

## L720-66-60

### Epoxy Lens Type Infrared Illuminator

L720-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency AlGaAs diode chips, mounted on a metal stem TO-66 with AlN ceramics and covered with double coated clear silicone and epoxy resin. These devices are designed for high current operation with proper heat sinking to improve thermal conductive efficiency.

**<Features>**

- High Reliability
- Compact(TO-66) Package
- High Output Power at 720nm

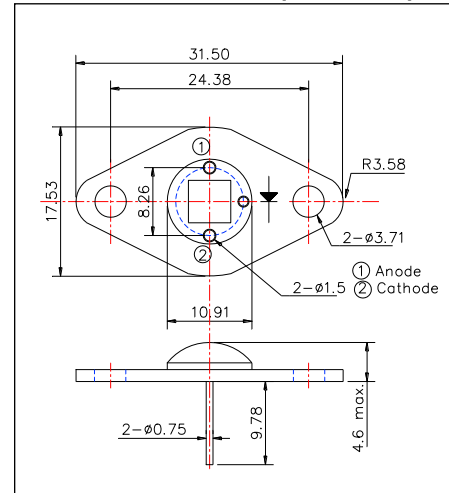
**<Application>**

- For IR Search Light
- For CCD Lighting

**<Specifications>**

1. Product Name: IR Illuminator
2. Type Number: L720-66-60
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 720nm typ.
4. Package
  - Type: TO-66 Stem with AlN
  - Lens: Clear Silicone and Epoxy Lens

Outer Dimension (Unit:mm)



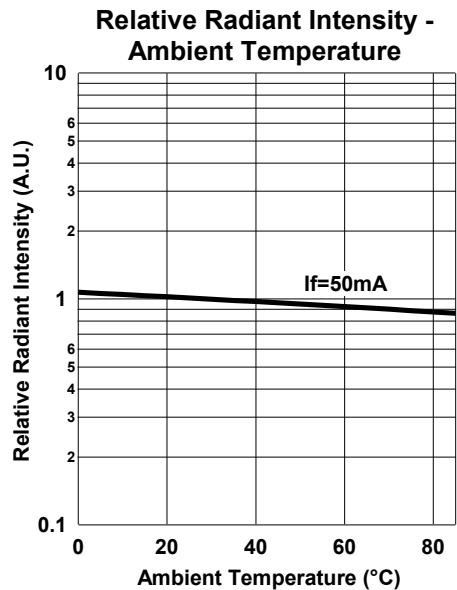
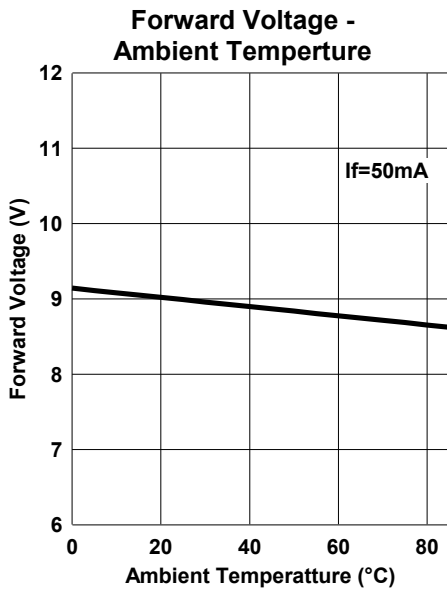
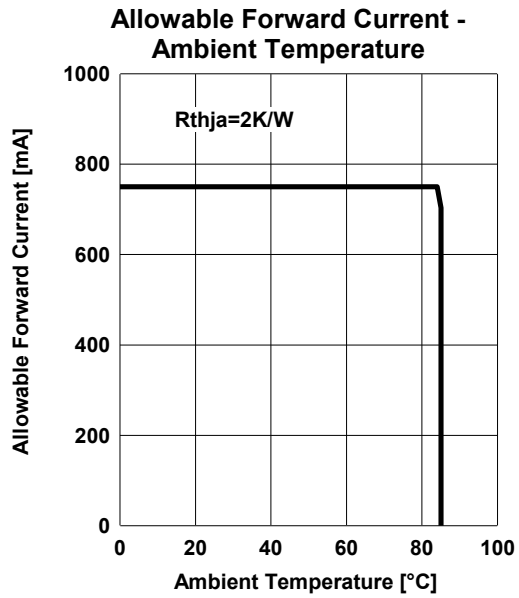
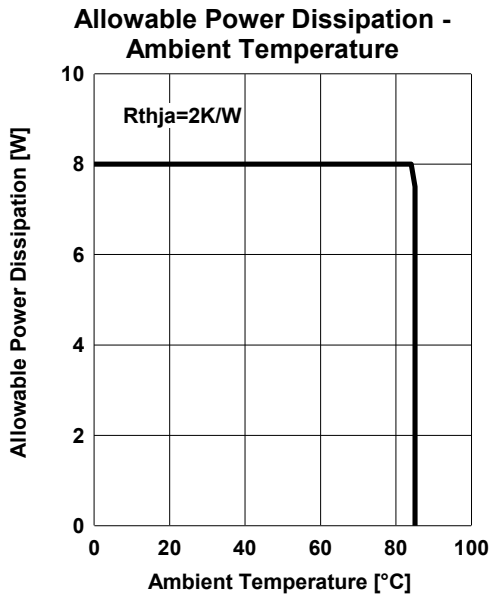
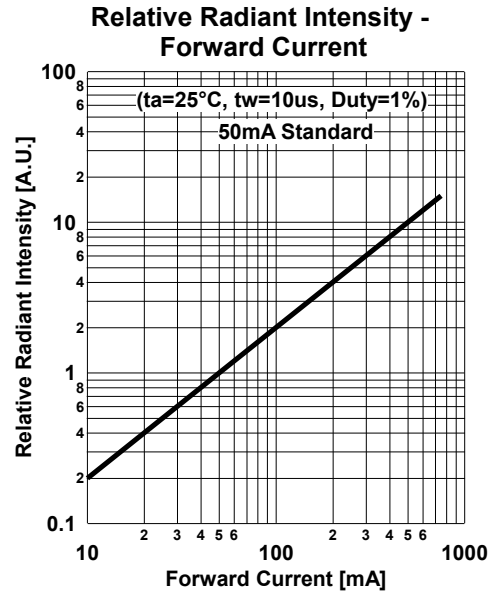
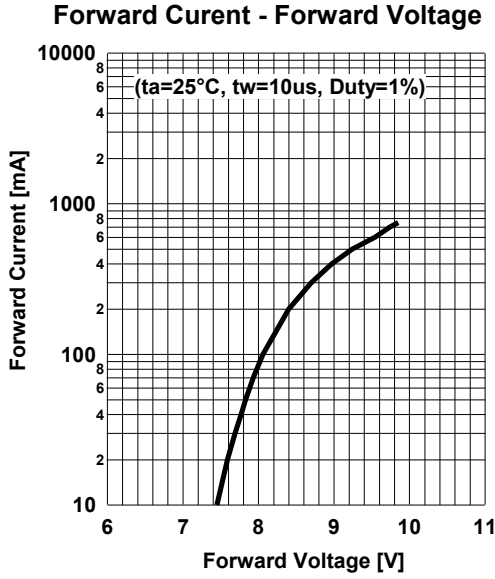
| Absolute Maximum Ratings[Ta=25°C] |        |                     |      |
|-----------------------------------|--------|---------------------|------|
| Item                              | Symbol | Maximum Rated Value | Unit |
| Power Dissipation                 | PD     | 8.0                 | W    |
| Forward Current                   | IF     | 750                 | mA   |
| Pulse Forward Current*            | IFP    | 3                   | A    |
| Reverse Voltage                   | VR     | 50                  | V    |
| Junction Temperature              | Tj     | 100                 | °C   |
| Thermal Resistance**              | Rthjp  | 2.0                 | K/W  |
| Operating Temperature             | TOPR   | -30 ~ +80           | °C   |
| Storage Temperature               | TSTG   | -30 ~ +110          | °C   |
| Soldering Temperature***          | TSOL   | 265                 | °C   |

