

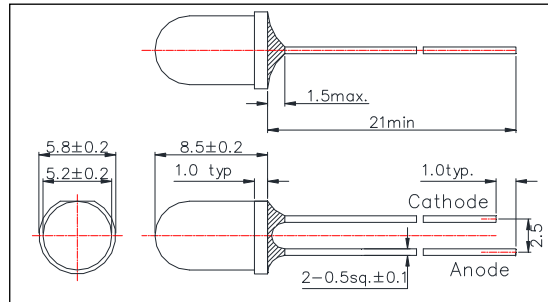
L890-02AU
Infrared LED Lamp

L890-02AU 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 890nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L890-02AU
3. Chip:
 - Chip Material: AlGaAs
 - Peak Wavelength: 890nm typ.
4. Package
 - Type: Φ5mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered (Lead Frame)

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	500	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	265	°C

* Duty=1% and Pulse Width=10us.

** Soldering condition must be completed within 3 second at 265 °C.

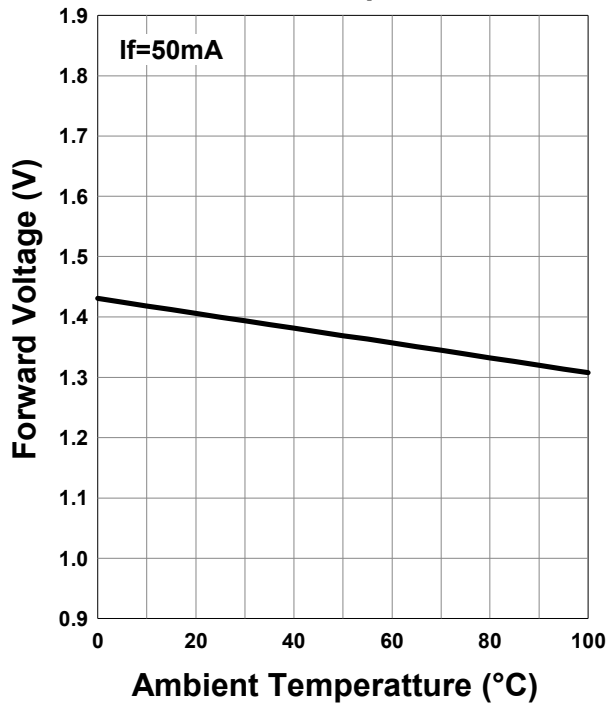
Electro-Optical Characteristics[Tc=25°C]						
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=50mA		1.4	1.8	V
	VFP	IFP=500mA		2.4		
Total Radiated Power*	PO	IF=50mA		15		mW
		IFP=500mA		140		
Radiant Intensity**	IE	IF=50mA		130		mW/sr
		IFP=500mA		1200		
Peak Wavelength	λP	IF=50mA	875		895	nm
Half Width	Δλ	IF=50mA		47		nm
Viewing Half Angle	θ1/2	IF=50mA		±10		deg
Rise Time	tr	IF=50mA		200		ns
Fall Time	tf	IF=50mA		300		ns

