

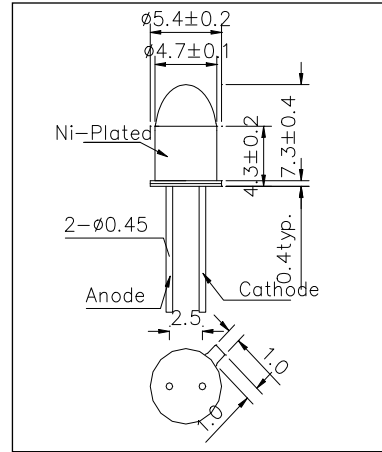
L660N-50M13N
Stem Type LED

This product is an AlGaInP LED mounted on TO-18 stem with hermetically sealed with spherical glass ball lens, being designed for ultra-narrow beam uses. On forward bias it emits a spectral band of radiation, which peaks at 660nm.

<Specifications>

1. Product Name: LED Lamp
2. Type Number: L660N-50M13N
3. Chip:
 - Chip material: AlGaInP
 - Deimansion: 500um x 500um
 - Peak Wavelength: 660nm
4. Package
 - Stem: TO-18 Stem
 - Lens: Spherical Glass Lens
 - Cap: Nickel Plated

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	400	mW
Forward Current	IF	150	mA
Pulse Forward Current*	IFP	700	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	20	K/W
Junction Temperature	Tj	115	°C
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	250	°C

* Duty=1% and Pulse Width=10μs

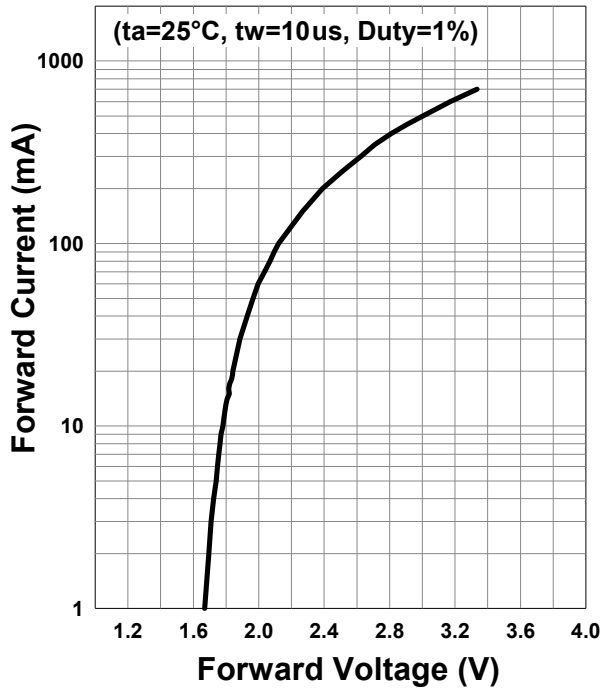
** Soldering condition must be completed within 3 seconds at 250°C

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=100mA		2.1	2.6	V
	VFP	IFP=500mA		3.0		
Radiated Power*	PO	IF=100mA		25		mW
		IFP=500mA		120		
Radiant Intensity**	IE	IF=100mA		300		mW/sr
		IFP=500mA		1460		
Luminous Flux	ΦV	IF=100mA		1.4		lm
		IFP=500mA		6.8		
Peak Wavelength	λP	IF=100mA	650	660	670	nm
Half Width	Δλ	IF=100mA		20		nm
Viewing Half Angle	θ1/2	IF=100mA		±3		deg
Rise Time	Tr	IF=100mA		40		ns
Fall Time	tf	IF=100mA		40		ns

