

L1050-05

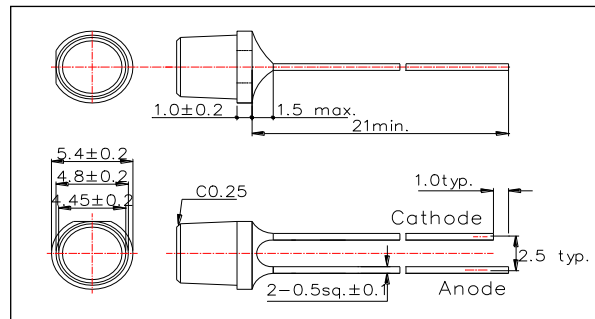
Infrared LED Lamp

L1050-05 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 1050nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L1050-05
3. Chip:
 - Chip material: InGaAsP
 - Peak Wavelength: 1050nm typ.
4. Package
 - Type: Φ5mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered (Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	140	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	1000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	120	°C
Thermal Resistance	Rthja	300	K/W
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	250	°C

* Duty=1% and Pulse Width=10us.

** Soldering condition must be completed within 5 second at 250 °C.

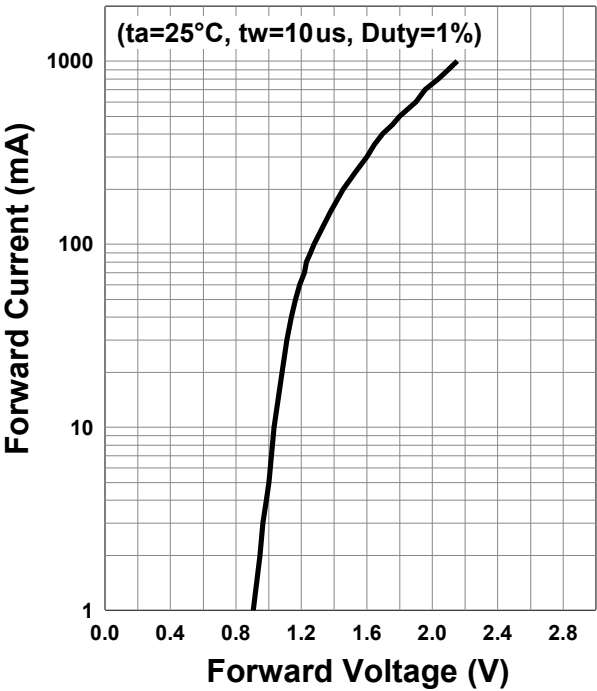
Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.2	1.4	V
	VFP	IFP=1A		2.2		
Total Radiated Power*	PO	IF=50mA	2.5	5.0		mW
		IFP=1A		34		
Radiant Intensity**	IE	IF=50mA		5		mW/sr
		IFP=1A		34		
Peak Wavelength	λP	IF=50mA	1000	1050	1100	nm
Half Width	Δλ	IF=50mA		50		nm
Viewing Half Angle	θ1/2	IF=50mA		± 30		deg

* Measured by G8370-85

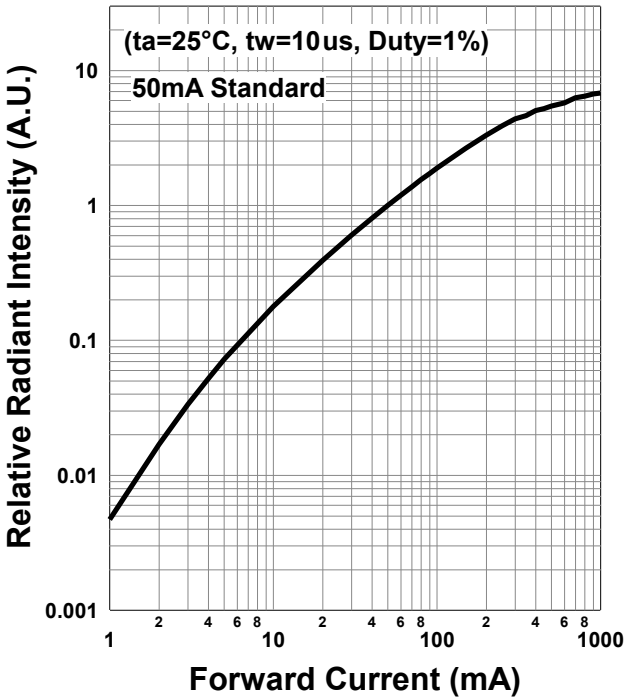
** Measured by Ando Optical Multi Meter AQ2140 & AQ2743



