

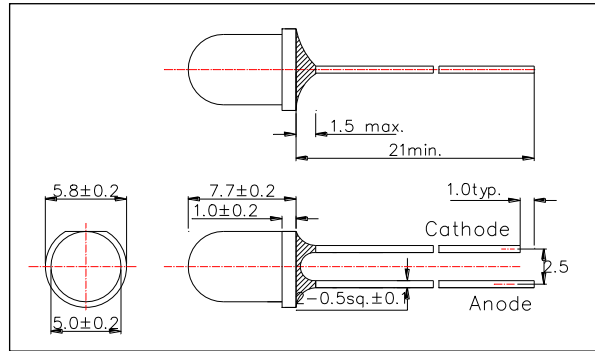
L680-04AU Infrared LED Lamp

L680-04AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation that peaks at 680nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L680-04AU
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 680nm typ.
4. Package
 - Type: Φ5mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	120	mW
Forward Current	IF	50	mA
Pulse Forward Current*	IFP	200	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	120	°C
Thermal Resistance	Rthjp	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.

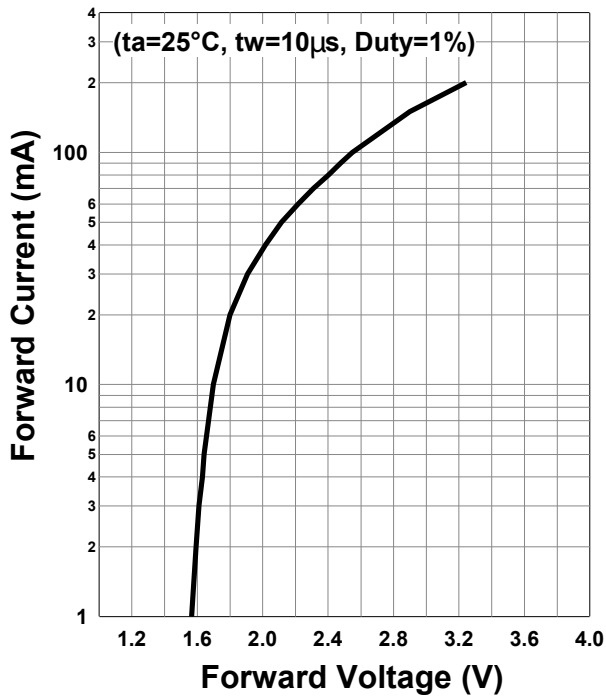
Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		1.8	2.3	V
Reverse Current	IR	VR=5V			-	uA
Total Radiated Power*	PO	IF=20mA		8		mW
Radiant Intensity**	IE	IF=20mA		18		mW/sr
Peak Wavelength	IV	IF=20mA	670	680	690	nm
Half Width	Δλ	IF=20mA		22		nm
Viewing Half Angle	θ1/2	IF=20mA		±12		deg
Rise Time	tr	IF=20mA		35		ns
Fall Time	tf	IF=20mA		30		ns

* Measured by S3584-08

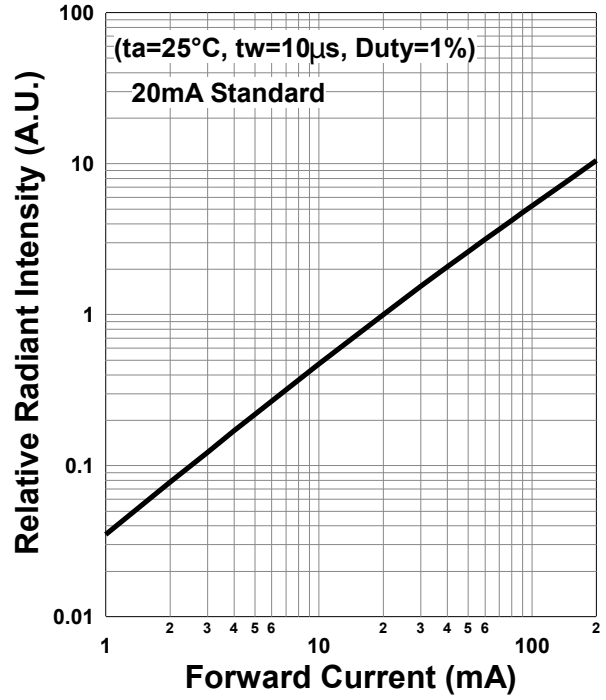
** Measured by CIE127-2007 Condition B.



