

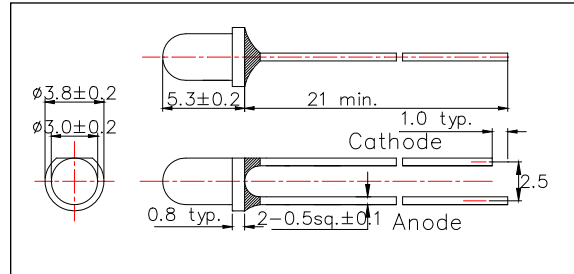
## L910D-33 Infrared LED Lamp

L910D-33 is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation that peaks at 910nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L910D-33
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 910nm typ.
4. Package
  - Type: Φ5mm Clear Molding
  - Resin Material: Epoxy Resin
  - Lead Frame: Soldered (Lead Frame)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	200	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	500	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance	Rthja	250	K/W
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	250	°C

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

\*\* Soldering condition must be completed within 3 second at 250 °C.

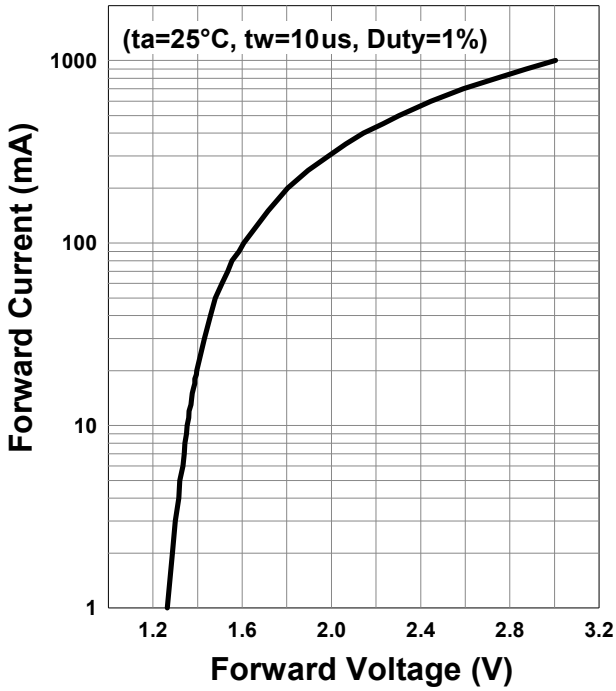
Electro-Optical Characteristics [Ta=25°C ]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.5	(2.0)	V
	VFP	IFP=1A		3.0		
Total Radiated Power*	PO	IF=50mA		13		mW
		IFP=1A		210		
Radiant Intensity**	IE	IF=50mA		44		mW/sr
		IFP=1A		710		
Peak wavelength	λP	IF=50mA	900	910	920	nm
Half Width	Δλ	IF=50mA		35		nm
Viewing Half Angle	θ1/2	IF=50mA		±15		deg
Rise Time	tr	IF=50mA		50		ns
Fall Time	tf	IF=50mA		50		ns

\* Measured by S3584-08

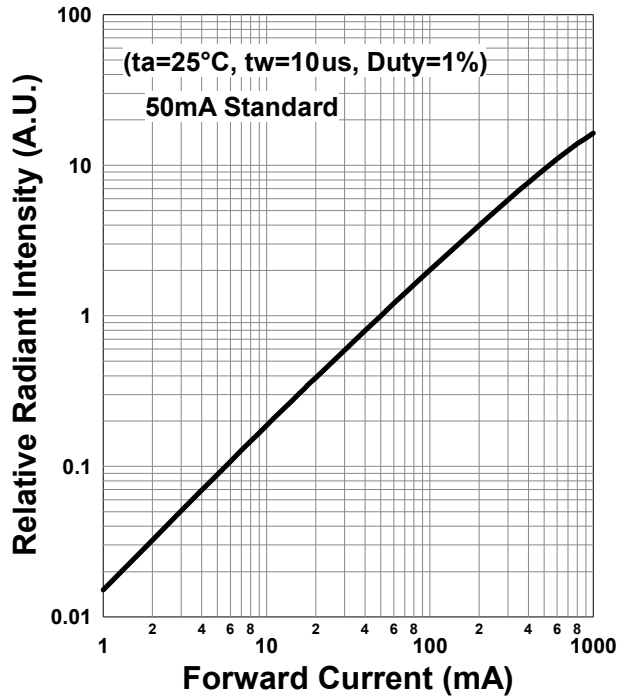
\*\* Measured by CIE127-2007 Coondition B



