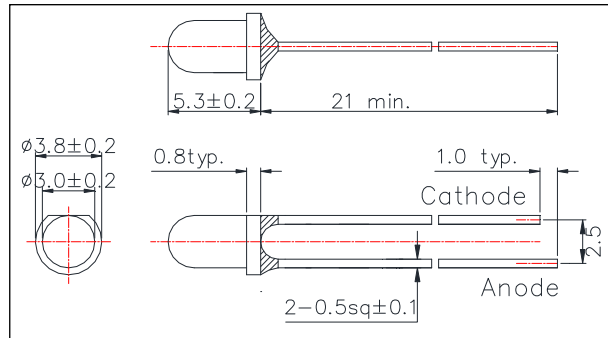


L780-33AU Infrared LED Lamp

<Specifications>

- Chip Material: AlGaAs
- Chip Dimension: 400um x 400um
- Number of Chips: 1pcs
- Peak wavelength: 780nm 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	200	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	500	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	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		1.7	2.0	V
	VFP	IFP=500A		3.5		
Total Radiated Power*	PO	IF=50mA		24		mW
		IFP=500A		230		
Radiant Intensity**	IE	IF=50mA		56		mW/sr
		IFP=500A		540		
Peak Wavelength	λP	IF=50mA	770		790	nm
Half Width	Δλ	IF=50mA		27		nm
Viewing Half Angle	θ1/2	IF=50mA		±18		deg
Rise Time	tr	IF=50mA		30		ns
Fall Time	tf	IF=50mA		30		ns

