

# L1200-06

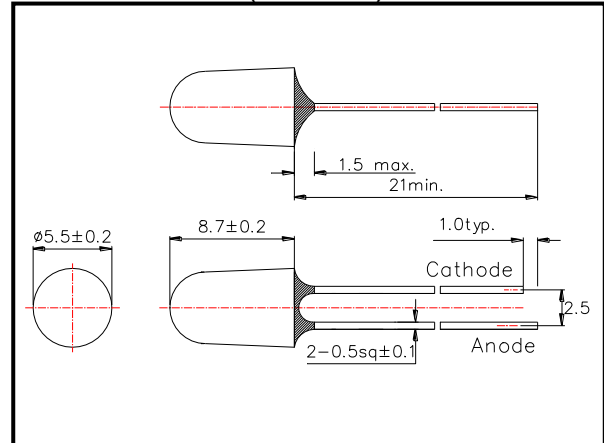
## Infrared LED Lamp

L1200-06 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 1200nm.

### ◆ Specifications

- 1) Product Name      Infrared LED Lamp
- 2) Type No.            L1200-06
- 3) Chip
- (1) Chip Material      InGaAsP
- (2) Peak Wavelength   1200nm 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	150	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

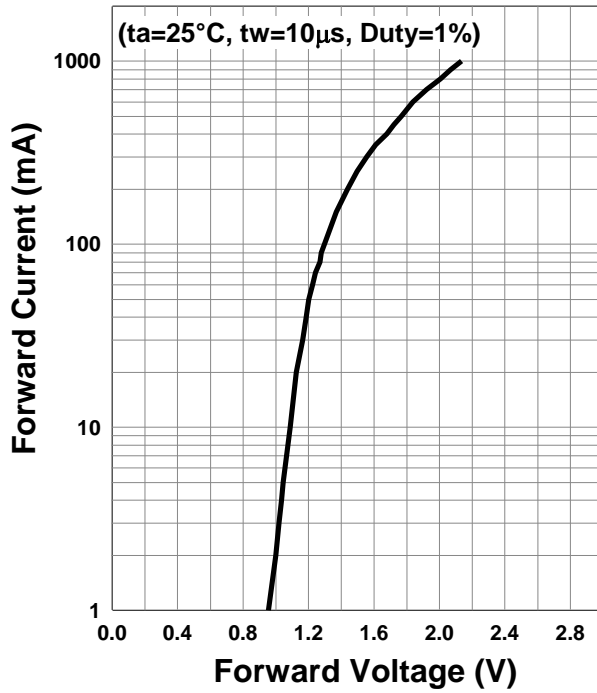
### ◆ Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.2	1.5	V
	VFP	IF=1A		1.8		
Radiated Power	PO	IF=50mA		6.0		mW
		IF=1A		50		
Radiant Intensity	IE	IF=50mA		92		mW/sr
		IF=1A		740		
Peak Wavelength	λP	IF=50mA	1150	1200	1250	nm
Half Width	Δλ	IF=50mA		85		nm
Viewing Half Angle	θ 1/2	IF=50mA		±8		deg.

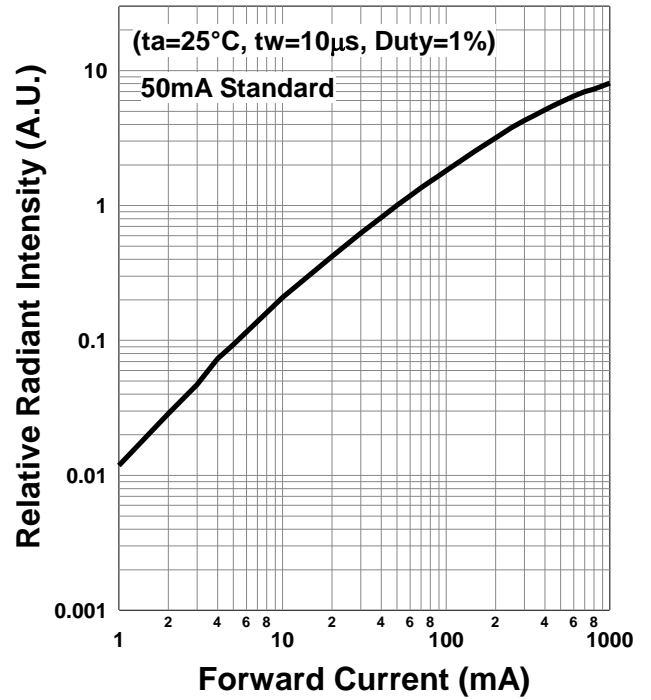
‡Radiated Power is measured by G8370-85.

