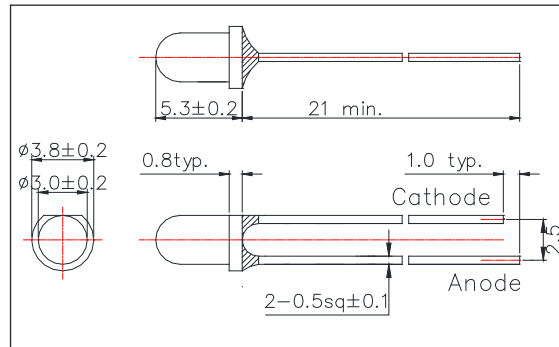


**L1450-33**  
Infrared LED Lamp

<Specifications>

- Chip Material: InGaAsP
- Chip Dimension: 300um x 300um
- Number of Chips: 1pcs
- Peak Wavelength: 1450nm typ.
- Package Type: Φ3mm Clear Molding
- Lead Frame: Soldered (Lead Free)
- Lens: Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Tc=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	130	W
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	1000	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	270	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	265	°C

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

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

Electro-Optical Characteristics[Tc= 25°C]						
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=50mA		0.9	1.3	V
	VFP	IPF=1A		1.7		
Total Radiated Power*	PO	IF=50mA		3.0		mW
		IPF=1A		16		
Radiant Intensity**	IE	IF=50mA		13		mW/sr
		IPF=1A		70		
Peak Wavelength	λP	IF=50mA	1400		1500	nm
Half Width	Δλ	IF=50mA		110		nm
Viewing Half Angle	θ1/2	IF=50mA		±23		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		30		ns

