

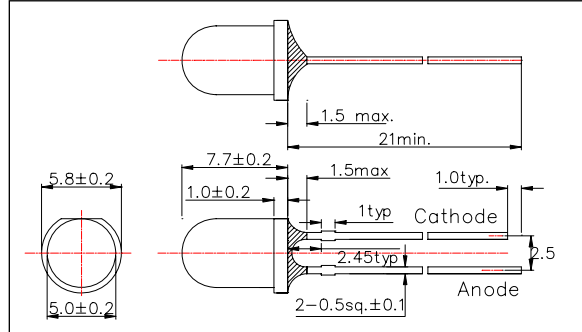
L890-04AU
Infrared LED Lamp

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 that peaks at 880nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L890-04AU
3. Chip:
 - Chip Material: AlGaAs
 - Dimension: 400um x 400um
 - Peak Wavelength: 880nm typ.
4. Package
 - Type: Φ5mm 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 |
| Operating Temperature | TOPR | -30 ~ +85 | °C |
| Storage Temperature | TSTG | -30 ~ +100 | °C |
| Soldering Temperature** | TSOL | 260 | °C |

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

** Soldering condition must be completed within 3 second at 260 °C.

| Electro-Optical Characteristics [Ta=25°C] | | | | | | |
|---|--------|-------------------|---------|---------|---------|-------|
| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
| Forward Voltage | VF | IF=50mA DC | | 1.45 | 1.70 | V |
| | VFP | IF=100mA, tp=20ms | | 1.65 | 1.95 | |
| Reverse Current | IR | VR=5V | | | 10 | uA |
| Total Radiated Power* | PO | IF=50mA DC | 10 | 15 | | mW |
| | | IF=100mA, tp=20ms | | 30 | | |
| Radiant Intensity** | IE | IF=50mA DC | 15 | 30 | | mW/sr |
| | | IF=100mA, tp=20ms | | 60 | | |
| Peak Wavelength | λP | IF=50mA DC | 865 | 880 | 895 | nm |
| Half Width | Δλ | IF=50mA DC | | 75 | | nm |
| Viewing Half Angle | θ1/2 | IF=50mA DC | | ±20 | | deg |
| Rise Time | tr | IF=50mA DC | | 800 | | ns |
| Fall Time | tf | IF=50mA DC | | 400 | | ns |

* Measured by Photodyne #500

** Measured by Tektronix J-6512

