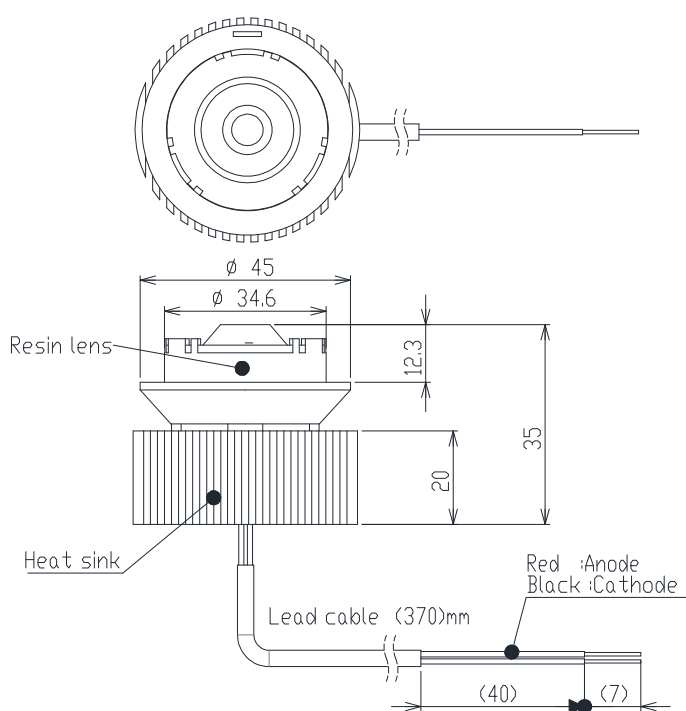


epitex

L780-66-60-1 30

Infrared illuminator

Outline and Internal Circuit



(Unit : mm)

Features

- Chip Material : AlGaAs
- Chip Dimension : 400um * 400um
- Number of Chips : 60pcs
- Peak Wavelength : 780nm typ.
- Stem : TO-66 stem
- Lens : PMMA lens
- Heat sink : Aluminum

Application

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	12	W
Forward Current	IF	1200	mA
Reverse Voltage	VR	25	V
Thermal Resistance	Rthjs	2	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	°C
Soldering Temperature	TSOL	265	°C

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

Optical and Electrical Characteristics (Tc=25°C)

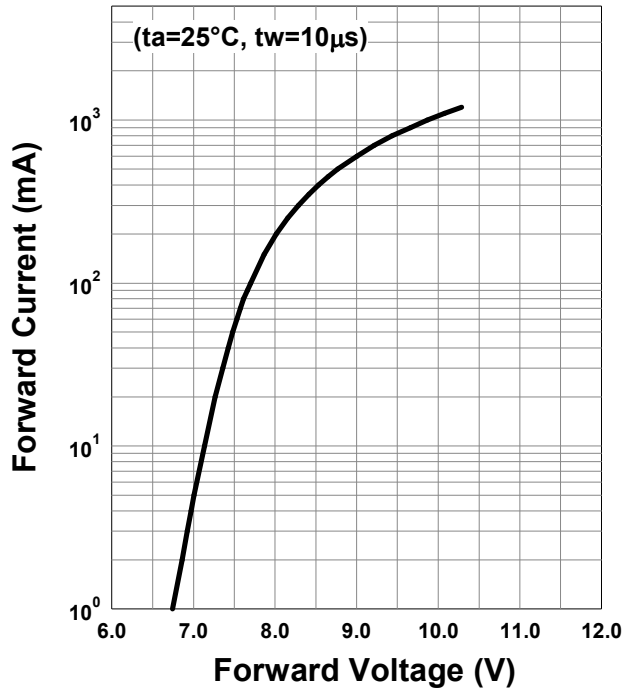
(*: 100% testing, **: reference value)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		9.0	10	V	IF=600mA*
Reverse Current	IR			10	uA	VR=25V*
Total Radiated Power	PO		580		mW	IF=600mA*
Peak Wavelength	λ_p	770		790	nm	IF=600mA*
Half Width	$\Delta\lambda$		27		nm	IF=600mA**
Viewing Half Angle	$\theta_{1/2}$		± 14		deg.	IF=100mA**
Rise Time	tr		35		ns	IF=600mA**
Fall Time	tf		40		ns	IF=600mA**

