

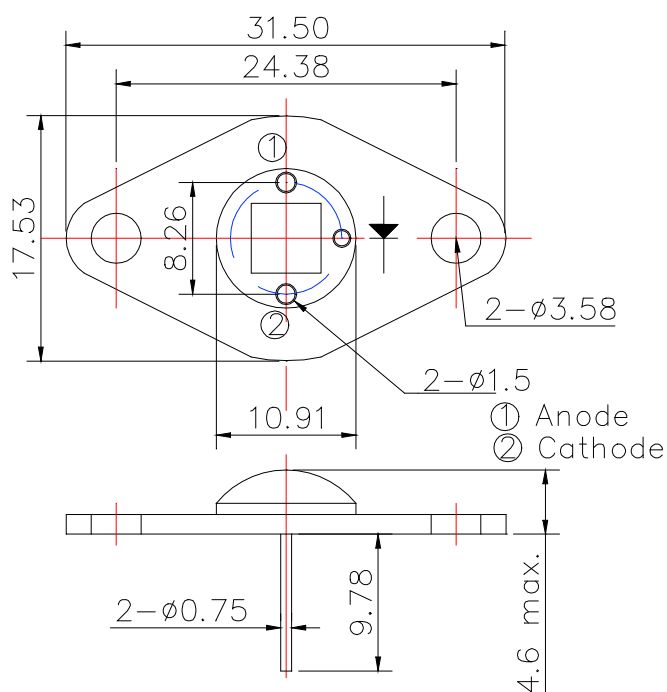


PRELIMINARY

L1450D-66-16100

Infrared illuminator

Outline and Internal Circuit



(Unit : mm)

Features

- Chip Material : InGaAsP
- Chip Dimension : 1000um * 1000um
- Number of Chips : 16pcs
- Peak Wavelength : 1450nm typ.
- Stem : TO-66 stem
- Lens : Silicone and/or Epoxy resin

Application

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	28	W
Forward Current	IF	4000	mA
Reverse Voltage	VR	12	V
Thermal Resistance	Rthjs	2	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	TSOL	265	°C

‡Soldering condition : Refer to technical support information on the website.

