

L660N-33

High Bright Red LED Lamp

L660N-33 is an AlGaInP LED mounted on a lead frame with a clear epoxy lens.

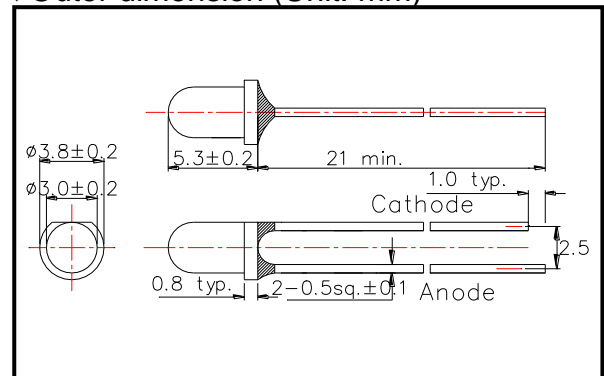
This is designed for the highest Po and damp proof.

On forward bias it emits a band of visible light, which peaks 660nm.

◆ Specifications

1) Product Name	Red LED Lamp
2) Type No.	L660N-33
3) Chip	
(1) Chip Material	AlGaInP
(2) Peak Wavelength	660nm typ.
4) Package	
(1) Type	Φ3mm clear molding
(2) Resin Material	Epoxy Resin
(3) Lead Frame	Soldered

◆ 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
Thermal Resistance	Rthja	200	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature	TSOL	250	°C

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C

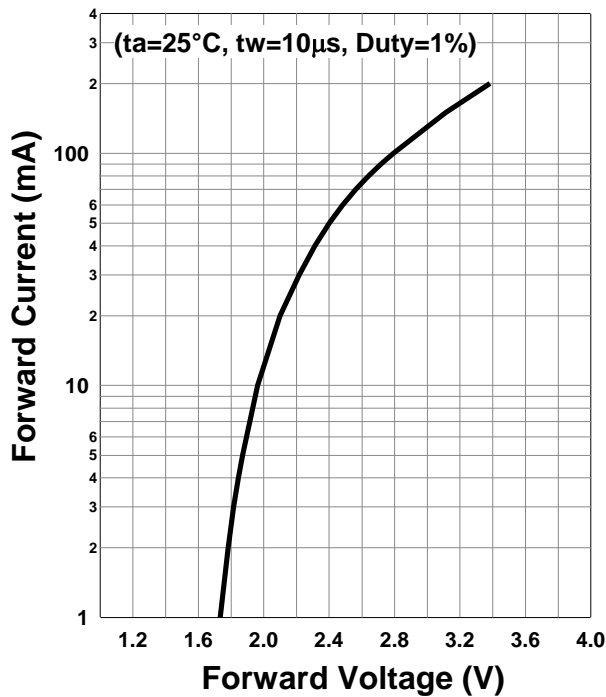
◆ Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		2.1	2.3	V
	VFP	IFP=200mA		3.4		
Radiated Power	PO	IF=20mA	8	15		mW
		IFP=200mA		155		
Radiant Intensity	IE	IF=20mA		18		mW/sr
		IFP=200mA		185		
Peak Wavelength	λ_P	IF=20mA	650	660	670	nm
Half Width	$\Delta\lambda$	IF=20mA		16		nm
Viewing Half Angle	$\theta_{1/2}$	IF=20mA		±20		deg.
Rise Time	tr	IF=20mA		35		ns
Fall Time	tf	IF=20mA		30		ns

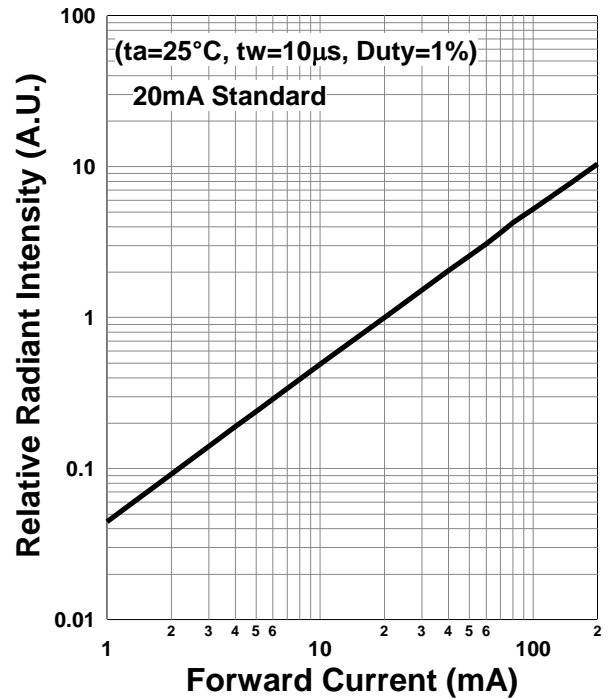
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE127-2007 Condition B.

