

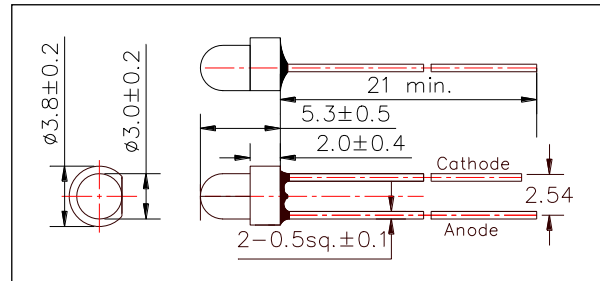
L800-36AU Infrared LED Lamp

L800-36AU 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 800nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L800-36AU
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 800nm typ.
4. Package
 - Type: Φ3mm clear molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



| Absolute Maximum Ratings [Ta=25°C] | | | |
|------------------------------------|--------|---------------------|------|
| Item | Symbol | Maximum Rated Value | Unit |
| Power Dissipation | PD | 200 | mW |
| Forward Current | IF | 100 | mA |
| Pulse Forward Current* | IFP | 500 | mA |
| Reverse Voltage | VR | 5 | V |
| Thermal Resistance | Rthja | 250 | K/W |
| Junction Temperature | Tj | 120 | °C |
| Operating Temperature | TOPR | -40 ~ +100 | °C |
| Storage Temperature | TSTG | -40 ~ +100 | °C |
| Soldering Temperature** | TSOL | 250 | °C |

* Duty=1% and Pulse Width=10μs.

** Soldering condition must be completed within 5 second at 250 °C.

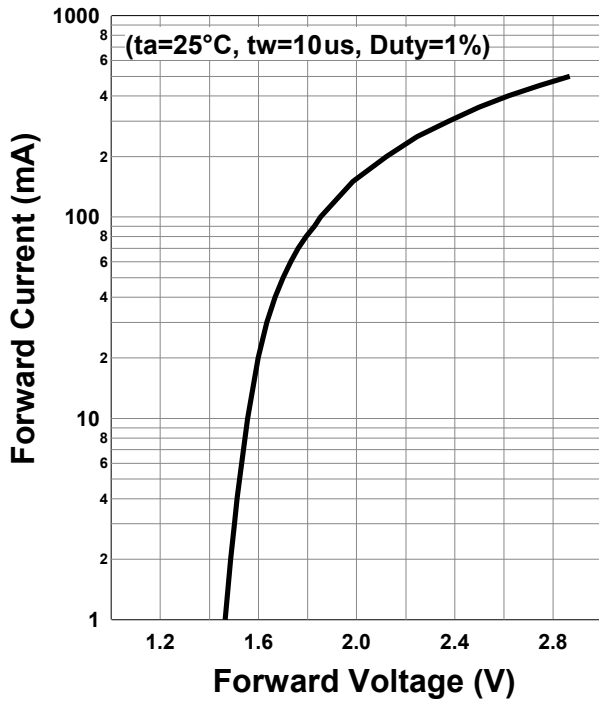
| Electro-Optical Characteristics [Ta=25°C typ.] | | | | | | |
|--|--------|-----------|---------|---------|---------|-------|
| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
| Forward Voltage | VF | IF=50mA | | 1.7 | 2.0 | V |
| | VFP | IFP=500mA | | 2.9 | | |
| Radiated Power* | PO | IF=50mA | | 27 | | mW |
| | | IFP=500mA | | 260 | | |
| Radiant Intensity** | IE | IF=50mA | | 30 | | mW/sr |
| | | IFP=500mA | | 290 | | |
| Peak Wavelength | λP | IF=50mA | 790 | 800 | 810 | nm |
| Half Width | Δλ | IF=50mA | | 29 | | nm |
| Viewing Half Angle | θ1/2 | IF=50mA | | ±28 | | Deg. |
| Rise Time | tr | IF=50mA | | 35 | | ns |
| Fall Time | tr | IF=50mA | | 30 | | ns |