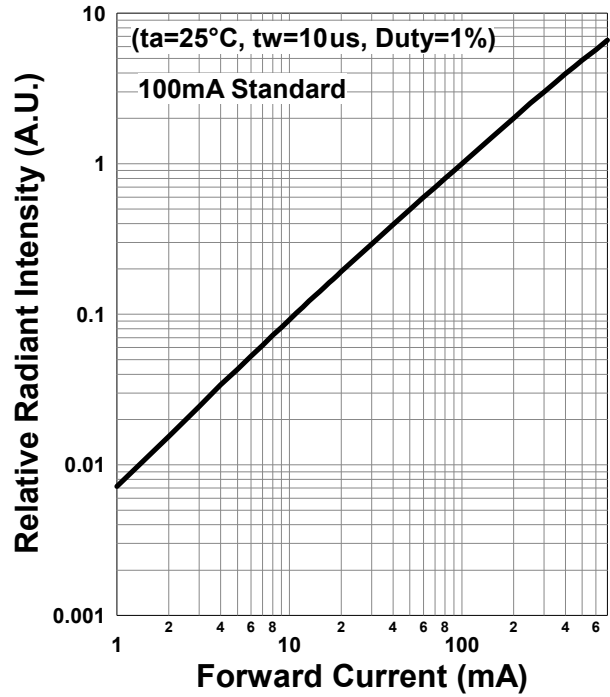
* Measured by S3584-08

** Measured by CIE127-2007 Condition B.

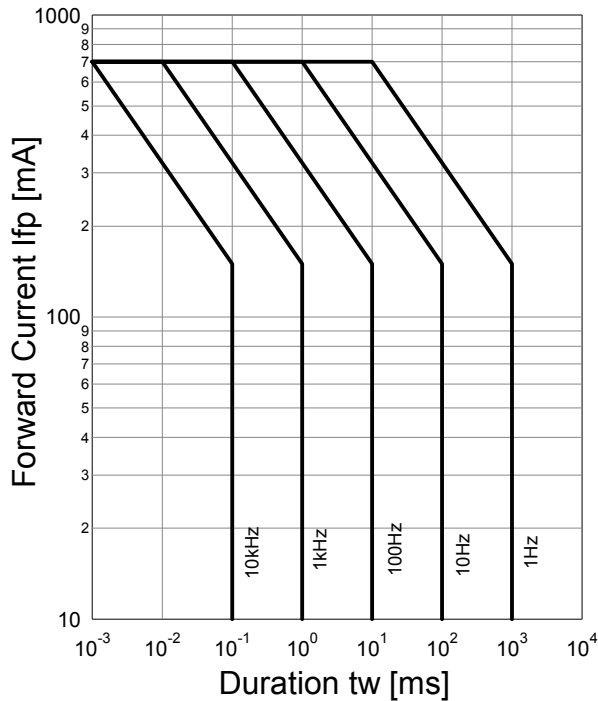
Forward Current - Forward Voltage



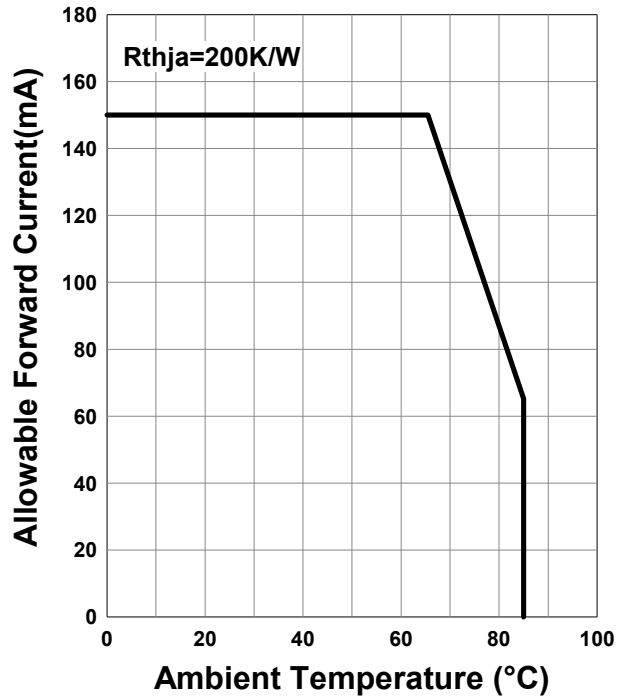
Relative Radiant Intensity - Forward Current



