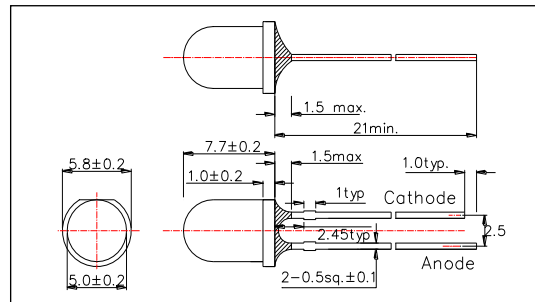


L980D-04
Infrared LED Lamp

<Specifications>

- Chip Material: AlGaAs
- Peak Wavelength: 980nm 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	Maximum Rated Value	Unit
Power Dissipation	PD	180	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	200	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 3 second at 250 °C.

Electro-Optical Characteristics[Tc=25°C]						
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=50mA		1.5	1.8	V
	VFP	IFP=1A		4.2		
Total Radiated Power*	PO	IF=50mA		30		mW
		IFP=1A		210		
Radiant Intensity**	IE	IF=50mA		50		mW
		IFP=1A		350		
Peak Wavelength	λP	IF=50mA	970	980	990	nm
Half Width	Δλ	IF=50mA		80		nm
Viewing Half Angle	θ1/2	IF=50mA		±3		deg
Rise Time	tr	IF=50mA		10		ns
Fall Time	tf	IF=50mA		10		ns

