

# L1070-66-60 epoxy lens type Infrared illuminator

L1070-66-60 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 1070nm

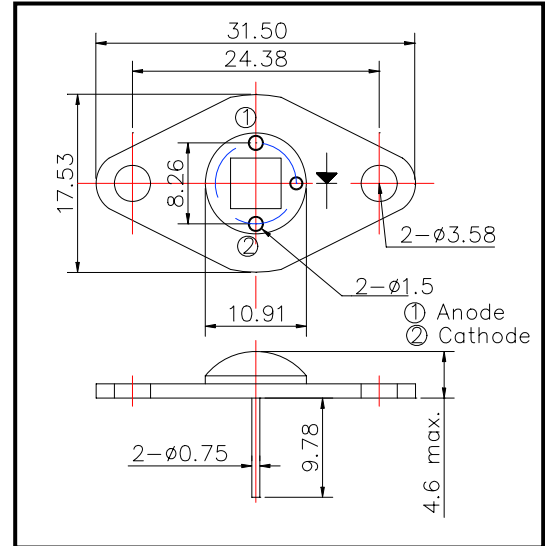
◆ Applications

- 1) For IR search light
- 2) For CCD lighting

◆ Specifications

- |                     |                               |
|---------------------|-------------------------------|
| 1) Product name     | IR illuminator                |
| 2) Spec. No.        | L1070-66-60                   |
| 3) Chip             |                               |
| (1) Material        | GaAs                          |
| (2) Peak wavelength | 1070nm                        |
| 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 <sub>D</sub>	6.0	W	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	800	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	50	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-30 ~ +80	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +110	°C	
Soldering Temperature	T <sub>SOL</sub>	240	°C	

‡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 <sub>O</sub>	I <sub>F</sub> =600mA		60		mW
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =600mA		7.0		V
Reverse Current	V <sub>R</sub>	I <sub>R</sub> =10uA	30			V
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =600mA	1020	1070	1120	nm
Half Width	Δλ	I <sub>F</sub> =600mA		55		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =600mA		±60		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =100mA		15		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =100mA		10		ns

‡Heat sink is required to protect LED at 60 °C or less.