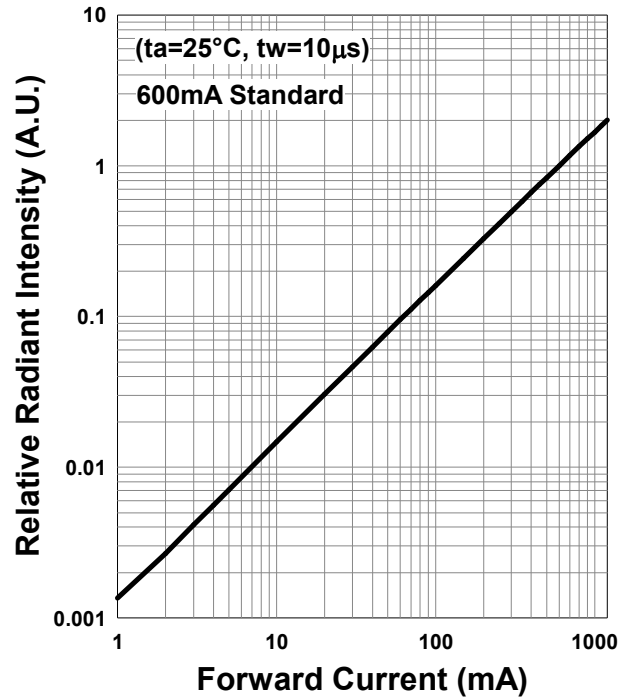
‡ Radiated Power is measured by S3584-08.

Typical Characteristic Curves

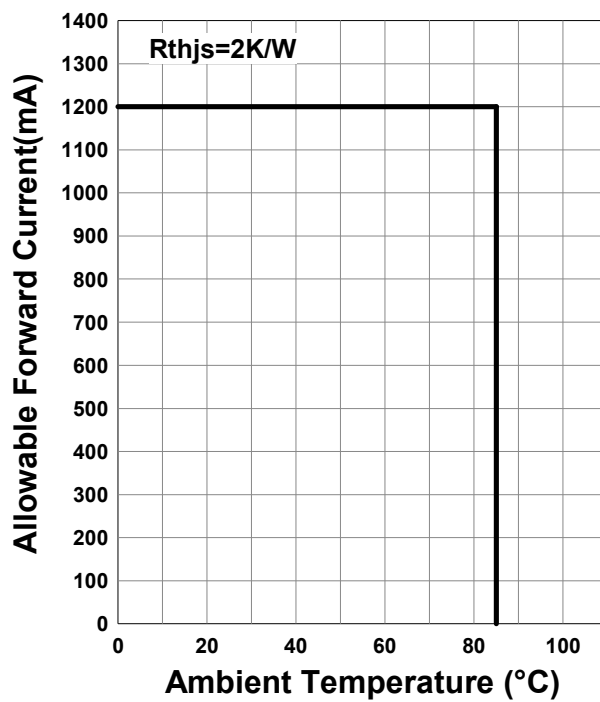
Forward Current - Forward Voltage



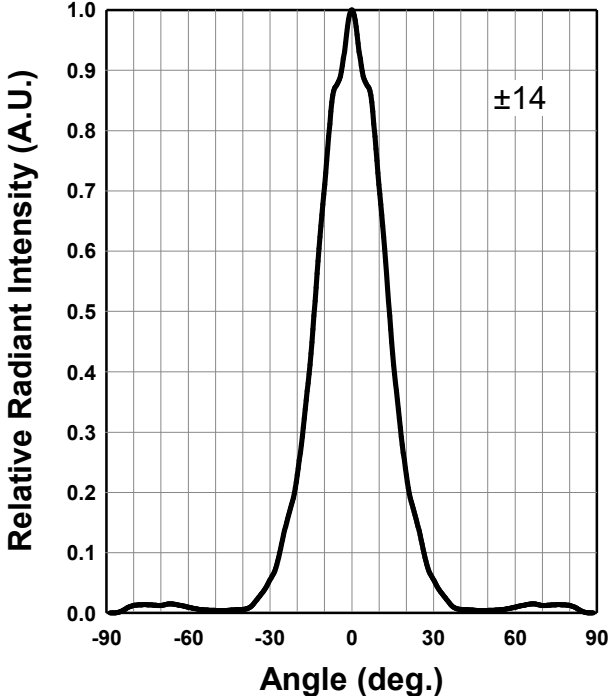
Relative Radiant Intensity - Forward Current



