.0	
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA	18.0	24.0		mW
Radiant Intensity	I _E	I _F =50mA	30	50		mW/sr
Peak Wavelength	λ _P	I _F =50mA	835	850	865	nm
Half Width	Δλ	I _F =50mA		40		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±18		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.