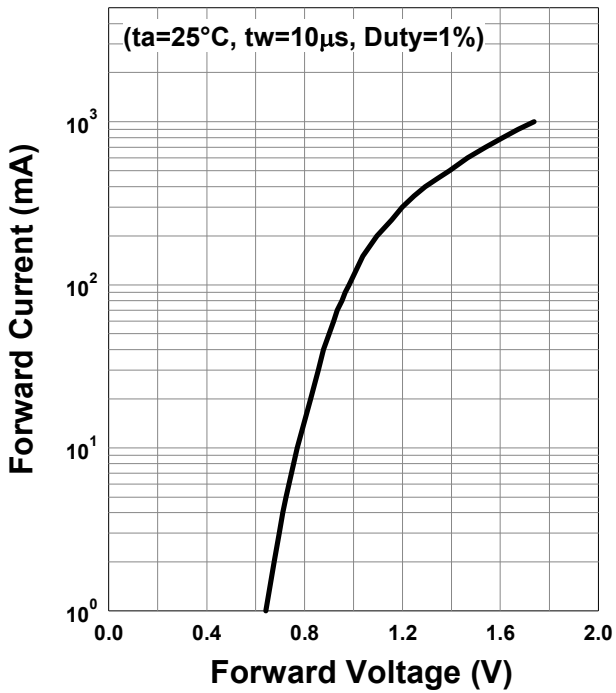
\* Measured by G8370-85

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

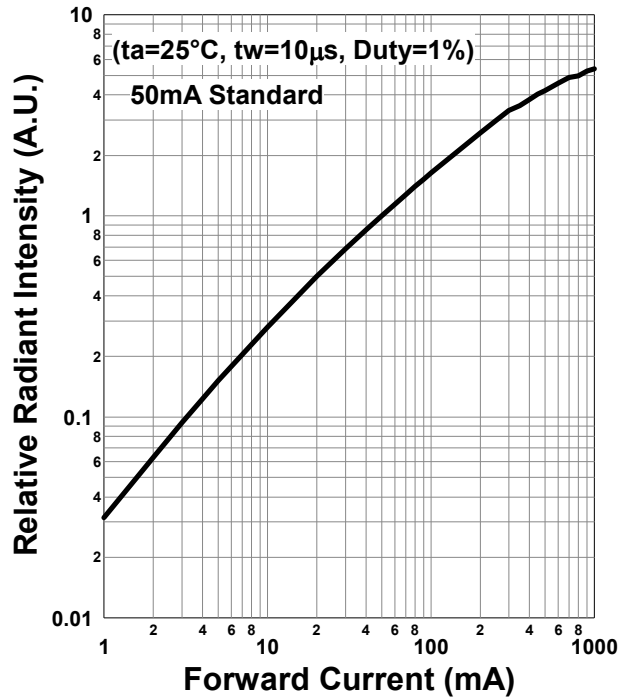


Typical Characteristic Curves

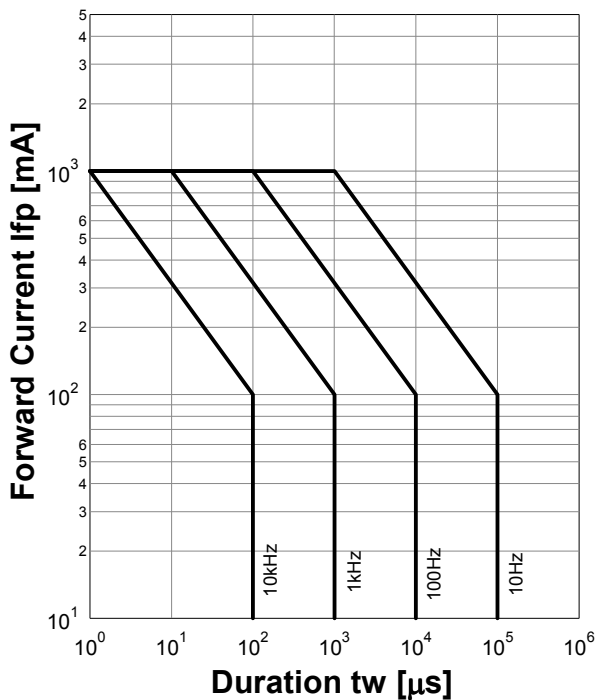
Forward Current - Forward Voltage



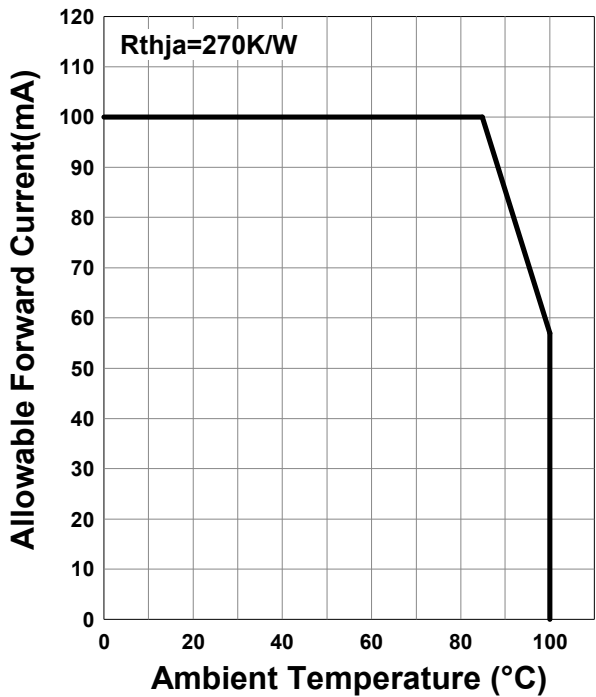
Relative Radiant Intensity - Forward Current

