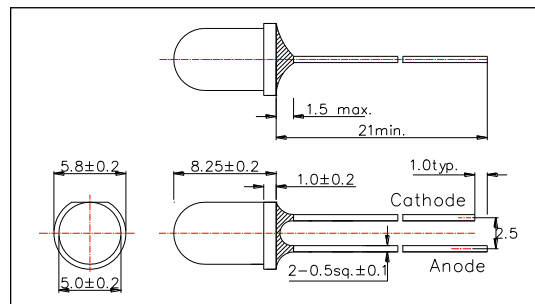


L980D-03
Infrared LED Lamp

<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 5 second at 250 °C.

Electro-Optical Characteristics [Ta=25°C typ.]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.5	1.8	V
		IF=100mA, T=20ms		1.7		
	VFP	IFP=1A		4.2		
Radiated Power*	PO	IF=50mA		30		mW
		IF=100mA, T=20ms		57		
		IFP=1A		210		
Radiant Intensity**	IE	IF=50mA		110		mW/sr
		IFP=1A		780		
Peak Wavelength	λP	IF=50mA	970	980	990	nm
Half Width	Δλ	IF=50mA		80		nm
Viewing Half Angle	θ1/2	IF=50mA		± 12		Deg.
Rise Time	tr	IF=50mA		10		ns
Fall Time	tr	IF=50mA		10		ns

