

PRELIMINARY

L690-66-60

Epoxy Lens type InfraRed Illuminator

L690-66-60 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 690nm

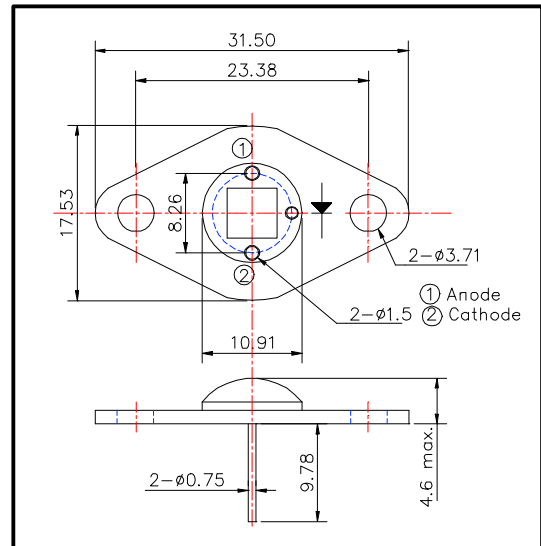
Applications

- 1) For high intensity lighting source

Specifications

- 1) Product name Red color illuminator
- 2) Spec. No. L690-66-60
- 3) Chip
 - (1) Material AlGaAs
 - (2) Peak wavelength 690nm
- 4) Package
 - (1) Stem TO-66 stem with AlN
 - (2) Lens Clear epoxy lens

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P _D	4.0	W	T _a =25°C
Forward Current	I _F	400	mA	T _a =25°C
Pulse Forward Current	I _{FP}	2000	A	T _a =25°C
Reverse Voltage	V _R	50	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +80	°C	
Storage Temperature	T _{STG}	-30 ~ +110	°C	
Soldering Temperature	T _{SOL}	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 _o	I _F =240mA		500		mW
Forward Voltage	V _F	I _F =240mA		9.8		V
Reverse Current	V _R	I _R =10uA	50			V
Peak Wavelength	λ _P	I _F =240mA	670	690	710	nm
Half Width	Δλ	I _F =240mA		20		nm
Viewing Half Angle	Q _{1/2}	I _F =240mA		±60		deg.

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