* Measured by S3584-08

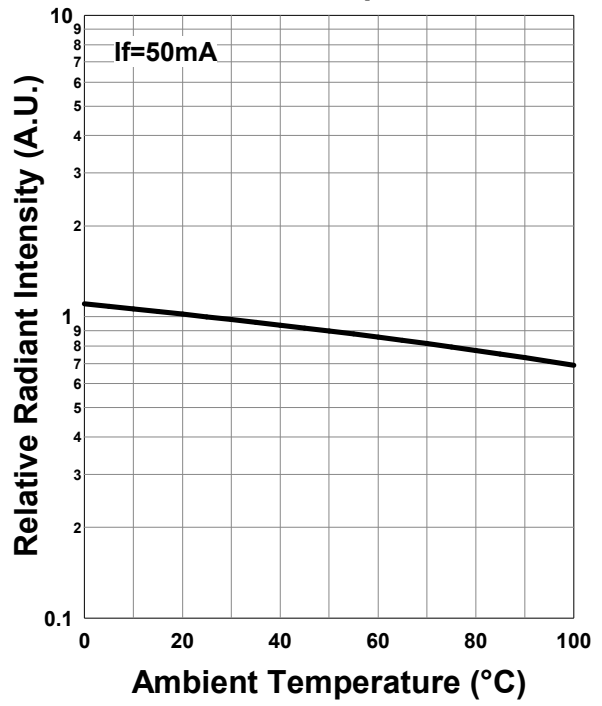
** Measured by CIE127-2007 Condition B



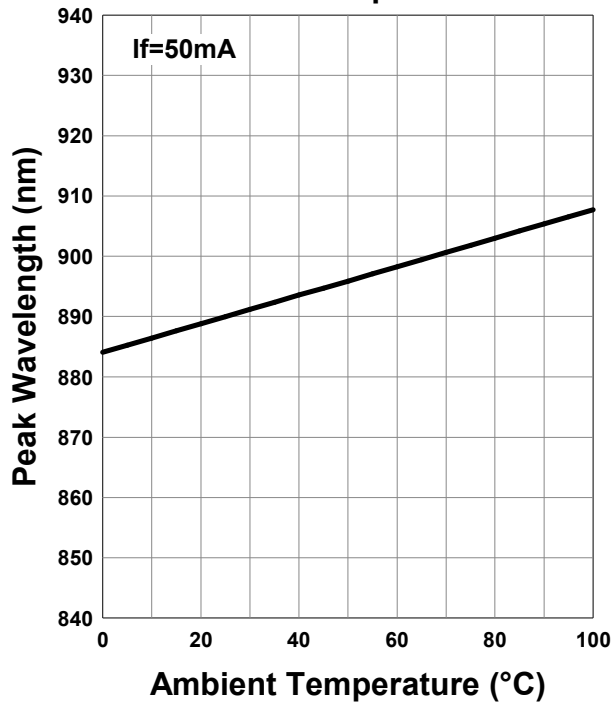
Forward Voltage - Ambient Temperature



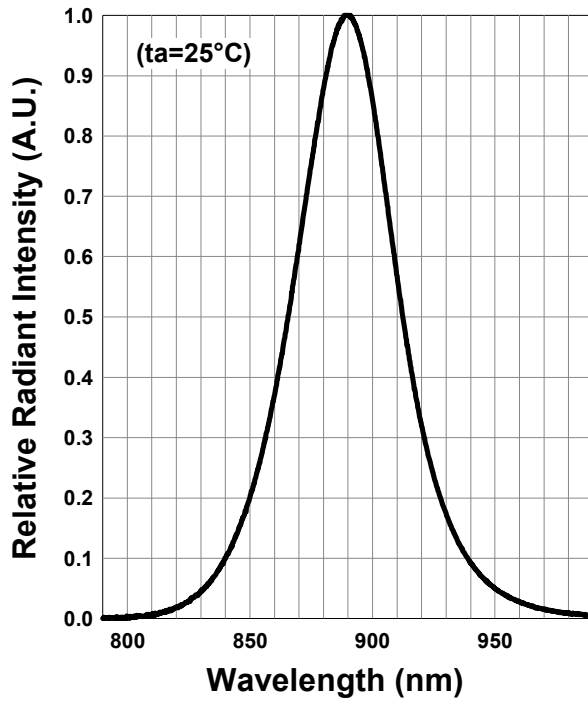
Relative Radiant Intensity - Ambient Temperature



