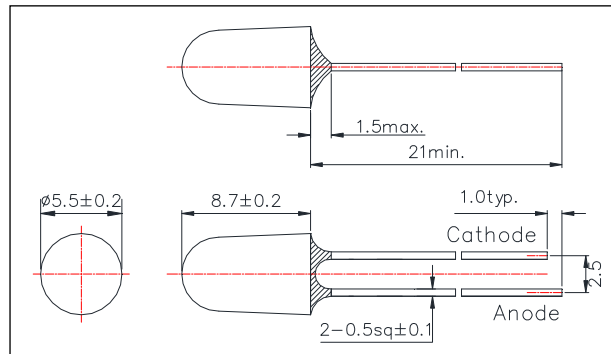


## L1050-06 Infrared LED Lamp

<Specifications>

- Chip Material: InGaAsP
- Chip Dimension: 300um x 300um
- Number of Chips: 1pcs
- Peak Wavelength: 1050nm typ.
- Package Type: Φ5mm Clear Molding
- Lead Frame: Soldered (Lead Free)
- Lens: Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	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	300	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature*	TSOL	265	°C

\* Duty=1% and Pulse Width=10μs

\*\* Soldering condition must be completed within 3 second at 265 °C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.2	1.3	V
	VFP	IFP=1A		1.9		
Total Radiated Power*	PO	IF=50mA		7.0		mW
		IFP=1A		42		
Radiant Intensity**	IE	IF=50mA		76		mW/sr
		IFP=1A		460		
Peak Wavelength	λP	IF=50mA	1000		1100	nm
Half Width	Δλ	IF=50mA		50		nm
Viewing half Angle	θ1/2	IF=50mA		±9		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		30		ns