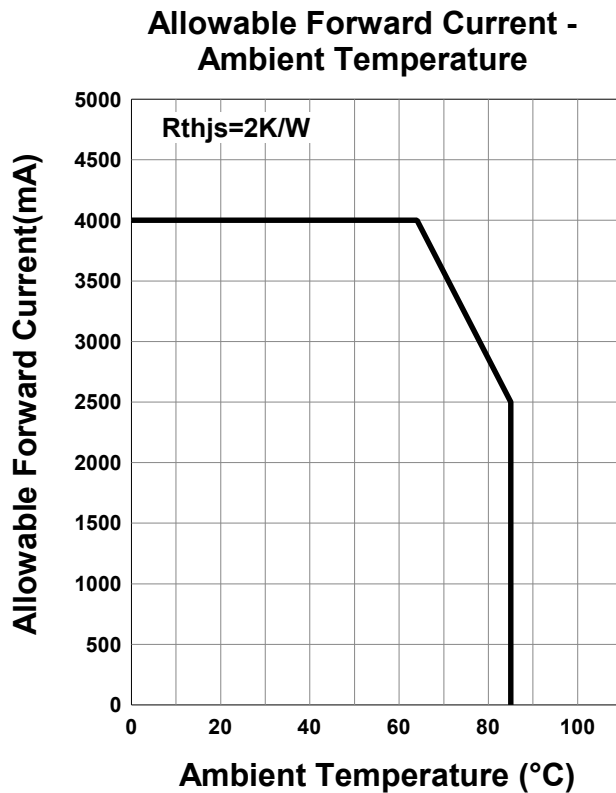
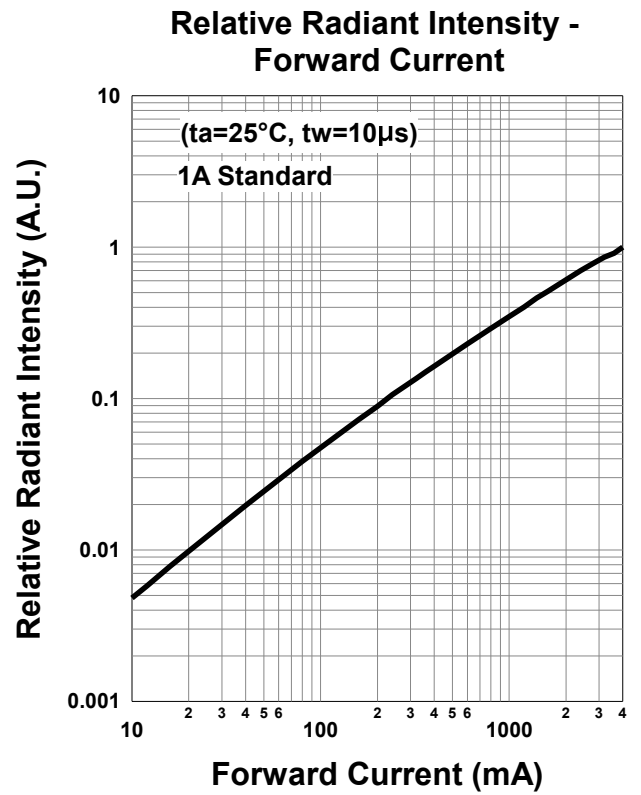
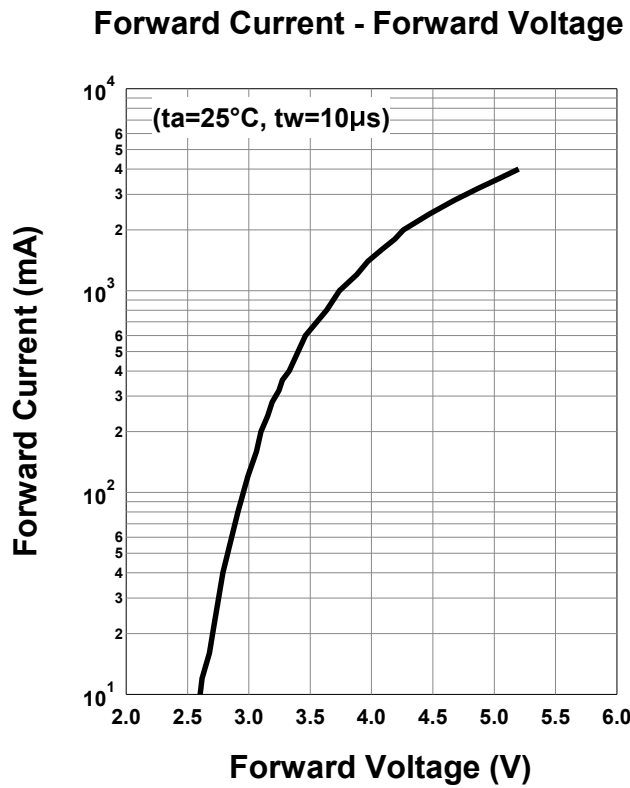
Optical and Electrical Characteristics (Tc=25°C)

