

L1300-66-60 epoxy lens type Infrared illuminator

L1300-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency InGaAsP diode chips, mounted on TO-66 with AlN ceramics and covered with coated clear 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 1300nm

◆ Applications

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

◆ Specifications

- 1) Product name IR illuminator
- 2) Spec. No. L1300-66-60
- 3) Chip
 - (1) Material InGaAsP
 - (2) Peak wavelength 1300nm
- 4) Package
 - (1) Stem TO-66 stem with AlN
 - (2) Lens Clear epoxy lens

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P _D	5.4	W	T _a =25°C
Forward Current	I _F	800	mA	T _a =25°C
Pulsed Forward Current	I _{FP}	5	A	T _a =25°C
Thermal Resistance	R _{thja}	4	K/W	
Operating Temperature	T _{OPR}	-30 ~ +80	°C	
Storage Temperature	T _{STG}	-30 ~ +110	°C	
Soldering Temperature	T _{SOL}	265	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal resistance: junction-ambient air flow

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Total Radiated Power	P _O	I _F =600mA		140		mW
		I _F =800mA		170		
Forward Voltage	V _F	I _F =600mA		5.0		V
		I _F =800mA		5.2		
Reverse Current	V _R	I _R =10uA	30			V
Peak Wavelength	λ _P	I _F =100mA		1300		nm
Half Width	Δλ	I _F =100mA		80		nm
Viewing Half Angle	θ _{1/2}	I _F =100mA		±60		deg.
Rise Time	t _f	I _F =100mA		15		ns
Fall Time	t _f	I _F =100mA		10		ns

‡Total Radiated Power is measured by G8370-85

‡Heat sink is required thermal resistance <2K/W

◆ Outer dimension (Unit: mm)

