

L1300-06

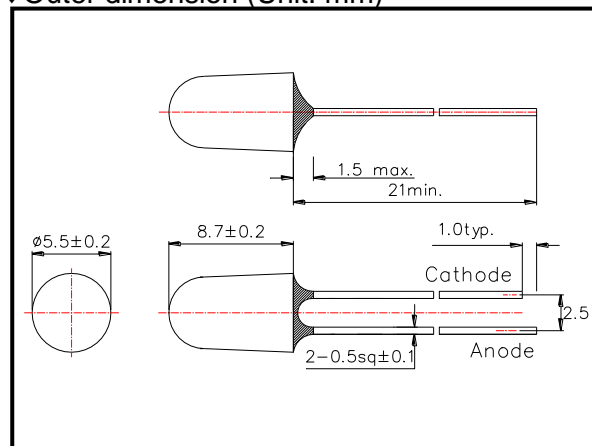
Infrared LED Lamp

L1300-06 is an InGaAsP LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation, which peaks at 1300nm.

◆ Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L1300-06
- 3) Chip
 - (1) Chip Material InGaAsP
 - (2) Peak Wavelength 1300nm typ.
- 4) Package
 - (1) Type Φ5mm clear molding
 - (2) Package Resin Epoxy Resin
 - (3) Lead Frame Soldered (Lead Frame)

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	130	mW
Forward Current	IF	100	mA
Pulse Forward Current	IFP	1000	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	250	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature	TSOL	250	°C

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

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C

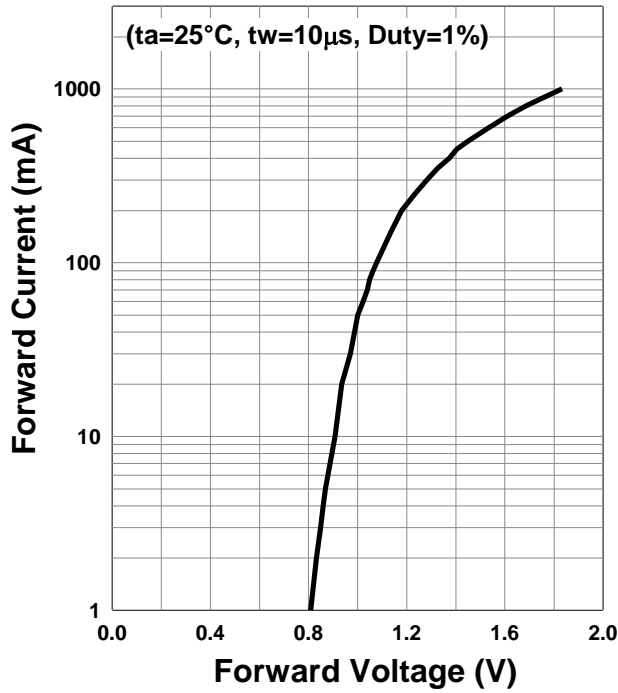
◆ Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.0	1.3	V
	VFP	IF=1A		1.8		
Radiated Power	PO	IF=50mA		4.5		mW
		IF=1A		30		
Radiant Intensity	IE	IF=50mA		120		mW/sr
		IF=1A		810		
Peak Wavelength	λP	IF=50mA	1250	1300	1350	nm
Half Width	Δλ	IF=50mA		85		nm
Viewing Half Angle	θ 1/2	IF=50mA		±9		deg.

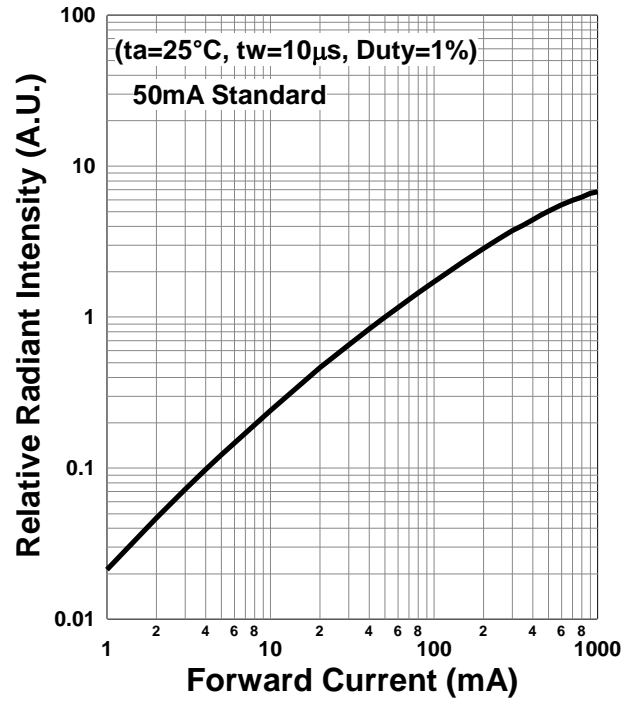
‡Radiated Power is measured by G8370-85.

