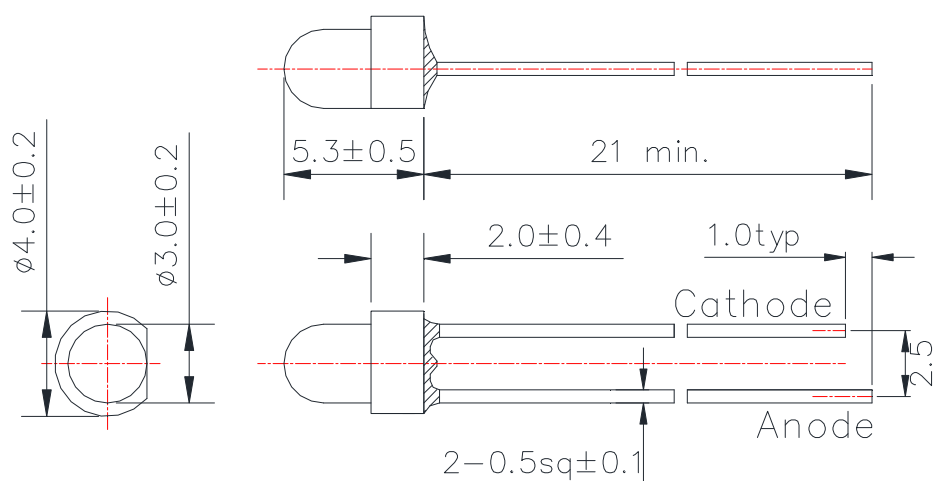




L800-36AU

Infrared LED Lamp

Outline and Internal Circuit



(Unit : mm)

Features

- Chip Material : AlGaAs
- Chip Dimension : 400um * 400um
- Number of Chips : 1pce
- Peak Wavelength : 800nm typ.
- Package Type : $\phi 5$ mm clear molding
- Lead Frame : Soldered (Lead Free)
- Lens : Epoxy Resin

Application

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	200	mW
Forward Current	IF	100	mA
Pulse Forward Current	IFP	500	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthjs	220	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	TSOL	265	°C

‡Pulse Forward Current condition : Duty 1% and Pulse Width=10us.

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

Optical and Electrical Characteristics (Tc=25°C)