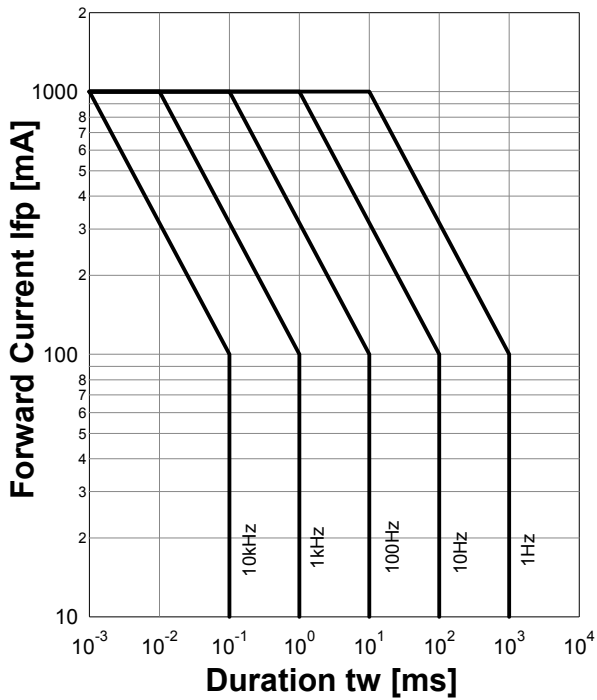
**Forward Current - Forward Voltage**



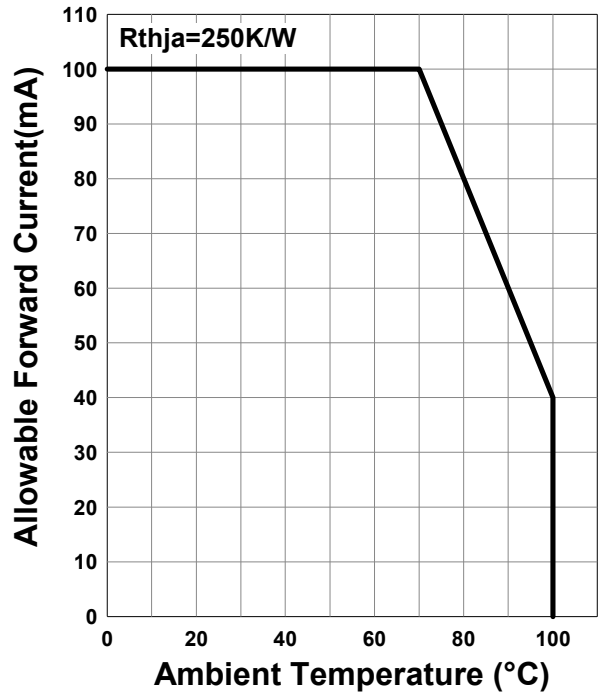
**Relative Radiant Intensity - Forward Current**



