

L870-66-60-550 IRED illuminator with Glass ball lens cap and heat sink

L870-66-60-550 is an extremely high beam and 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 sealed with glass ball lens cap and with heat sink for high current use.

◆ Features

- 1) High beam
- 2) Compact (TO-66) package
- 3) High output power

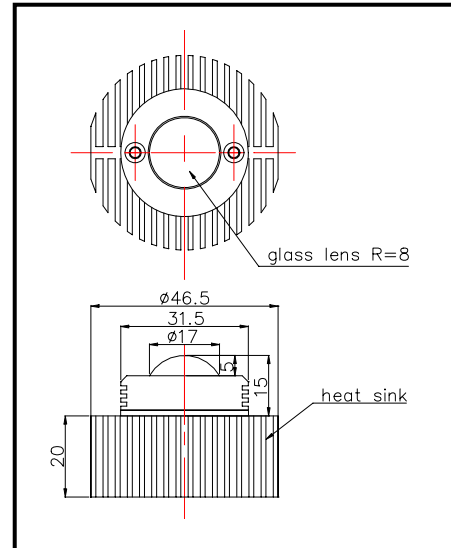
◆ Applications

- 1) For IR search light
- 2) For CCD lighting
- 3) For machine vision use

◆ Specifications

- | | |
|---------------------|---------------------|
| 1) Product name | IR illuminator |
| 2) Spec. No. | L870-66-60-550 |
| 3) Chip | |
| (1) Material | AlGaAs |
| (2) Peak wavelength | 870nm |
| 4) Package | |
| (1) Stem | TO-66 stem with AlN |
| (2) Lens | Glass ball lens |
| (3) Heat sink | Aluminum |

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	PD	7.5	W	Ta=25°C
Forward Current	IF	1.2	A	Ta=25°C
Pulse Forward Current	IFP	6	A	Ta=25°C
Reverse Voltage	VR	50	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +80	°C	
Storage Temperature	TSTG	-30 ~ +110	°C	
Soldering Temperature	TSOL	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 (Ta=25°C)

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Total Radiated Power	PO	IF=800mA		950		mW
Total Radiated Power	PO	IF=5A		5500		mW
Radiant Intensity	IE	IF=800mA		600		mW/sr
Forward Voltage	VF	IF=800mA		7.50		V
Reverse Current	VR	IR=10uA	50			V
Peak Wavelength	λP	IF=800mA	860	870	880	nm
Half Width	Δλ	IF=800mA		40		nm
Viewing Half Angle	θ 1/2	IF=800mA		±15		deg.
Rise Time	tf	IF=100mA		15		ns
Fall Time	tf	IF=100mA		10		ns

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