PRELIMINARY

L1050-66-60 epoxy lens type Infrared illuminator

L1050-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency GaAs 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 1050nm

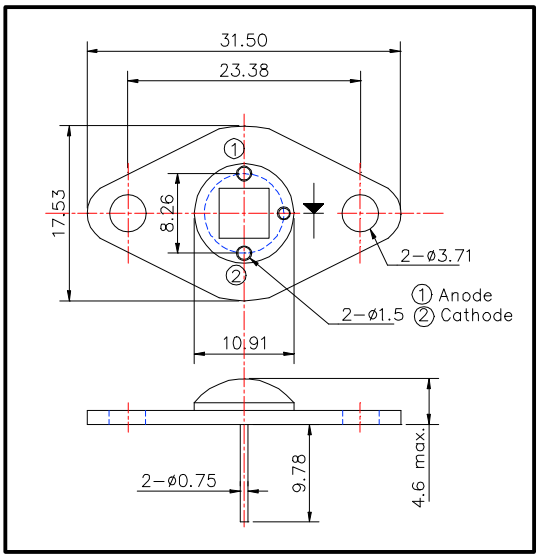
Applications

1) For IR search light
2) For CCD lighting

Specifications

1) Product name	IR illuminator
2) Spec. No.	L1050-66-60
3) Chip	
(1) Material	GaAs
(2) Peak wavelength	1050m
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	6.0	W	Ta=25°C
Forward Current	I_F	800	mA	Ta=25°C
Reverse Voltage	V_R	50	V	Ta=25°C
Operating Temperature	T_{OPR}	-30 ~ +80	°C	
Storage Temperature	T_{STG}	-30 ~ +110	°C	
Soldering Temperature	T_{SOL}	240	°C	

‡ 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=600mA		120		mW
Forward Voltage	V_F	I_F=600mA		7.0		V
Reverse Current	V_R	I_R=10uA	30			V
Peak Wavelength	λ_P	I_F=600mA	1000	1050	1100	nm
Half Width	$\Delta\lambda$	I_F=600mA		55		nm
Viewing Half Angle	$\theta_{1/2}$	I_F=600mA		±60		deg.
Rise Time	tr	I_F=100mA		15		ns
Fall Time	tf	I_F=100mA		10		ns

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

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