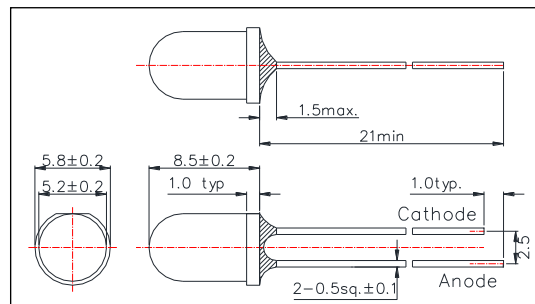


**L980-02**  
Infrared LED Lamp

<Specifications>

- Chip Material: GaAs
- 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	140	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	250	K/W
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 3seconds at 265°C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.3	1.4	V
	VFP	IFP=1A		2.1		
Total Radiated Power*	PO	IF=50mA		17		mW
		IFP=1A		150		
Radiant Intensity**	IE	IF=50mA		170		mW/sr
		IFP=1A		1500		
Peak Wavelength	λP	IF=50mA	970		990	nm
Half Width	Δλ	IF=50mA		37		nm
Viewing half Angle	θ1/2	IF=50mA		±9		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		15		ns

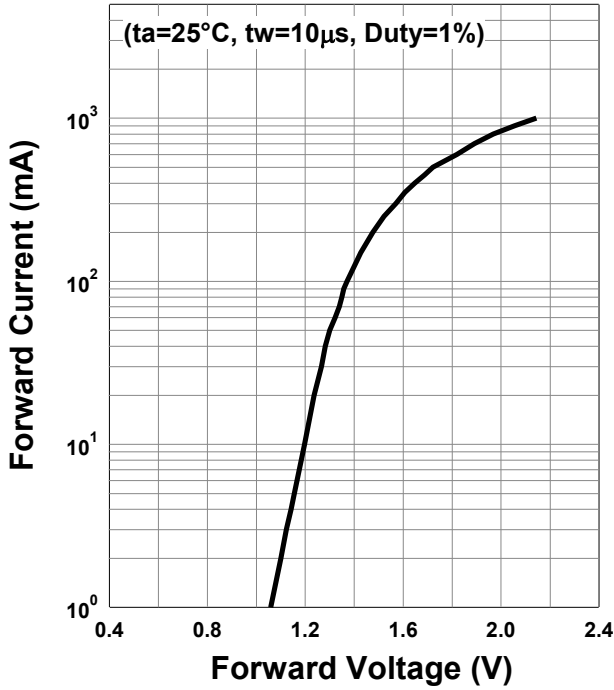
\* Measured by S3584-08

\*\* Measured by CIE127-2007 Condition B.

