

L810N-66-16100

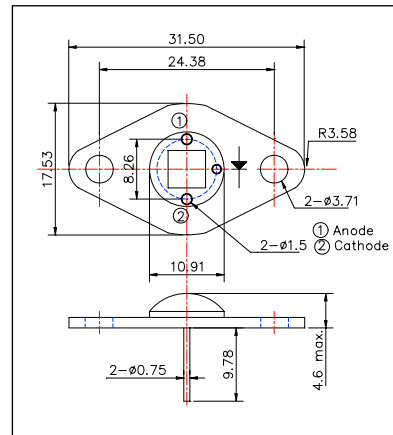
Epoxy Lens Type Infrared Illuminator

L810N-66-16100 is a wide viewing and extremely high output power illuminator assembled with a total of 16pcs of 1mm square chips, mounted on a metal stem TO-66 with AlN ceramics and covered with epoxy resin. These devices are designed for high current operation with proper heat sinking to improve thermal conductive efficiency.

<Specifications>

1. Product Name: IR Illuminator
2. Type Number: L810N-66-16100
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 810nm typ.
 - Dimension: 1mm x 1mm
 - Number: 16pcs
4. Package
 - Type: TO-66 Stem Cu made
 - Insulator: AlN Ceramics
 - Lens: Clear Epoxy Lens

Outer Dimension (Unit:mm)



| Absolute Maximum Ratings[Ta=25°C] | | | |
|-----------------------------------|--------|---------------------|------|
| Item | Symbol | Maximum Rated Value | Unit |
| Power Dissipation | PD | 16 | W |
| Forward Current | IF | 2000 | mA |
| Pulse Forward Current* | IFP | 8000 | mA |
| Reverse Voltage | VR | 50 | V |
| Junction Temperature | Tj | 100 | °C |
| Thermal Resistance** | Rthjp | 5 | K/W |
| Operating Temperature | TOPR | -30 ~ +80 | °C |
| Storage Temperature | TSTG | -30 ~ +110 | °C |
| Soldering Temperature*** | TSOL | 265 | °C |

* Duty=1% and Pulse Width=10us

** Junction - metal block

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

| Electro-Optical Characteristics | | | | | | |
|---------------------------------|--------|---------------|---------|---------|---------|-------|
| Item | Symbol | Condition | Minimum | Typical | Maximum | Unit |
| Radiated Power | PO | IF=1200mA | | 1340 | | mW |
| | | IF=2A, tp=1ms | | 2200 | | |
| Radiant Intensity | IE | IF=1200mA | | 530 | | mW/sr |
| | | IF=2A, tp=1ms | | 880 | | |
| Forward Voltage | VF | IF=1200mA | | 6.4 | | V |
| | | IF=2A, tp=1ms | | 6.9 | | |
| Peak Wavelength | λP | IF=600mA | | 810 | | nm |
| Half Width | Δλ | IF=600mA | | 35 | | nm |
| Viewing Half Angle | θ1/2 | IF=600mA | | ±60 | | deg |
| Rise Time | Tr | IF=600mA | | 100 | | ns |
| Fall Time | tf | IF=600mA | | 100 | | ns |

Heat sink is required by 2K/W