

L780-66-60 epoxy lens type Infrared illuminator

L780-66-60 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 780nm

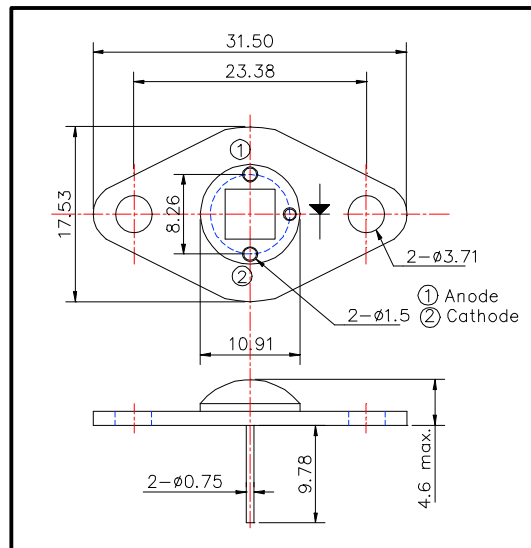
Applications

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

Specifications

- 1) Product name IR illuminator
- 2) Spec. No. L780-66-60
- 3) Chip
 - (1) Material AlGaAs
 - (2) Peak wavelength 780nm
- 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_D	7.8	W	$T_a=25^{\circ}\text{C}$
Forward Current	I_F	750	mA	$T_a=25^{\circ}\text{C}$
Pulse Forward Current	I_{FP}	3	A	$T_a=25^{\circ}\text{C}$
Reverse Voltage	V_R	50	V	$T_a=25^{\circ}\text{C}$
Operating Temperature	T_{OPR}	$-30 \sim +80$	$^{\circ}\text{C}$	
Storage Temperature	T_{STG}	$-30 \sim +110$	$^{\circ}\text{C}$	
Soldering Temperature	T_{SOL}	240	$^{\circ}\text{C}$	

‡ 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_o	$I_F=600\text{mA}$		1000		mW
Total Radiated Power	P_o	$I_F=3\text{A}$		4000		mW
Radiant Intensity	I_E	$I_F=600\text{mA}$		450		mW/sr
Forward Voltage	V_F	$I_F=600\text{mA}$		9.0		V
Reverse Current	V_R	$I_R=10\mu\text{A}$	50			V
Peak Wavelength	λ_P	$I_F=600\text{mA}$		780		nm
Half Width	$\Delta\lambda$	$I_F=600\text{mA}$		40		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=600\text{mA}$		± 60		deg.
Rise Time	t_r	$I_F=600\text{mA}$		100		ns
Fall Time	t_f	$I_F=600\text{mA}$		100		ns

‡ Heat sink is required thermal resistance $<8\text{K/W}$