‡Radiant Intensity is measured by ANDO Optical Multi Meter AQ2140 & AQ2743.

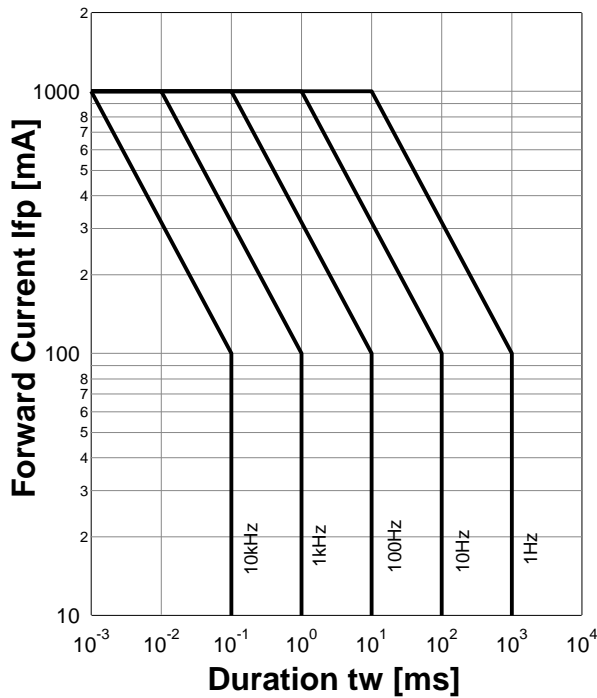
Forward Current - Forward Voltage



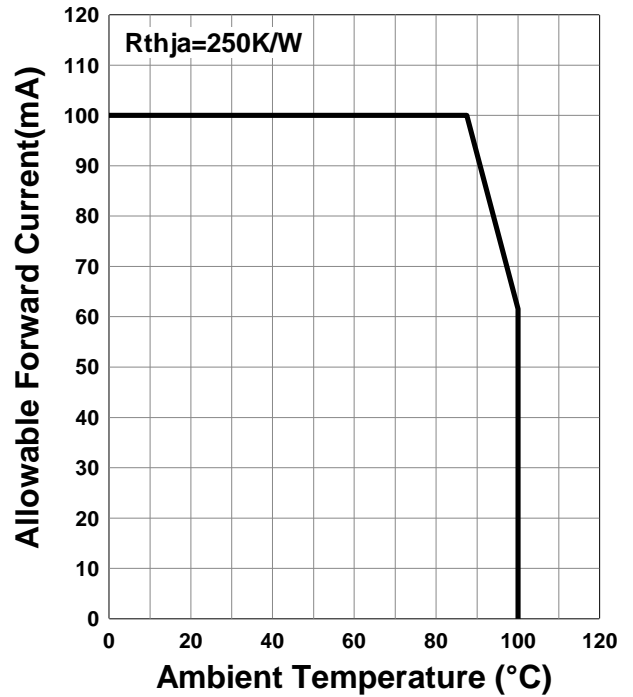
Relative Radiant Intensity - Forward Current



