

# L470-01

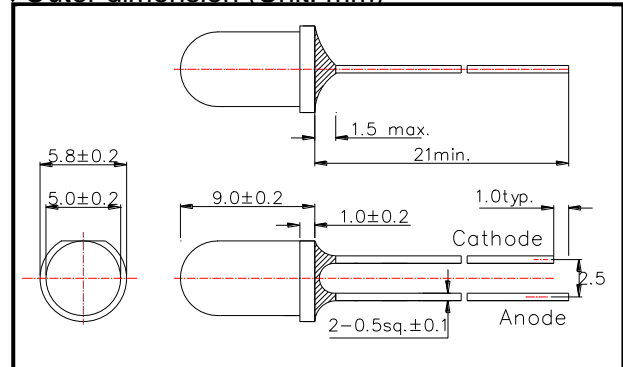
## High Bright Green LED Lamp

L470-01 is an InGaN LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a band of visible light, which peaks 470nm.

### ◆ Specifications

- |                     |                      |
|---------------------|----------------------|
| 1) Product Name     | Blue LED Lamp        |
| 2) Type No.         | L470-01              |
| 3) Chip             |                      |
| (1) Chip Material   | InGaN                |
| (2) Peak Wavelength | 470nm typ.           |
| 4) Package          |                      |
| (1) Type            | Φ5mm clear molding   |
| (2) Resin Material  | Epoxy Resin          |
| (3) Lead Frame      | Soldered (Lead Free) |

### ◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	180	mW
Forward Current	IF	30	mA
Pulse Forward Current	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	270	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

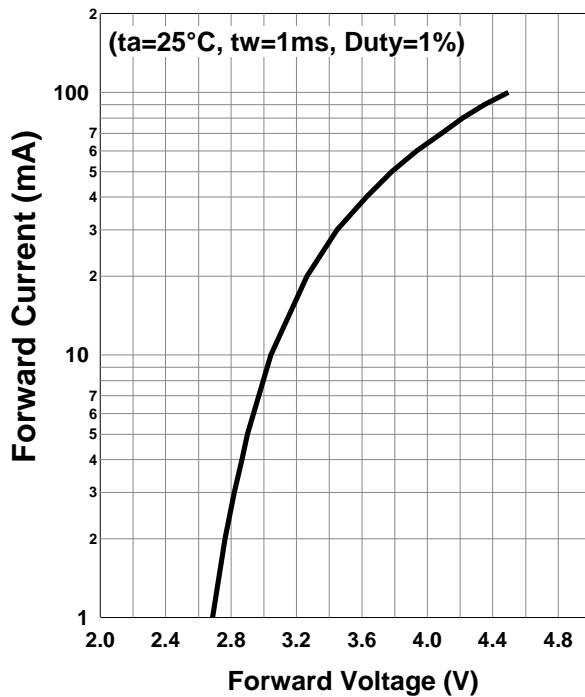
### ◆ Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	IF=20mA		3.2	4.0	V
	V <sub>FP</sub>	IFP=100mA		4.0		
Radiated Power	P <sub>O</sub>	IF=20mA		23		mW
		IFP=100mA		77		
Brightness	I <sub>V</sub>	IF=20mA		9700		mcd
Radiant Intensity	I <sub>E</sub>	IF=20mA		45		mW/sr
Peak Wavelength	λ <sub>P</sub>	IF=20mA	460	470	480	nm
Dominant Wavelength	λ <sub>D</sub>	IF=20mA		475		nm
Half Width	Δλ	IF=20mA		29		nm
Viewing Half Angle	θ <sub>1/2</sub>	IF=20mA		±8		deg.
Rise Time	t <sub>r</sub>	IF=20mA		230		ns
Fall Time	t <sub>f</sub>	IF=20mA		240		ns