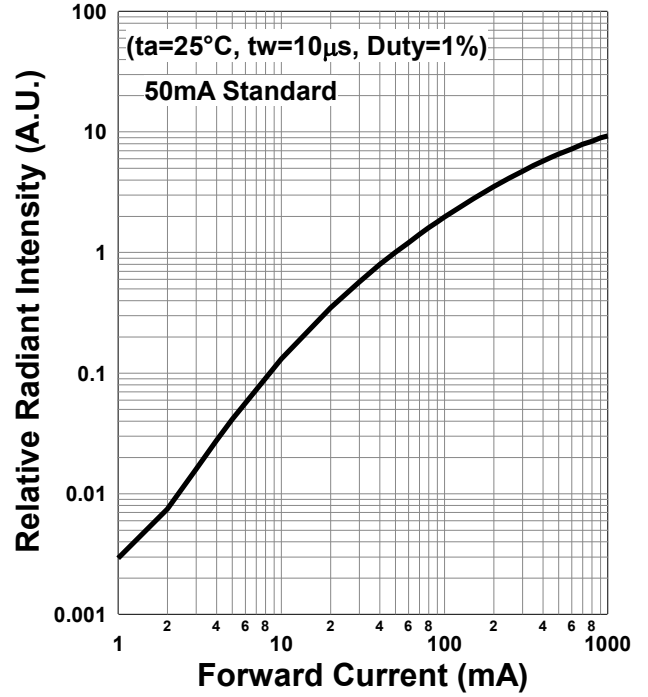


Typical Characteristic Curves

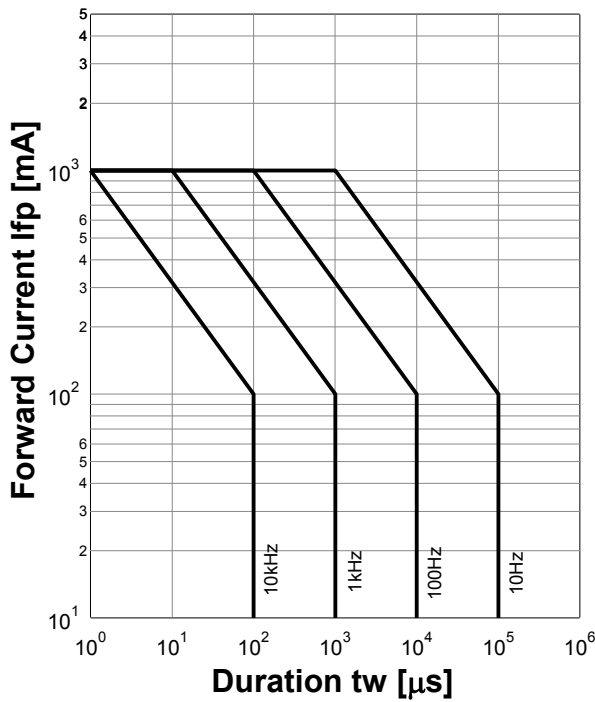
Forward Current - Forward Voltage



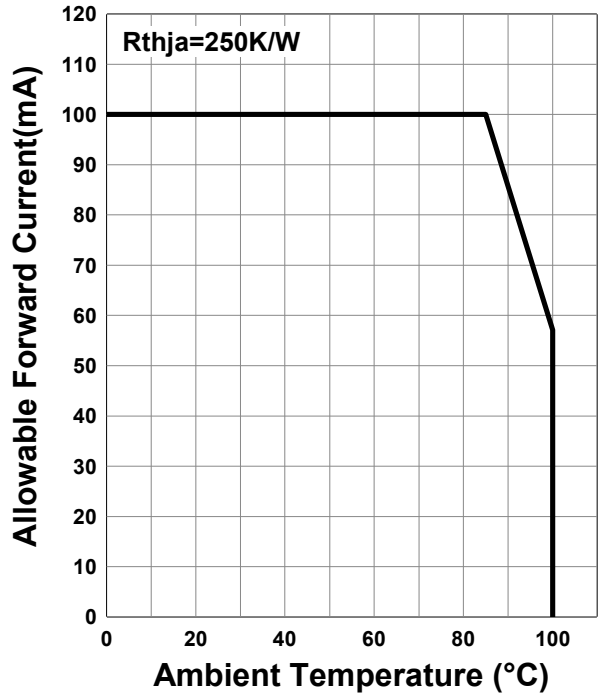
Relative Radiant Intensity - Forward Current