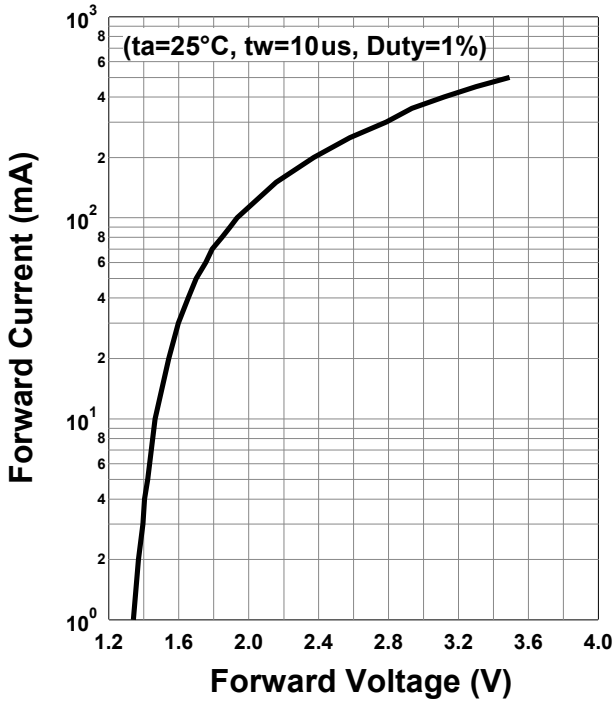
* Measured by S3584-08

** Measured by CIE127-2007 Condition B

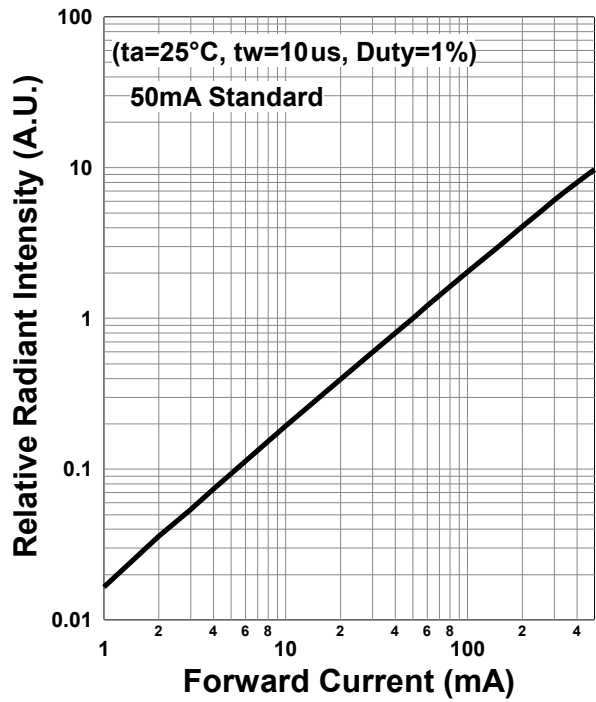


Typical Characteristic Curves

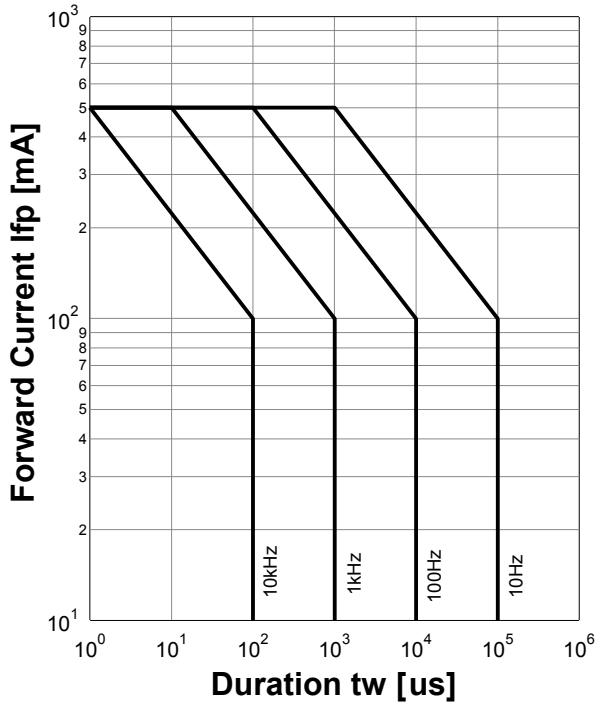
Forward Current - Forward Voltage



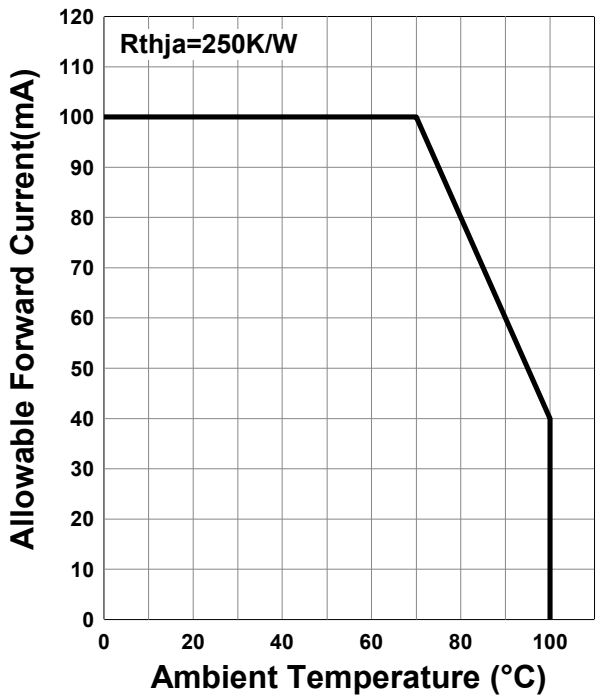
Relative Radiant Intensity - Forward Current