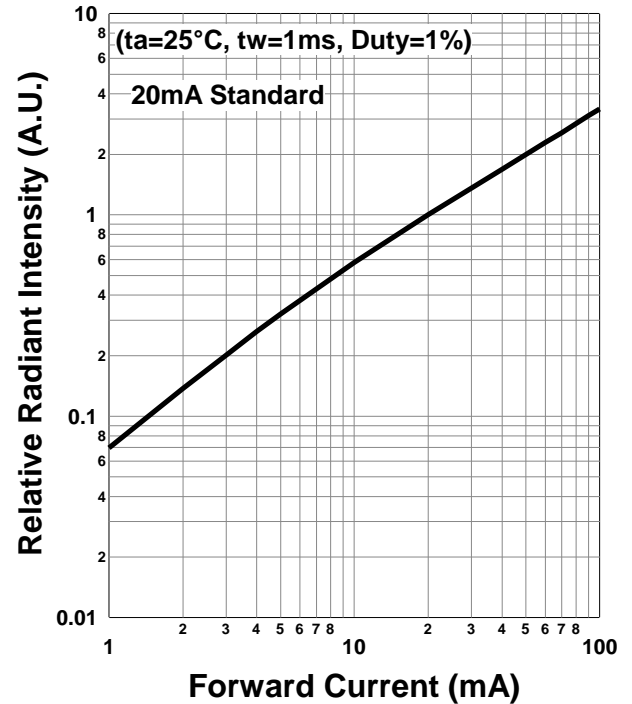
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE 127 Condition B.

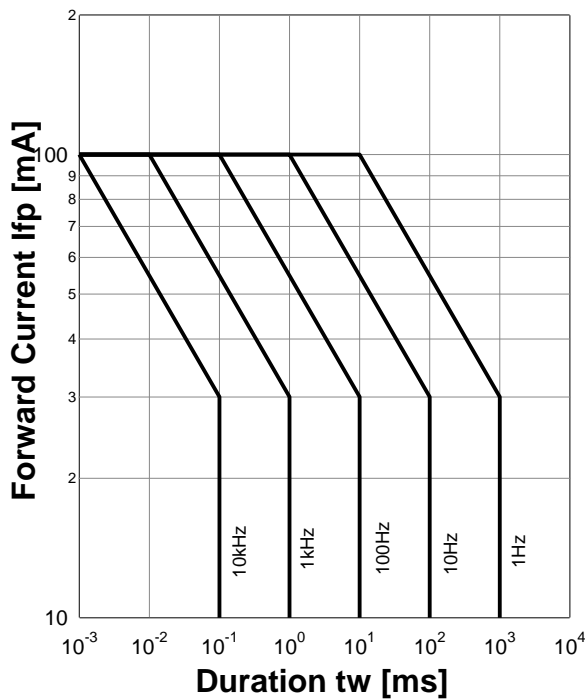
Forward Current - Forward Voltage



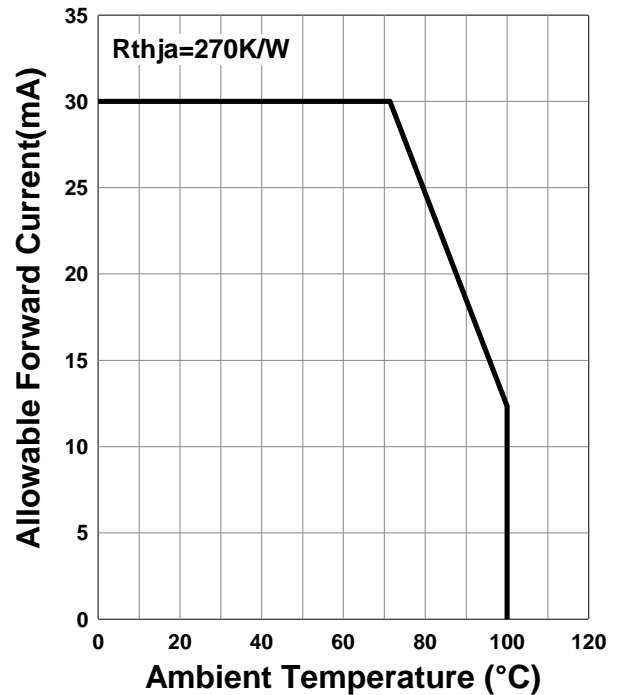
Relative Radiant Intensity - Forward Current