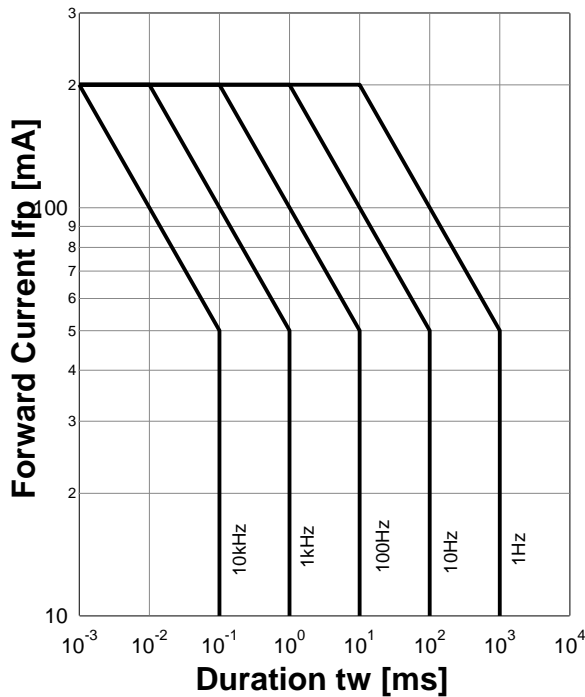
Forward Current - Forward Voltage



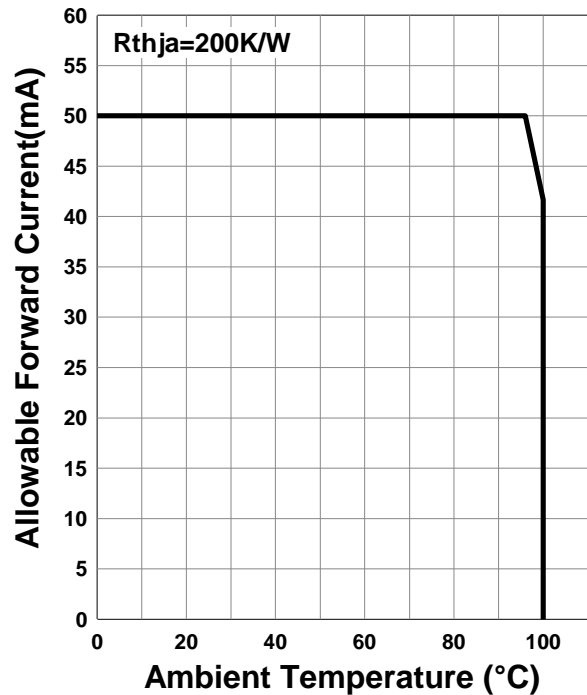
Relative Radiant Intensity - Forward Current