* Measured by S3584-08

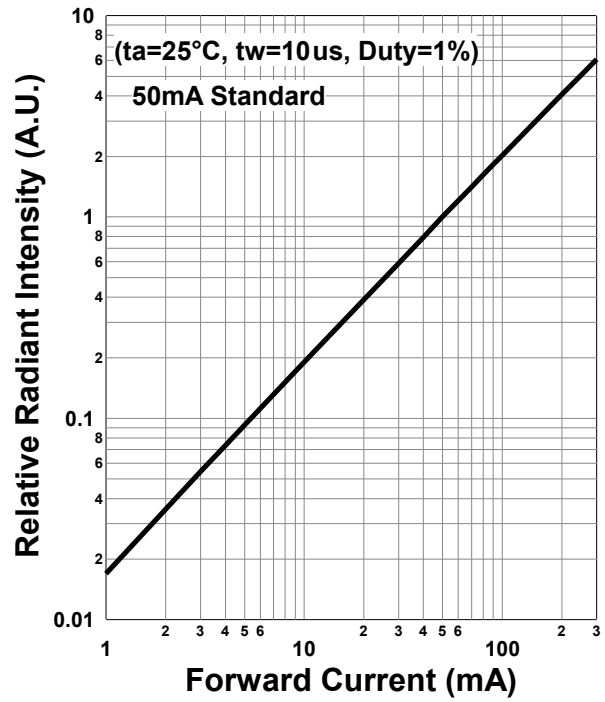
** Measured by CIE127-2007 Condition B.



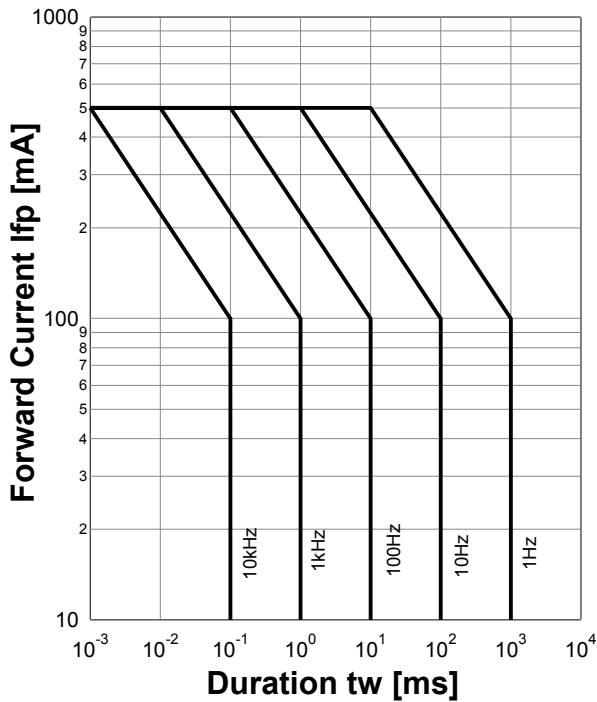
Forward Current - Forward Voltage



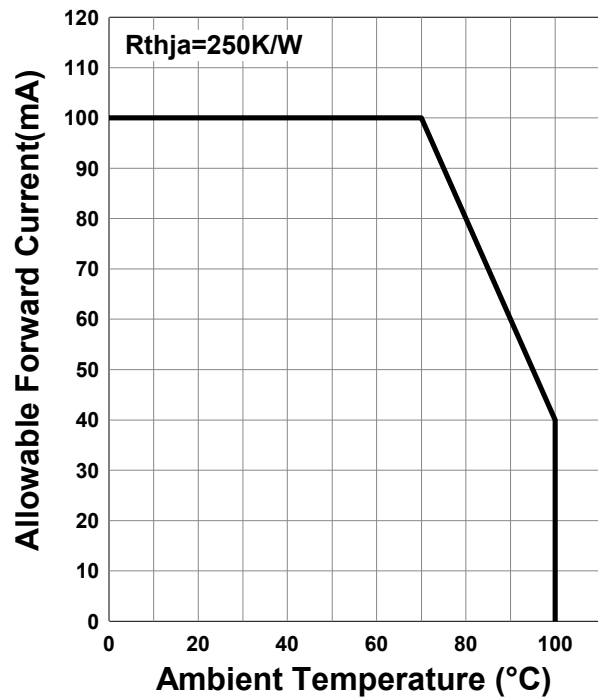
Relative Radiant Intensity - Forward Current



