

# L630-66-60

## epoxy lens type RED color illuminator

L630-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency InGaAlP 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 630nm

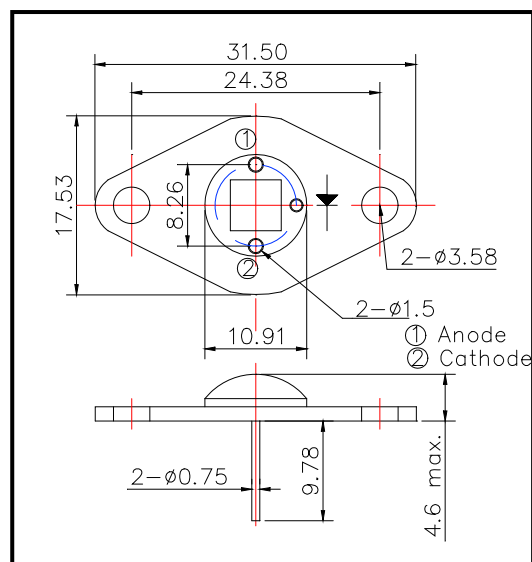
### ◆ Applications

- 1) For high intensity lighting source

### ◆ Specifications

- |                     |                               |
|---------------------|-------------------------------|
| 1) Product Name     | Red color illuminator         |
| 2) Type No.         | L630-66-60                    |
| 3) Chip             |                               |
| (1) Chip Material   | InGaAlP                       |
| (2) Peak Wavelength | 630nm typ.                    |
| 4) Package          |                               |
| (1) Stem            | TO-66 stem with AlN           |
| (2) Lens            | Clear silicone and epoxy lens |

### ◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	P <sub>D</sub>	4.5	W
Forward Current	I <sub>F</sub>	400	mA
Pulse Forward Current	I <sub>FP</sub>	600	mA
Reverse Voltage	V <sub>R</sub>	50	V
Operating Temperature	T <sub>OPR</sub>	-30 ~ +80	°C
Storage Temperature	T <sub>STG</sub>	-30 ~ +110	°C
Soldering Temperature	T <sub>SOL</sub>	260	°C

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

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

### ◆ Electro-Optical Characteristics [Ta=25°C typ.]

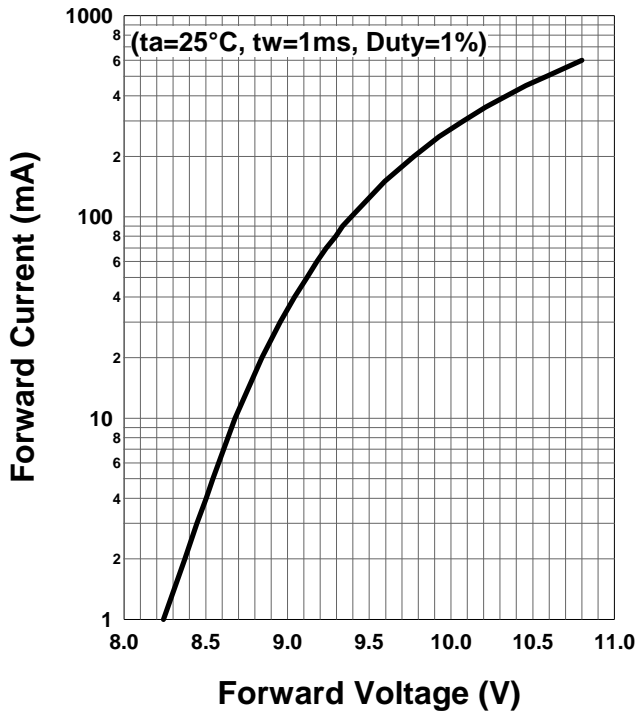
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =240mA		10.0		V
Luminous Flux	Φ <sub>V</sub>	I <sub>F</sub> =240mA		65		lm
Brightness	I <sub>V</sub>	I <sub>F</sub> =240mA		36,000		mcd
Radiated Power	P <sub>O</sub>	I <sub>F</sub> =240mA		480		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =240mA		180		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =240mA	620	630	640	nm
Half Width	Δλ	I <sub>F</sub> =240mA		15		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =100mA		±63		deg.

‡Radiated Power is measured by S3584-08.

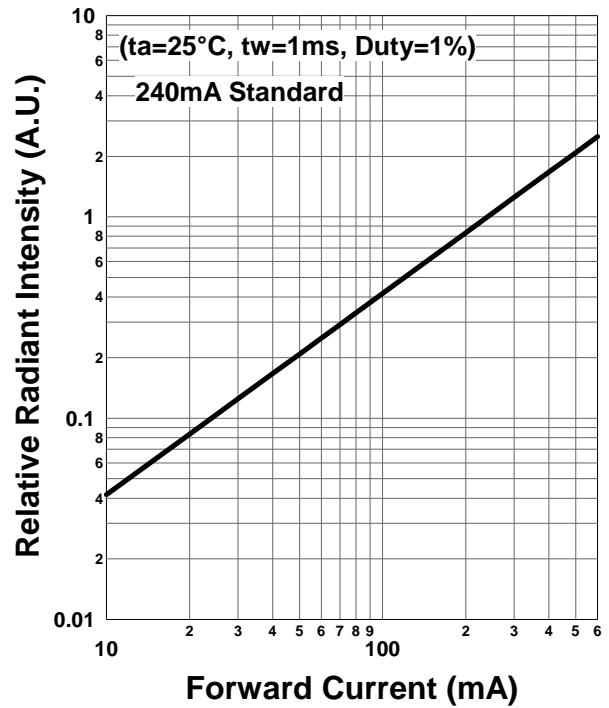
‡Radiant Intensity is measured by Tektronix J-6512.