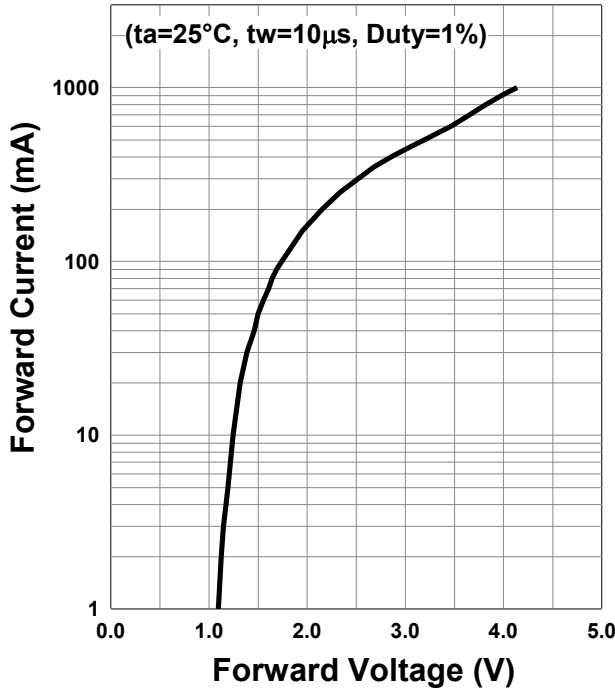
* Measured by S3584-08

** Measured by CIE127-2007 Condition B.

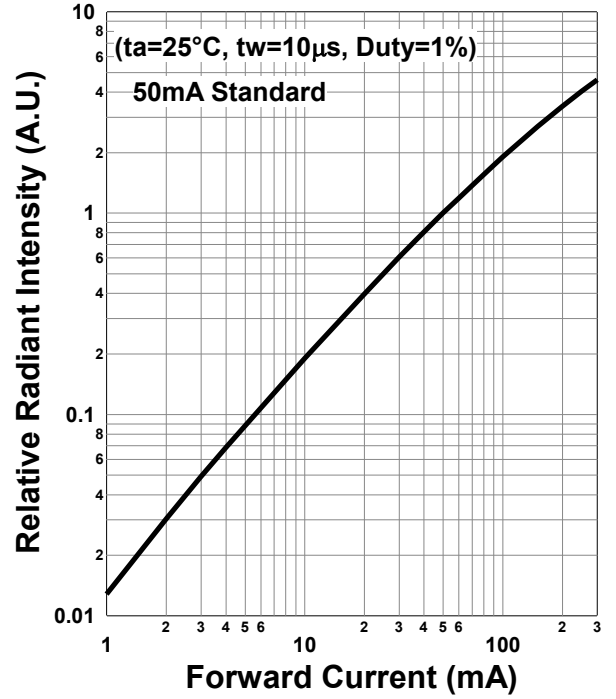


Typical Characteristic Curves

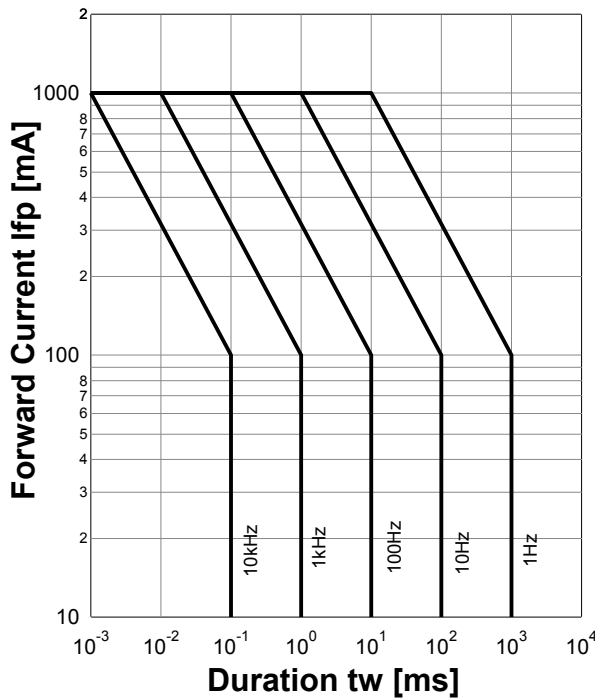
Forward Current - Forward Voltage



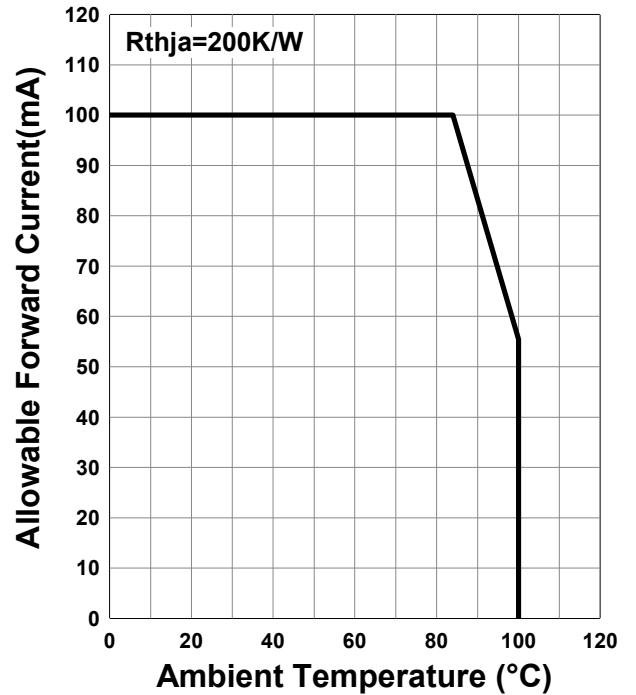
Relative Radiant Intensity - Forward Current