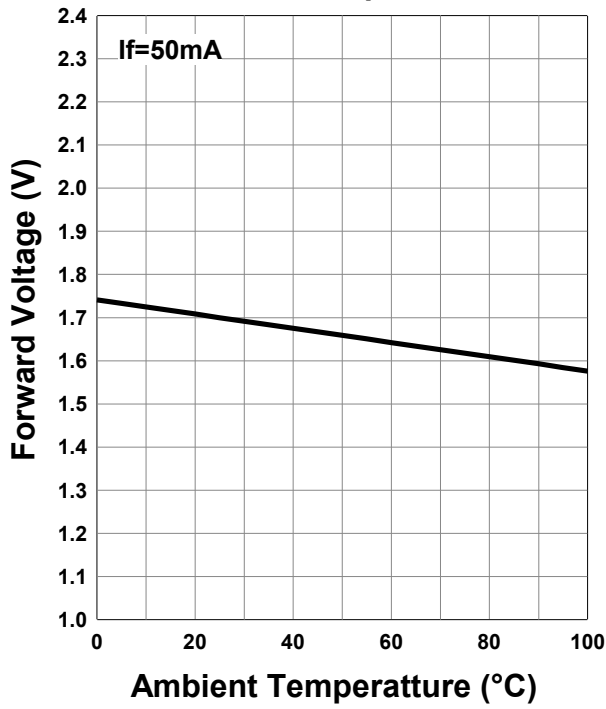
Forward Current - Pulse Duration



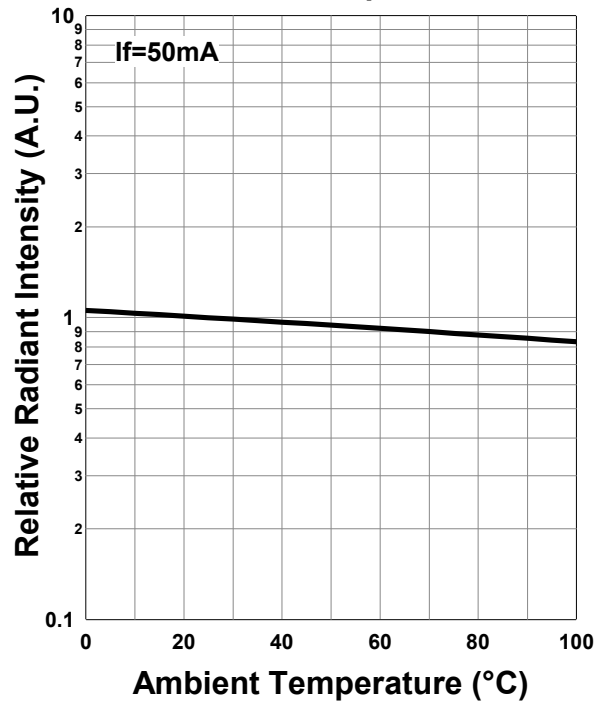
Allowable Forward Current - Ambient Temperature



