

**PRELIMINARY**

# LED505-66-60 epoxy lens type Bluish Green color illuminator

LED505-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency InGaN 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

- 1) High reliability
- 2) Compact (TO-66) package
- 3) High output power at 505 nm

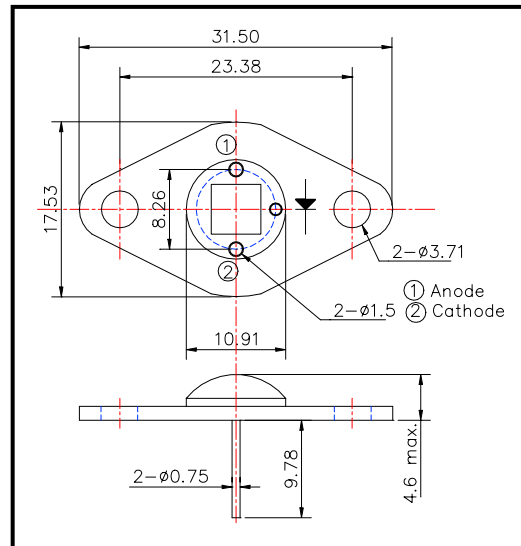
◆ Applications

- 1) For high intensity lighting source

◆ Specifications

- 1) Product name      Bluish Green color illuminator
- 2) Spec. No.         LED505-66-60
- 3) Chip
- 1) Material            InGaN
- 2) Peak wavelength   505 nm
- 4) Package
- 1) Stem                TO-66 stem with AlN
- 2) Lens                Clear silicone and epoxy lens

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P <sub>D</sub>	7.8	W	T <sub>a</sub> = 25 °C
Forward Current	I <sub>F</sub>	400	mA	T <sub>a</sub> = 25 °C
Pulse Forward Current	I <sub>FP</sub>	2000	mA	T <sub>a</sub> = 25 °C
Reverse Voltage	V <sub>R</sub>	50	V	T <sub>a</sub> = 25 °C
Operating Temperature	T <sub>OPR</sub>	-30 ~ +80	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +110	°C	
Soldering Temperature	T <sub>SOL</sub>	240	°C	

‡Pulse Forward Current condition: Duty = 1% and Pulse Width = 1 μs.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 240 mA		18.5		V
Brightness	I <sub>V</sub>	I <sub>F</sub> = 240 mA		4500		mcd
Total Radiated Power	P <sub>O</sub>	I <sub>F</sub> = 240 mA		60		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> = 240 mA		10		mW/sr
Reverse Current	V <sub>R</sub>	I <sub>R</sub> = 10 μA	30			V
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 240 mA	495	505	515	nm
Half Width	Δλ	I <sub>F</sub> = 240 mA		30		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> = 240 mA		±60		deg.

‡Heat sink is required thermal resistance <8 K/W

ROITHNER LASERTECHNIK, A-1040 Vienna, Austria, Schoenbrunner Strasse 7  
 Tel.: +43-1-586 52 43 - 0, Fax.: +43-1-586 52 43 44  
 e-mail: office@roithner-laser.com, http://www.roithner-laser.com