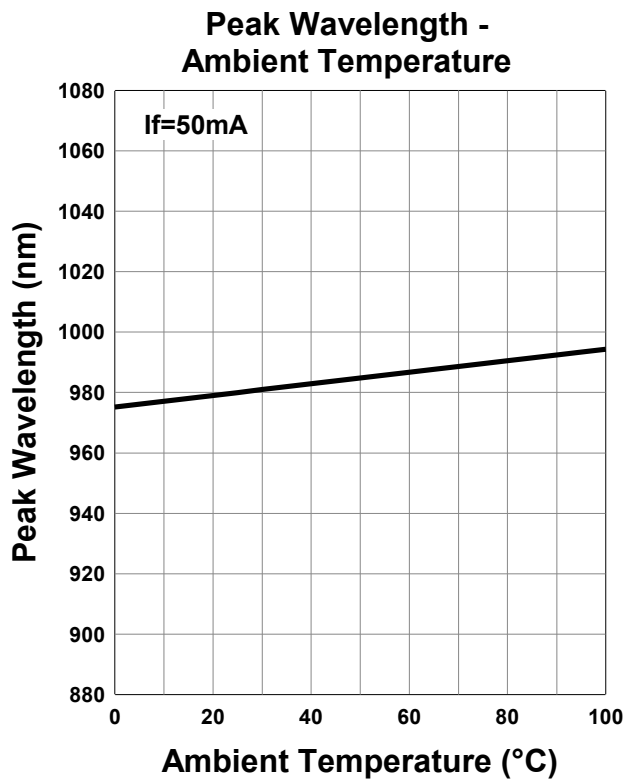
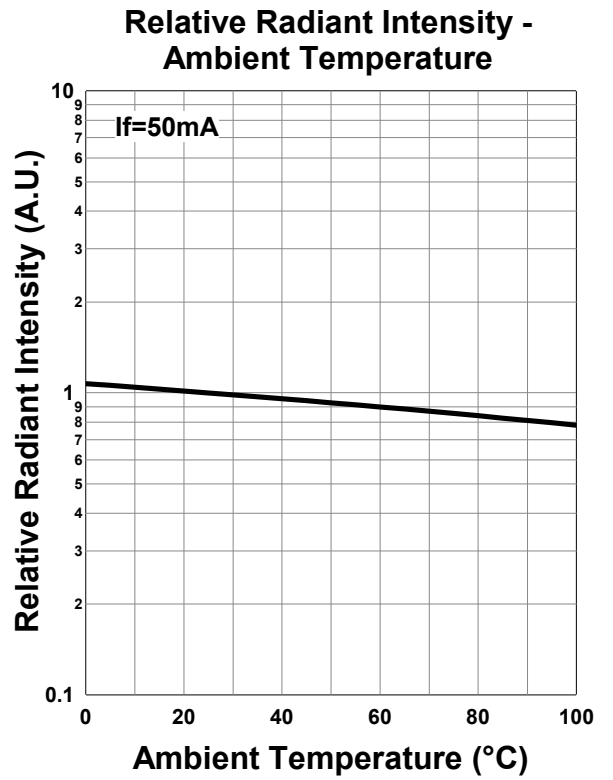
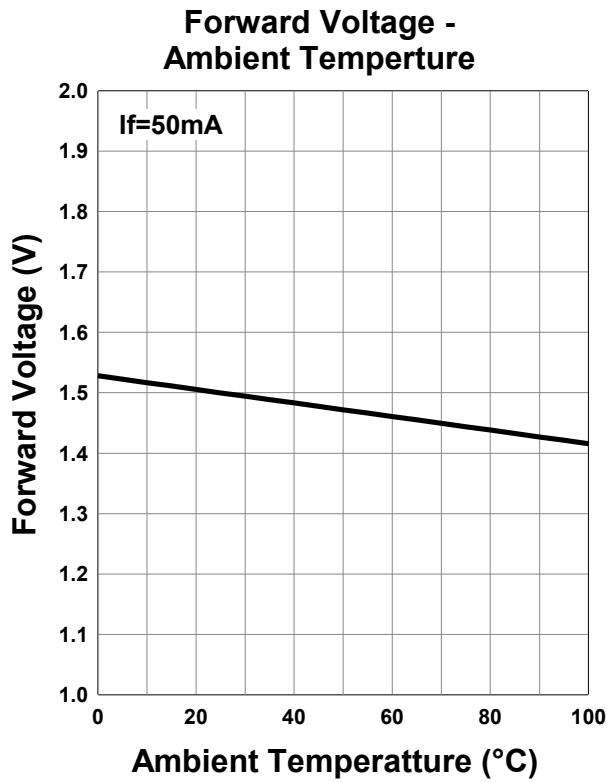