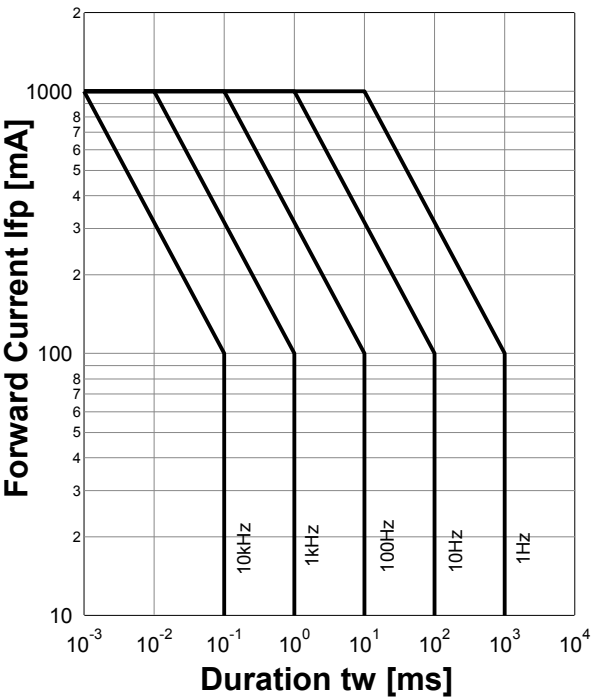
Forward Current - Forward Voltage



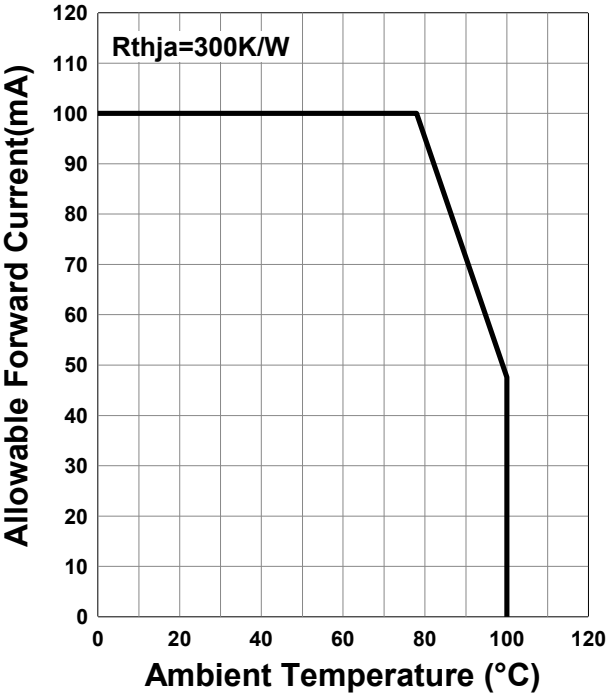
Relative Radiant Intensity - Forward Current

