

PRELIMINARY

# LEDW47-66-60-120 Flat Lens Type White Color Light Illuminator

LEDW47-66-60-120 is a wide viewing and extremely high bright and output power illuminator assembled with a total of 60 high efficiency InGaN blue color diode chips, mounted on a metal stem TO-66 and covered with Flat Glass Cap.

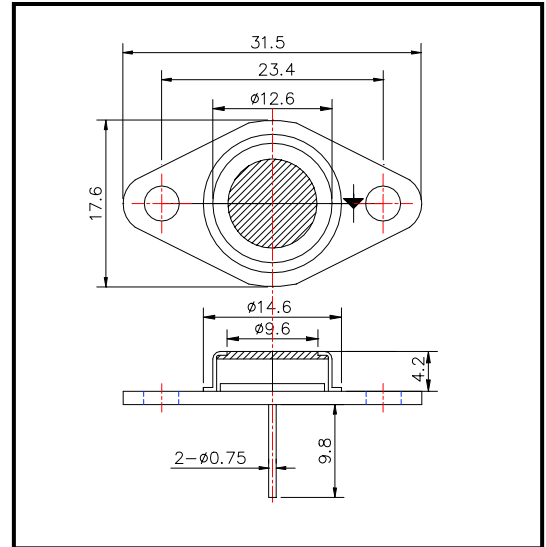
## ◆ Features

- 1) High Brightness
- 2) Compact (TO-66) package

## ◆ Specifications

- 1) Product name white color light illuminator
- 2) Spec. No. LEDW47-66-60-120
- 3) Chip
  - (1) Material InGaN
  - (2) Peak wavelength white color
- 4) Package
  - (1) Stem TO-66 stem
  - (2) Lens flat glass cap

◆ Outer dimension (unit: mm)



## ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	$P_D$	8.5	W	$T_a = 25^\circ\text{C}$
Forward Current	$I_F$	400	mA	$T_a = 25^\circ\text{C}$
Pulse Forward Current	$I_{FP}$	2000	mA	$T_a = 25^\circ\text{C}$
Reverse Voltage	$V_R$	30	V	$T_a = 25^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-30 ~ +80	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	-30 ~ +100	$^\circ\text{C}$	
Soldering Temperature	$T_{SOL}$	240	$^\circ\text{C}$	

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

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

## ◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	$V_F$	$I_F = 240\text{ mA}$		19.0		V
Brightness	$I_V$	$I_F = 240\text{ mA}$		13		cd
Total Radiated Power	$P_O$	$I_F = 240\text{ mA}$		60		mW
Radiant Intensity	$I_E$	$I_F = 240\text{ mA}$		35		mW/sr
Reverse Current	$V_R$	$I_R = 10\ \mu\text{A}$	50			V
Peak Wavelength	$\lambda_P$	$I_F = 240\text{ mA}$		*1		nm
Half Width	$\Delta\lambda$	$I_F = 240\text{ mA}$		-		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F = 240\text{ mA}$		$\pm 55$		deg.

\*1 x:  $2.3 \pm 0.3E-01$ , y:  $2.2 \pm 0.3E-01$

‡ Heat sink is required thermal resistance  $< 8\text{K/W}$

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