Forward Current - Pulse Duration

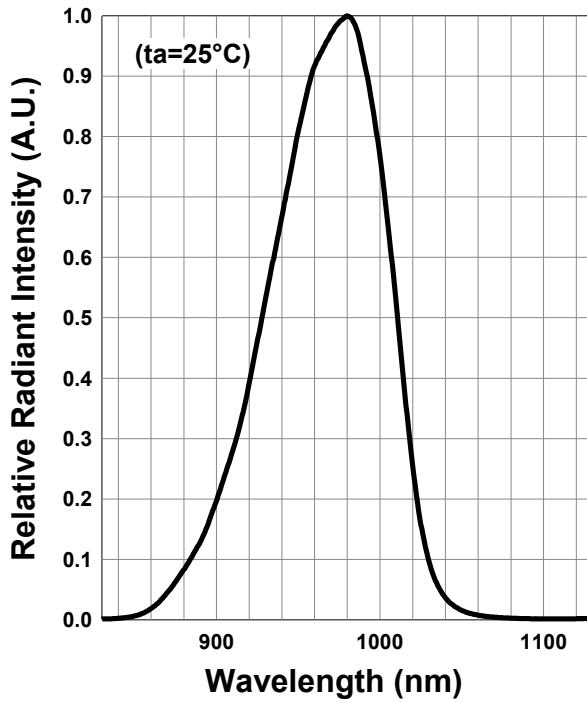


Allowable Forward Current - Ambient Temperature

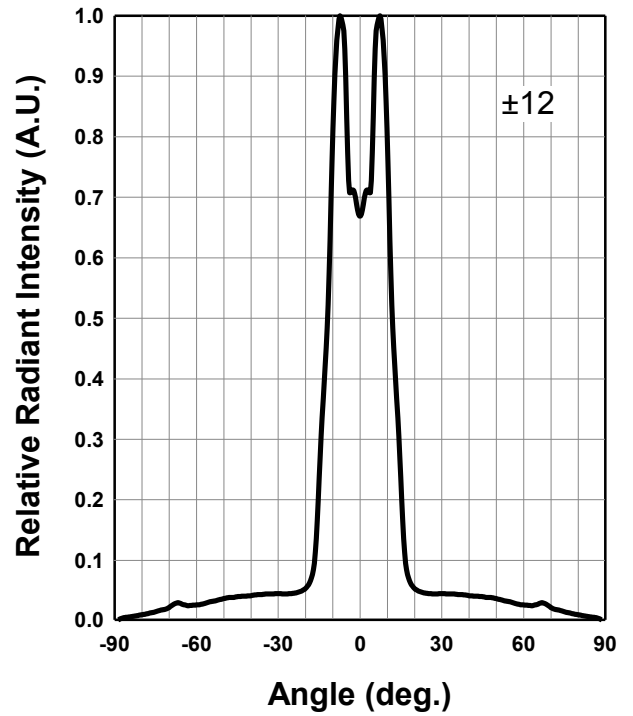




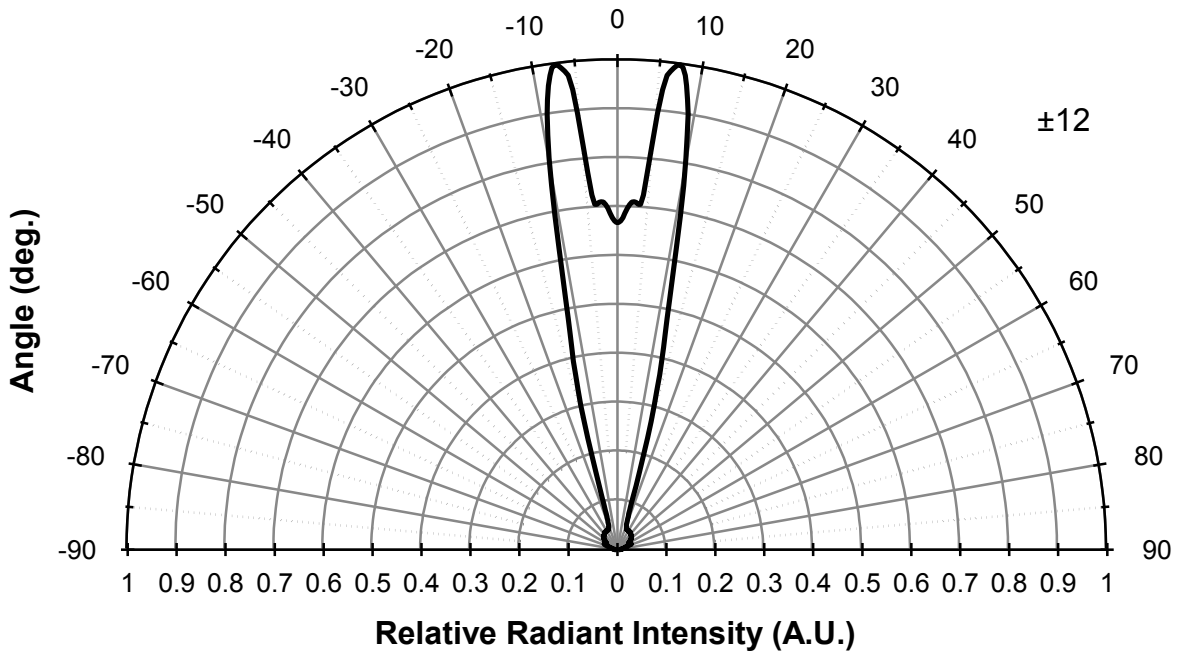
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



Disclaimer

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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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2015.07