

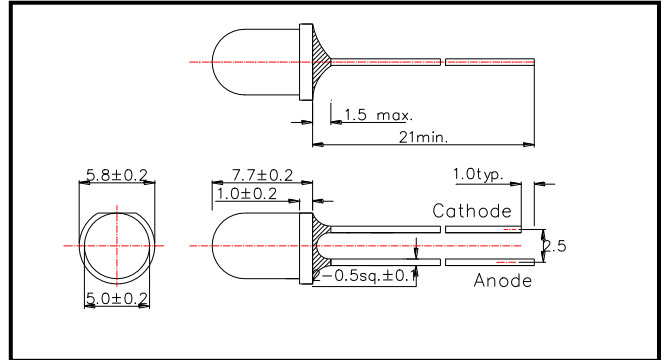
L940-04T Infrared LED Lamp

L940-04T is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. It is designed for high radiant intensity 56mW/sr typ. On forward bias it emits a spectral band of radiation, which peaks at 940nm.

◆ Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L940-04T
- 3) Chip
- (1) Chip Material AlGaAs
- (2) Peak Wavelength 940nm typ.
- 4) Package
- (1) Type Φ5mm clear molding
- (2) Resin Material Epoxy Resin
- (3) Lead Frame Ag plated

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	140	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current	IFP	500	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Junction Temperature	TJ	100	°C	
Thermal Resistance	Rthja	290	K/W	
Operating Temperature	TOPR	-30 ~ +85	°C	
Storage Temperature	TSTG	-30 ~ +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	VF	IF=50mA		1.30	1.40	V
		IF=100mA, tp=20ms		1.35	1.55	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power	PO	IF=50mA	14.0	17.0		mW
		IF=100mA, tp=20ms		34		
Radiant Intensity	IE	IF=50mA	18	26		mW/sr
		IF=100mA, tp=20ms		56		
Peak Wavelength	λP	IF=50mA	930	940	955	nm
Half Width	Δλ	IF=50mA		50		nm
Viewing Half Angle	θ 1/2	IF=50mA		±19		deg.
Rise Time	tr	IF=50mA		1000		ns
Fall Time	tf	IF=50mA		500		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512