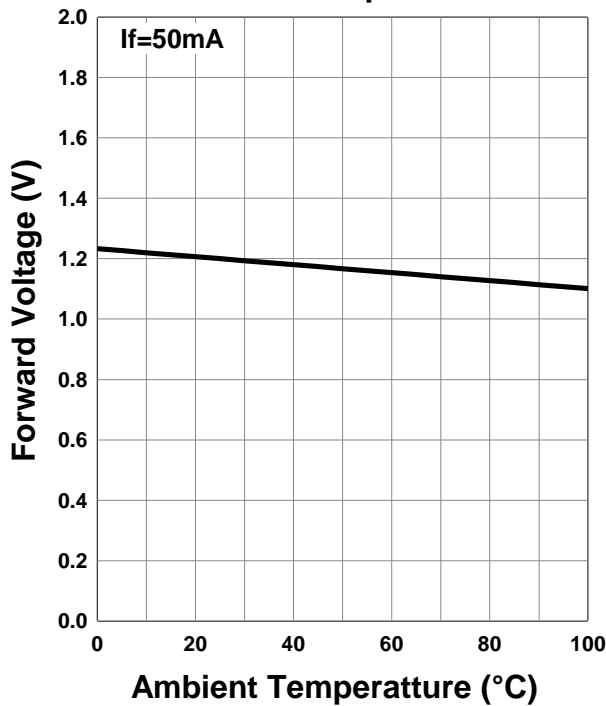
Forward Current - Pulse Duration



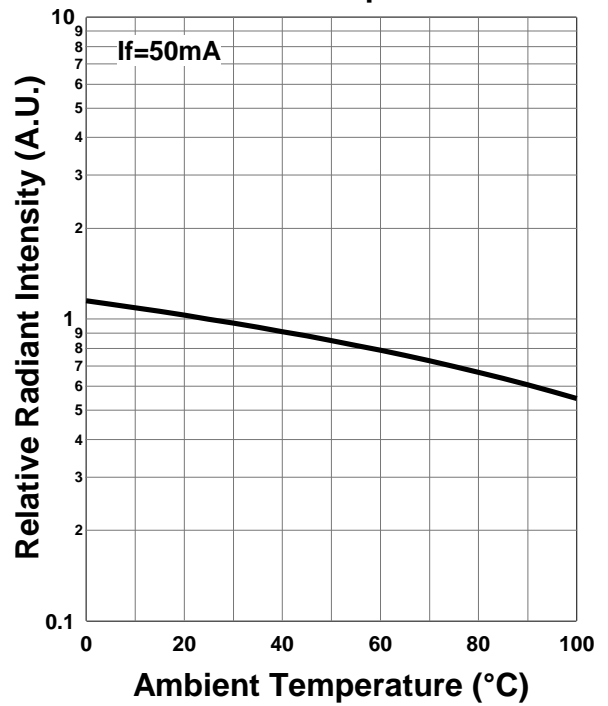
Allowable Forward Current - Ambient Temperature



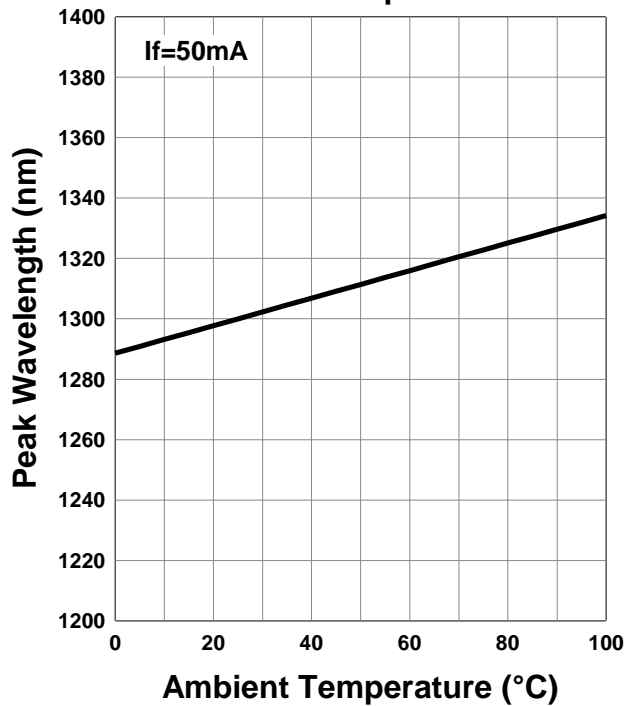
Forward Voltage - Ambient Temperature



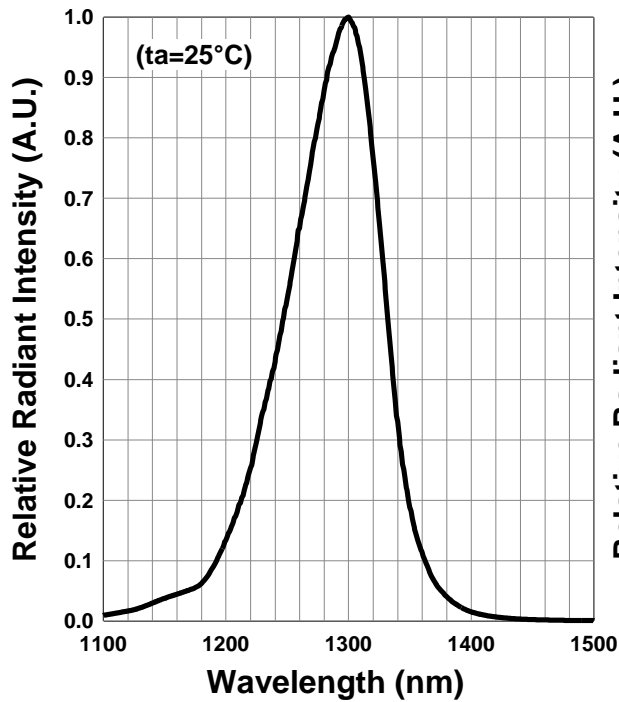
Relative Radiant Intensity - Ambient Temperature