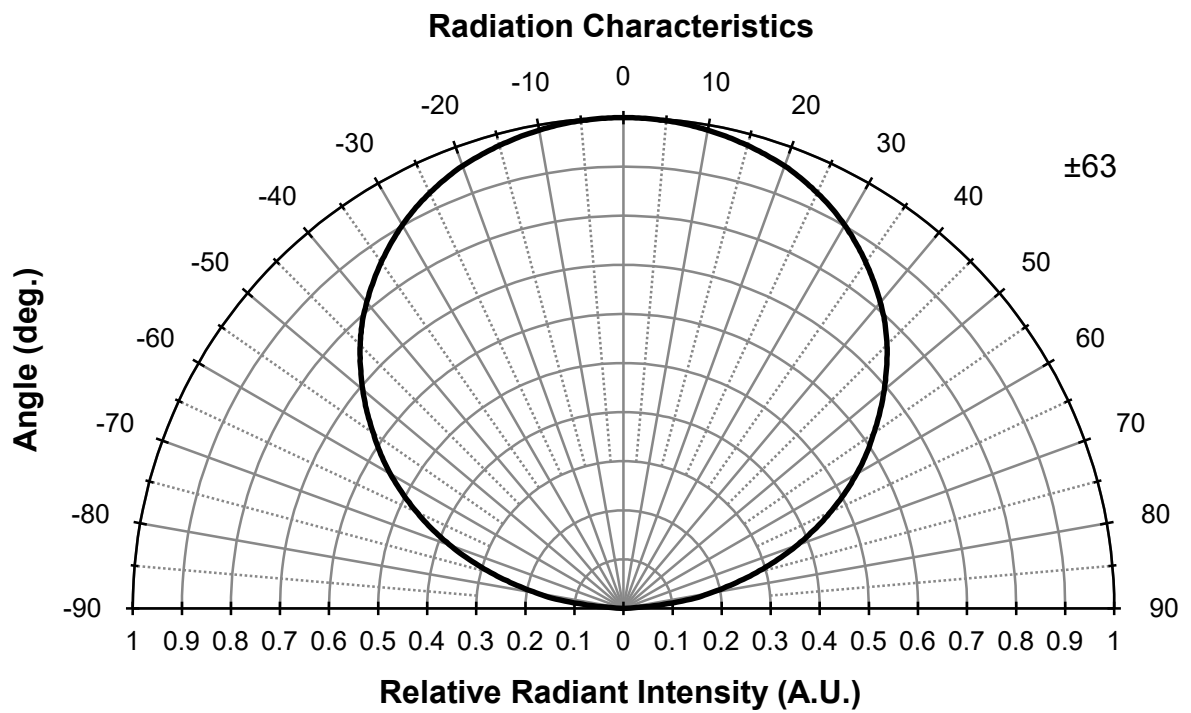
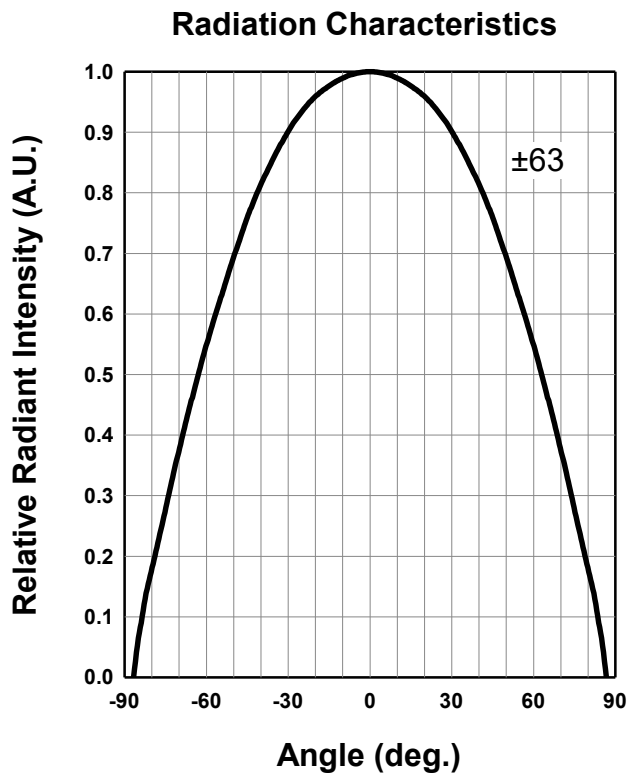
(*: 100% testing, **: reference value)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		5.2	6.8	V	IF=4A**
Reverse Current	IR			10	uA	VR=12V**
Total Radiated Power	PO	650	1000		mW	IF=4A**
Peak Wavelength	λ_p	1400		1500	nm	IF=100mA*
Half Width	$\Delta\lambda$		90		nm	IF=100mA**
Viewing Half Angle	$\theta_{1/2}$		±63		deg.	IF=100mA**
Rise Time	tr		90		ns	IF=4A**
Fall Time	tf		30		ns	IF=4A**