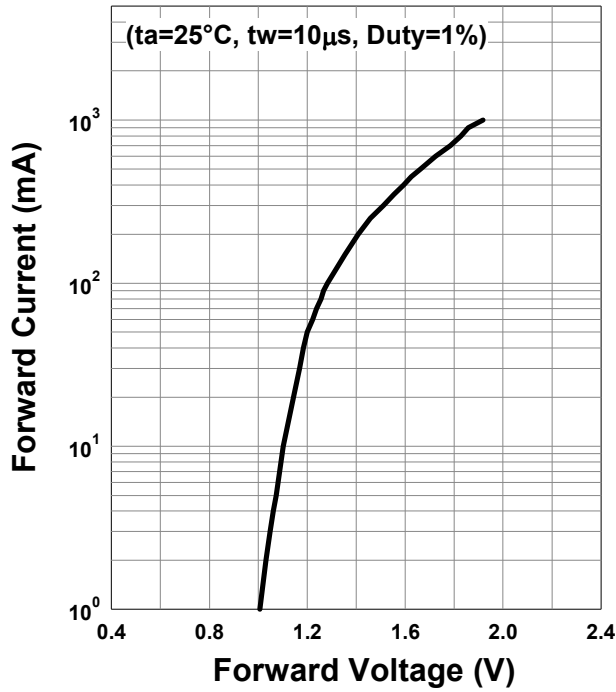
\* Measured by G8370-85

\*\* Measured by Ando Optical Mutil Meter AQ2140 & AQ2742

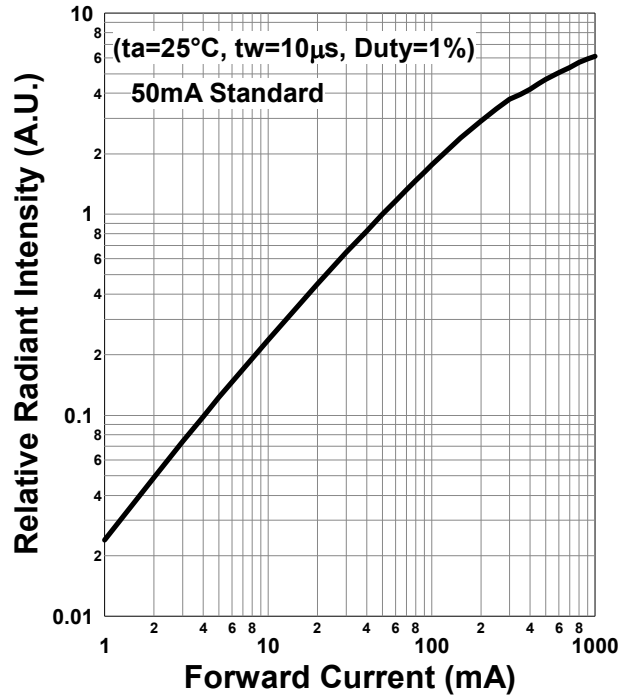


# Typical Characteristic Curves

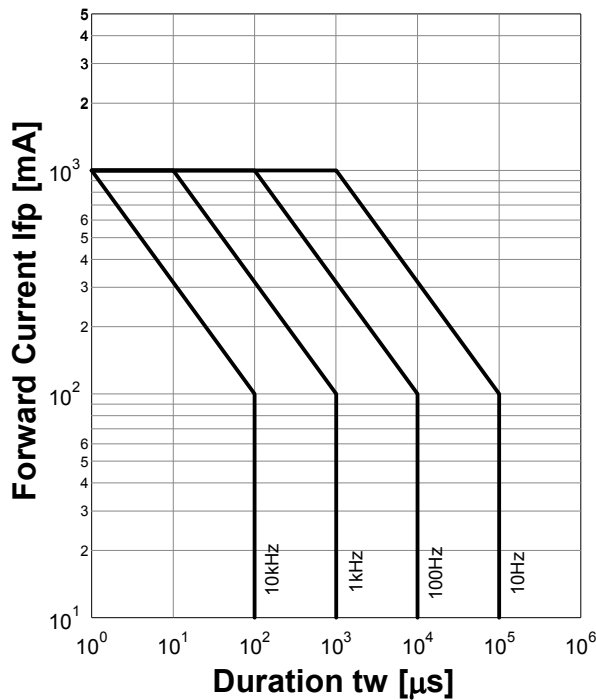
## Forward Current - Forward Voltage



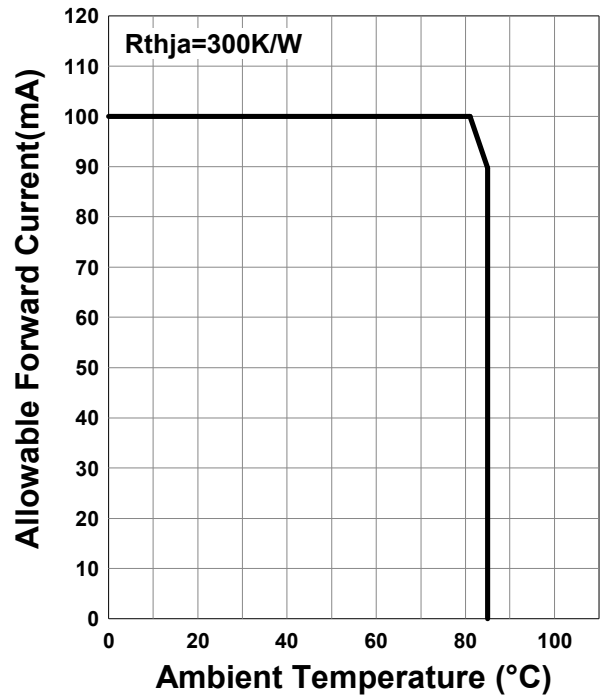
## Relative Radiant Intensity - Forward Current