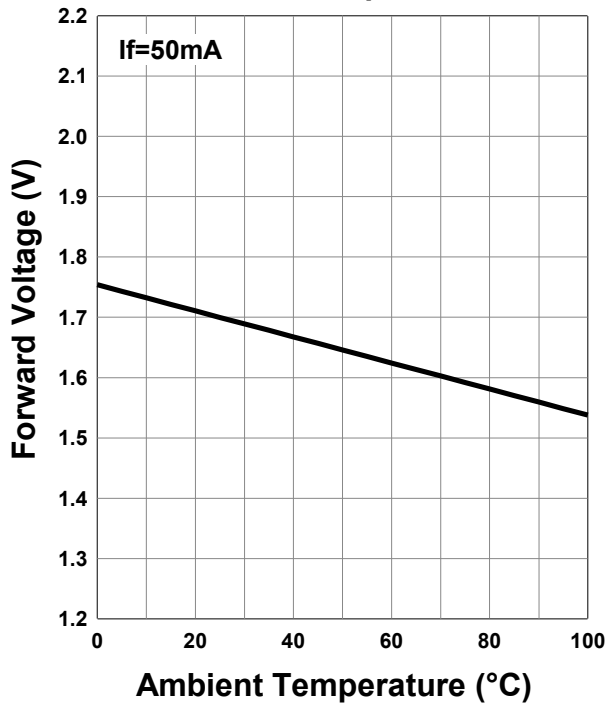
Forward Current - Pulse Duration



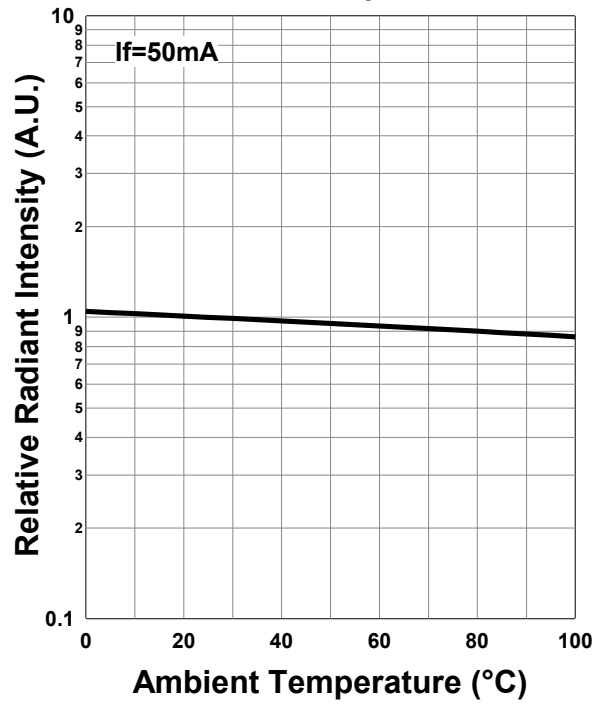
Allowable Forward Current - Ambient Temperature



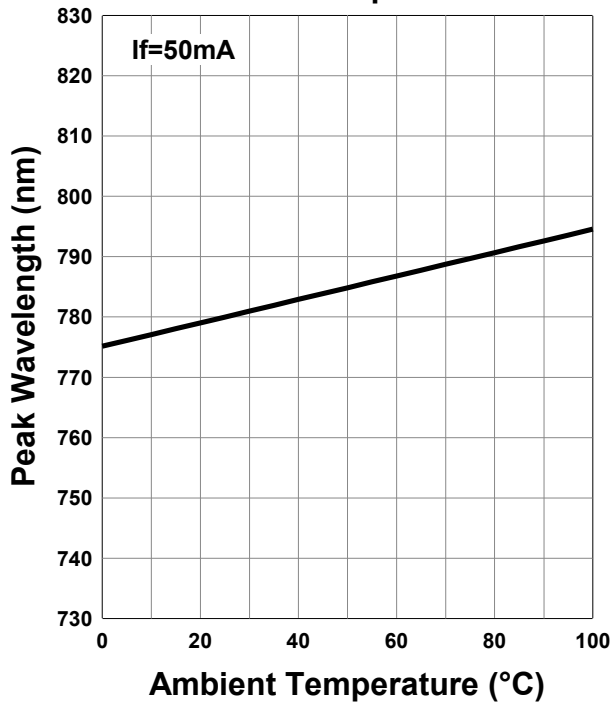
Forward Voltage - Ambient Temperature



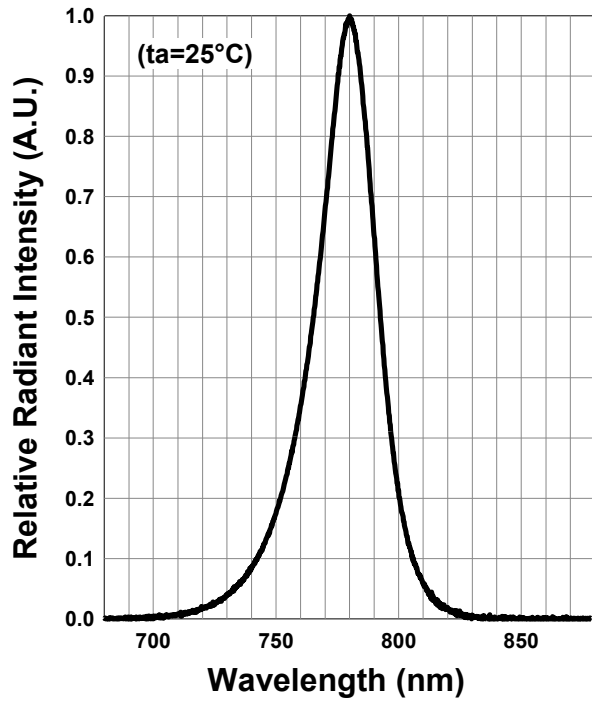
Relative Radiant Intensity - Ambient Temperature