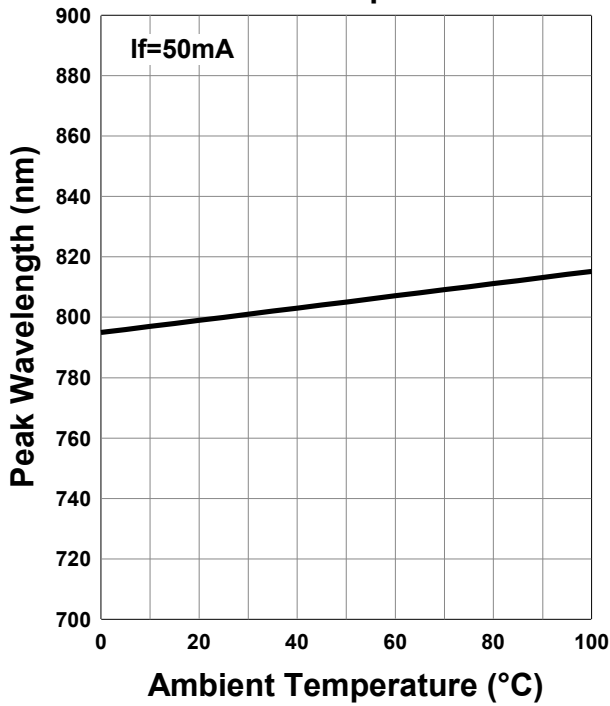
Forward Voltage - Ambient Temperature

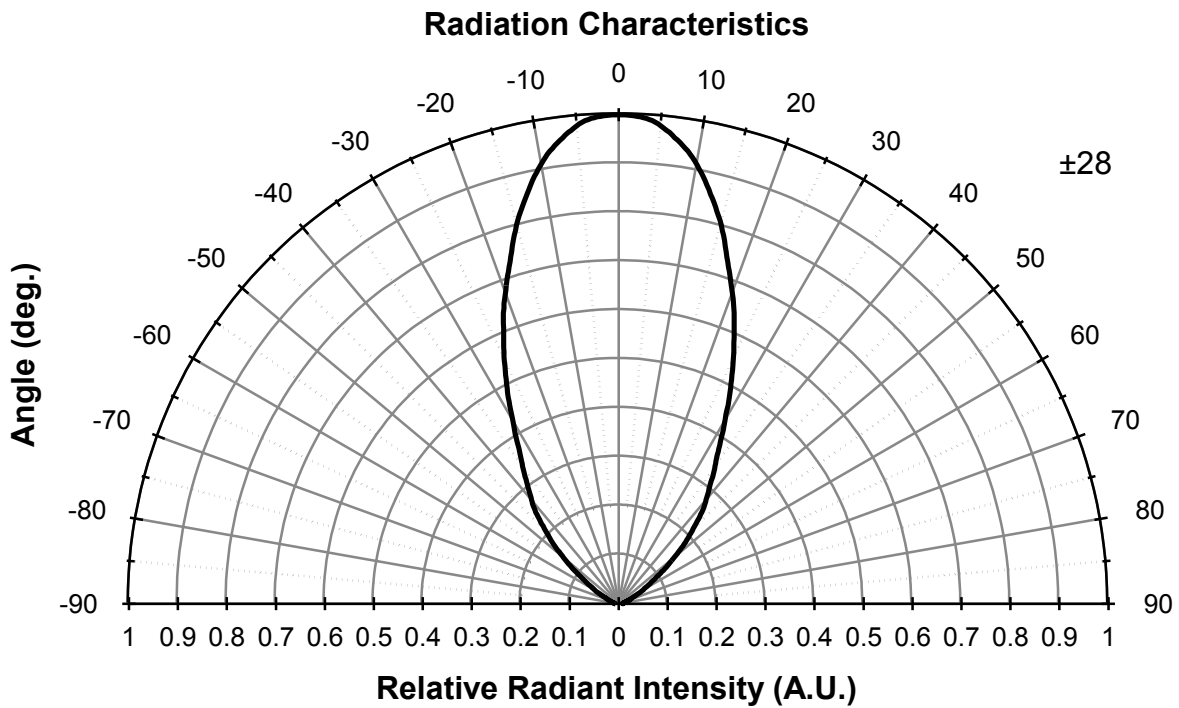
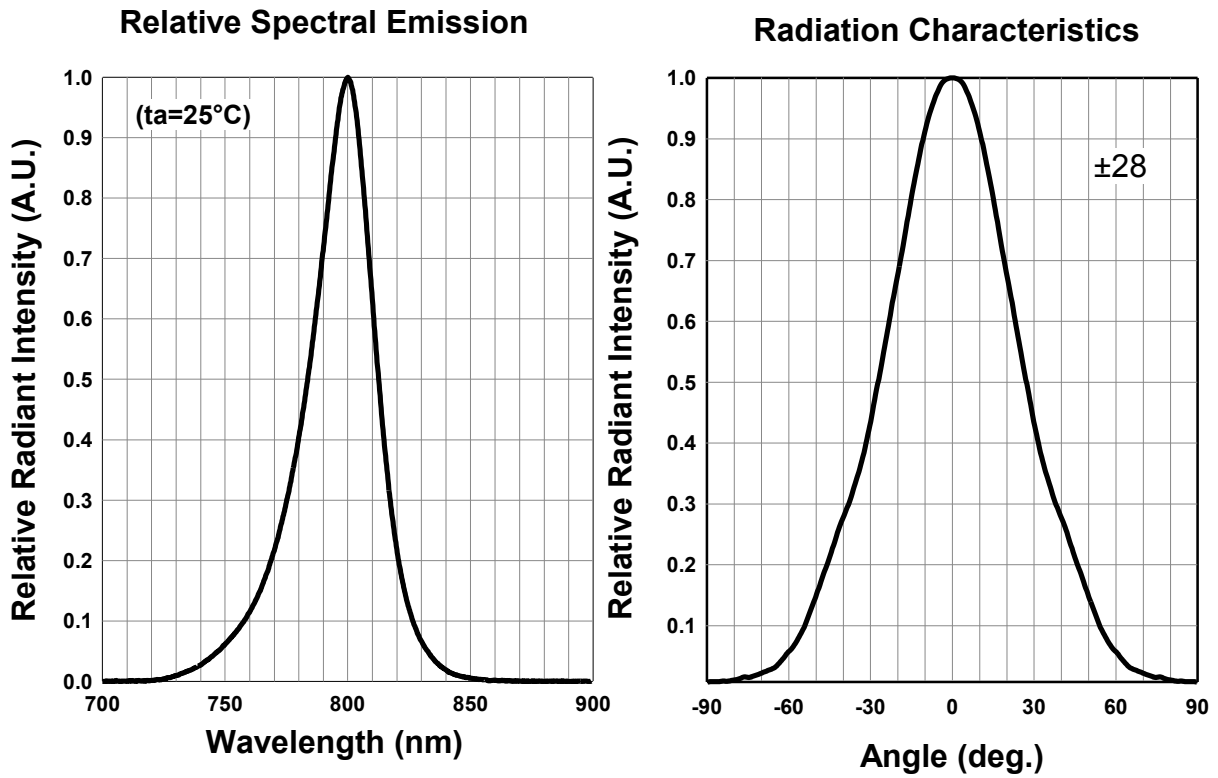


Relative Radiant Intensity - Ambient Temperature



Peak Wavelength - Ambient Temperature





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.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

2014.06