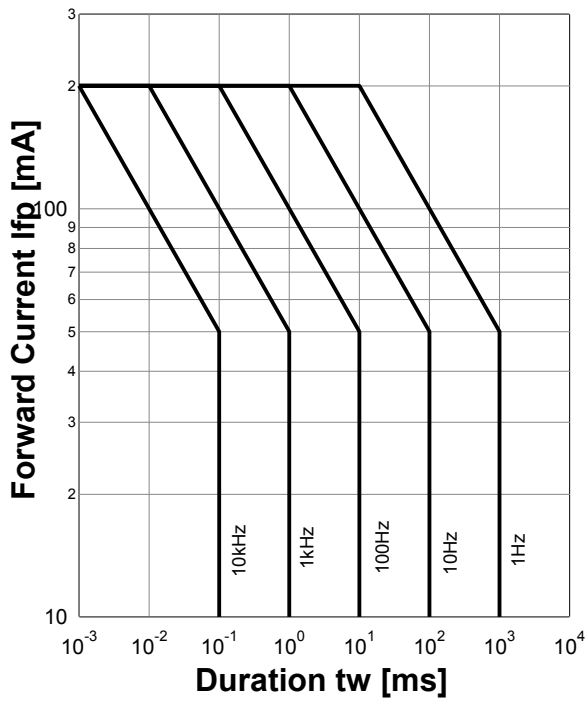
Forward Current - Forward Voltage



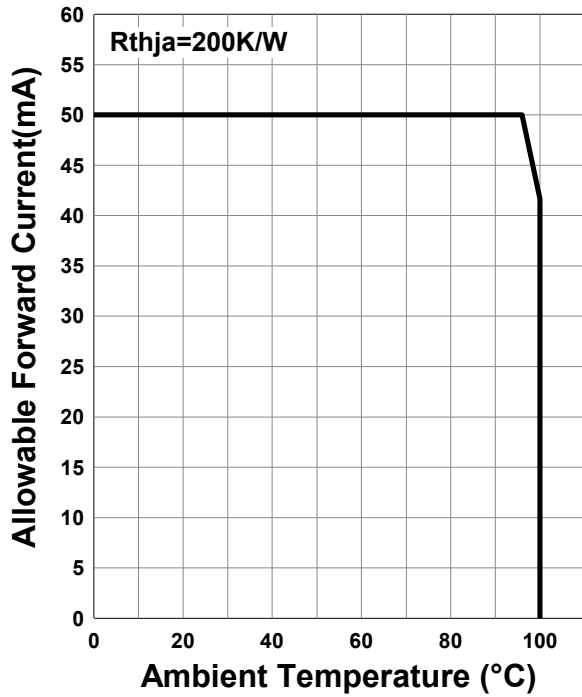
Relative Radiant Intensity - Forward Current