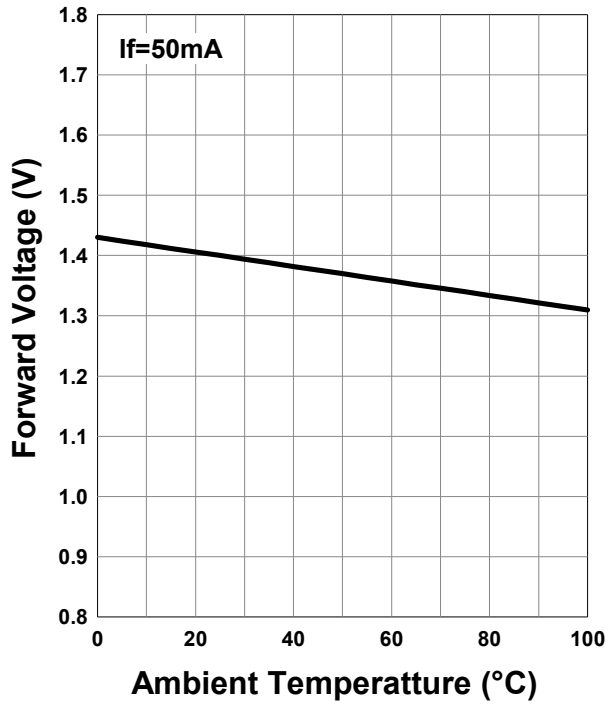
**Forward Current - Pulse Duration**



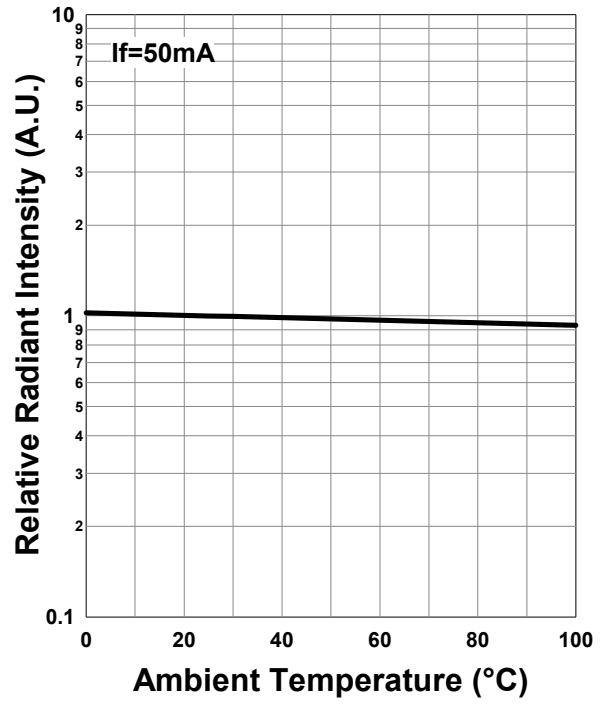
**Allowable Forward Current - Ambient Temperature**



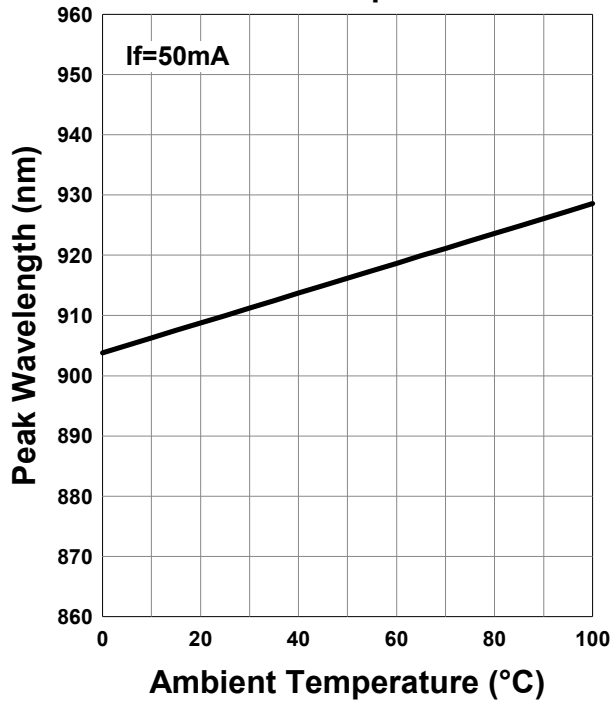
**Forward Voltage - Ambient Temperature**