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

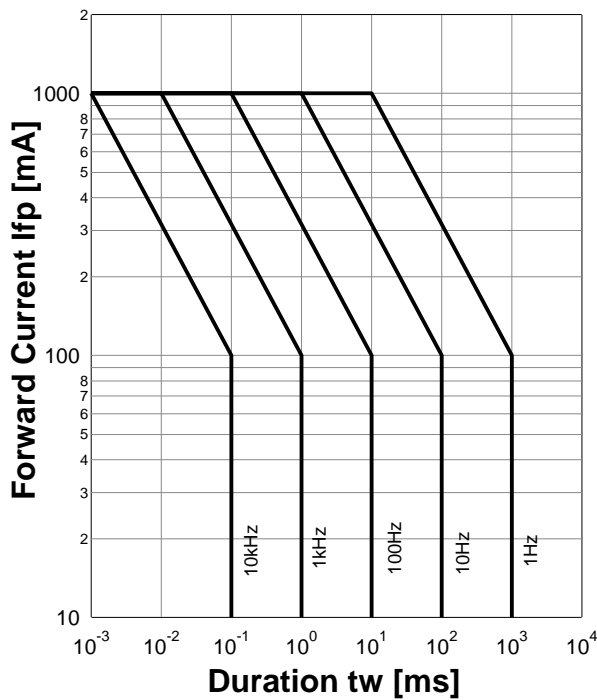
**Forward Current - Forward Voltage**



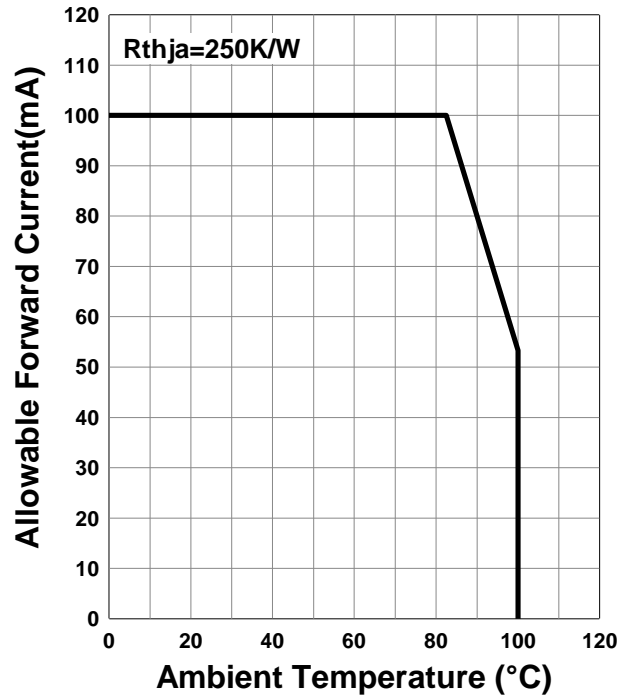
**Relative Radiant Intensity - Forward Current**