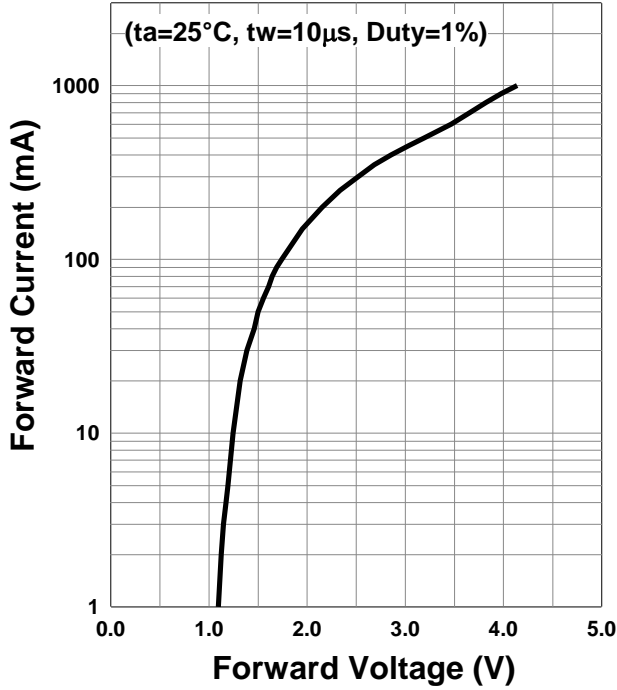
* Measured by S3584-08

** Measured by CIE127-2007 Condition B

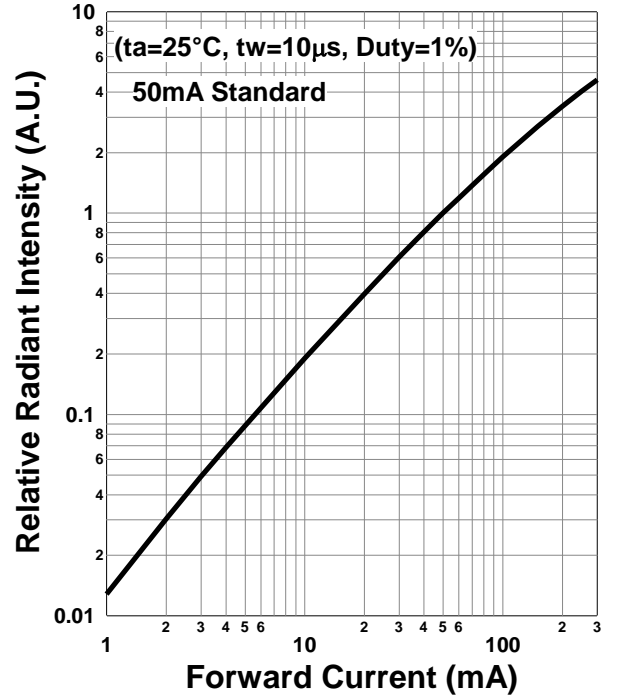


Typical Characteristic Curves

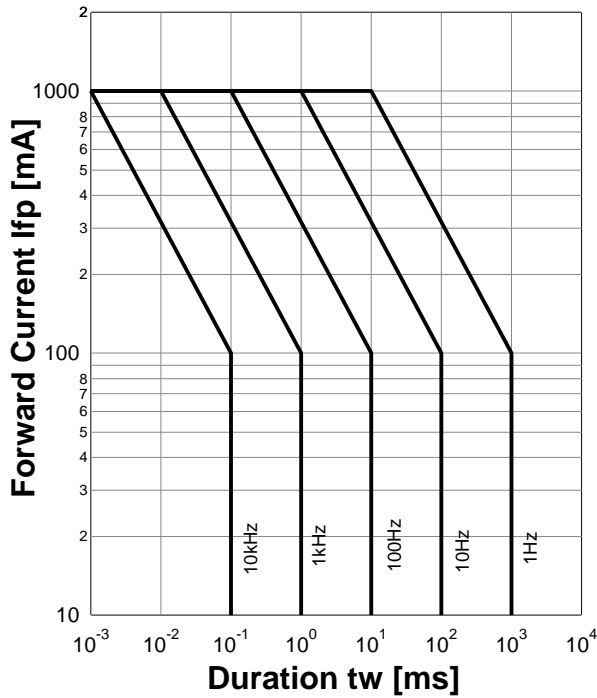
Forward Current - Forward Voltage



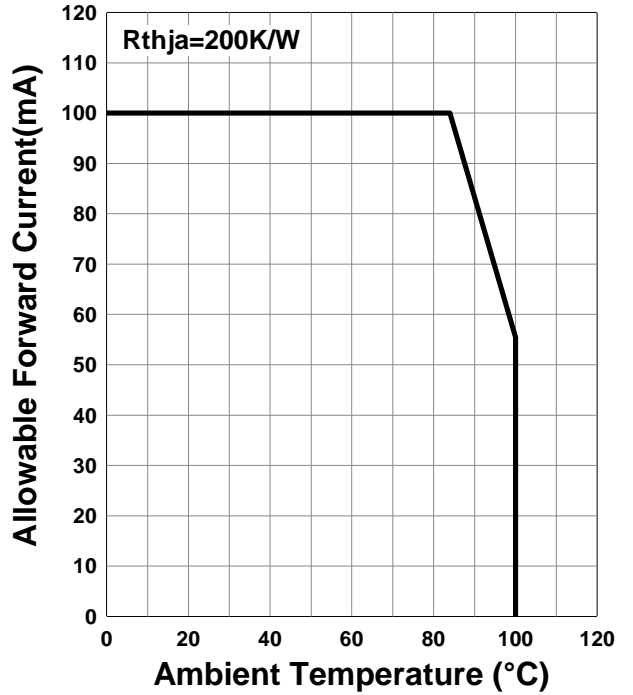
Relative Radiant Intensity - Forward Current