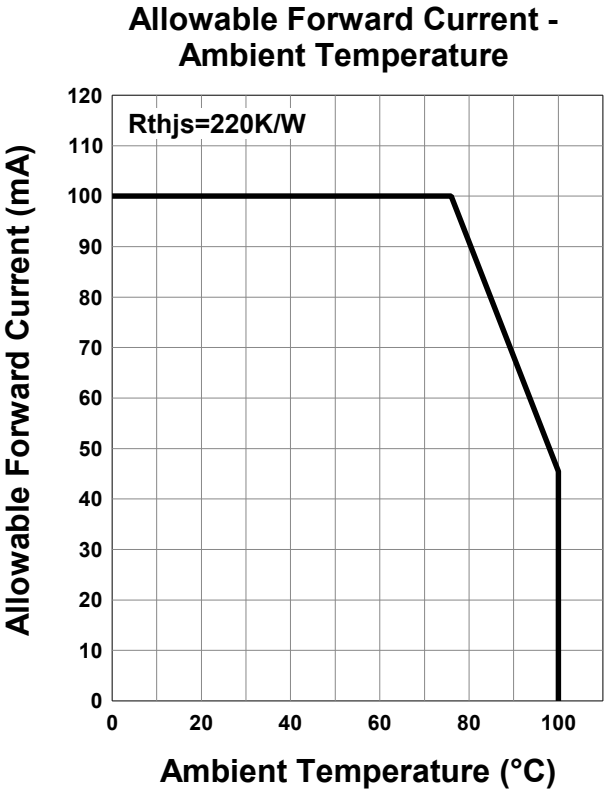
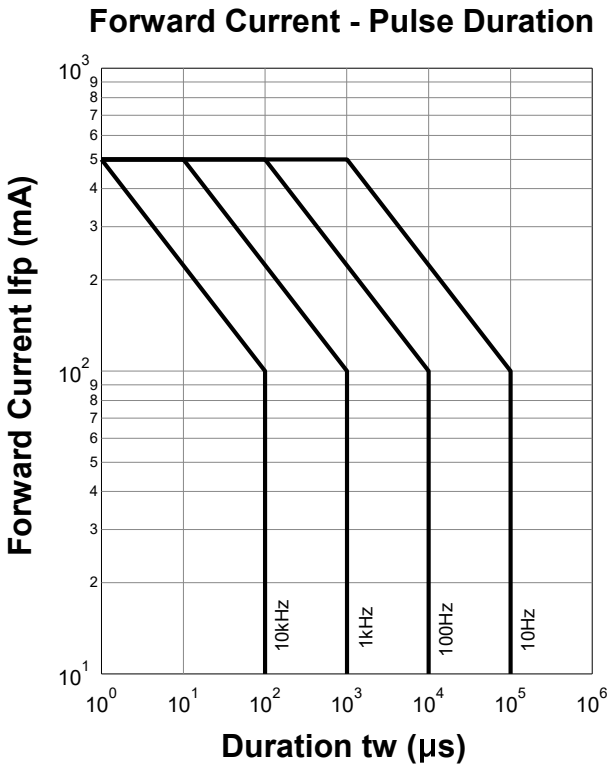
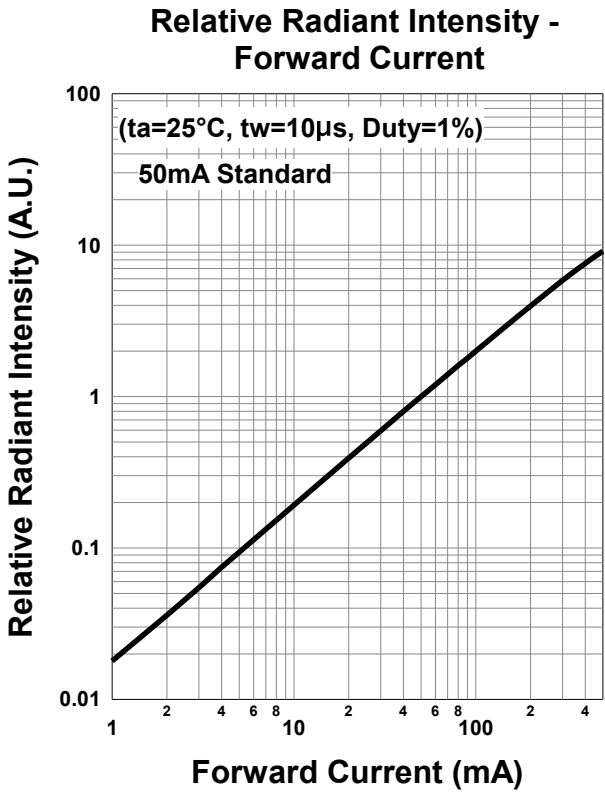
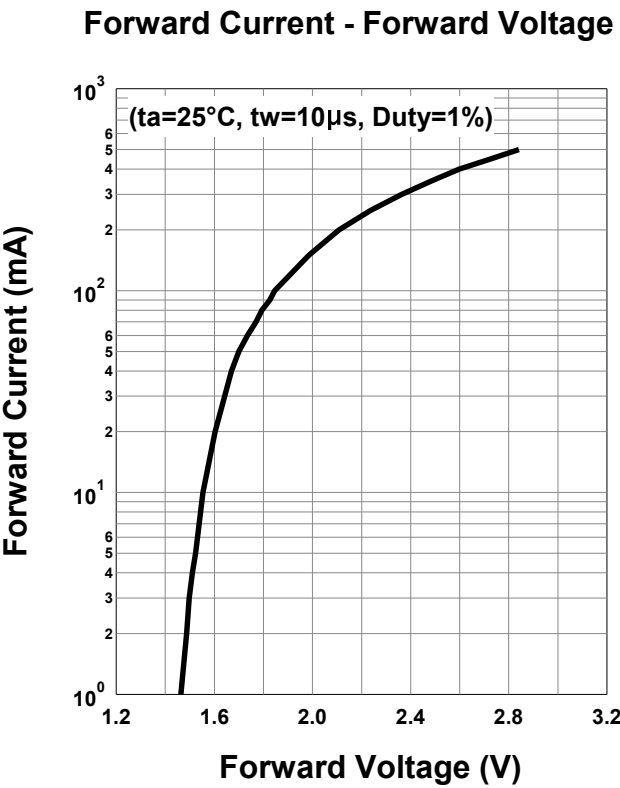
(*: 100% testing, **: reference value)