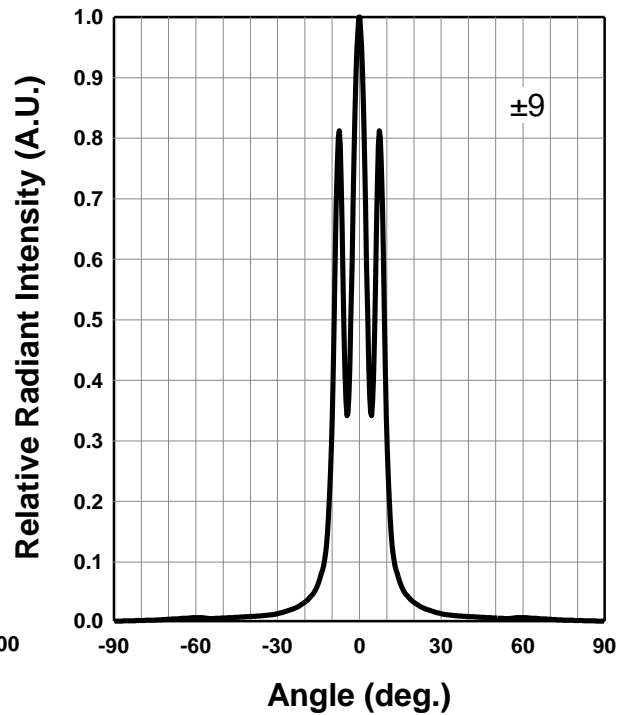
Peak Wavelength - Ambient Temperature



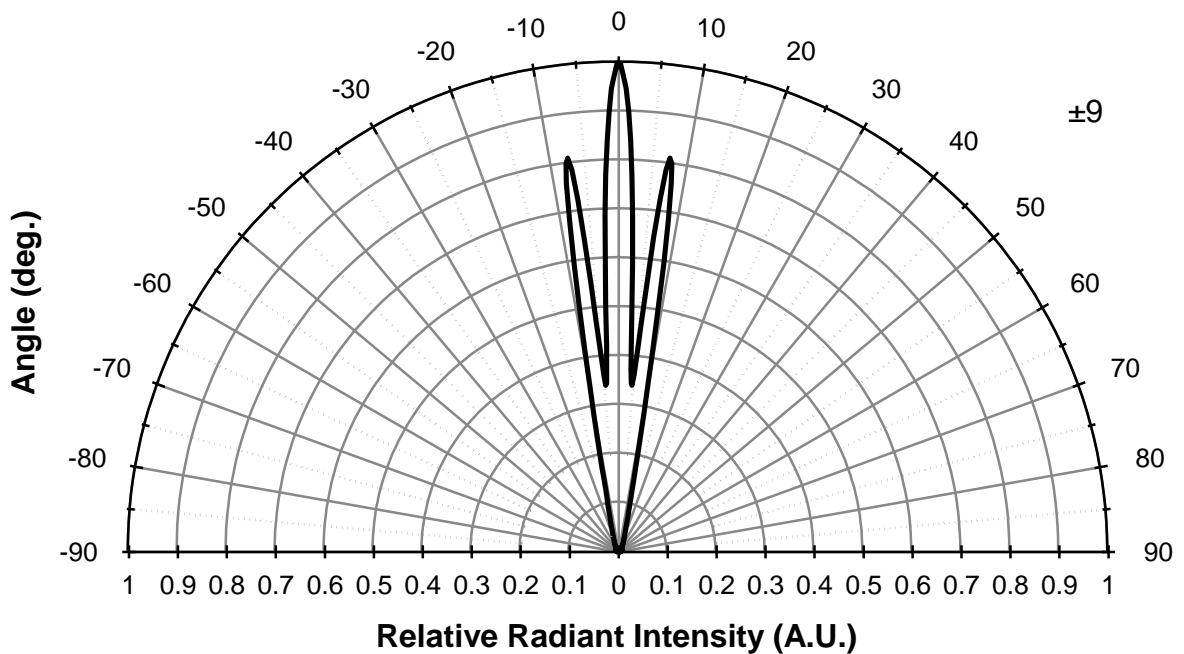
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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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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