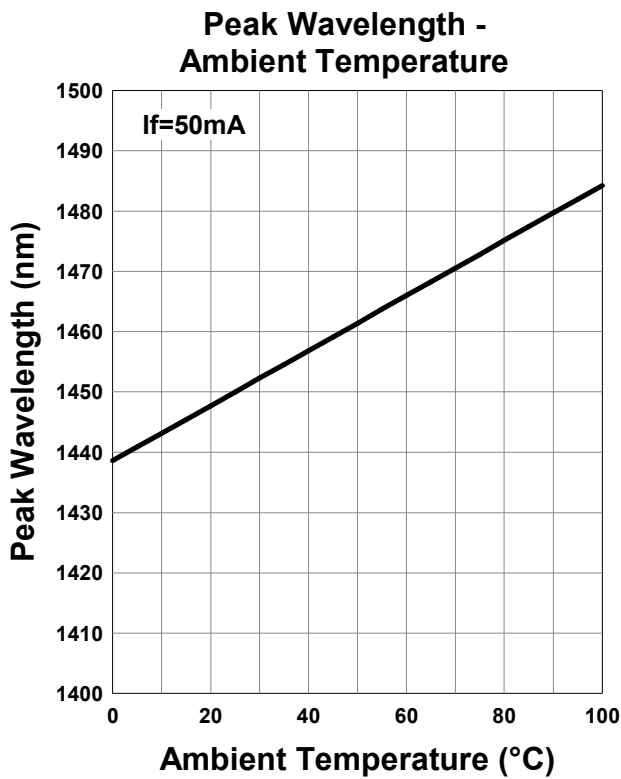
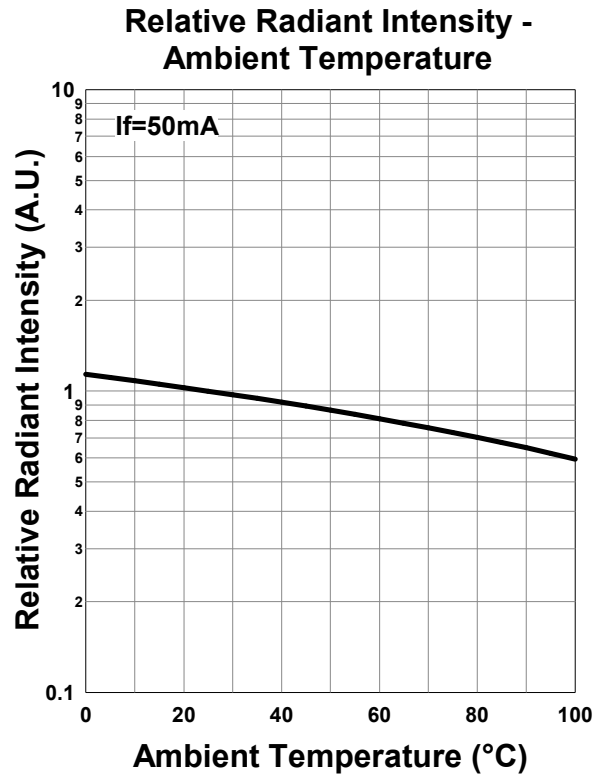
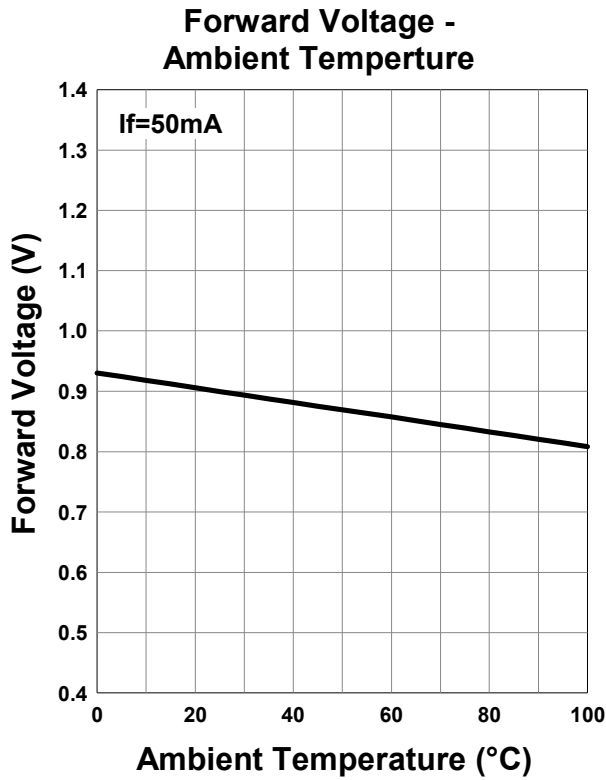