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

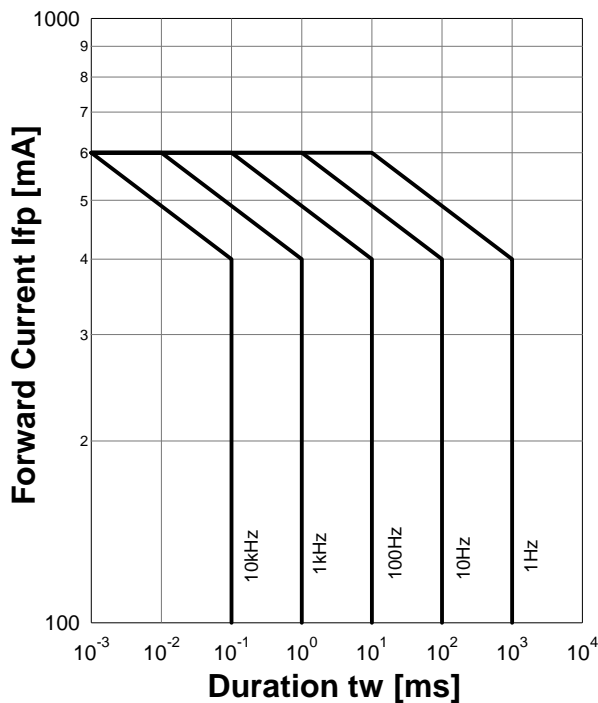
Forward Current - Forward Voltage



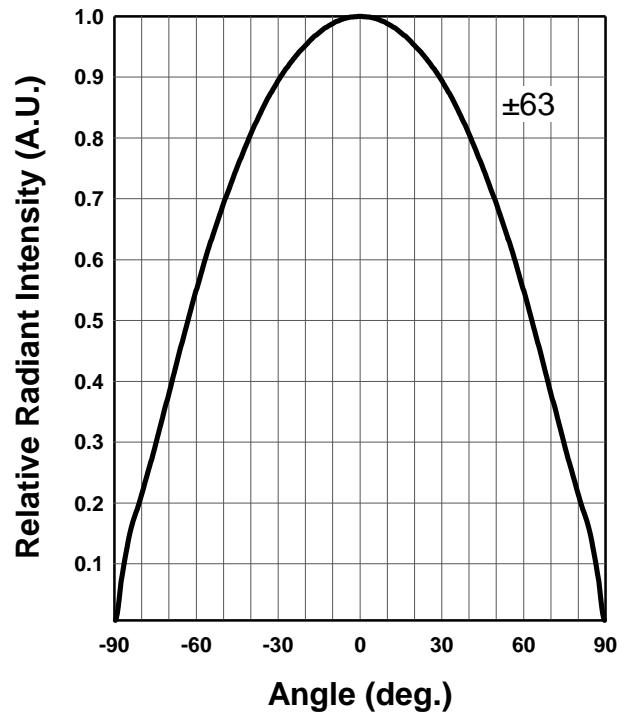
Relative Radiant Intensity - Forward Current



