

# L810-66-60 Epoxy Lens type Infrared Illuminator

L810-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency AlGaAs 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 810nm

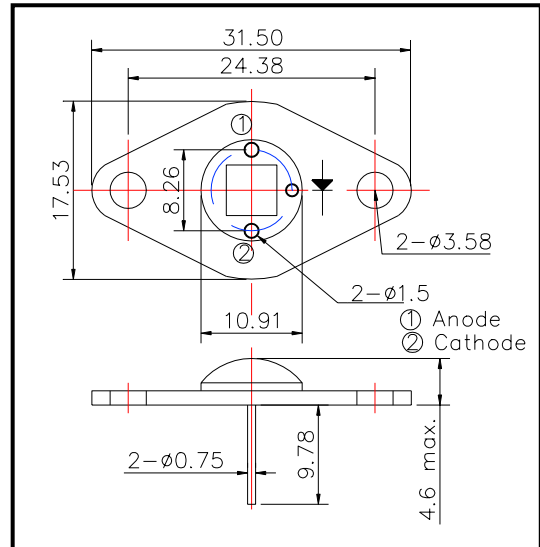
### ◆ Applications

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

### ◆ Specifications

- |                     |                               |
|---------------------|-------------------------------|
| 1) Product name     | IR illuminator                |
| 2) Spec. No.        | L810-66-60                    |
| 3) Chip             |                               |
| (1) Material        | AlGaAs                        |
| (2) Peak wavelength | 810nm                         |
| 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>	7.6	W	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	750	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	3	A	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	

‡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		1000		mW
Total Radiated Power	P <sub>o</sub>	I <sub>FP</sub> =3A		4000		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =600mA		450		mW/sr
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =600mA		9.0		V
Reverse Current	V <sub>R</sub>	I <sub>R</sub> =10uA	50			V
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =600mA		810		nm
Half Width	Δλ	I <sub>F</sub> =600mA		30		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =600mA		±60		deg.
Rise Time	t <sub>f</sub>	I <sub>F</sub> =600mA		100		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =600mA		100		ns

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