

# L1450-66-60 epoxy lens type Infrared illuminator

L1450-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency InGaAsP 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 1450nm

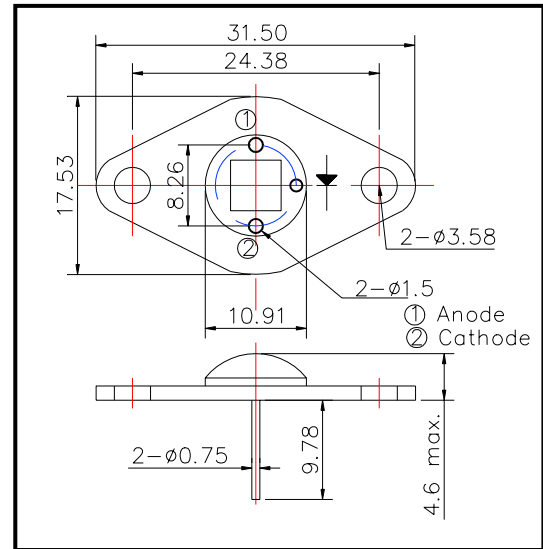
#### ◆ Applications

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

#### ◆ Specifications

- |                     |                               |
|---------------------|-------------------------------|
| 1) Product name     | IR illuminator                |
| 2) Spec. No.        | L1450-66-60                   |
| 3) Chip             |                               |
| (1) Material        | InGaAsP                       |
| (2) Peak wavelength | 1450nm                        |
| 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>	5.5	W	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	800	mA	T <sub>a</sub> =25°C
Pulsed Forward Current	I <sub>FP</sub>	5	A	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	

‡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
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		6.0		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	1400	1450	1500	nm
Half Width	Δλ	I <sub>F</sub> =600mA		100		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

‡Total Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2742.

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