



LED470-66-16100



TECHNICAL DATA

High Power LED Array, 4 x 4 matrix

InGaN

LED470-66-16100 is composed by 16pcs. of 1 x 1 mm² high current drive InGaN blue color diode chips, mounted on a metal stem TO-66 and covered with epoxy resin.
It is designed for wide viewing and extremely high output power illuminator.

Specifications

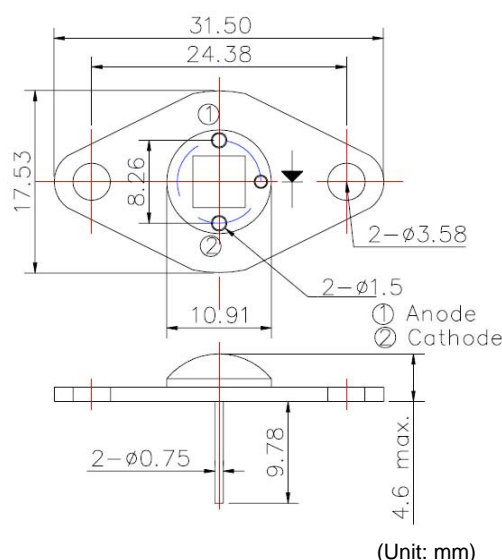
- Structure: InGaN, 16 power LED chips, 4 x 4 array
- Peak Wavelength: typ. 465 nm
- Optical Output Power: typ. 420 mW
- Package: TO-66 stem,
clear silicone and epoxy resin

Absolute Maximum Ratings ($T_C=25^{\circ}\text{C}$)

| Item | Symbol | Value | Unit |
|--------------------------------------|-----------|--------------|------|
| Power Dissipation | P_D | 8.5 | W |
| Forward Current | I_F | 1.6 | A |
| Pulse Forward Current * ¹ | I_{FP} | 2.0 | A |
| Reverse Voltage | V_R | 30 | V |
| Operating Temperature | T_{opr} | -30 ... +80 | °C |
| Storage Temperature | T_{stg} | -30 ... +100 | °C |
| Soldering Temperature * ² | T_{sol} | 265 | °C |

*¹ duty cycle = 1%, pulse width = 1μs

*² must be completed within 3 seconds



Electro-Optical Characteristics

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|----------------------|-----------------|------------------------|------|------|------|------|
| Forward Voltage | V_F | $I_F = 1.2 \text{ A}$ | - | 14.0 | - | V |
| Brightness | I_V | $I_F = 1.2 \text{ A}$ | - | - | - | cd |
| Total Radiated Power | P_O | $I_F = 1.2 \text{ A}$ | - | 420 | - | mW |
| Reverse Voltage | V_R | $I_R = 10 \mu\text{A}$ | 20 | - | - | V |
| Peak Wavelength | λ_P | $I_F = 1.2 \text{ A}$ | - | 465 | - | nm |
| Half Width | $\Delta\lambda$ | $I_F = 1.2 \text{ A}$ | - | 20 | - | nm |
| Viewing Half Angle | $\Theta_{1/2}$ | $I_F = 1.2 \text{ A}$ | - | ±55 | - | deg. |

LED is required to keep less than 60°C

Notes

- This high power LED must be cooled!
- Do not view directly into the emitting area of the LED during operation!
- The above specifications are for reference purpose only and subjected to change without prior notice.