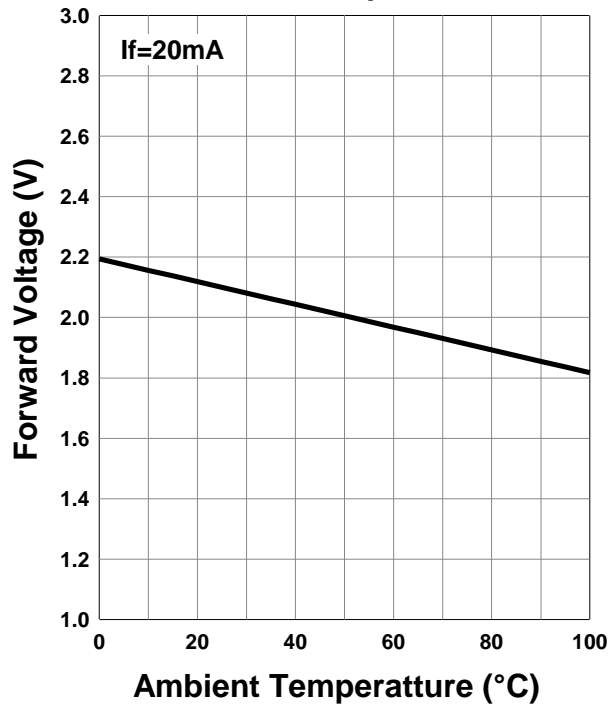
Forward Current - Pulse Duration



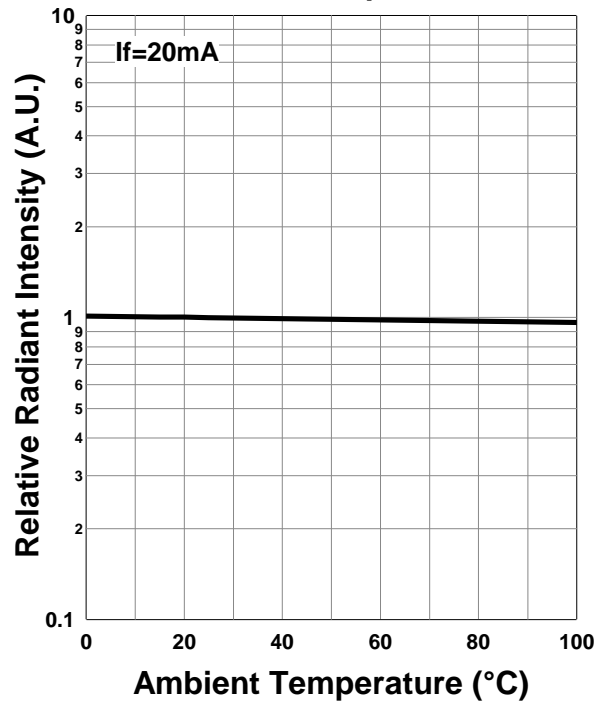
Allowable Forward Current - Ambient Temperature



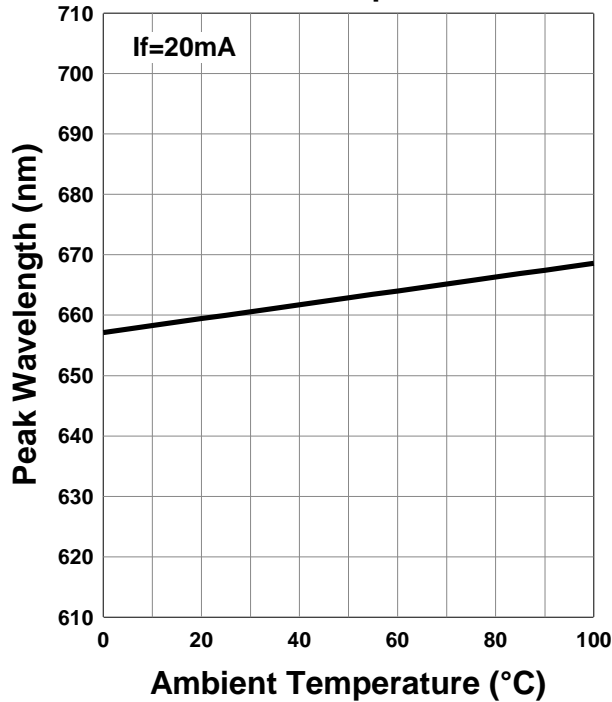
Forward Voltage - Ambient Temperature



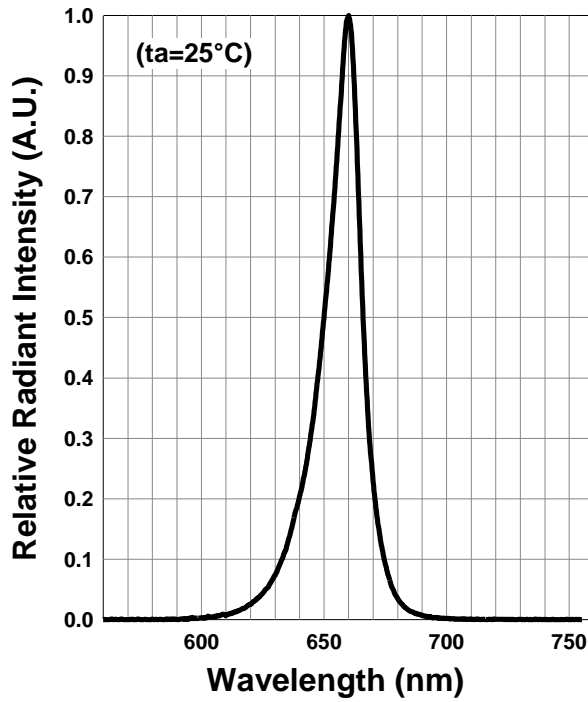
Relative Radiant Intensity - Ambient Temperature



