

PRELIMINARY

LED940-66-60-520 Glass ball lens cap type Infrared illuminator

LED940-66-60-520 is an extremely high beam and 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 sealed with glass ball lens cap. 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 radiant intensity at 940 nm

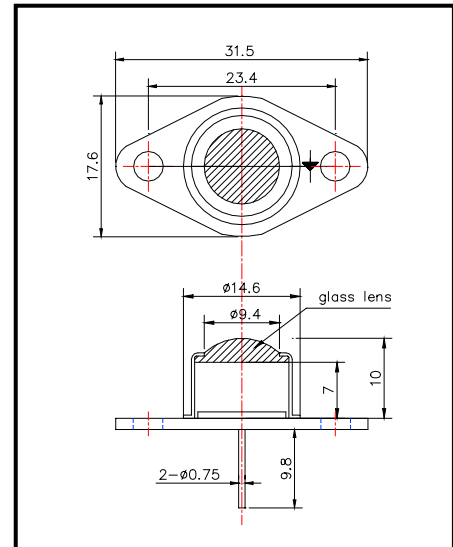
Applications

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

Specifications

- 1) Product name IR illuminator
- 2) Spec. No. LED940-66-60-520
- 3) Chip
 - (1) Material GaAs
 - (2) Peak wavelength 940 nm
 - (4) Package
 - (1) Stem TO-66 stem with AlN
 - (2) Lens Glass ball lens

Outer dimension (Units: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	7.5	W	T _a = 25°C
Forward Current	I _F	1.0	A	T _a = 25°C
Pulse Forward Current	I _{FP}	5	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 ~ +100	°C	
Soldering Temperature	T _{SOL}	240	°C	

‡Pulse Forward Current condition: Duty = 1% and Pulse Width = 1 μs.

‡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 = 800 mA		700		mW
Total Radiated Power	P _O	I _F = 5 A		4000		mW
Radiant Intensity	I _E	I _F = 800 mA		400		mW/sr
Forward Voltage	V _F	I _F = 800 mA		7.1		V
Reverse Current	V _R	I _R = 10 μA	50			V
Peak Wavelength	P	I _F = 800 mA	930	940	955	nm
Half Width		I _F = 800 mA		40		nm
Viewing Half Angle		I _F = 800 mA		±30		deg.

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

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