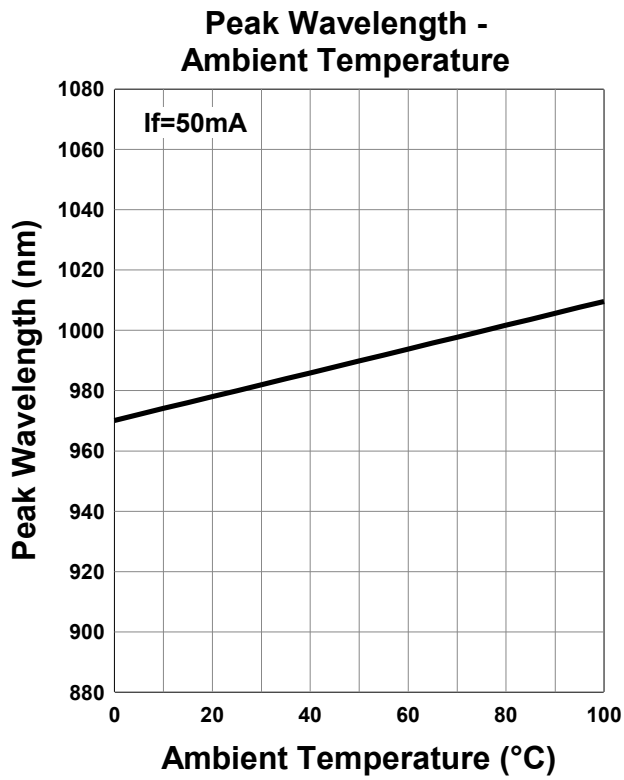
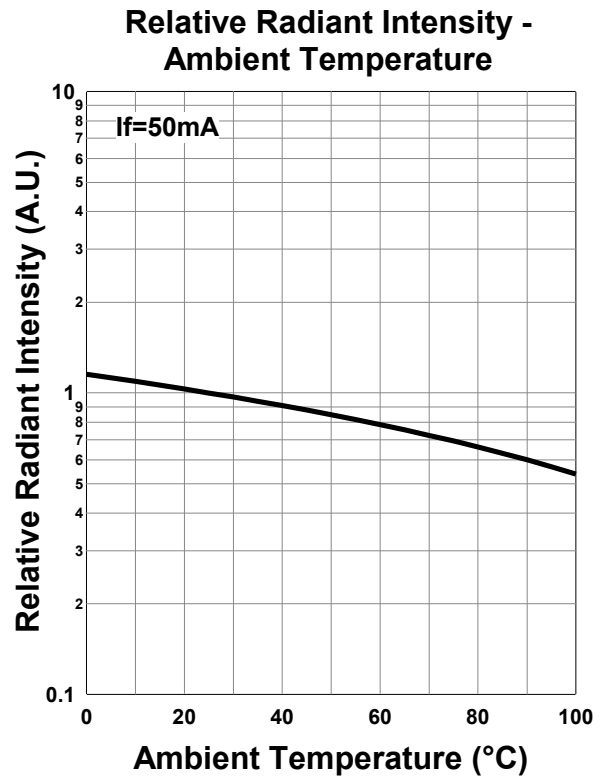
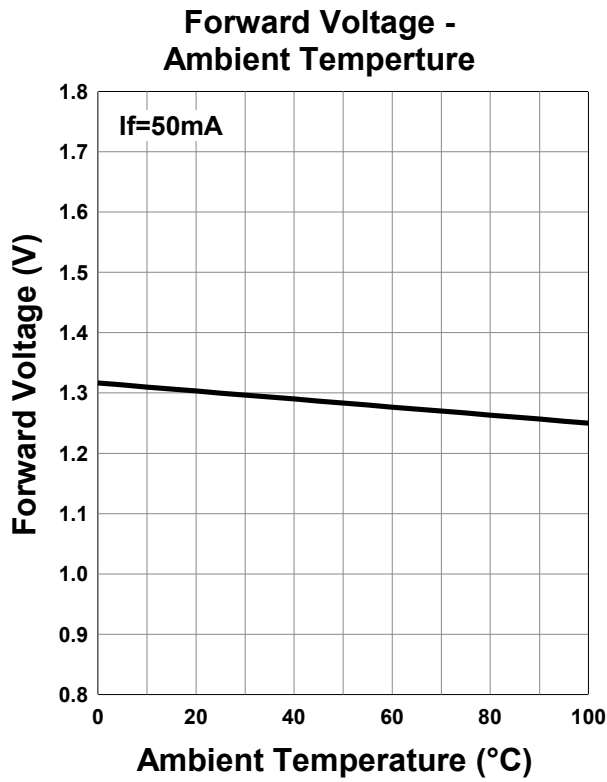