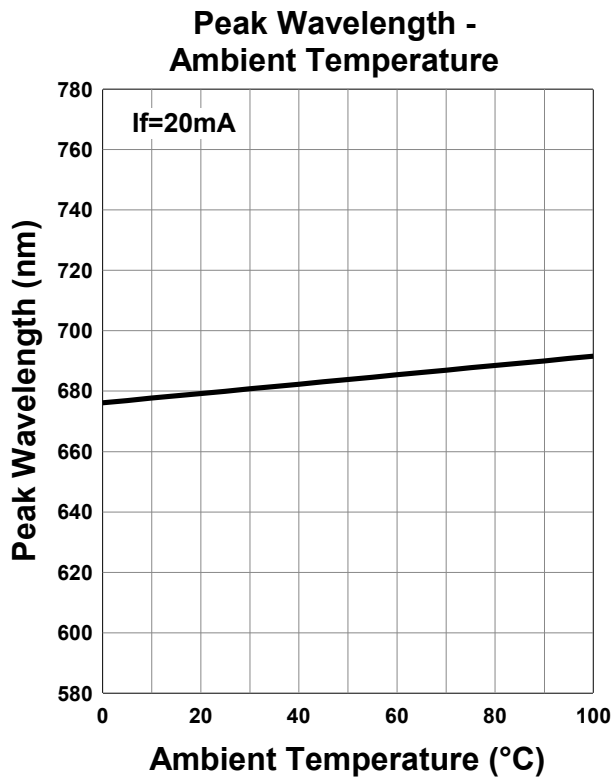
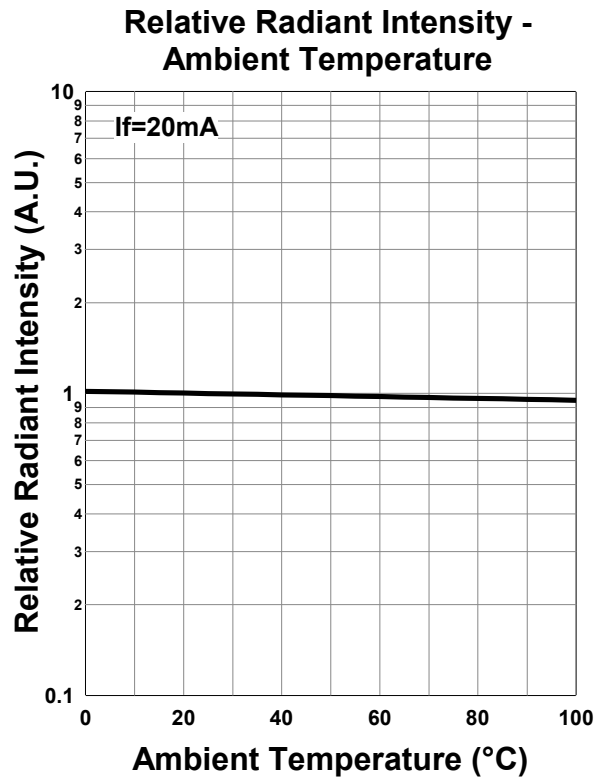
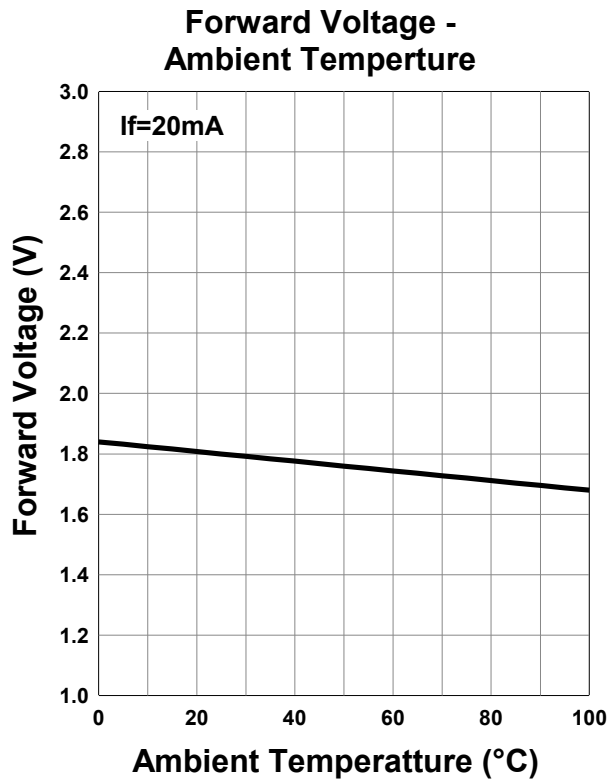