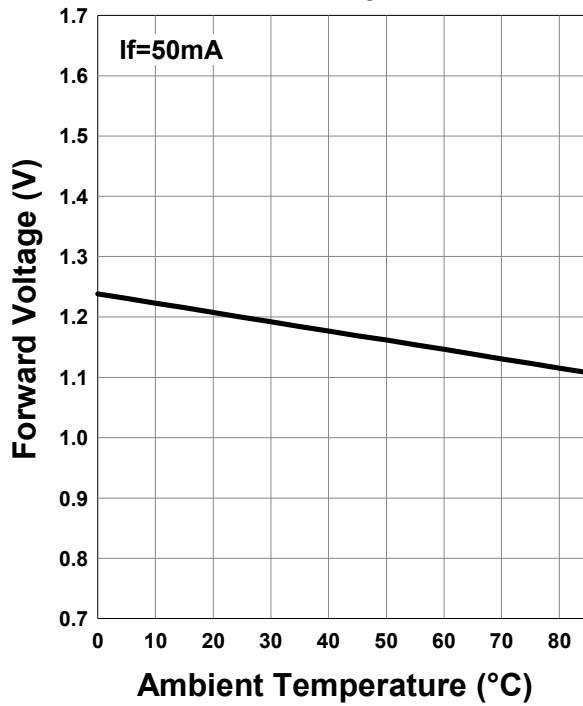
## Forward Current - Pulse Duration



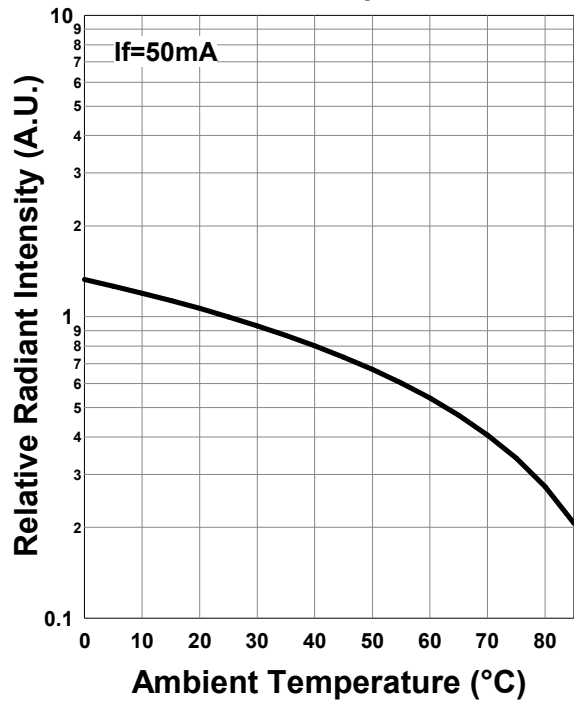
## Allowable Forward Current - Ambient Temperature



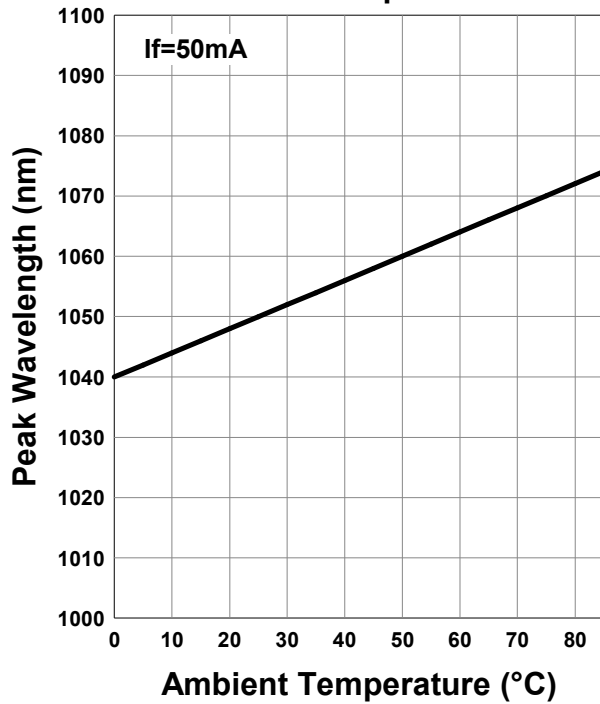
**Forward Voltage - Ambient Temperature**



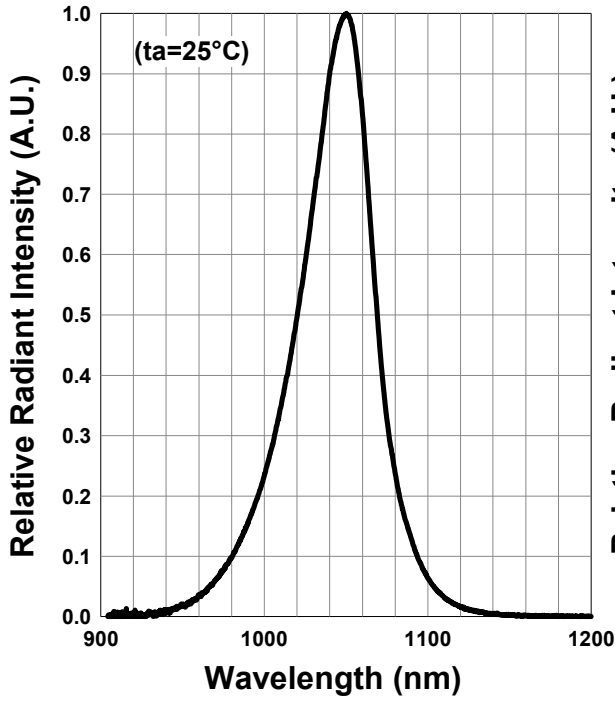
**Relative Radiant Intensity - Ambient Temperature**



