

PRELIMINARY

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

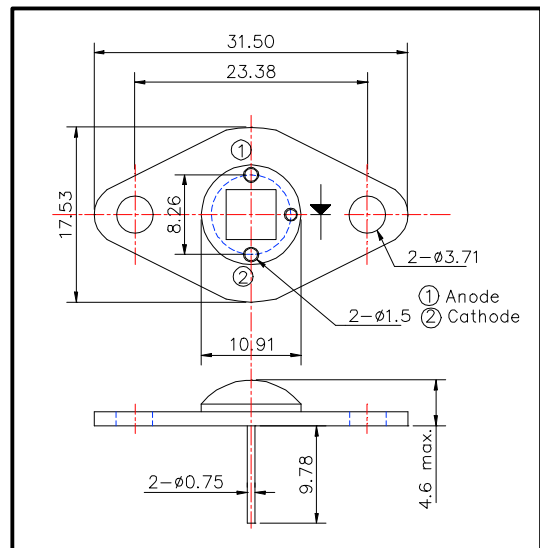
Applications

- 1) For high intensity lighting source

Specifications

- 1) Product name Red color illuminator
- 2) Spec. No. L630-66-60
- 3) Chip
 - (1) Material InGaAlP
 - (2) Peak wavelength 630nm
- 4) Package
 - (1) Stem TO-66 stem with AlN
 - (2) Lens Clear epoxy lens

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P_D	4.5	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	A	$T_a=25^{\circ}\text{C}$
Reverse Voltage	V_R	50	V	$T_a=25^{\circ}\text{C}$
Operating Temperature	T_{OPR}	$-30 \sim +80$	$^{\circ}\text{C}$	
Storage Temperature	T_{STG}	$-30 \sim +110$	$^{\circ}\text{C}$	
Soldering Temperature	T_{SOL}	240	$^{\circ}\text{C}$	

‡ 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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	$I_F=240\text{mA}$		10.0		V
Brightness	I_v	$I_F=240\text{mA}$		7000		mcd
Total Radiated Power	P_O	$I_F=240\text{mA}$		140		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	λ_P	$I_F=240\text{mA}$	620	630	640	nm
Half Width	$\Delta\lambda$	$I_F=240\text{mA}$		20		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=240\text{mA}$		± 60		deg.

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