

# L660N-30K42N

High Beam Red LED

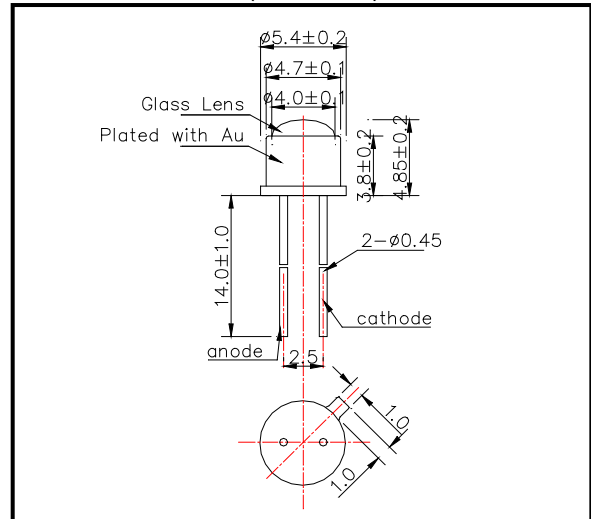
L660N-30K42N is an AlGaInP LED mounted on TO-46 stem and hermetically sealed with spherical glass ball lens can being designed for high beam uses..

On forward bias it emits a spectral band of radiation, which peaks at 665nm.

### ◆ Specifications

1) Product Name	LED Lamp
2) Type No.	L660N-30K42N
3) Chip	
(1) Chip Material	AlGaInP
(2) Chip dimension	300um*300um
(2) Peak Wavelength	635nm typ.
4) Package	
(1) Type	TO-46 stem
(2) Lens	Spherical Glass Lens
(3) Cap	Gold plated

### ◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	110	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	50	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	500	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	5	V	T <sub>a</sub> =25°C
Thermal Resistance	R <sub>thja</sub>	180	K/W	
Junction Temperature	T <sub>j</sub>	100	°C	
Operating Temperature	T <sub>OPR</sub>	-40 ~ +85	°C	
Storage Temperature	T <sub>STG</sub>	-40 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	265	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C.

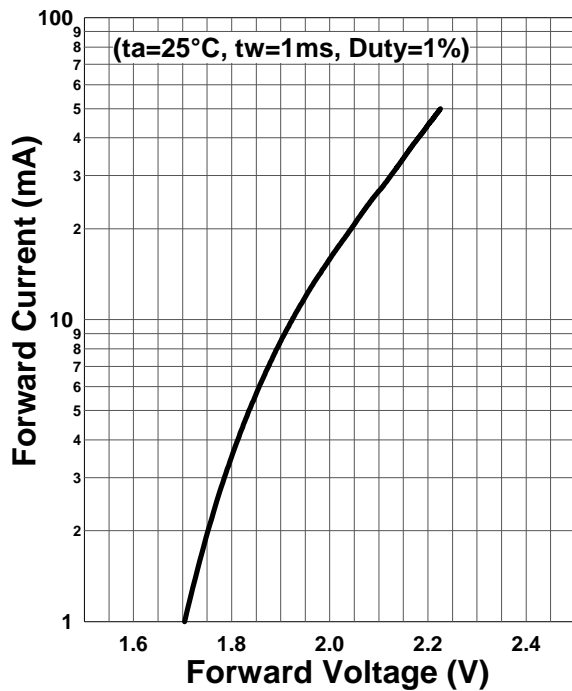
### ◆ Electro-Optical Characteristics [T<sub>a</sub>=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA		2.0	2.2	V
		I <sub>F</sub> =50mA		2.2	2.4	
Radiated Power	P <sub>O</sub>	I <sub>F</sub> =20mA		4.5		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =20mA		70		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	655	665	675	nm
Half Width	Δλ	I <sub>F</sub> =20mA		18		nm
Wavelength(dominant)	λ <sub>D</sub>	I <sub>F</sub> =20mA		648		nm
Wavelength(centroid)	λ <sub>C</sub>	I <sub>F</sub> =20mA		661		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =20mA		±4.2		deg.