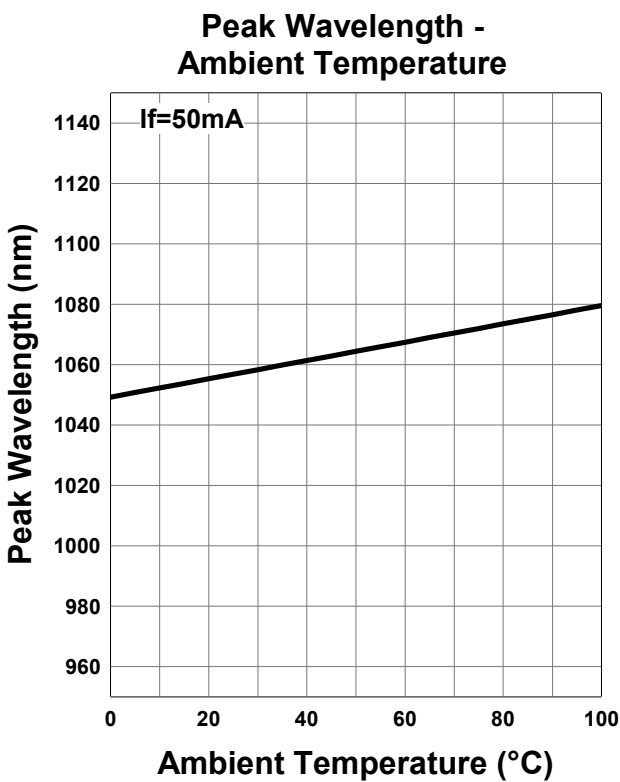
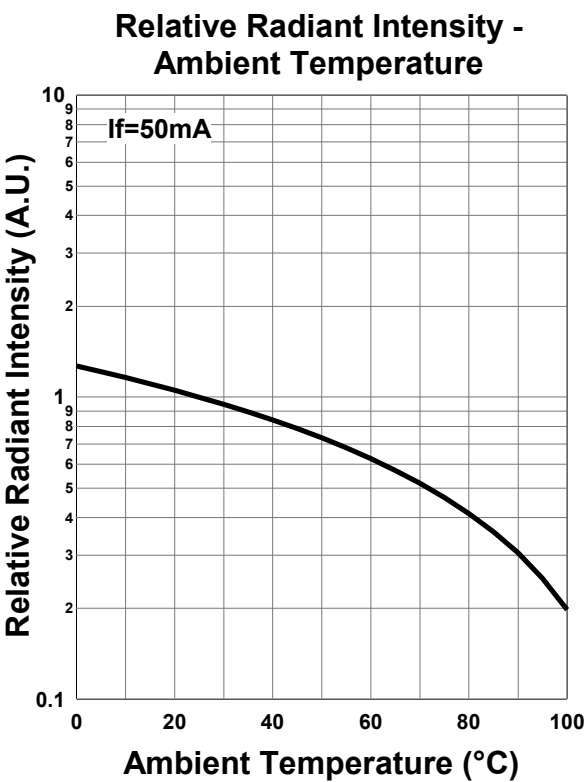
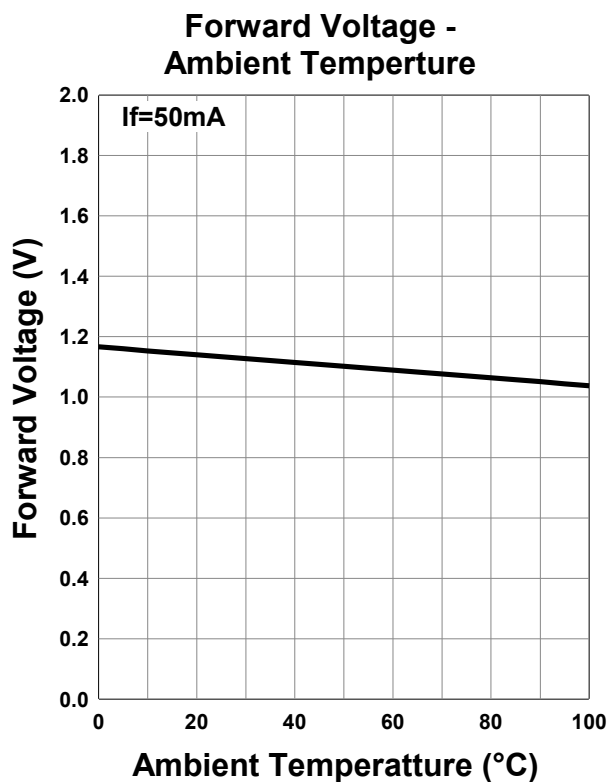