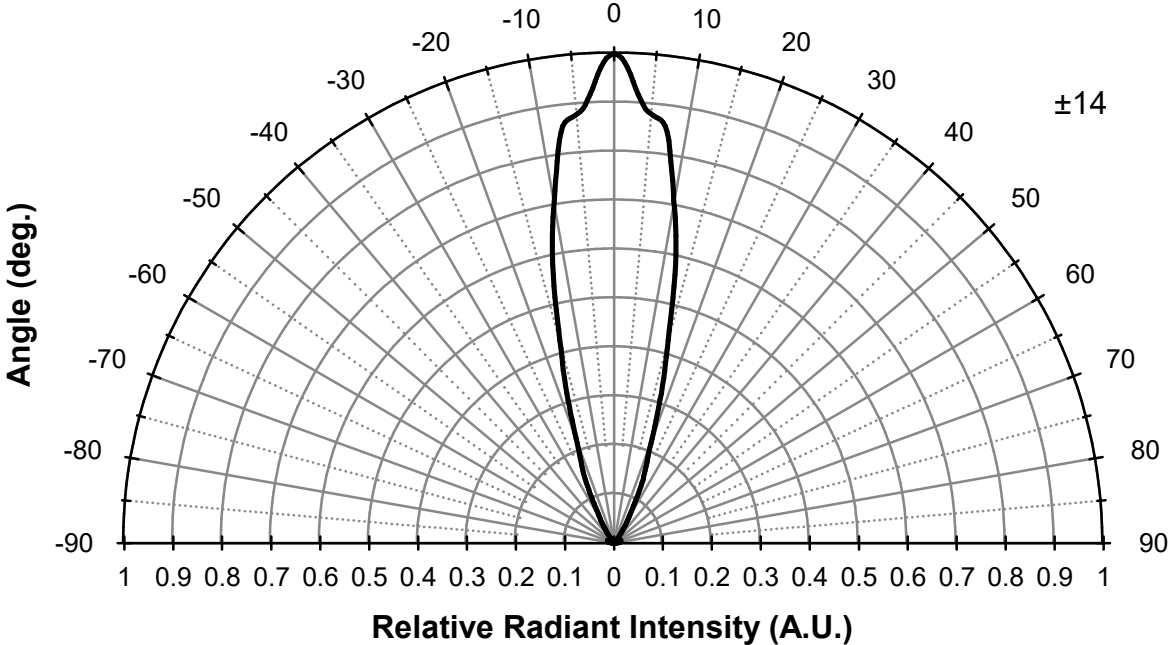
Allowable Forward Current - Ambient Temperature