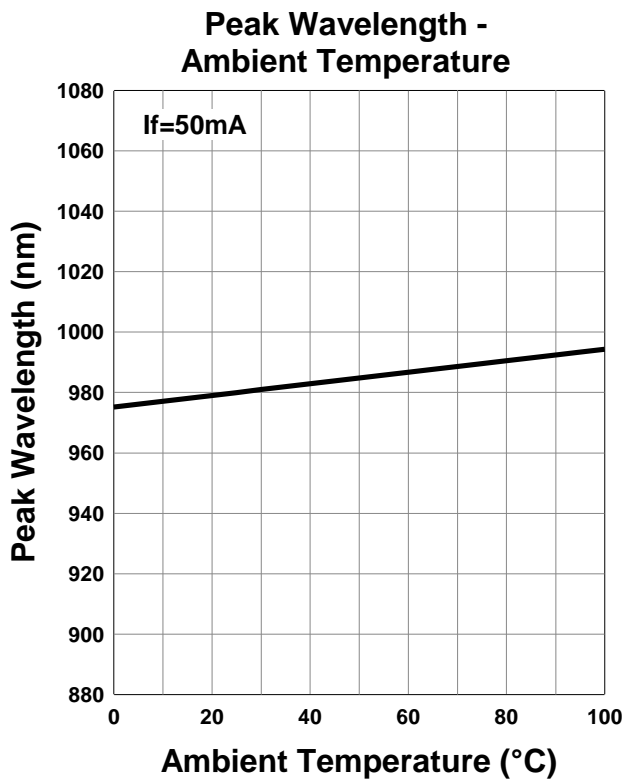
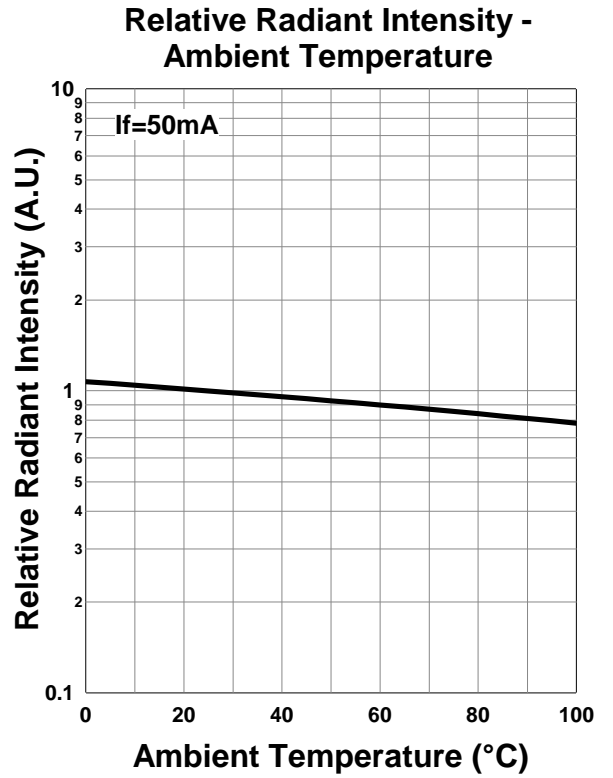
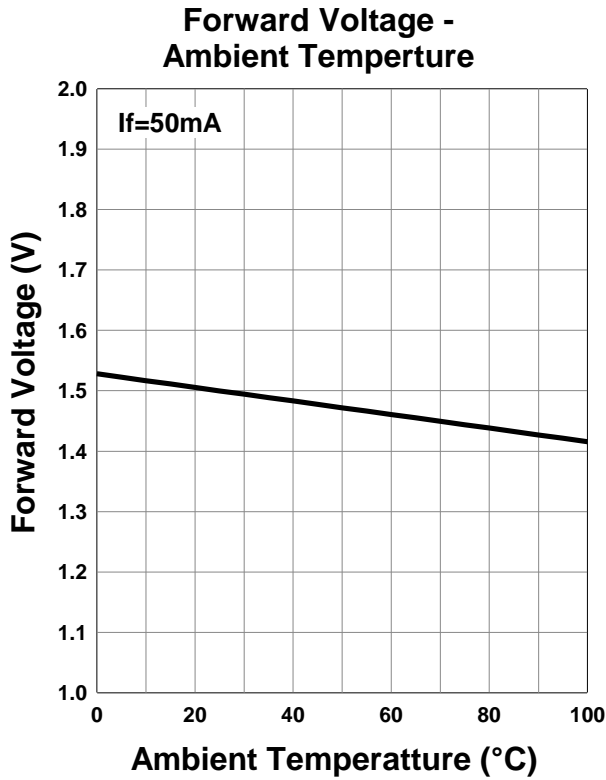


