

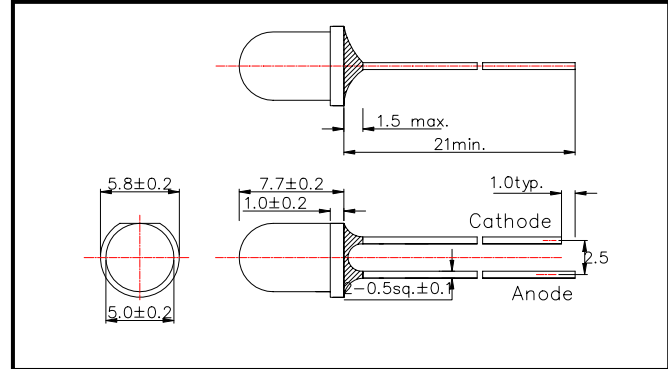
L850D-04L6CU Infrared LED Lamp for High Radiant Intensity

L850D-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.	L850D-04L6CU
3)Chip	
(1)Chip Material	AlGaAs
(2)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)



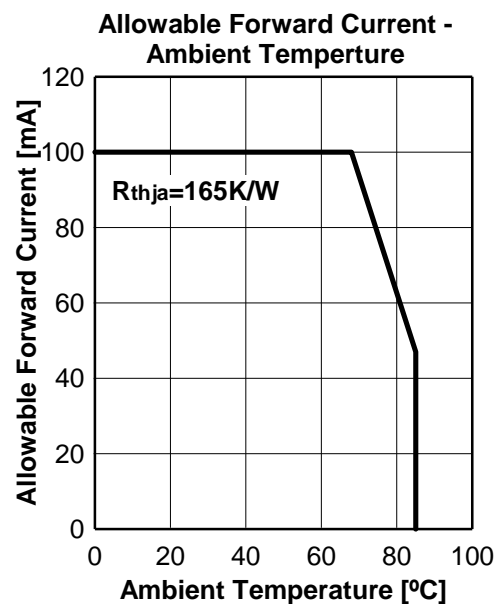
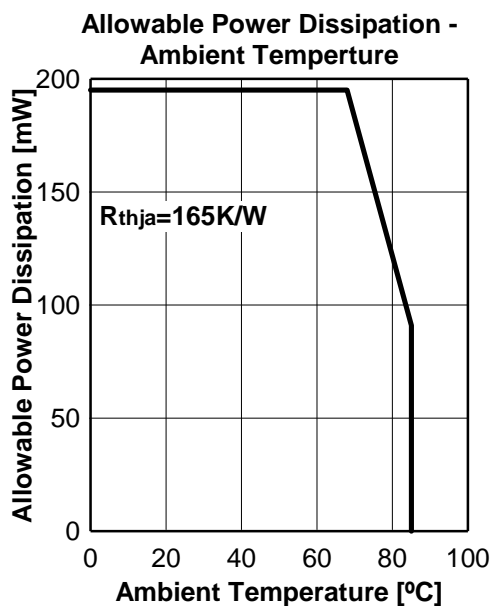
◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	195	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current	IFP	1000	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Junction Temperature	TJ	100	°C	
Thermal Resistance	Rthja	165	K/W	
Operating Temperature	TOPR	-40 ~ +85	°C	
Storage Temperature	TSTG	-40 ~ +100	°C	
Soldering Temperature	TSOL	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

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



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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.6	1.8	V
		I _F =100mA, t _p =20ms		1.75	1.95	
		I _F =1A, t _p =10us		3.50	4.00	
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA	18.0	24.0		mW
		I _F =100mA	36.0	50.0		
Radiant Intensity	I _E	I _F =50mA	36	50		mW/sr
		I _F =100mA	72	100		
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		±16		
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.