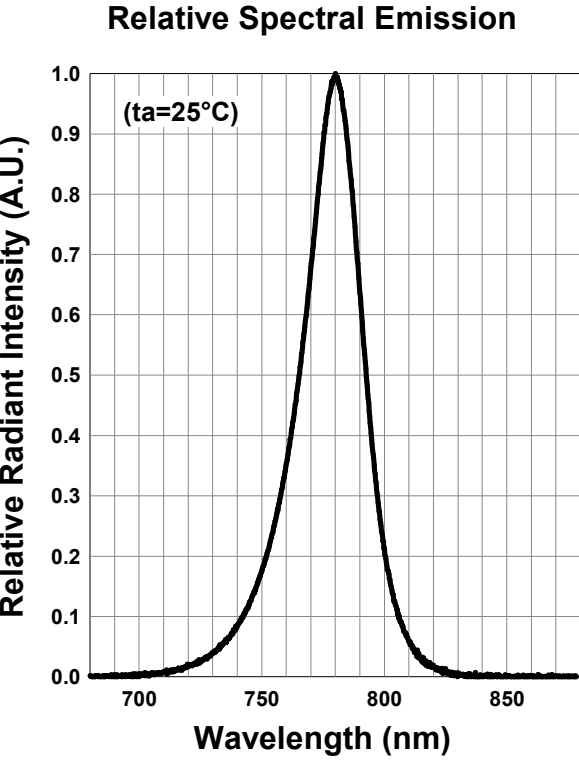
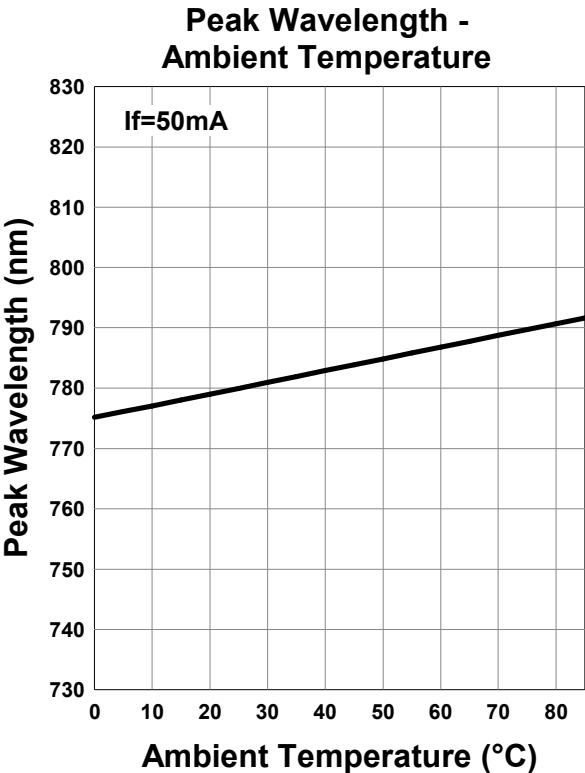
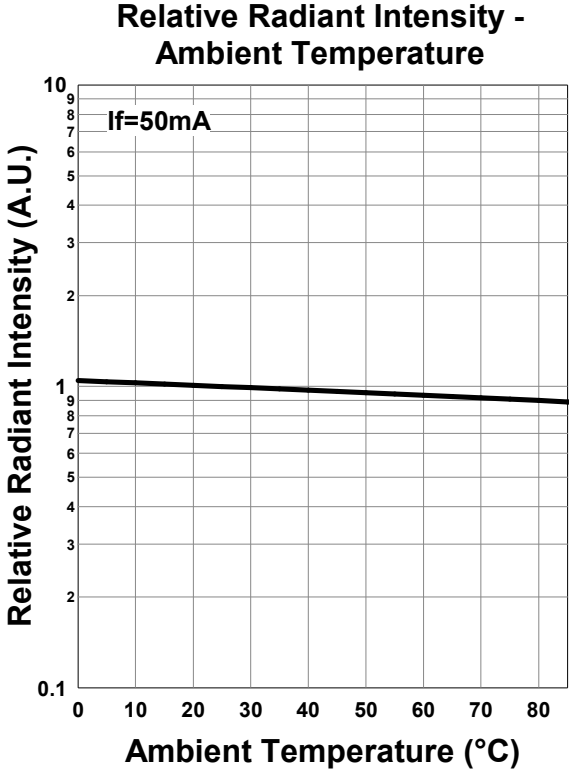
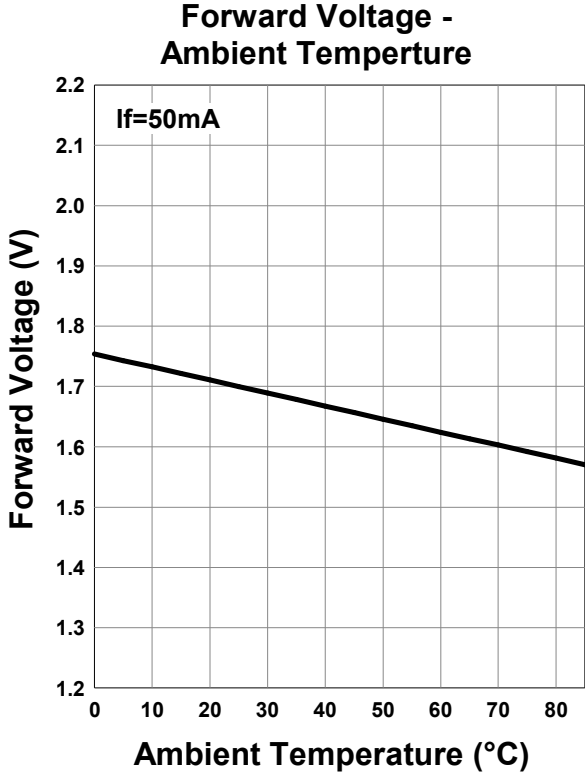
Radiation Characteristics



Radiation Characteristics



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



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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