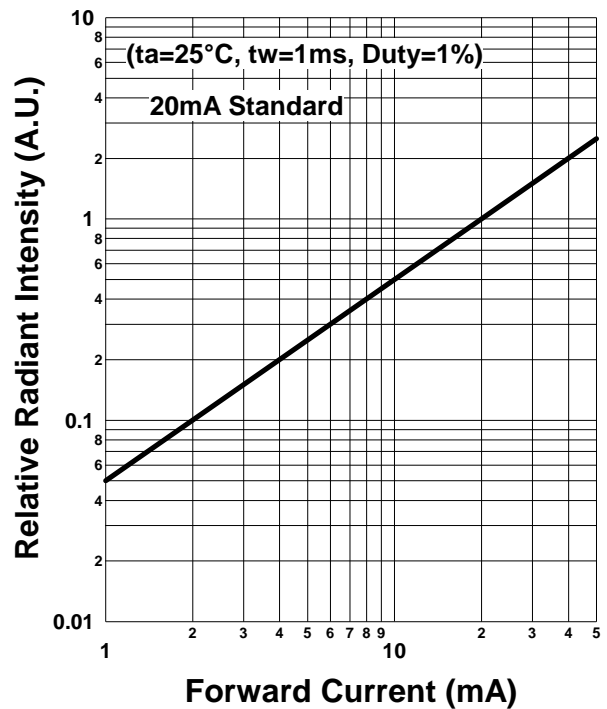
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by Tektronix J-6512.

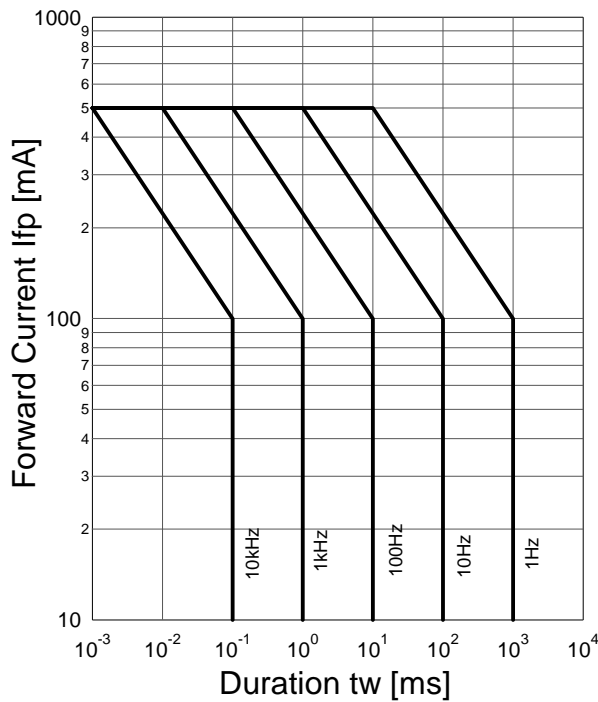
Forward Current - Forward Voltage



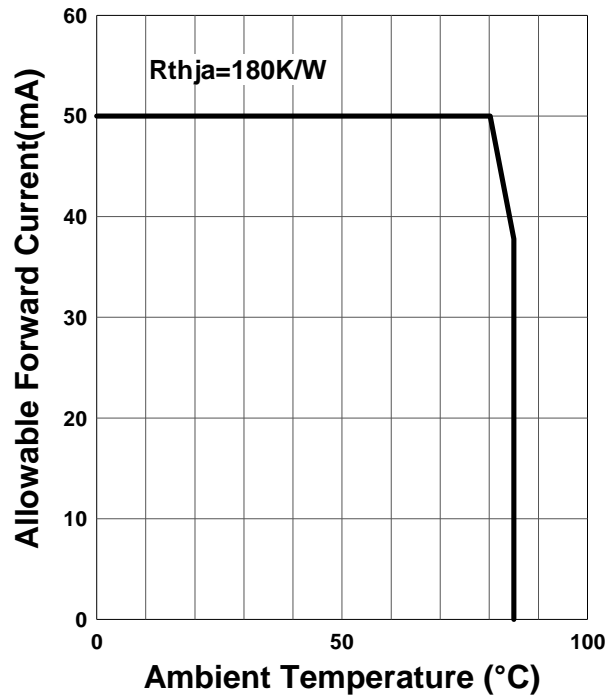
Relative Radiant Intensity - Forward Current



