

# L470-66-60 epoxy lens type BLUE color illuminator

L470-66-60 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 470nm

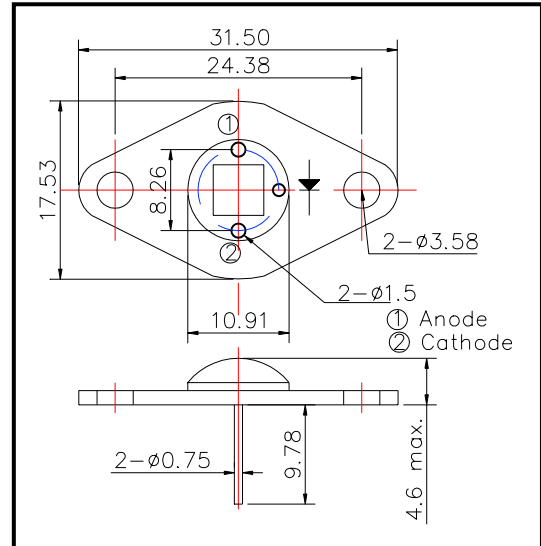
### ◆ Applications

- 1) For high intensity lighting source

### ◆ Specifications

- |                     |                               |
|---------------------|-------------------------------|
| 1) Product name     | Blue color illuminator        |
| 2) Spec. No.        | L470-66-60                    |
| 3) Chip             |                               |
| (1) Material        | InGaN                         |
| (2) Peak wavelength | 470nm                         |
| 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	$P_D$	7.5	W	$T_a=25^\circ\text{C}$
Forward Current	$I_F$	400	mA	$T_a=25^\circ\text{C}$
Pulse Forward Current	$I_{FP}$	500	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	$V_R$	50	V	$T_a=25^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-30 ~ +80	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	-30 ~ +110	$^\circ\text{C}$	
Soldering Temperature	$T_{SOL}$	240	$^\circ\text{C}$	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=1 $\mu$ s.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260 $^\circ\text{C}$

### ◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	$V_F$	$I_F=240\text{mA}$		18.5		V
Brightness	$I_V$	$I_F=240\text{mA}$		4500		mcd
Total Radiated Power	$P_O$	$I_F=240\text{mA}$		120		mW
Radiant Intensity	$I_E$	$I_F=240\text{mA}$		33		mW/sr
Reverse Current	$V_R$	$I_R=10\mu\text{A}$	50			V
Peak Wavelength	$\lambda_P$	$I_F=240\text{mA}$	460	470	480	nm
Half Width	$\Delta\lambda$	$I_F=240\text{mA}$		20		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=240\text{mA}$		$\pm 60$		deg.

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