

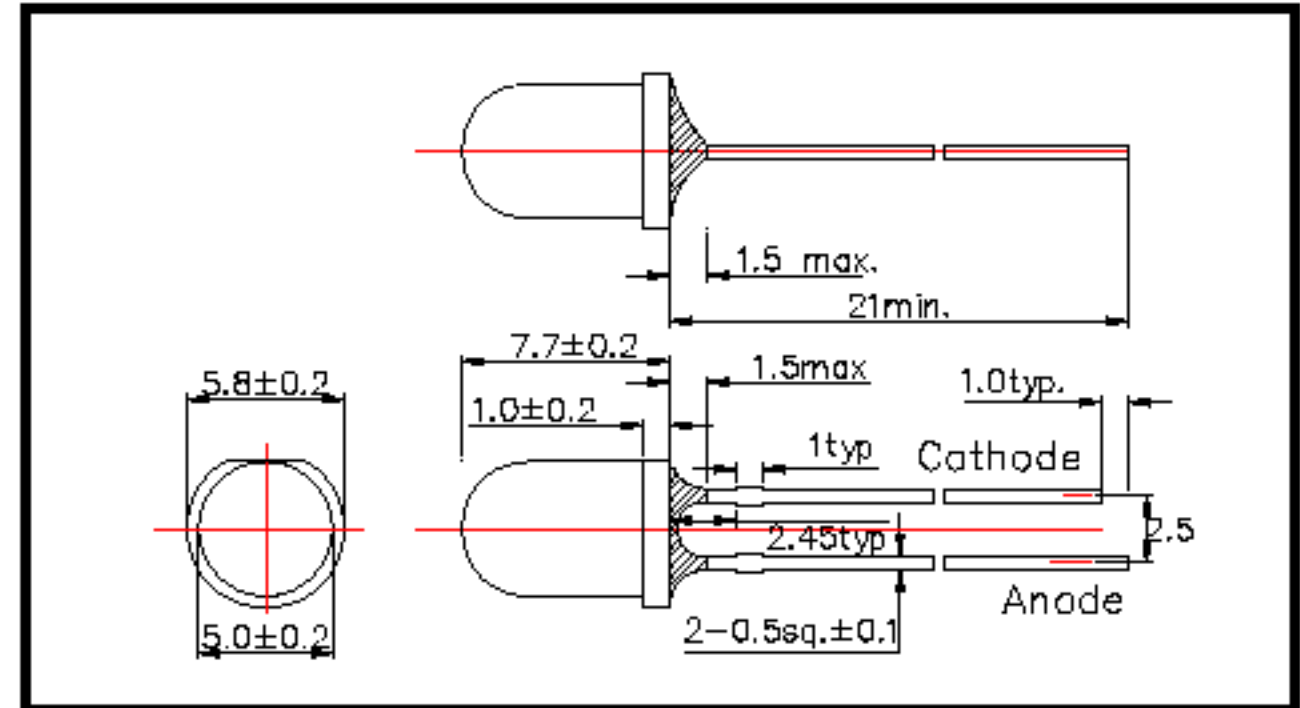
L890-04AU Infrared LED Lamp

L890-04AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 880nm.

◆ Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	L890-04AU
3) Chip	
(1) Chip Material	AlGaAs
(2) Chip Active Area	400umx400um
(2) Peak Wavelength	880nm 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	150	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	500	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}	260	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA DC		1.45	1.70	V
		I _F =100mA, t _p =20ms		1.65	1.95	
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA DC	10.0	15.0		mW
		I _F =100mA, t _p =20ms		30.0		
Radiant Intensity	I _E	I _F =50mA DC	15	30		mW/sr
		I _F =100mA, t _p =20ms		60		
Peak Wavelength	λ _P	I _F =50mA DC	865	880	895	nm
Half Width	Δλ	I _F =50mA DC		75		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA DC		±20		deg.
Rise Time	t _r	I _F =50mA DC		800		ns
Fall Time	t _f	I _F =50mA DC		400		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512