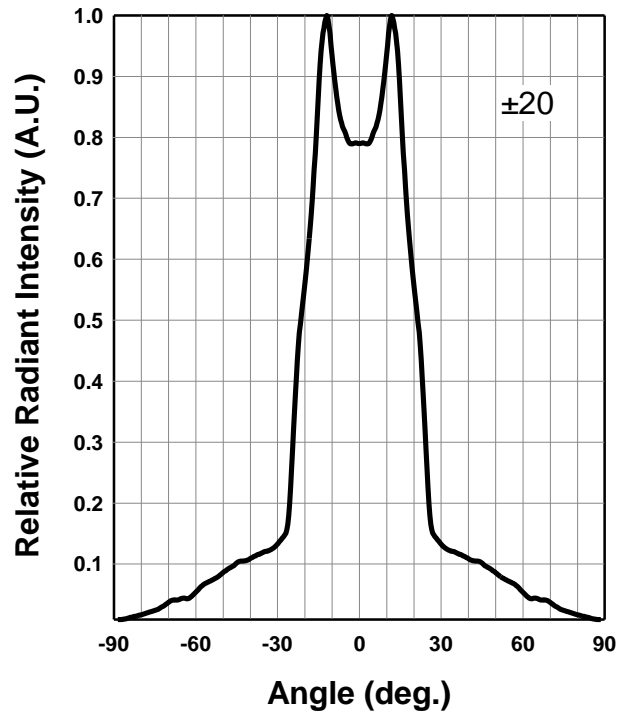
Peak Wavelength - Ambient Temperature



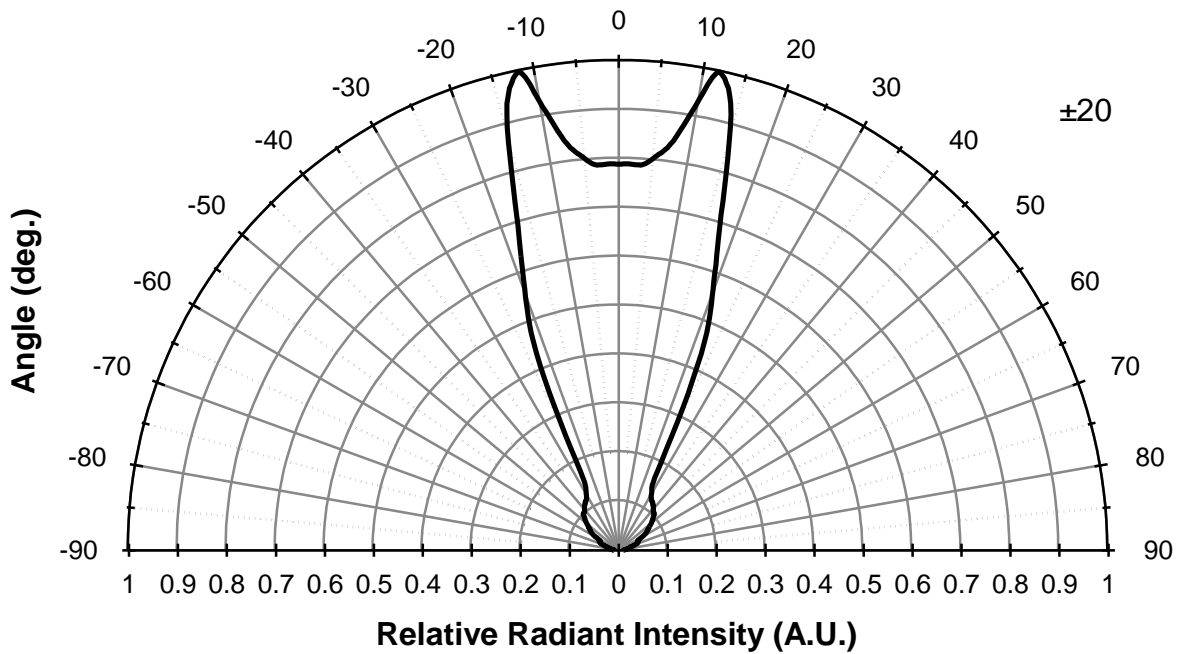
Relative Spectral Emission



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.

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.