Forward Current - Pulse Duration

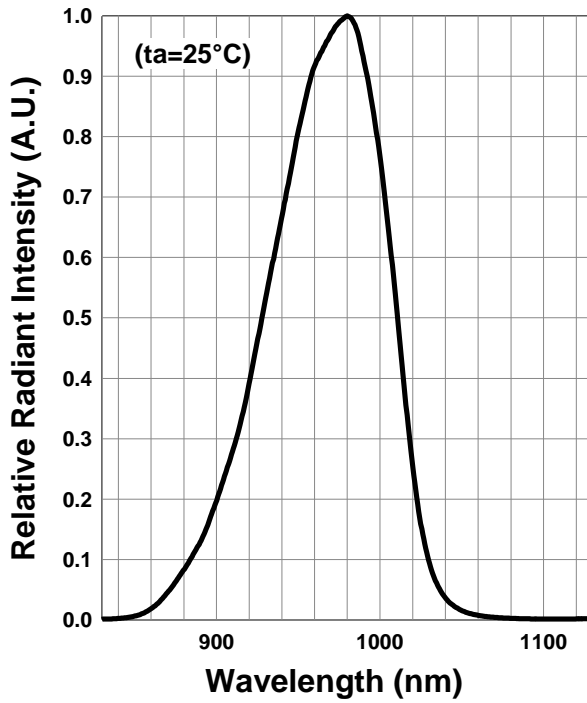


Allowable Forward Current - Ambient Temperature

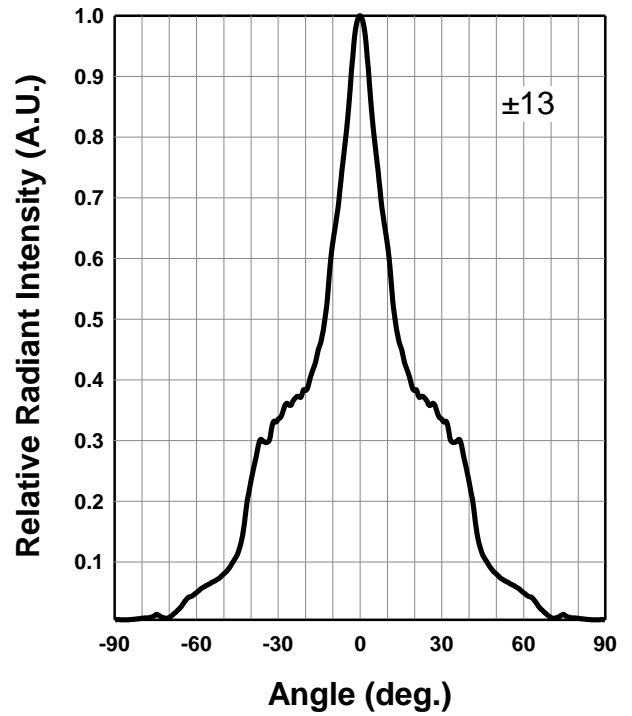




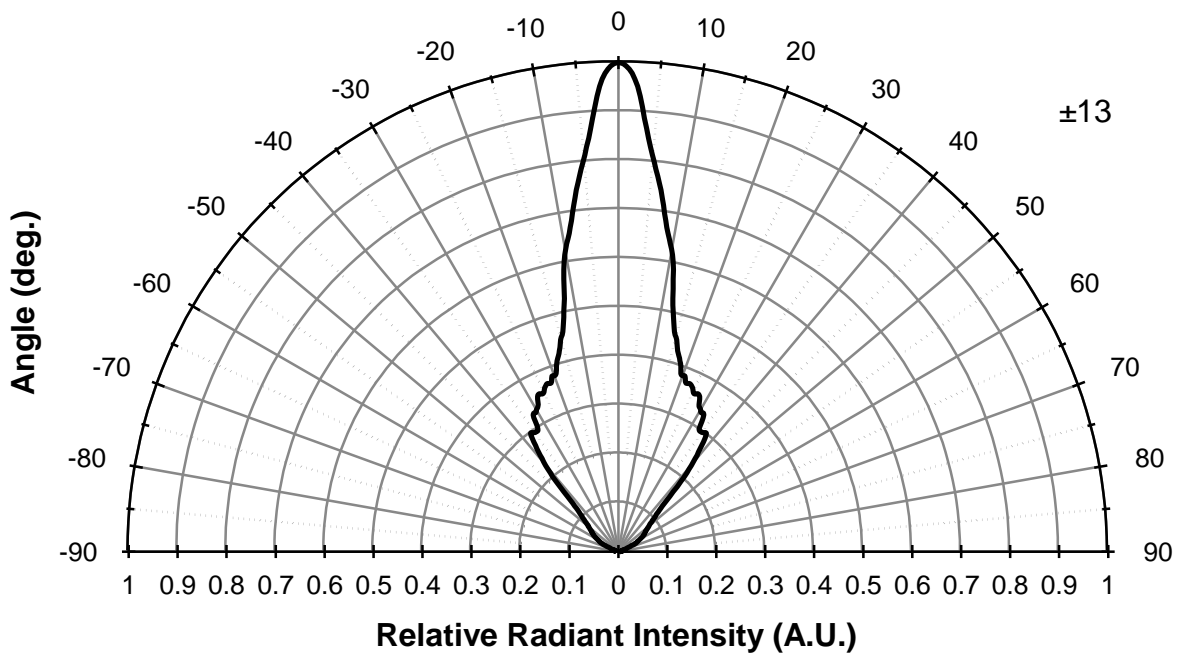
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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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