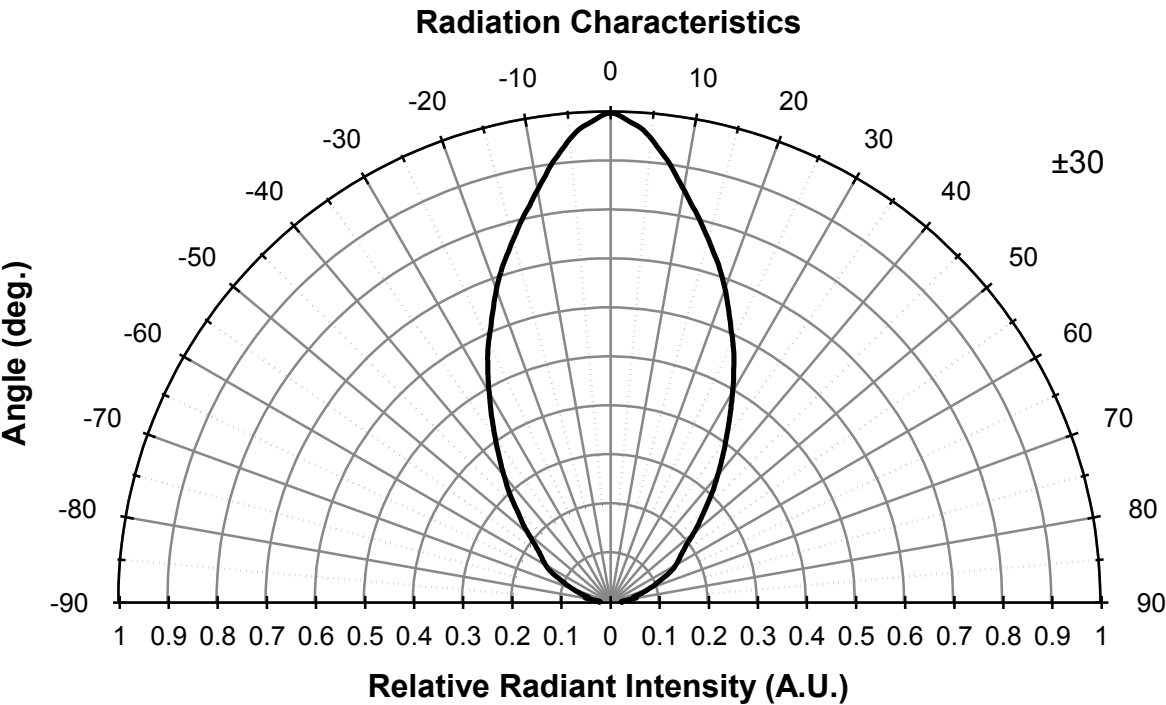
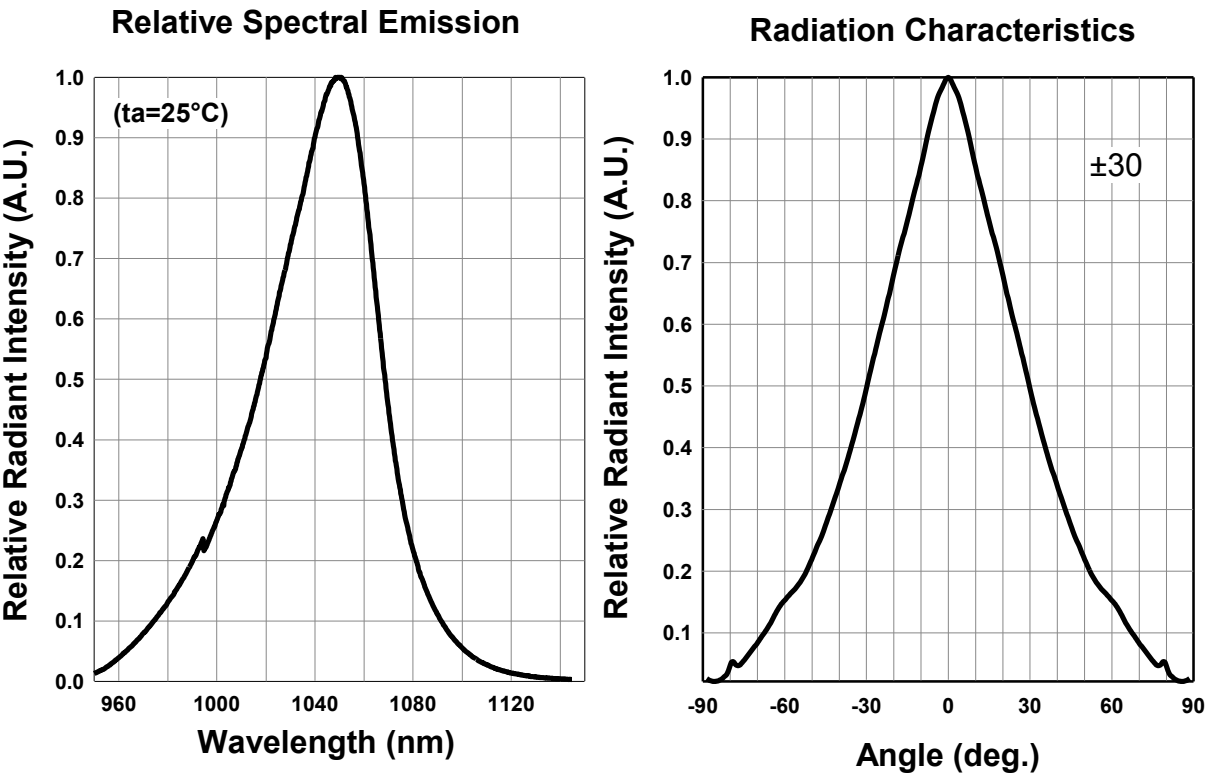
Forward Current - Pulse Duration



Allowable Forward Current - Ambient Temperature







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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