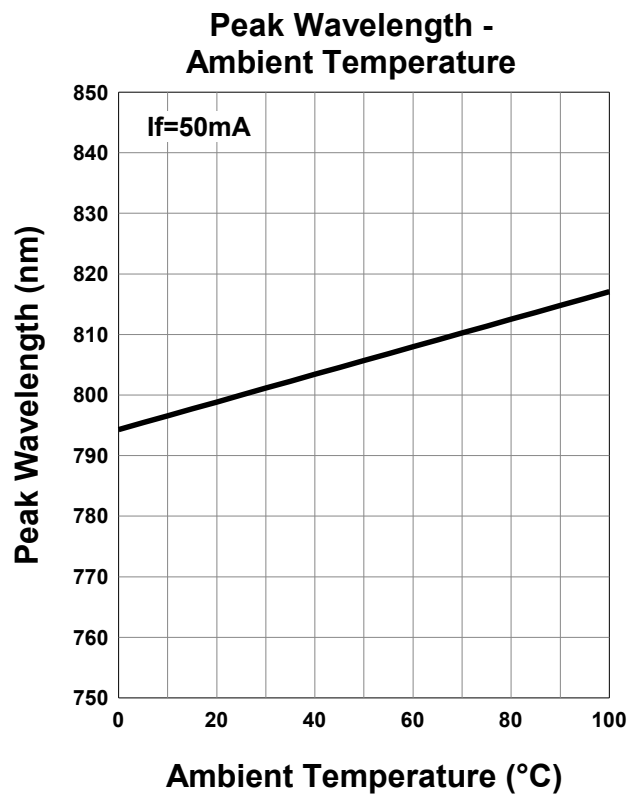
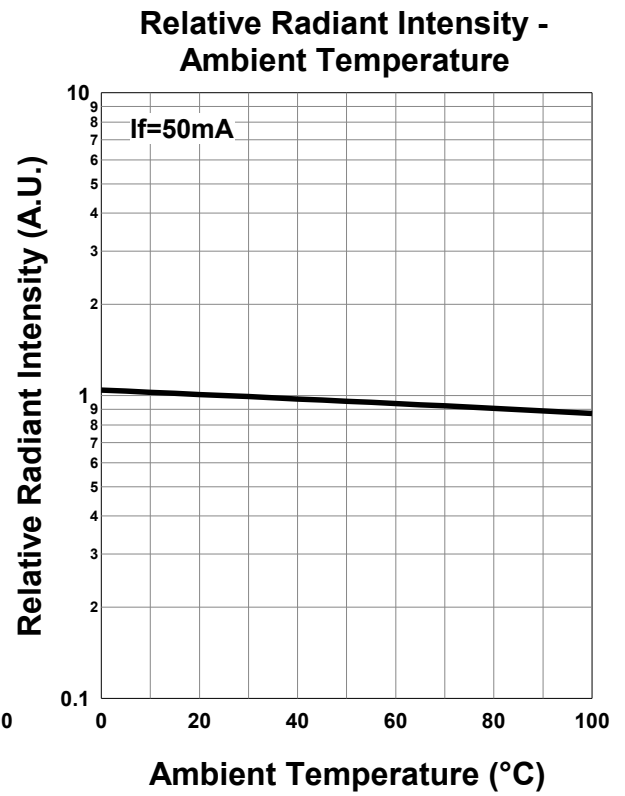
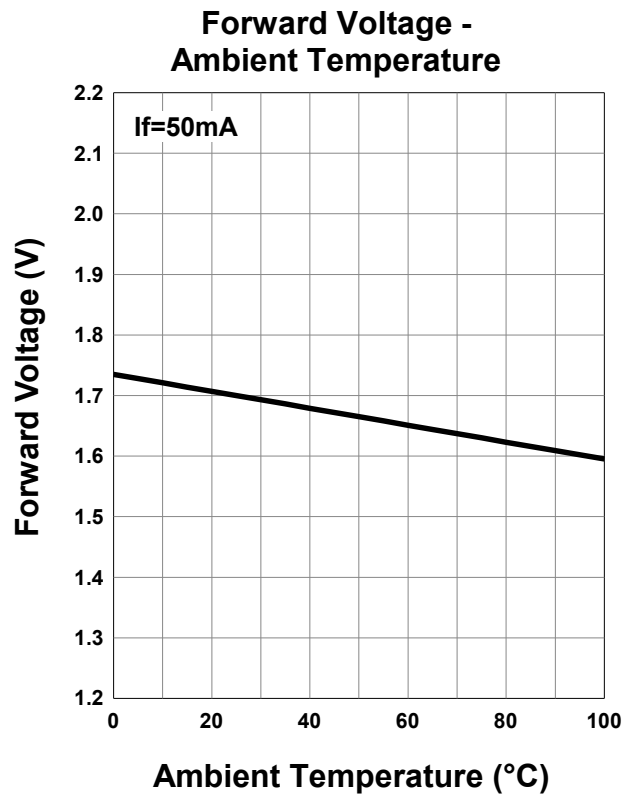
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		1.7	2.0	V	IF=50mA*
	VFP		2.8			IFP=500mA**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	18	27		mW	IF=50mA*
			240			IFP=500mA**
Radiant Intensity	IE		24		mW/sr	IF=50mA**
			220			IFP=500mA**
Peak Wavelength	λ_p	790		810	nm	IF=50mA*
Half Width	$\Delta\lambda$		29		nm	IF=50mA**
Viewing Half Angle	$\theta_{1/2}$		±30		deg.	IF=50mA**
Rise Time	tr		10		ns	IF=50mA**
Fall Time	tf		20		ns	IF=50mA**

