

L660N-66-60

For Plant Growth and Photo Synthetically Active Radiation use

L660N-66-60 is a wide viewing and extremely high output power illuminator assembled with a total of 60 high efficiency AlGaInP diode chips, mounted on a copper made 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.

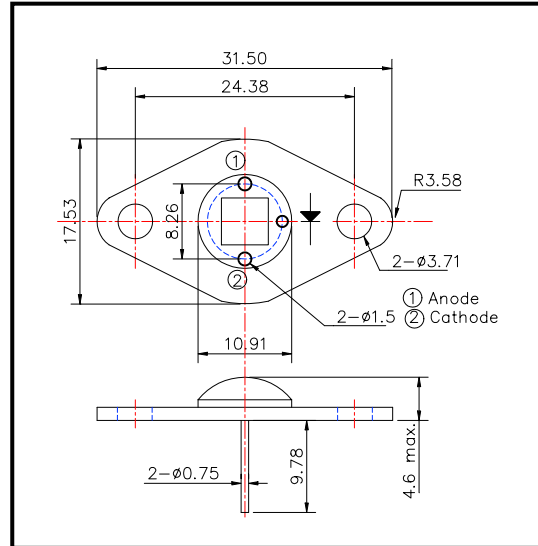
◆ Features

- 1) High reliability
- 2) Compact (TO-66) package
- 3) High output power at 660nm

◆ Specifications

- | | |
|---------------------|-----------------------------|
| 1) Product name | IR illuminator |
| 2) Spec. No. | L660N-66-60 |
| 3) Chip | |
| (1) Material | AlGaInP |
| (2) Peak wavelength | 660nm |
| 4) Package | |
| (1) Stem | TO-66 stem with AlN |
| (2) Lens | Silicone and/or Epoxy resin |

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temp.
Power Dissipation	P _D	16.8	W	T _a =25°C
Forward Current	I _F	1.2	A	T _a =25°C
Reverse Voltage	V _R	50	V	T _a =25°C
Junction Temperature	T _J	100	°C	
Thermal Resistance	R _{thjp}	2	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.

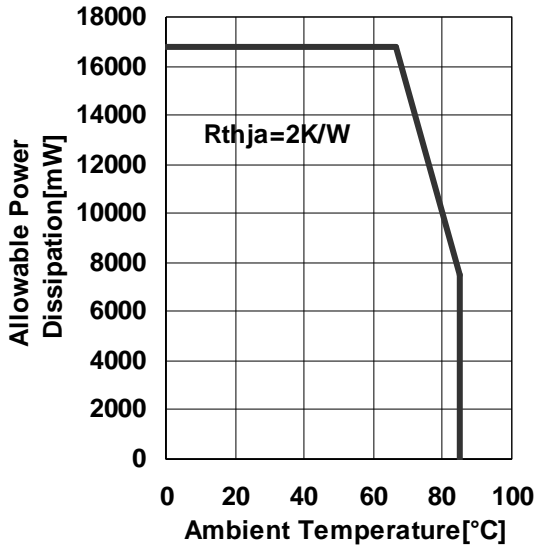
‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

‡Thermal Resistance: Junction – Package, mounted on heat sink

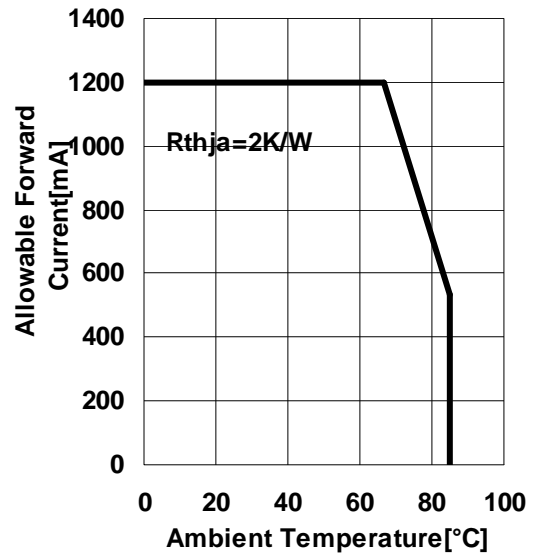
◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Total Radiated Power	P _O	I _F =600mA		1200		mW
		I _F =1.2A		2400		
Radiant Intensity	I _E	I _F =600mA		270		mW/sr
		I _F =1.2A		540		
Brightness	I _v	I _F =600mA		31400		mcd
		I _F =1.2A		62800		
Forward Voltage	V _F	I _F =600mA		11.2		V
		I _F =1.2A		12.0		
Peak Wavelength	λ _P	I _F =600mA		660		nm
Half Width	Δλ	I _F =600mA		16		nm
Viewing Half Angle	θ _{1/2}	I _F =600mA		±60		deg.

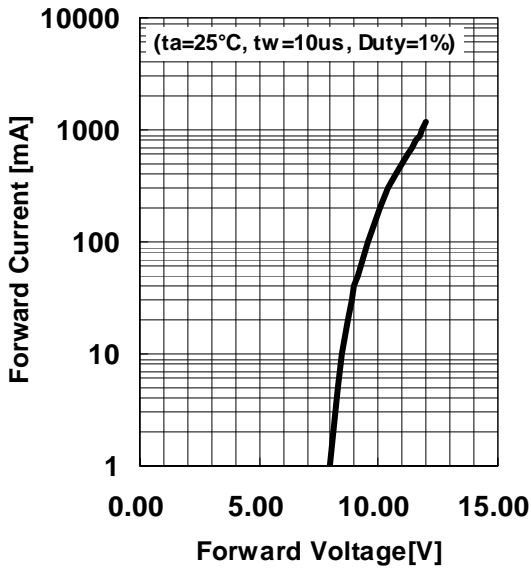
Allowable Power Dissipation- Ambient Temperature



Allowable Forward Current- Ambient Temperature



Forward Current - Forward Voltage



Relative Radiant intensity - Forward Current