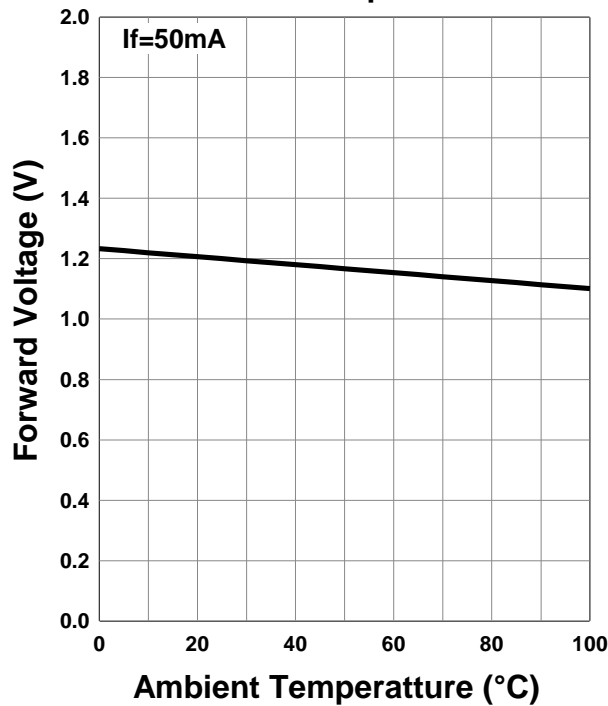
**Forward Current - Pulse Duration**



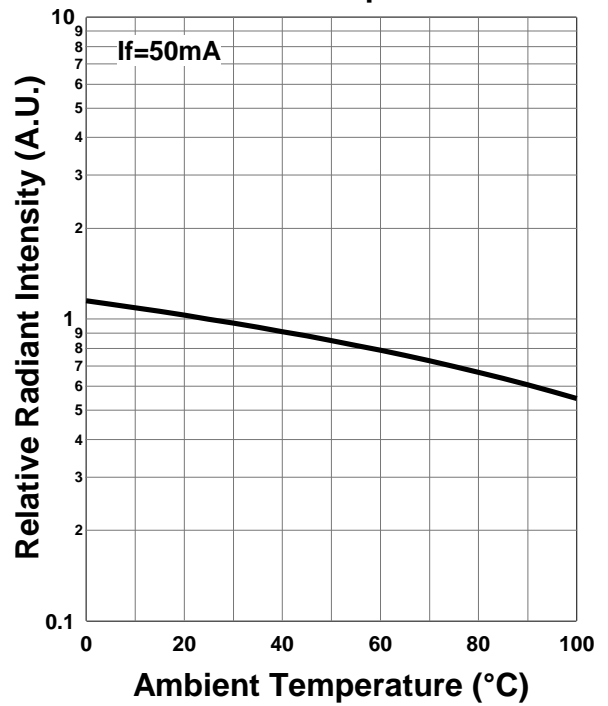
**Allowable Forward Current - Ambient Temperature**



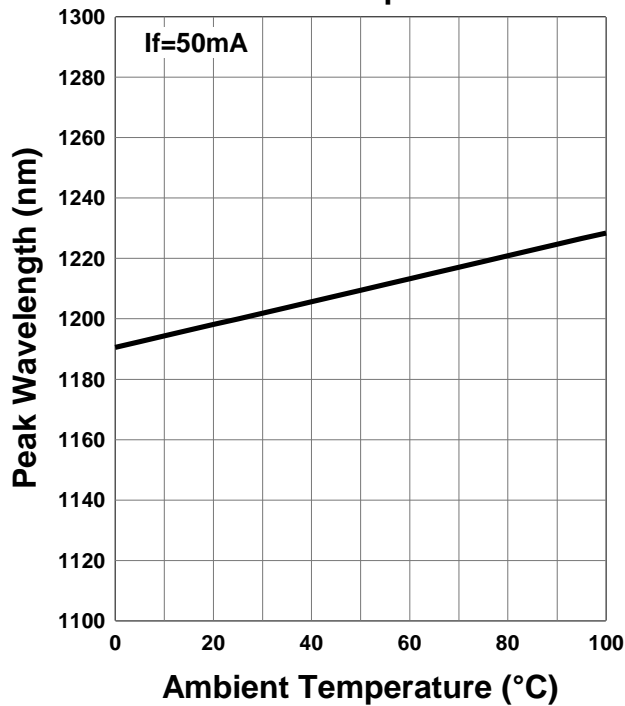
**Forward Voltage - Ambient Temperature**



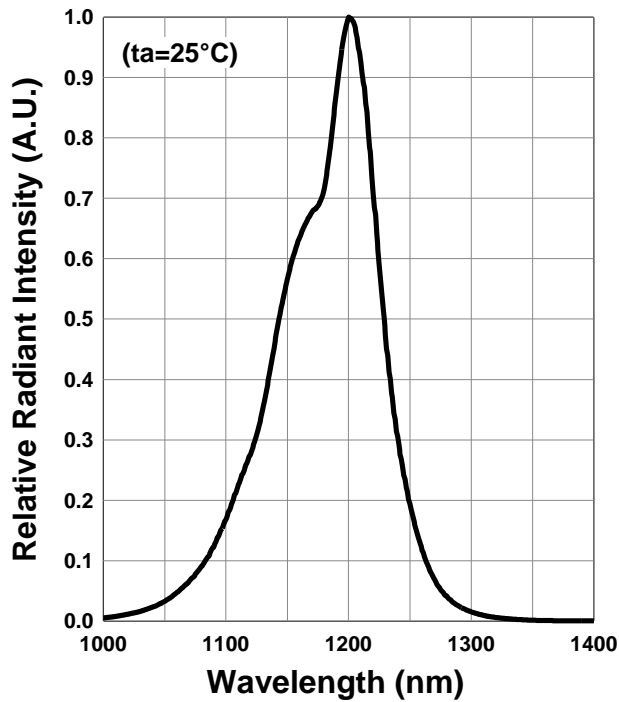
**Relative Radiant Intensity - Ambient Temperature**