‡ Radiated Power is measured by S3584-08.

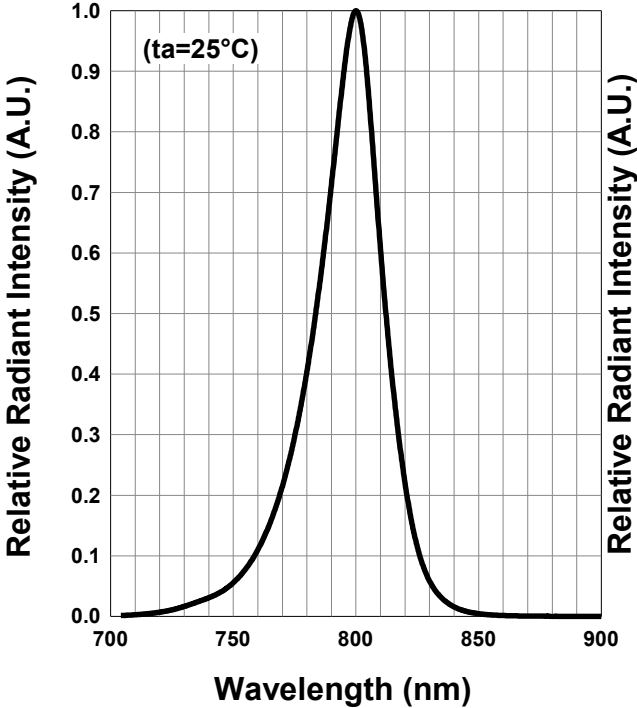
‡ Radiant Intensity is measured by CIE127-2007 Condition B.