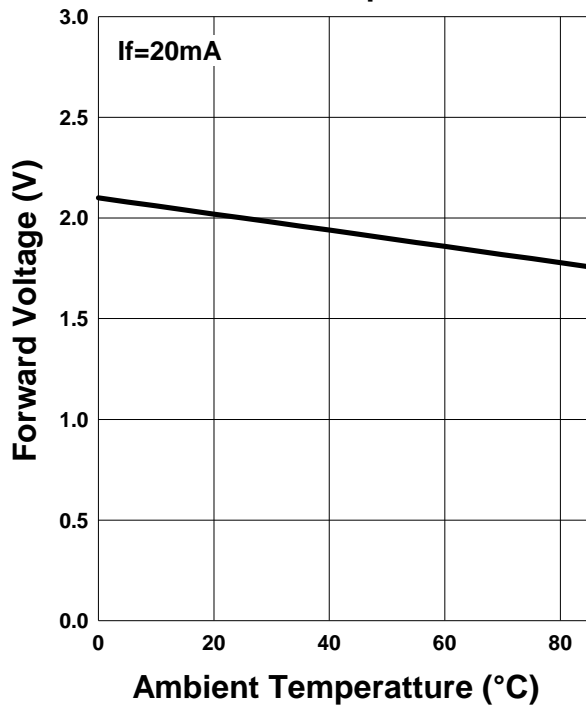
Forward Current - Pulse Duration



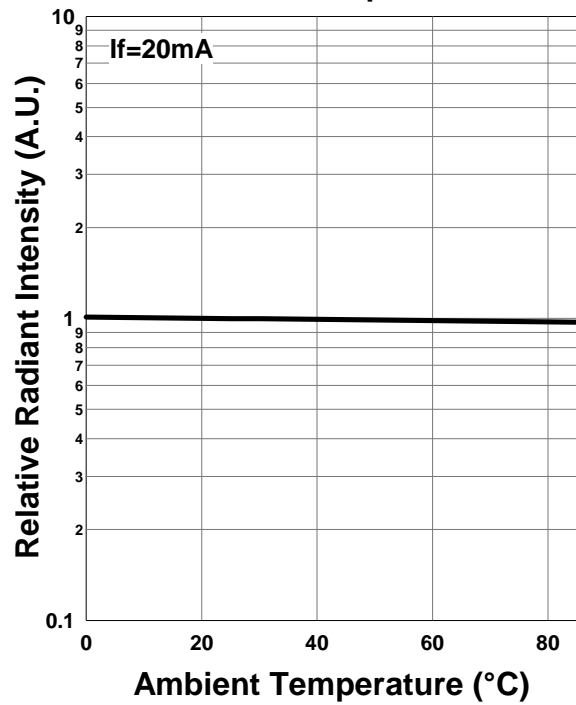
Allowable Forward Current - Ambient Temperature