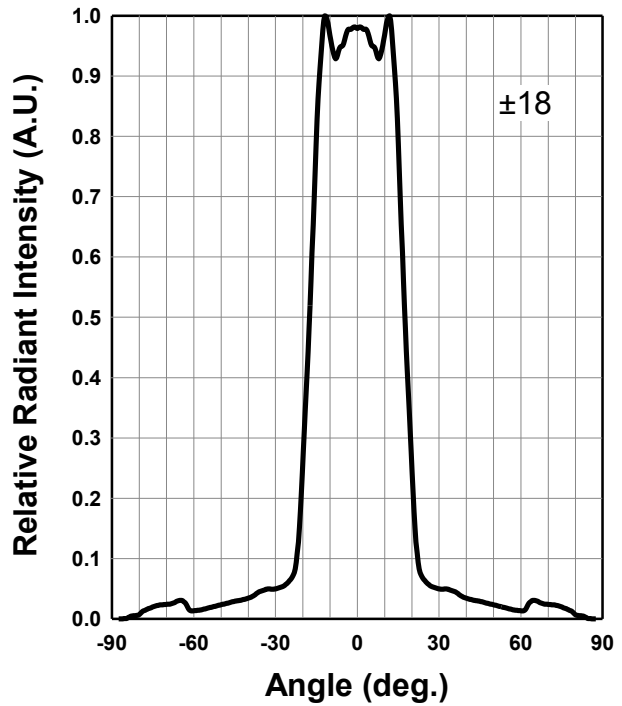
Peak Wavelength - Ambient Temperature



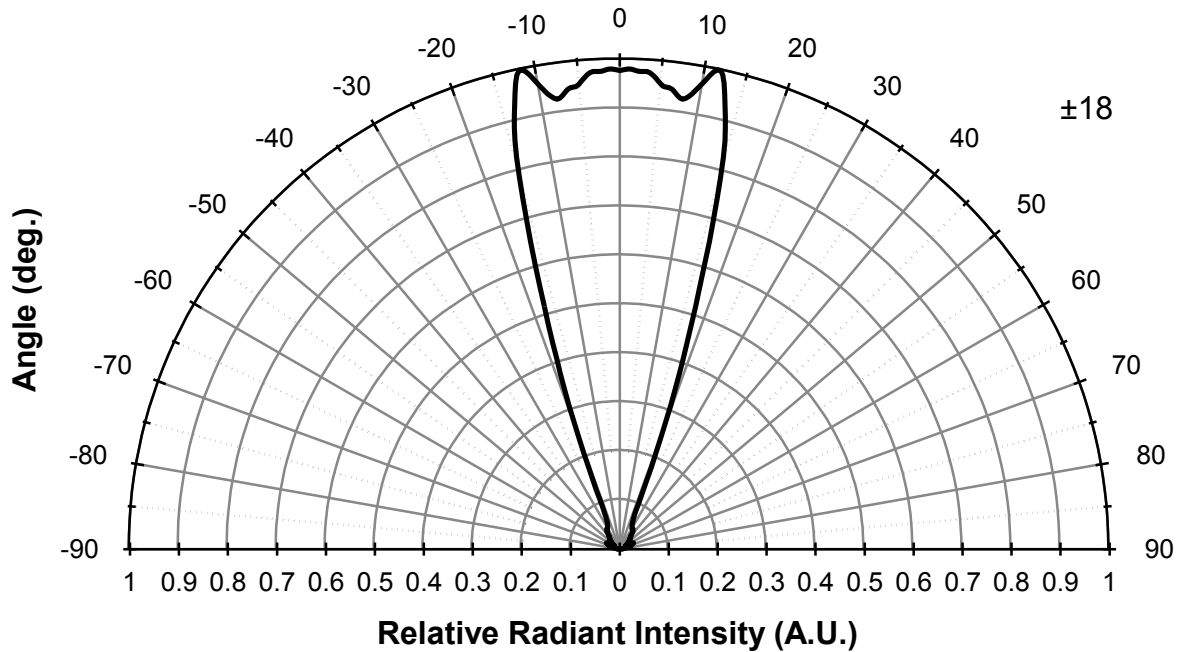
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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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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