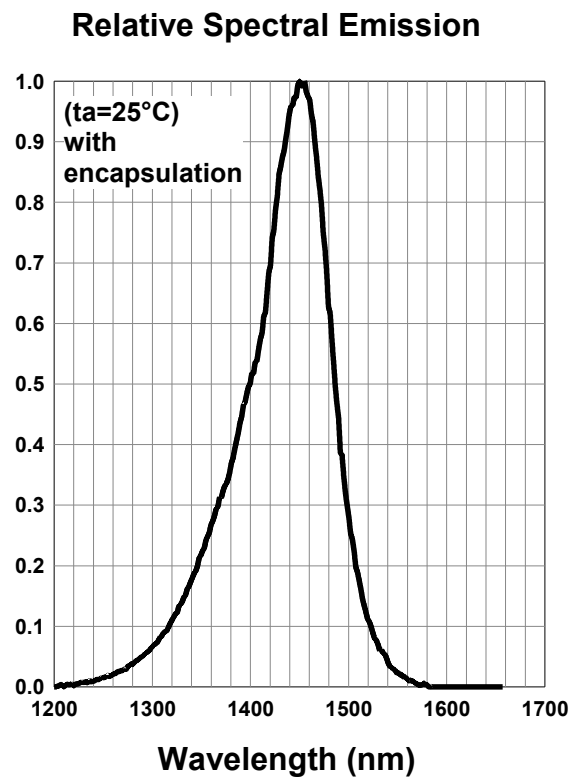
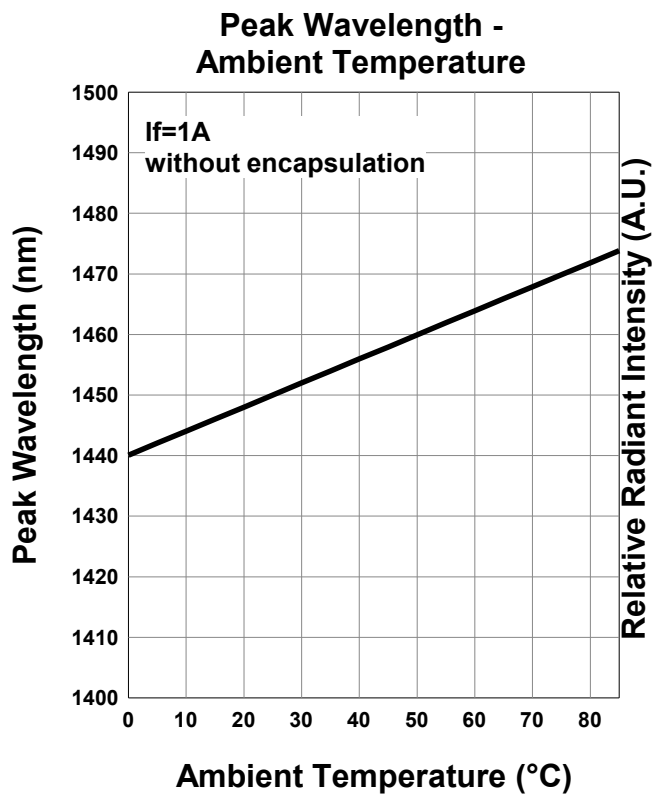
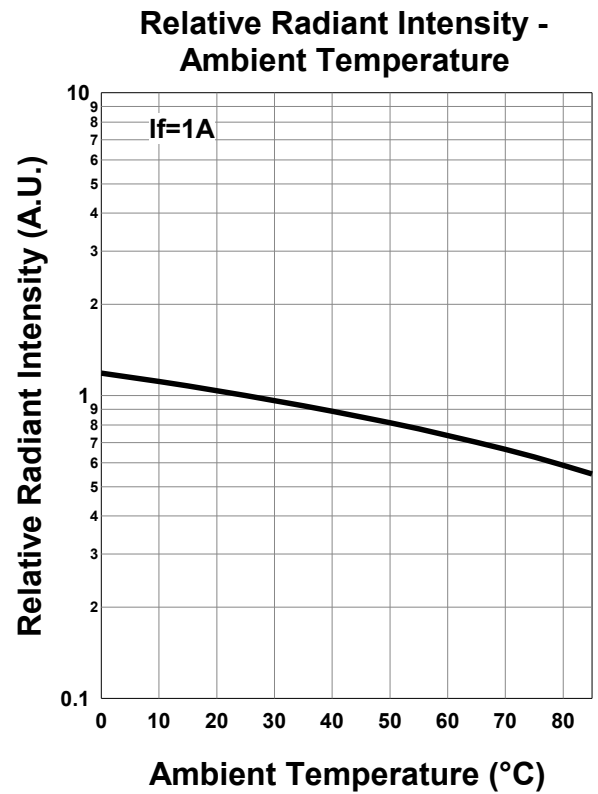
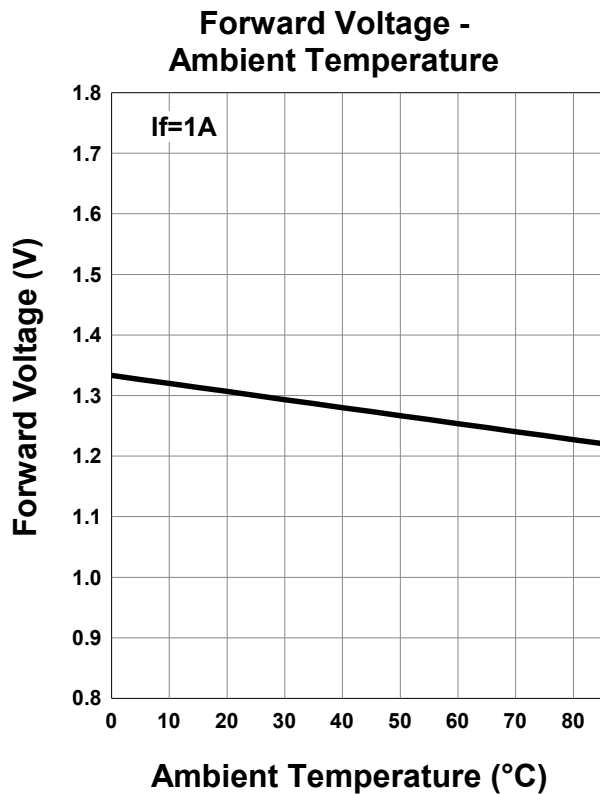
‡ Radiated Power is measured by G8370-85.