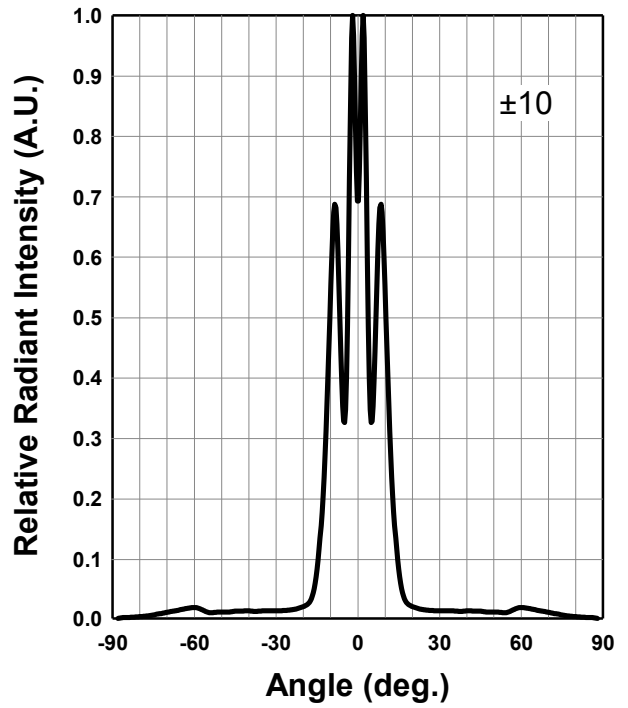
Peak Wavelength - Ambient Temperature



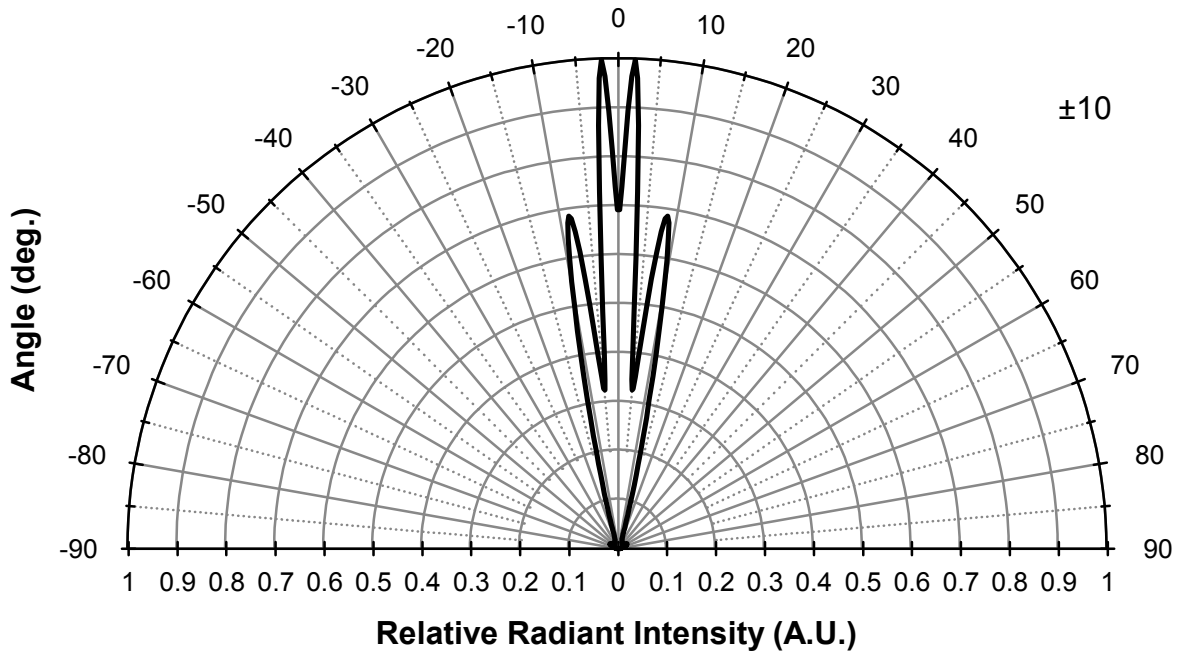
Relative Spectral Emission



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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