Forward Current - Pulse Duration

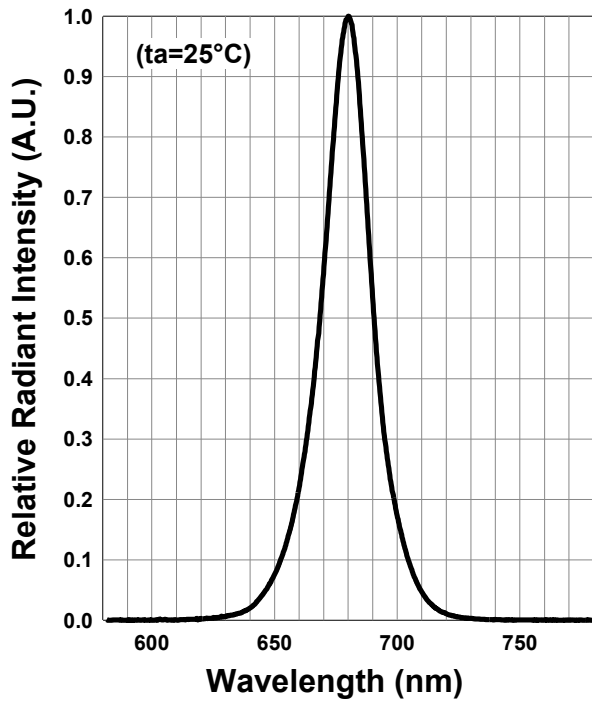


Allowable Forward Current - Ambient Temperature

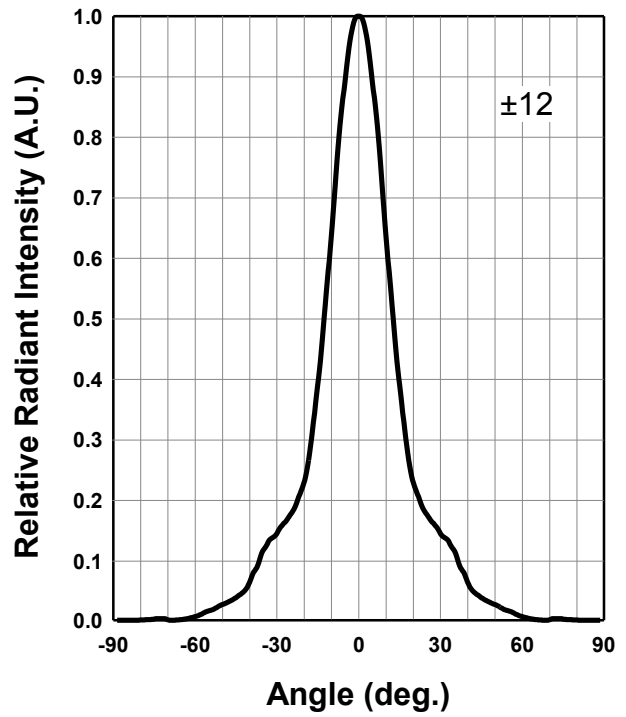




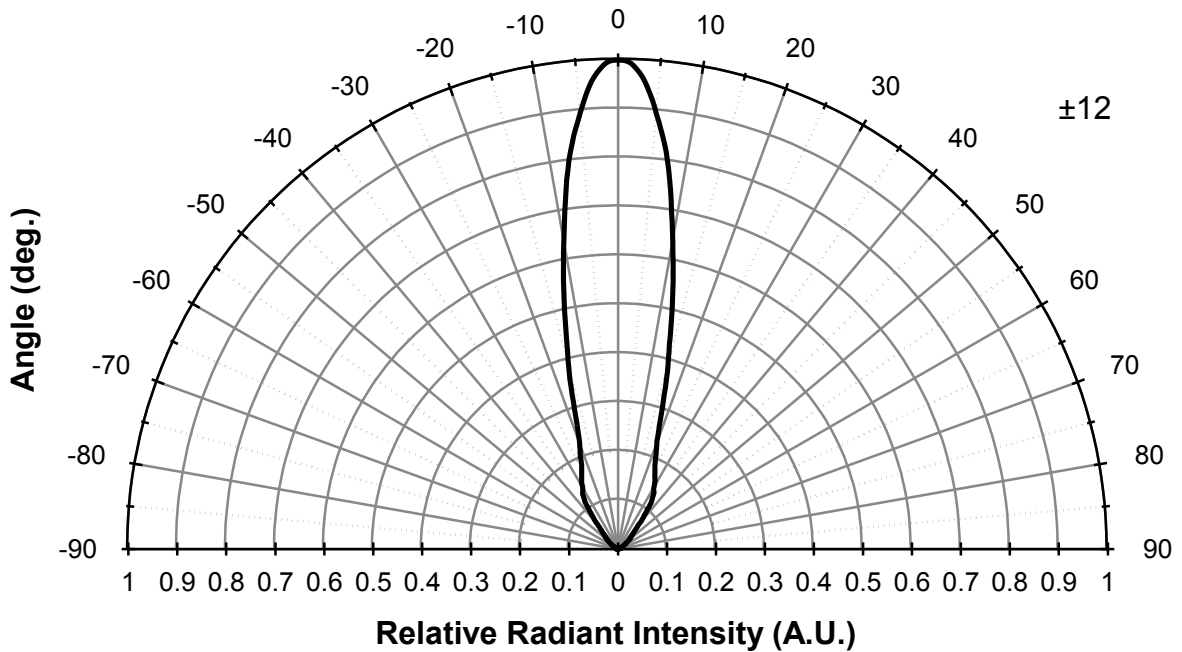
Relative Spectral Emission



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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