Typical Characteristic Curves

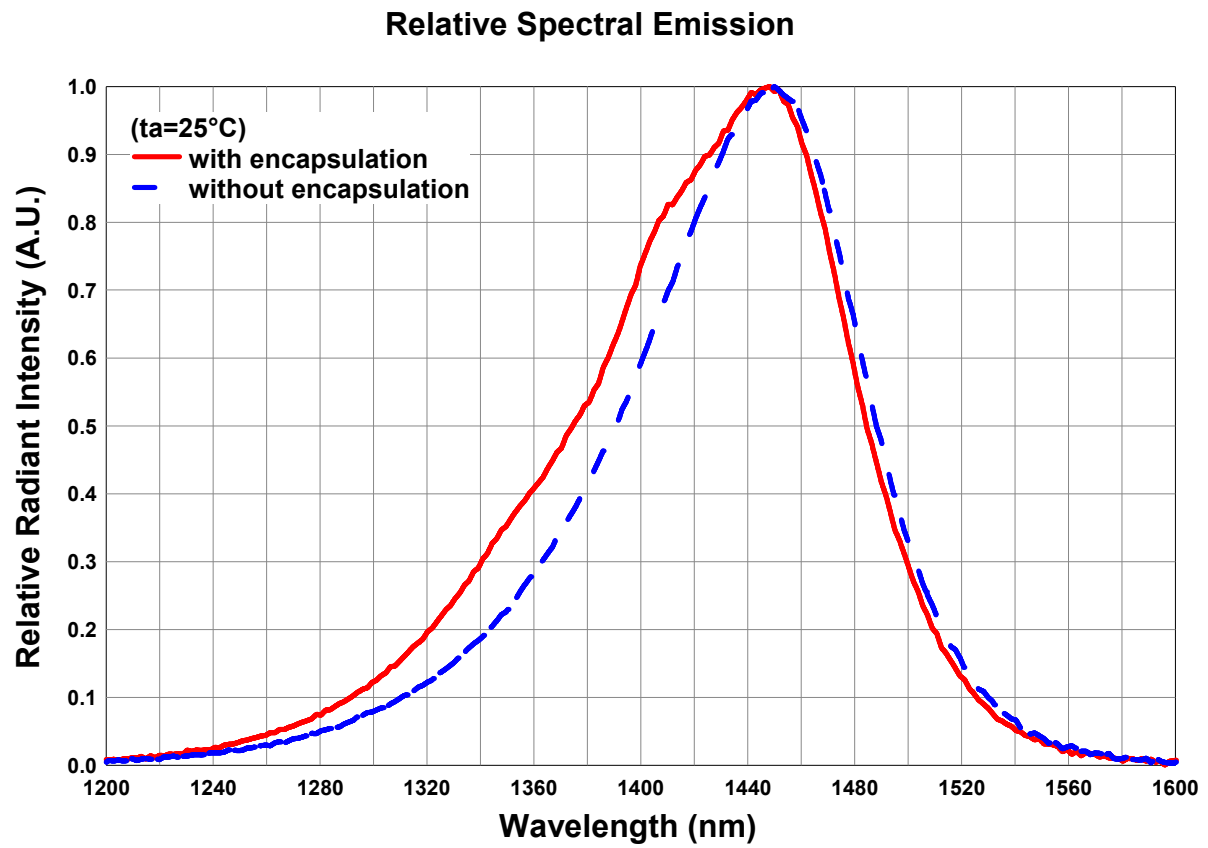




*The data below shows the characteristics of one representative TO-66 chip.



*The absorption of lens resin changes spectral emission.



Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

Technical Support Information

<https://www.ushio.co.jp/en/led/technology/index.html>



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