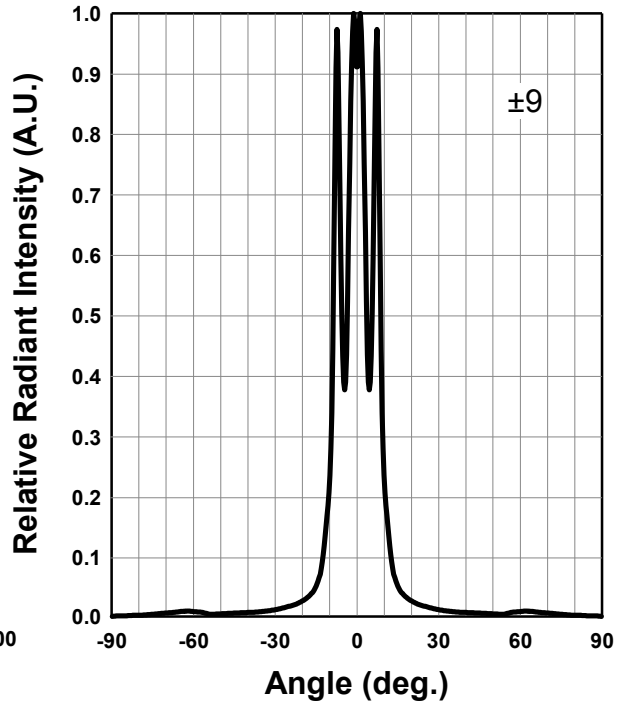
**Peak Wavelength - Ambient Temperature**



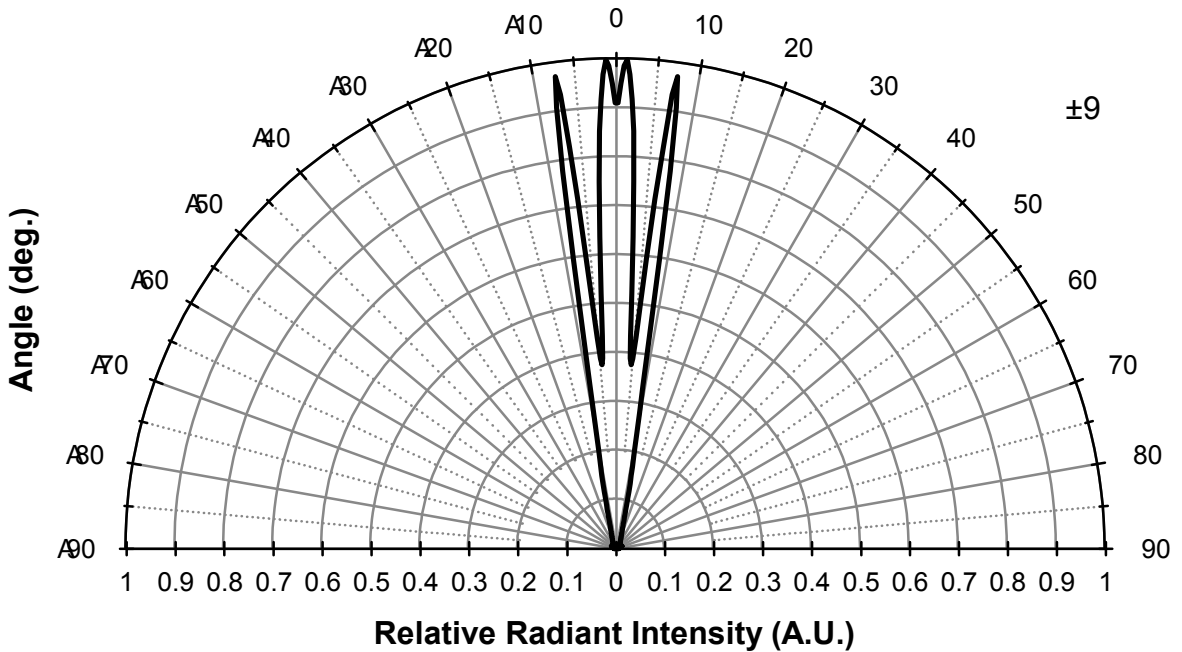
**Relative Spectral Emission**



**Radiation Characteristics**



**Radiation Characteristics**



## **Disclaimer**

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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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