LED630-66-60 epoxy lens type Infrared illuminator

LED630-66-60 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.

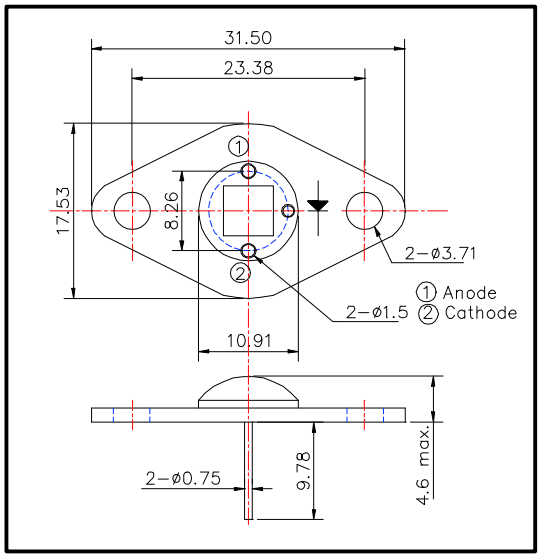
Features

1) high reliability
2) compact TO-66 package
3) high output power at 630 nm

Applications

1) medical
2) CCD lighting

Outer dimension (Unit: mm)



Specifications

1) Product name	red color illuminator
2) Spec. No.	LED630-66-60
3) Luminous Flux	80 lm @ 240mA
(1) Material	InGaAlP
(2) Peak wavelength	630 nm
4) Package	
(1) Stem	TO-66 stem with AlN
(2) Lens	Clear silicone and epoxy lens

Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	4.5	W	Ta = 25°C
Forward Current	I_F	400	mA	Ta = 25°C
Pulse Forward Current	I_{FP}	2.0	A	Ta = 25°C
Reverse Voltage	V_R	50	V	Ta = 25°C
Operating Temperature	T_{OPR}	-30 ~ +80	°C	
Storage Temperature	T_{STG}	-30 ~ +110	°C	
Soldering Temperature	T_{SOL}	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_F	I_F = 240 mA		10		V
Reverse Voltage	V_R	I_R =10 μA	50			V
Total Radiated Power	P_O	I_F = 240 mA		150		mW
Total Radiated Power	P_O	I_F = 2 A		-----		mW
Radiant Intensity	I_E	I_F = 240 mA		400		mW/sr
Brightness	I_V	I_F = 240 mA		6000		mcd
Peak Wavelength	λ_P	I_F = 240 mA	620	630	640	nm
Half Width	$\Delta\lambda$	I_F = 240 mA		20		nm
Viewing Half Angle	$\theta_{1/2}$	I_F = 240 mA		±60		deg.

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

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