

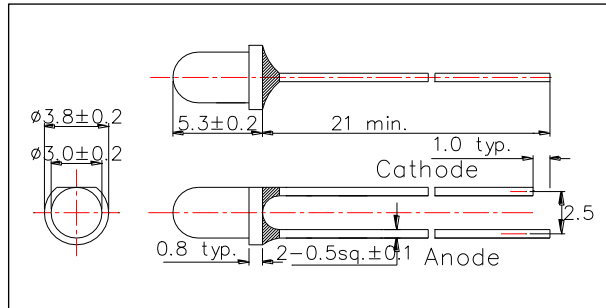
L890-33AU
Infrared LED Lamp

L890-33AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation that peaks at 880nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L890-33AU
3. Chip:
 - Chip Material: AlGaAs
 - Dimension: 400um x 400um
 - Peak Wavelength: 880nm typ.
4. Package
 - Type: Φ3mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered (Lead Frame)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	150	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	500	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance**	Rthja	300	K/W
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature***	TSOL	265	°C

* Duty=1% and Pulse Width=10us.

** Junction - ambient, leads 7mm, soldered on PCB.

*** Soldering condition must be completed within 3 second at 265°C.

Electro-Optical Characteristics[Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.45	1.70	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	10	15		mW
Radiant Intensity**	IE	IF=50mA	10	20		mW/sr
Peak Wavelength	λP	IF=50mA	870	880	895	nm
Half Width	Δλ	IF=50mA		75		nm
Viewing Half Angle	θ1/2	IF=50mA		±15		deg
Rise Time	tr	IF=50mA		800		ns
Fall Time	tf	IF=50mA		400		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