\* Duty=1% and Pulse Width=1us

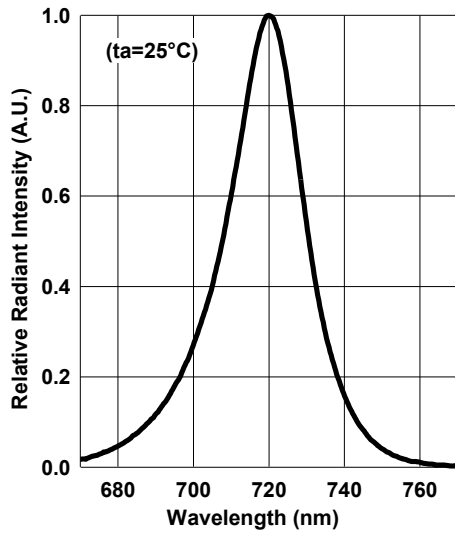
\*\* Junction - Package, mounted on heat sink

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

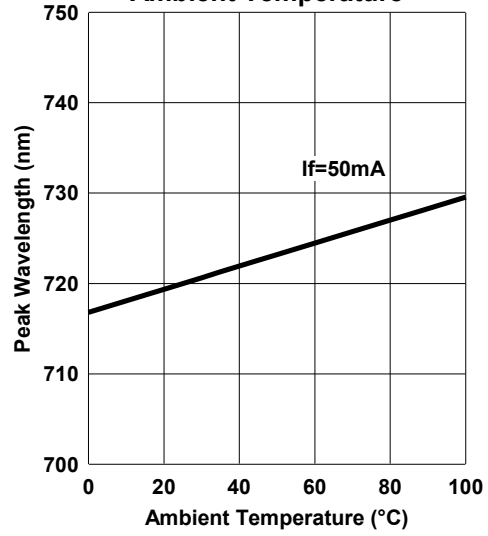
| Electro-Optical Characteristics |        |           |         |         |         |       |
|---------------------------------|--------|-----------|---------|---------|---------|-------|
| Item                            | Symbol | Condition | Minimum | Typical | Maximum | Unit  |
| Total Radiated Power            | PO     | IF=600mA  |         | 550     |         | mW    |
|                                 |        | IF=3A     |         | 2750    |         |       |
| Radiant Intensity               | IE     | IF=600mA  |         | 180     |         | mW/sr |
| Forward Voltage                 | VF     | IF=600mA  |         | 9.5     |         | V     |
| Reverse Current                 | VR     | IR=10uA   | 50      |         |         | V     |
| Peak Wavelength                 | λP     | IF=600mA  |         | 720     |         | nm    |
| Half Width                      | Δλ     | IF=600mA  |         | 30      |         | nm    |
| Viewing Half Angle              | θ1/2   | IF=600mA  |         | ±60     |         | deg   |
| Rise Time                       | Tr     | IF=600mA  |         | 100     |         | Ns    |
| Fall Time                       | tf     | IF=600mA  |         | 100     |         | ns    |



Relative Spectral Emission



Peak Wavelength - Ambient Temperature



Radiation Characteristics