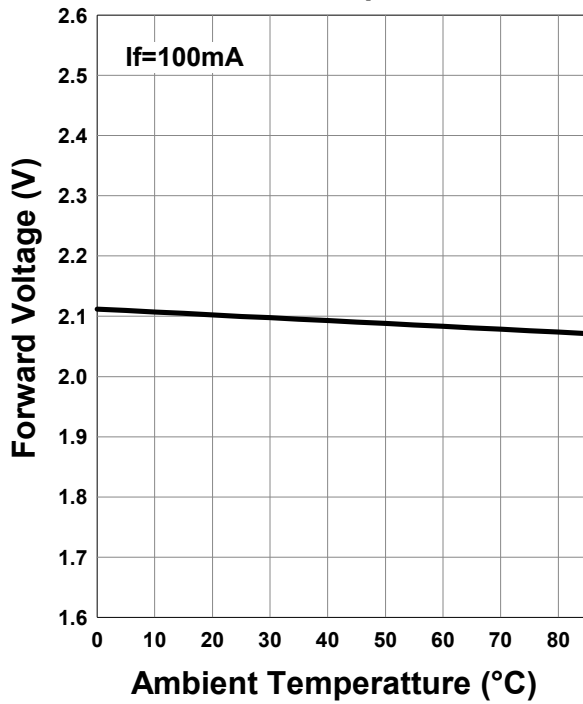
Forward Current - Pulse Duration



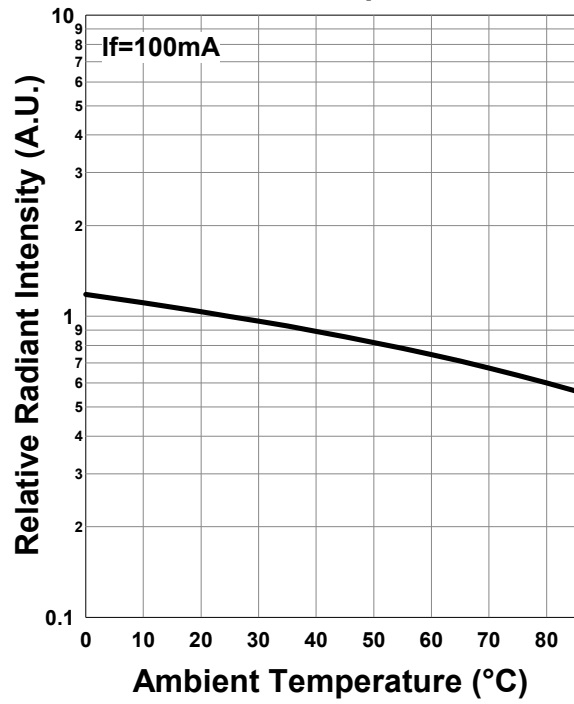
Allowable Forward Current - Ambient Temperature