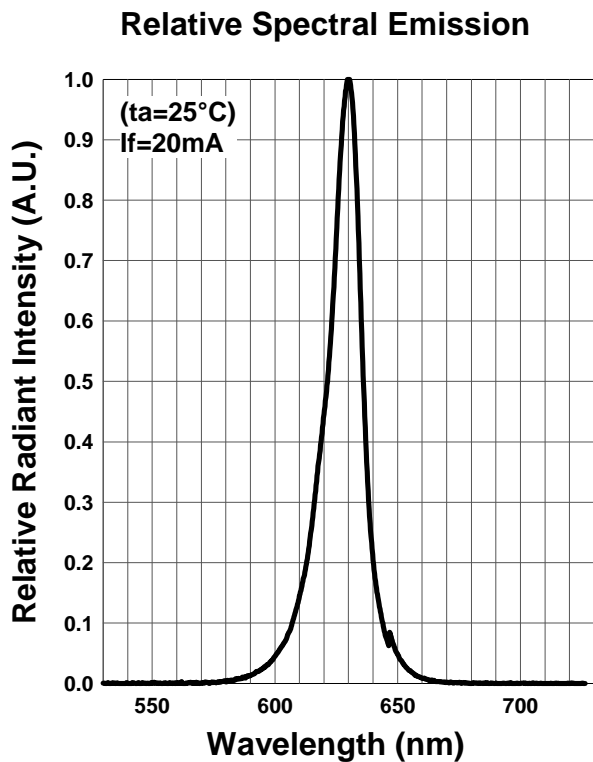
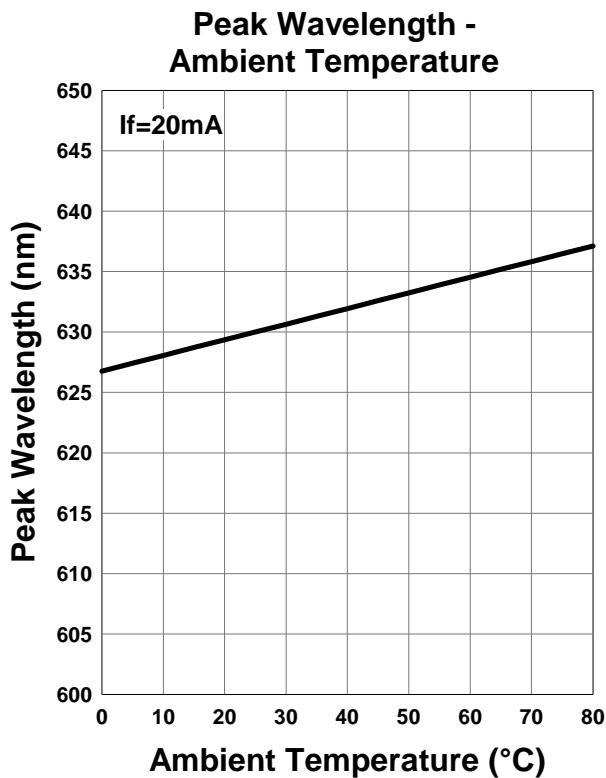
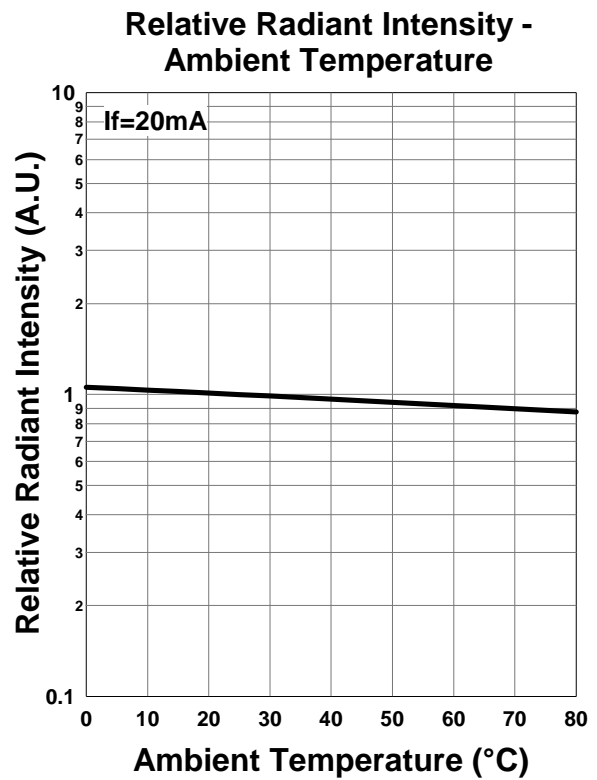
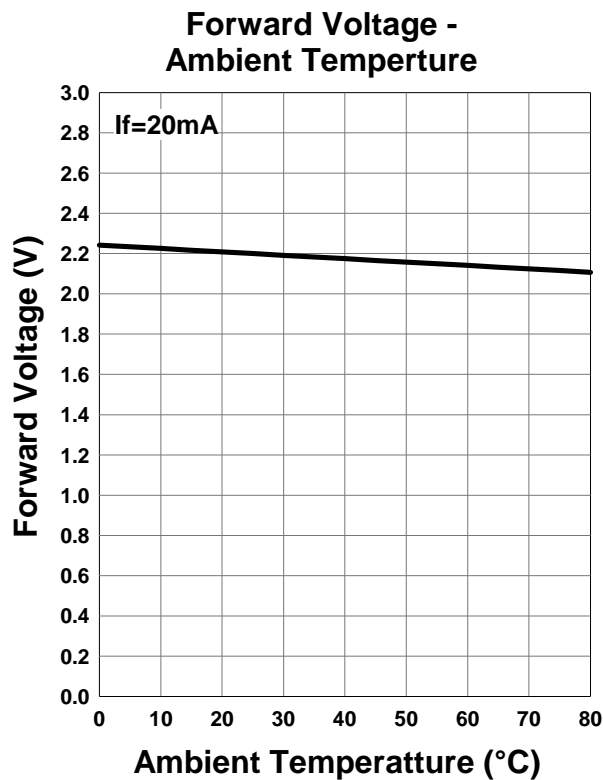
Forward Current - Pulse Duration



Radiation Characteristics



\*The data below shows the characteristics of one representative TO-66 chip.



**Disclaimer**

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Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

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