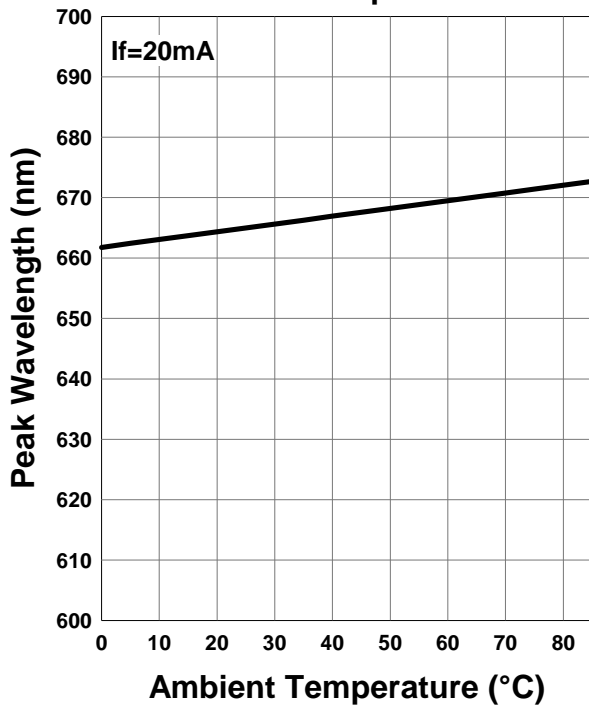
Forward Voltage - Ambient Temperature



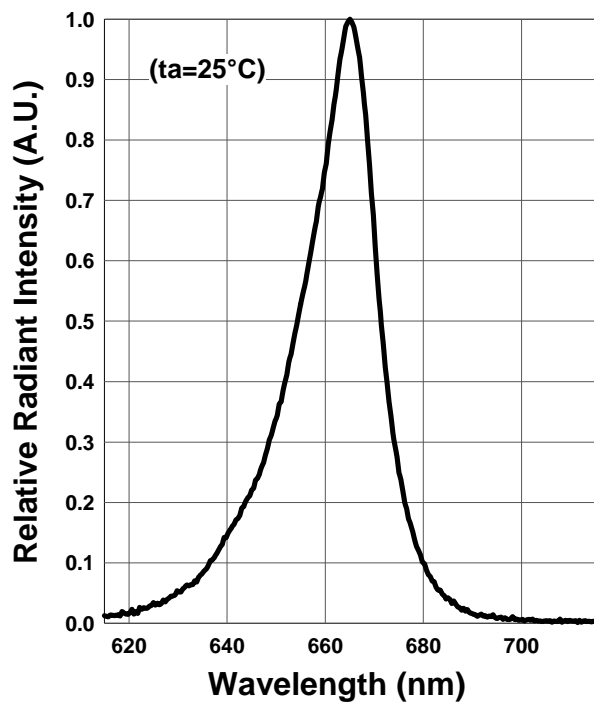
Relative Radiant Intensity - Ambient Temperature



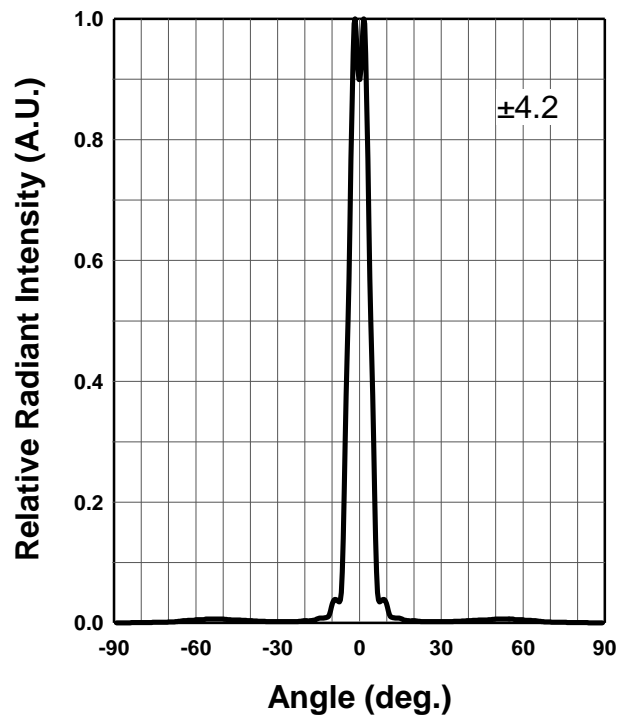
Peak Wavelength - Ambient Temperature



Relative Spectral Emission



Radiation Characteristics



#### **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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