Forward Current - Pulse Duration

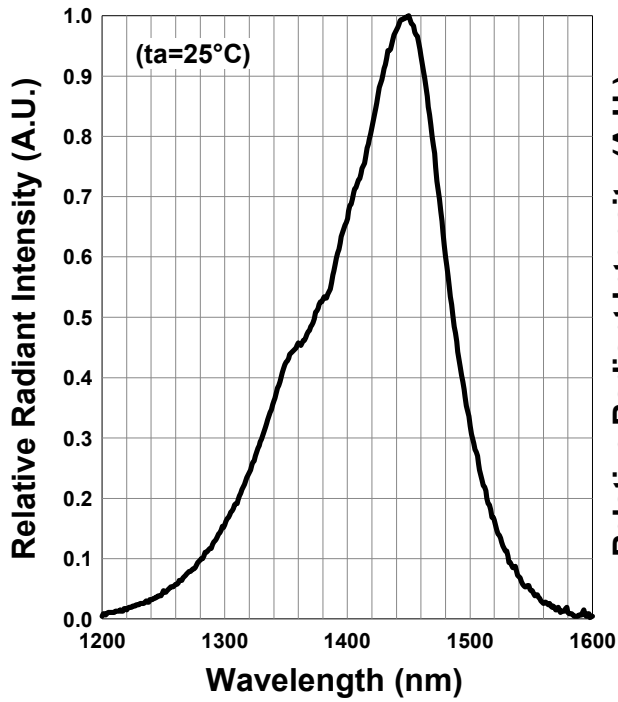


Allowable Forward Current - Ambient Temperature

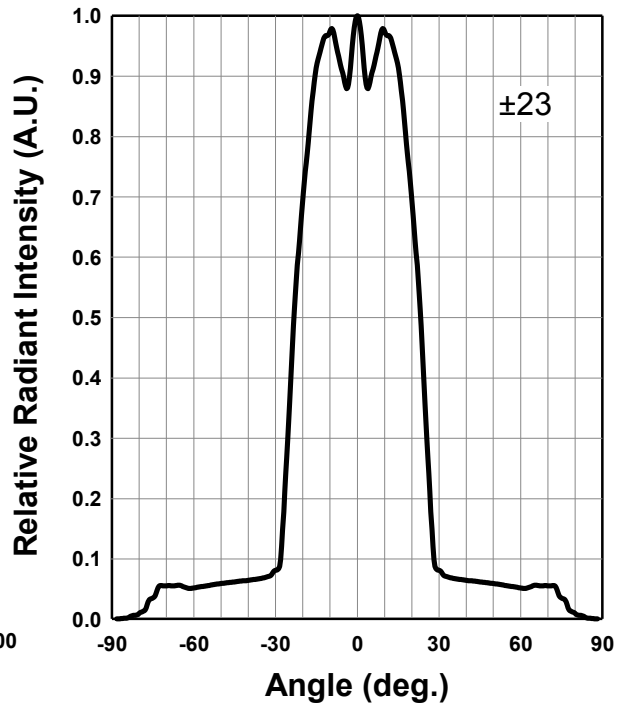




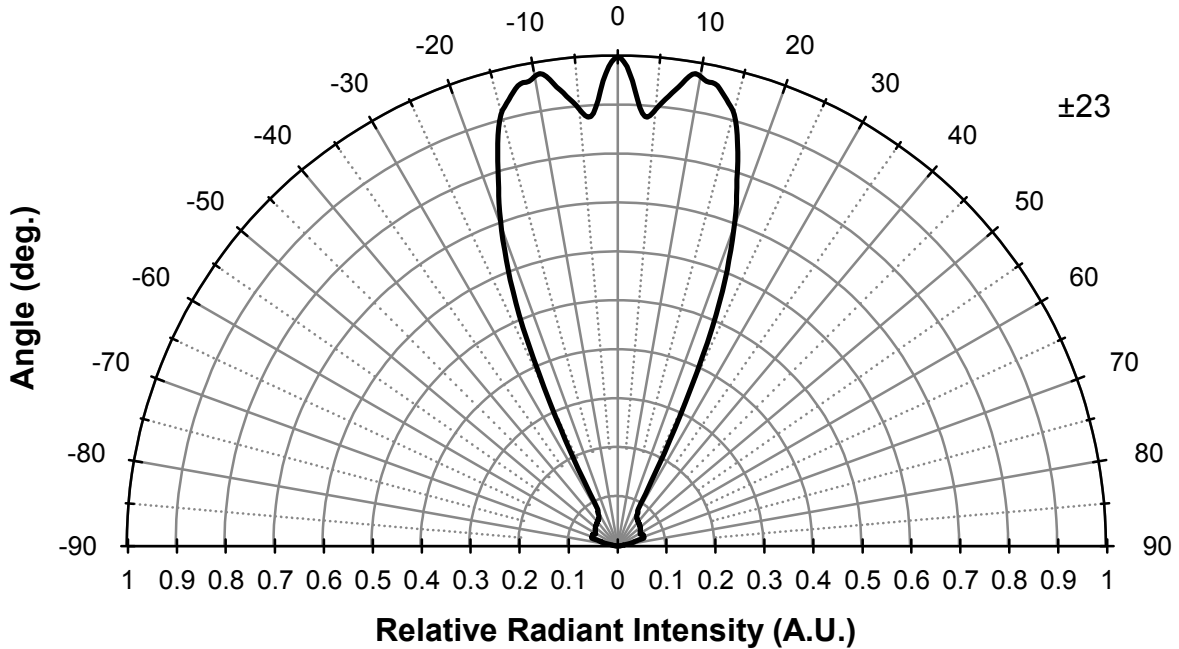
**Relative Spectral Emission**



**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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