

PRELIMINARY

L590-66-60

epoxy lens type Yellow color illuminator

L590-66-60 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 590nm

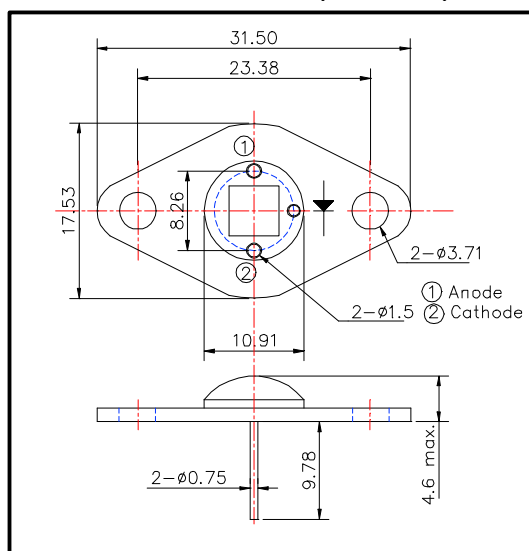
Applications

- 1) For high intensity lighting source

Specifications

- | | |
|---------------------|--------------------------|
| 1) Product name | Orange color illuminator |
| 2) Spec. No. | L590-66-60 |
| 3) Chip | |
| (1) Material | InGaAlP |
| (2) Peak wavelength | 590nm |
| 4) Package | |
| (1) Stem | TO-66 stem with AlN |
| (2) Lens | Clear epoxy lens |

Outer dimension (Unit: mm)



Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P _D	4.5	W	T _a =25°C
Forward Current	I _F	400	mA	T _a =25°C
Pulse Forward Current	I _{FP}	2000	A	T _a =25°C
Reverse Voltage	V _R	50	V	T _a =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=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 =240mA		10.0		V
Brightness	I _V	I _F =240mA		7000		mcd
Total Radiated Power	P _O	I _F =240mA		60		mW
Radiant Intensity	I _E	I _F =240mA		15		mW/sr
Reverse Current	V _R	I _R =10uA	50			V
Peak Wavelength	I _P	I _F =240mA	580	590	600	nm
Half Width	D I	I _F =240mA		15		nm
Viewing Half Angle	Q 1/2	I _F =240mA		±60		deg.

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