

L880-05-55-2D

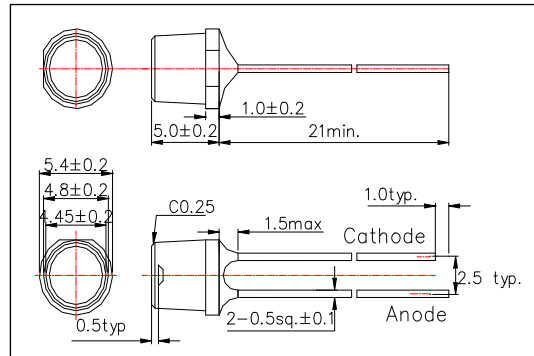
Infrared LED Lamp

L880-05-55-2D 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. These Devices are intended to be operated at pulsed current of 2A under max. 4.0V.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L880-05-55-2D
3. Chip:
 - Chip material: AlGaAs
 - 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 | 2000 | mA |
| Reverse Voltage | VR | 5 | V |
| Junction Temperature | Tj | 100 | °C |
| Thermal Resistance | Rthja | 340 | 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.

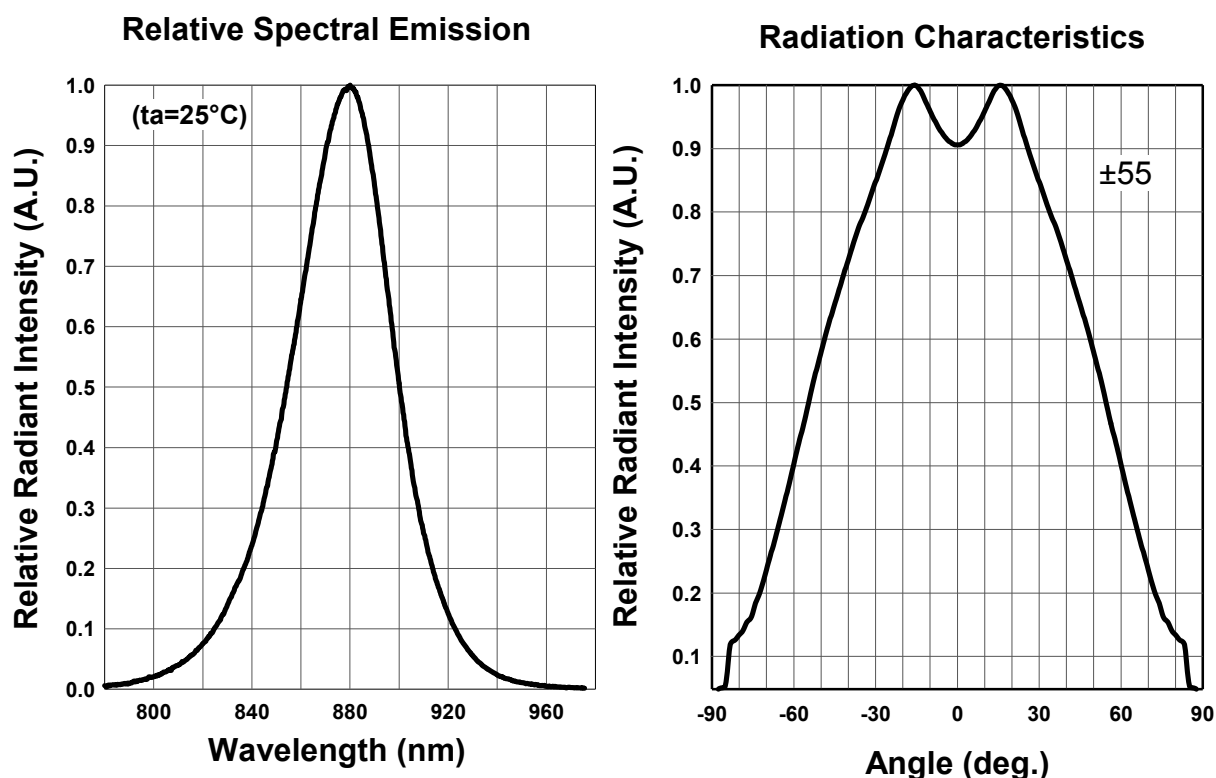
** Soldering condition must be completed within 3 second at 265 °C.

| Electro-Optical Characteristics [Ta=25°C] | | | | | | |
|---|--------|------------|---------|---------|---------|-------|
| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
| Forward Voltage | VF | IF=50mA | | 1.45 | | V |
| | VFP | IFP=2000mA | | 4.0 | | |
| Reverse Current | IR | VR=5V | | | 10 | uA |
| Total Radiated Power* | PO | IF=50mA | 13 | 18 | | mW |
| | | IFP=2000mA | | 720 | | |
| Radiant Intensity** | IE | IF=50mA | | 7.0 | | mW/sr |
| | | IFP=2000mA | | 280 | | |
| Peak Wavelength | λP | IF=50mA | 870 | 880 | 890 | nm |
| Half Width | Δλ | IF=50mA | | 45 | | nm |
| Viewing Half Angle | θ1/2 | IF=50mA | | ±55 | | deg |
| Rise Time | tr | IF=50mA | | 30 | | ns |
| Fall Time | tf | IF=50mA | | 30 | | ns |

* Measured by Photodyne #500

** Measured by Tektronix J-6512





Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

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