Typical Characteristic Curves

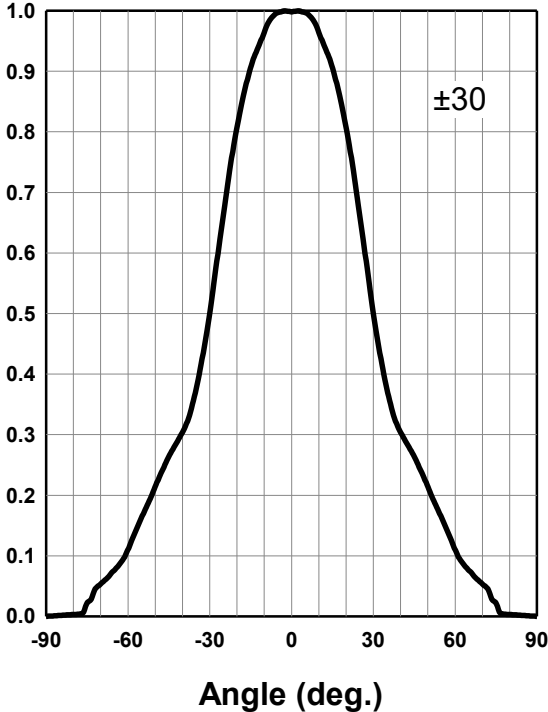




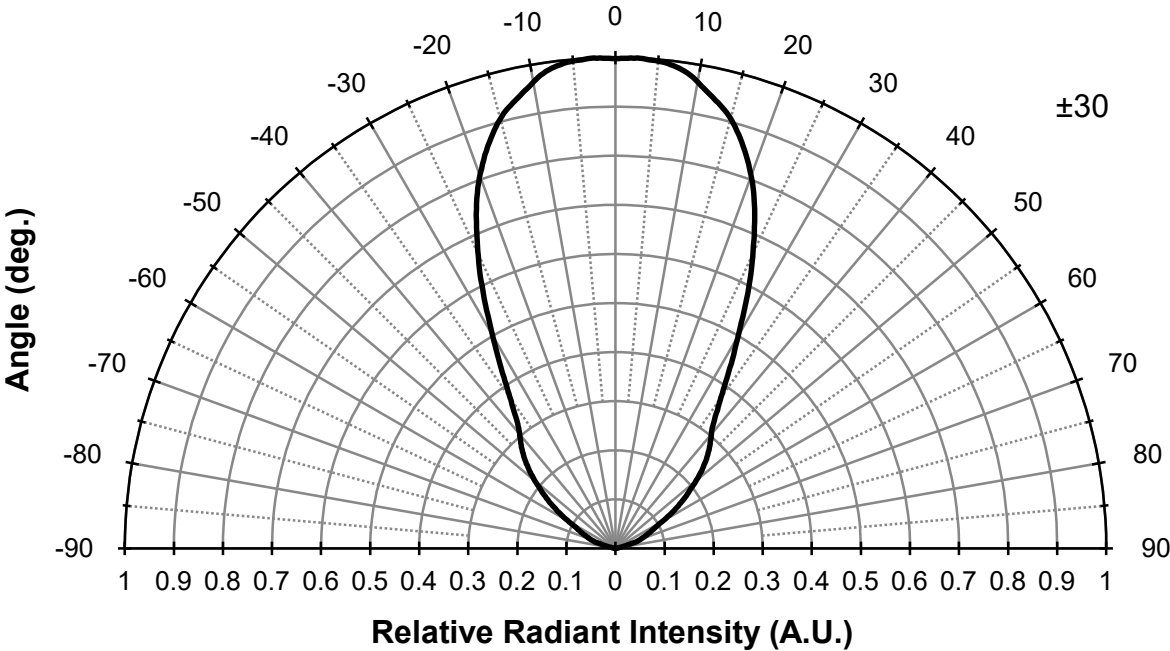
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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.

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Technical Support Information

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



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