Forward Current - Pulse Duration

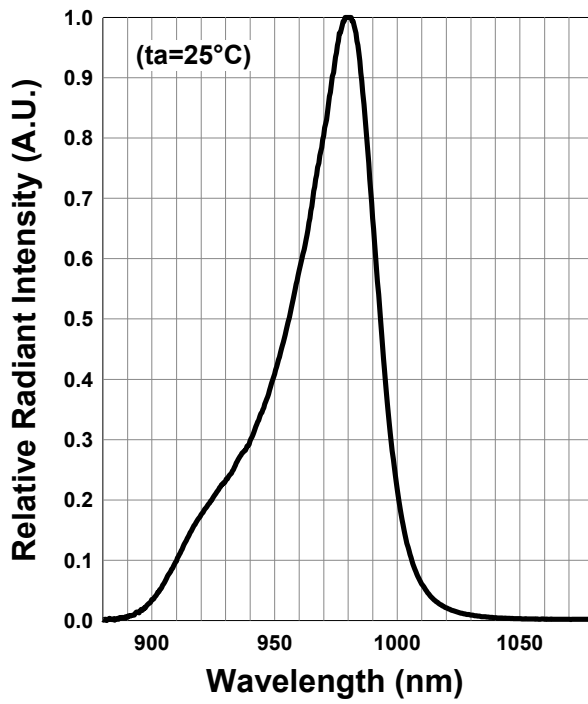


Allowable Forward Current - Ambient Temperature

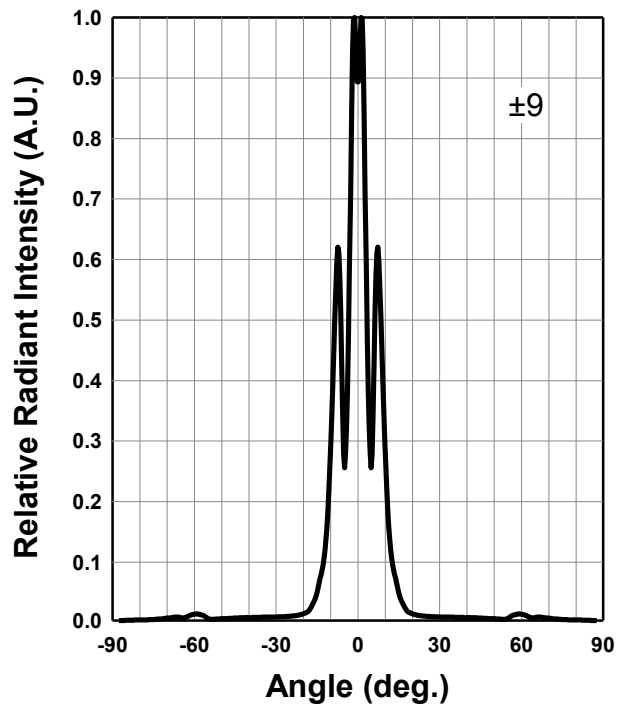




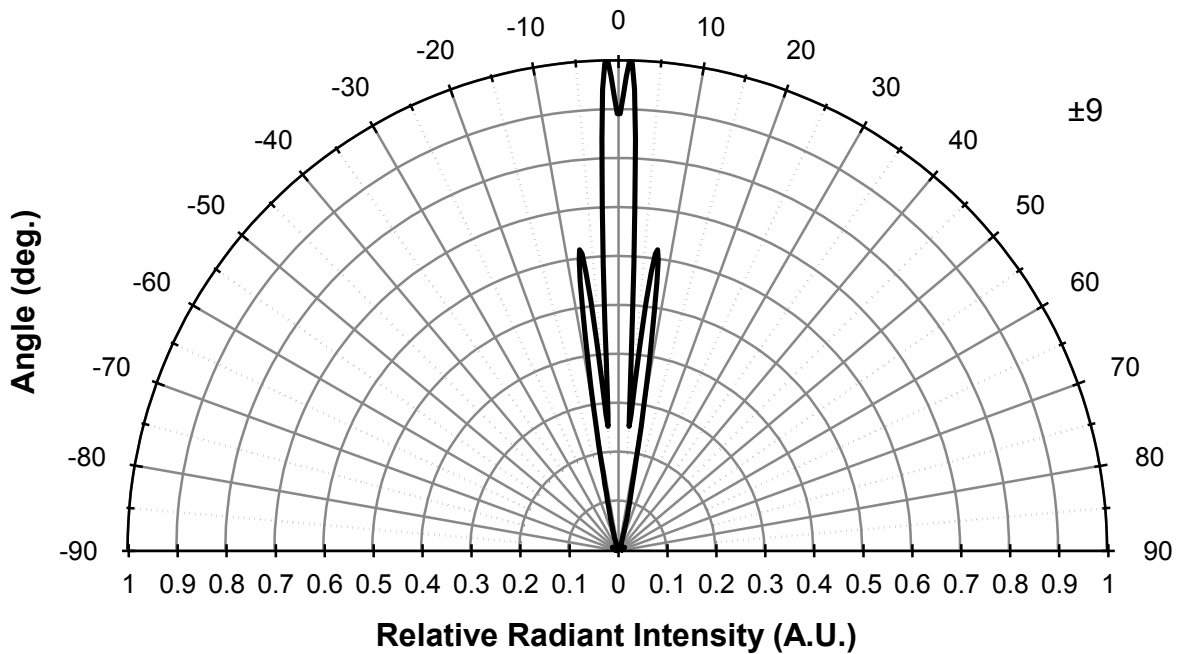
**Relative Spectral Emission**



**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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