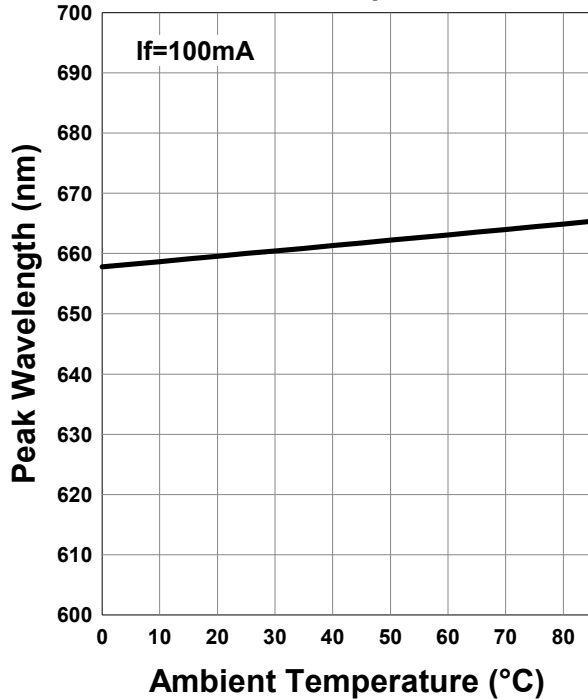
Forward Voltage - Ambient Temperature

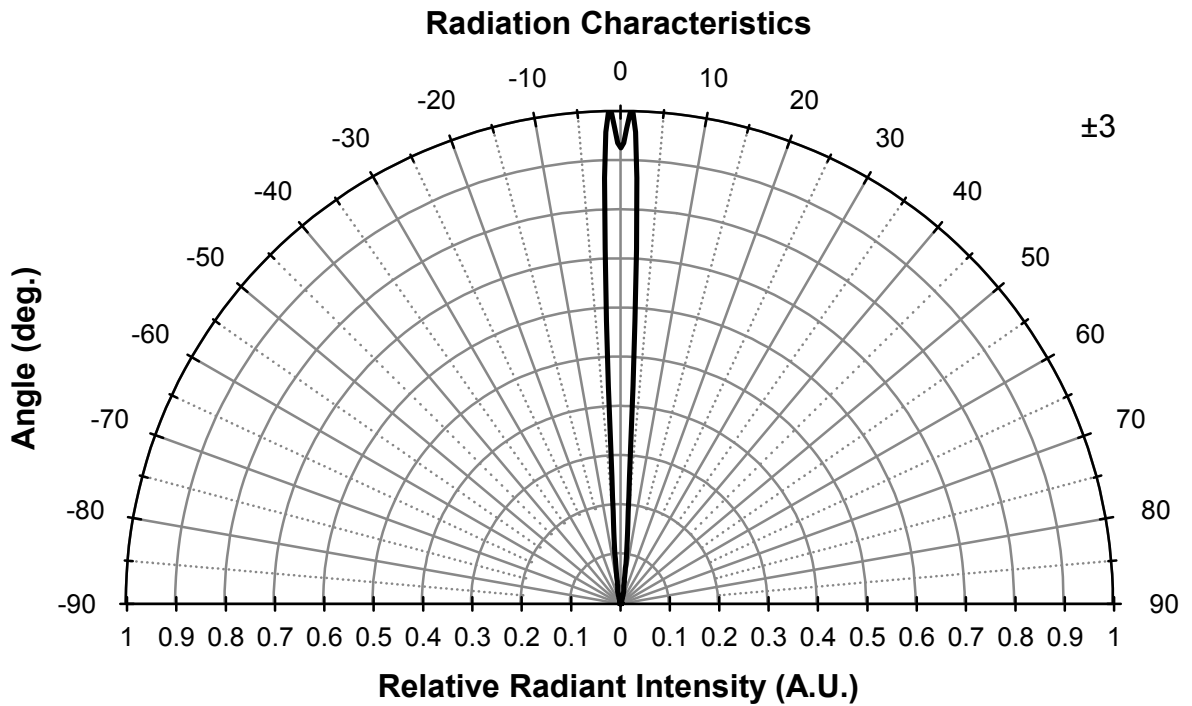
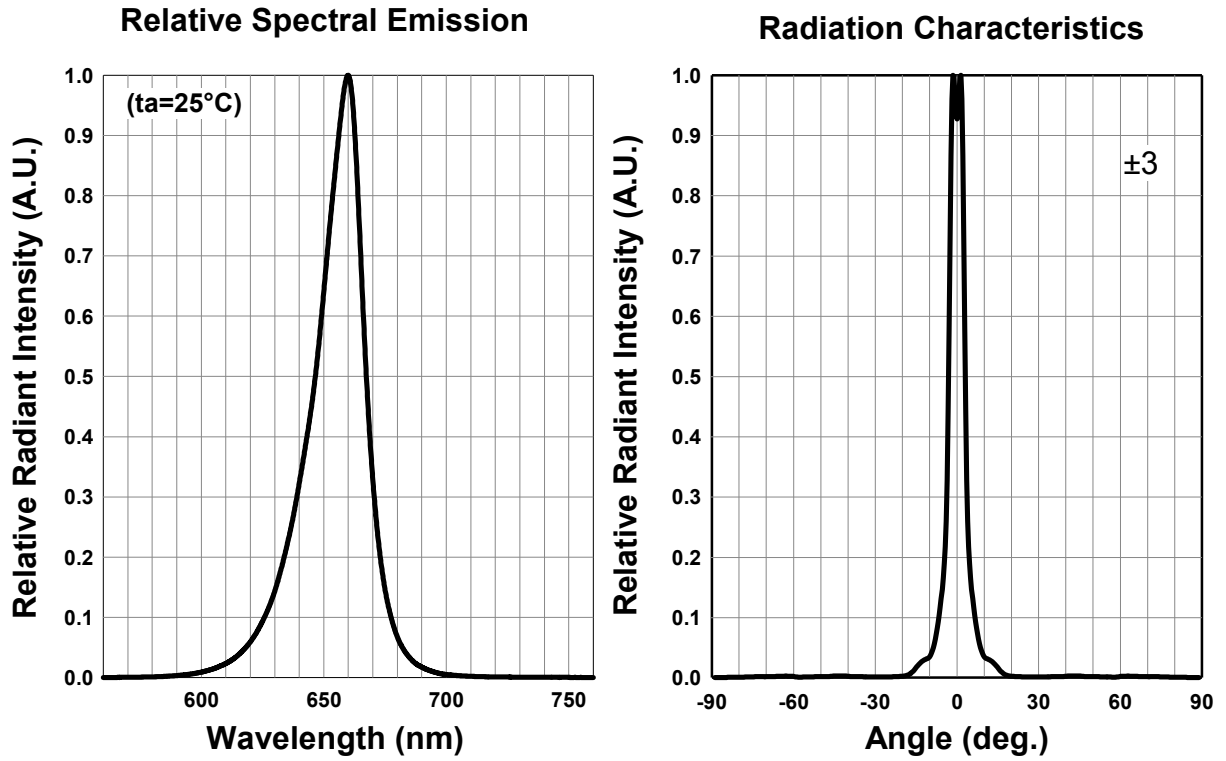


Relative Radiant Intensity - Ambient Temperature



Peak Wavelength - Ambient Temperature





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.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

2014.01