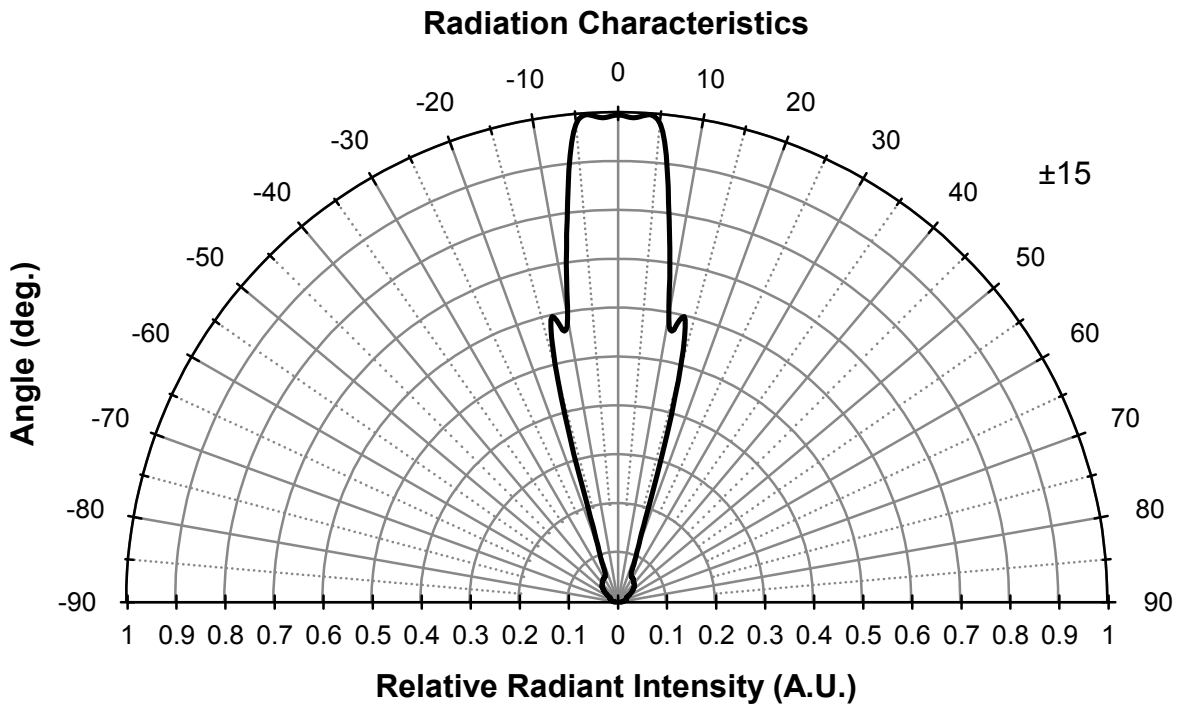
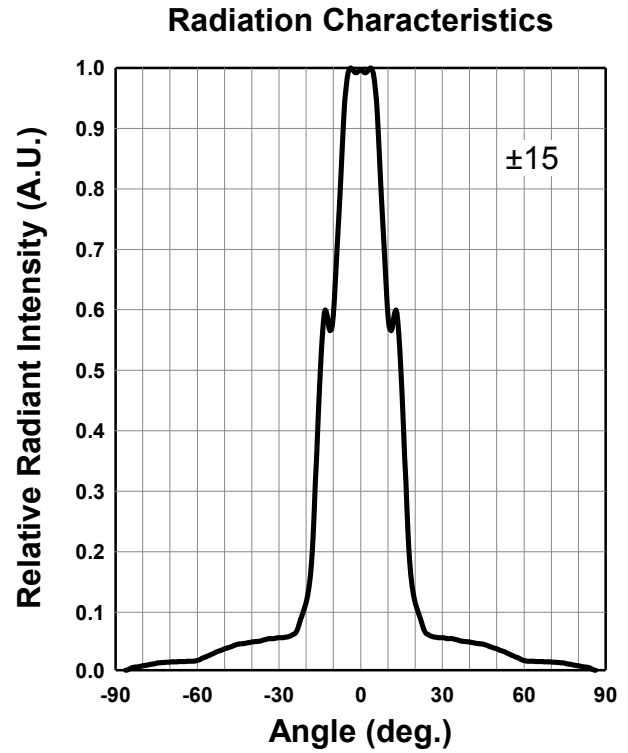
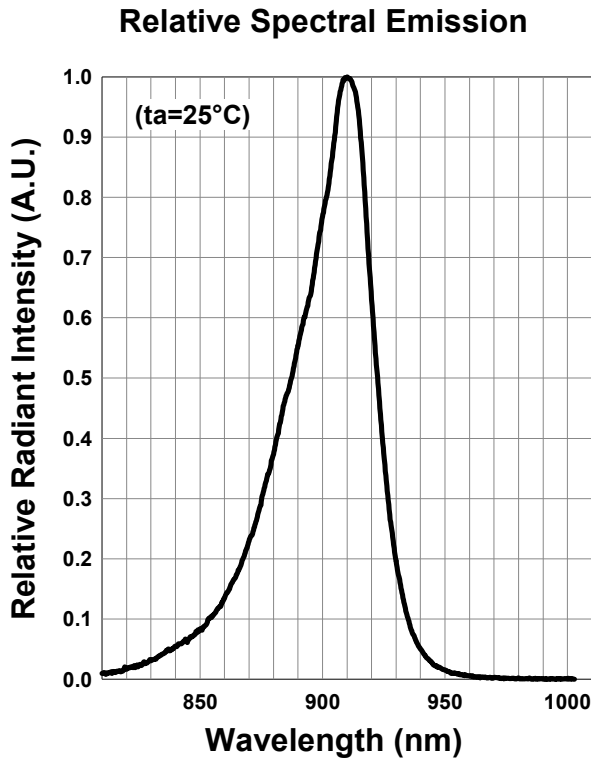


**Relative Radiant Intensity - Ambient Temperature**



**Peak Wavelength - Ambient Temperature**





**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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