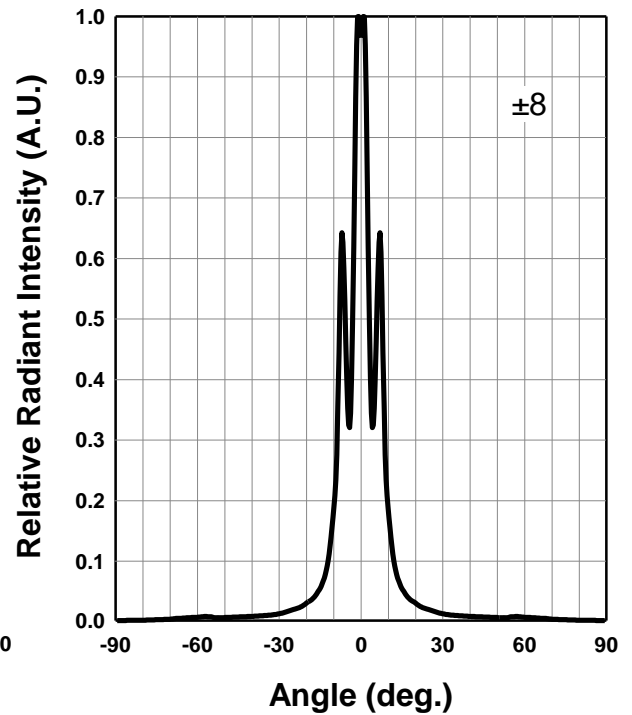
**Peak Wavelength - Ambient Temperature**



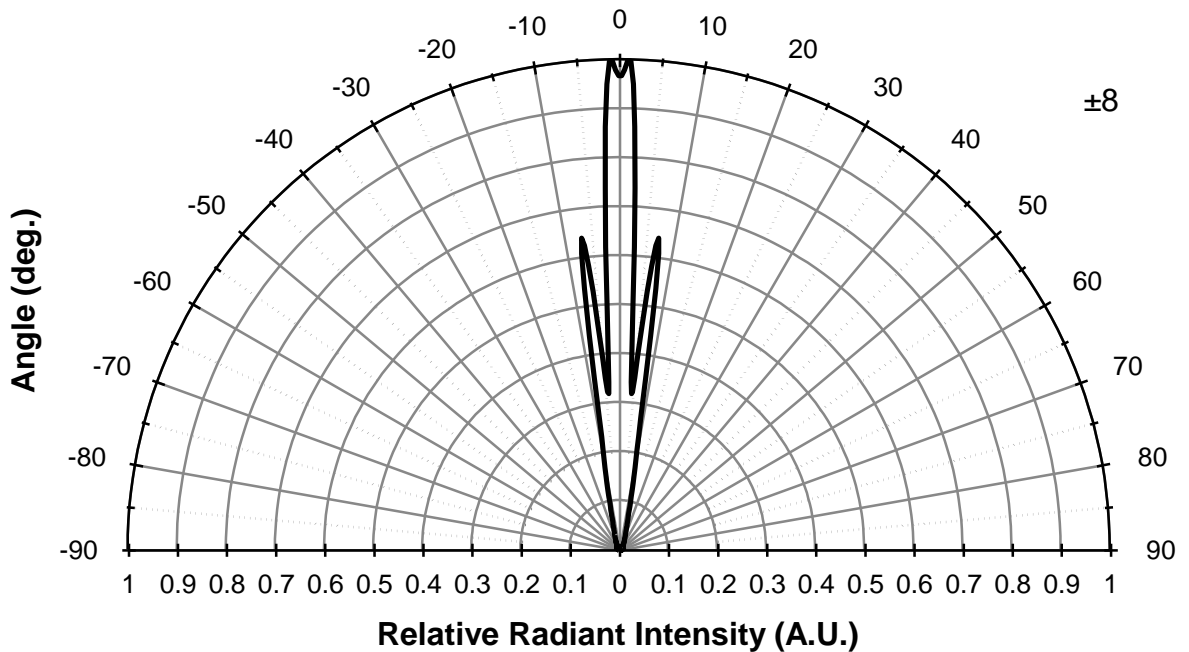
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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