

PRELIMINARY

LED750-66-60

epoxy lens type Infrared illuminator LED750-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency AlGaAs LED 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 750 nm

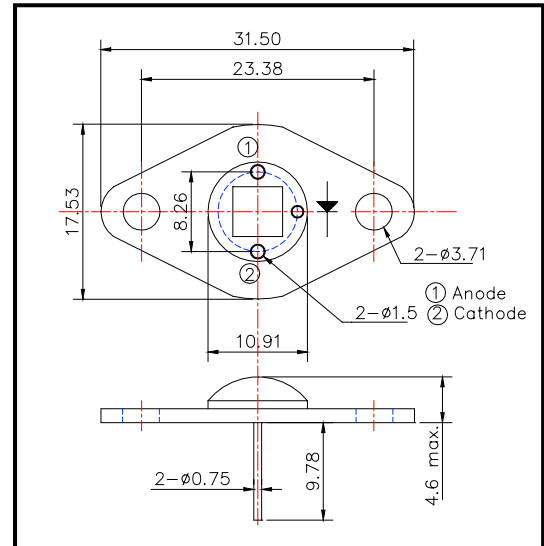
Applications

- 1) For IR search light
- 2) For CCD lighting
- 3) For night vision light source

Specifications

- | | |
|---------------------|-------------------------------|
| 1) Product name | IR illuminator |
| 2) Spec. No. | LED750-66-60 |
| 3) Chip | |
| (1) Material | AlGaAs |
| (2) Peak wavelength | 750 nm |
| 4) Package | |
| (1) Stem | TO-66 stem with AlN |
| (2) Lens | Clear silicone and epoxy lens |

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P _D	7.8	W	T _a = 25°C
Forward Current	I _F	750	mA	T _a = 25°C
Pulse Forward Current	I _{FP}	3	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 = 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
Total Radiated Power	P _O	I _F = 600 mA		1000		mW
Total Radiated Power	P _O	I _F = 3 A		4000		mW
Radiant Intensity	I _E	I _F = 600 mA		450		mW/sr
Forward Voltage	V _F	I _F = 600 mA		9.0		V
Reverse Current	V _R	I _R = 10 μA	50			V
Peak Wavelength	λ _P	I _F = 600 mA	735	750	765	nm
Half Width	Δλ	I _F = 600 mA		30		nm
Viewing Half Angle	2Θ/2	I _F = 600 mA		±60		deg.
Rise Time	t _r	I _F = 600 mA		100		ns
Fall Time	t _f	I _F = 600 mA		100		ns

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