

L940-66-60 epoxy lens type Infrared illuminator

L940-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency GaAs 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 940nm

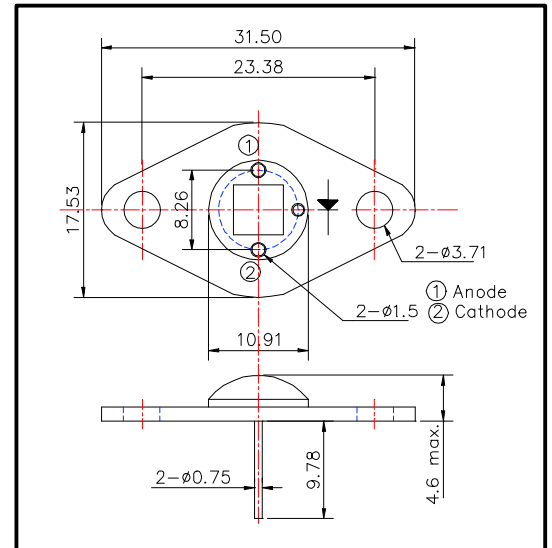
Applications

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

Specifications

- | | |
|---------------------|-------------------------------|
| 1) Product name | IR illuminator |
| 2) Spec. No. | L940-66-60 |
| 3) Chip | |
| (1) Material | GaAs |
| (2) Peak wavelength | 940m |
| 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 Temperature
Power Dissipation	P _D	7.5	W	T _a =25°C
Forward Current	I _F	1.0	A	T _a =25°C
Pulse Forward Current	I _{FP}	5	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 ~ +100	°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 =800mA		7.1		V
Reverse Voltage	V _R	I _R =10uA	50			V
Total Radiated Power	P _O	I _F =800mA		1200		mW
Total Radiated Power	P _O	I _F =5A		7000		mW
Radiant Intensity	I _E	I _F =800mA		350		mW/sr
Brightness	I _v	I _F =800mA		600		mcd
Peak Wavelength	λ _P	I _F =800mA	930	940	955	nm
Half Width	Δλ	I _F =800mA		40		nm
Viewing Half Angle	Q _{1/2}	I _F =800mA		±60		deg.

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