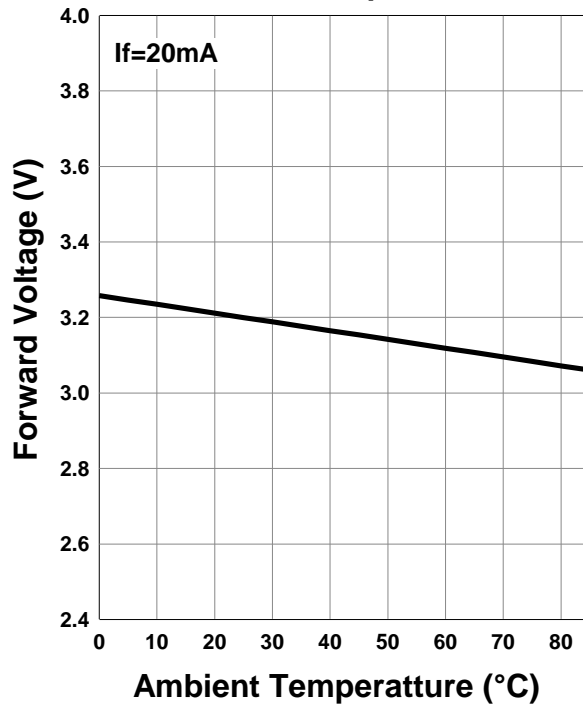
Forward Current - Pulse Duration



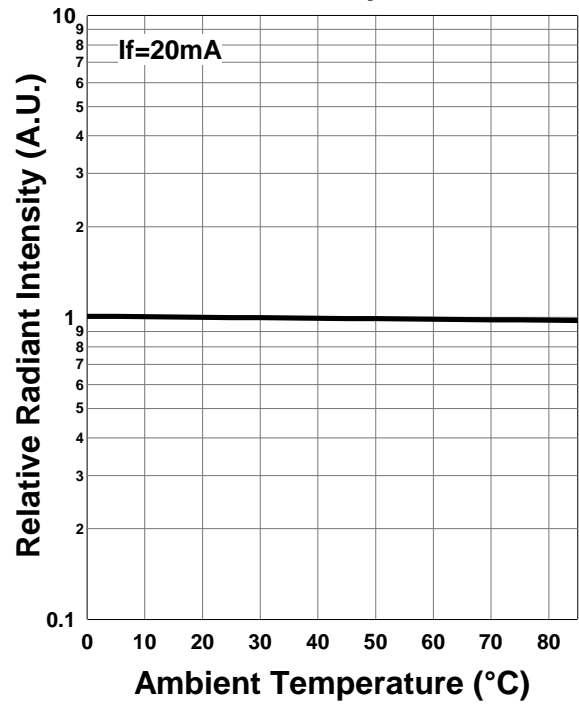
Allowable Forward Current - Ambient Temperature



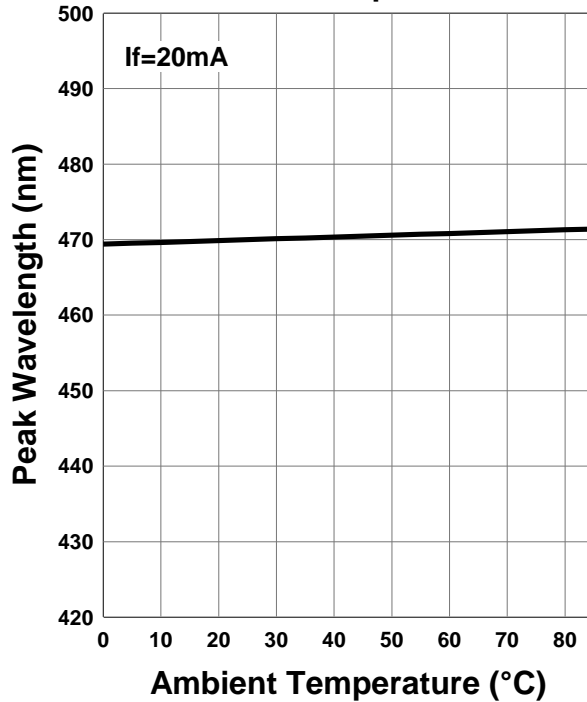
**Forward Voltage - Ambient Temperature**



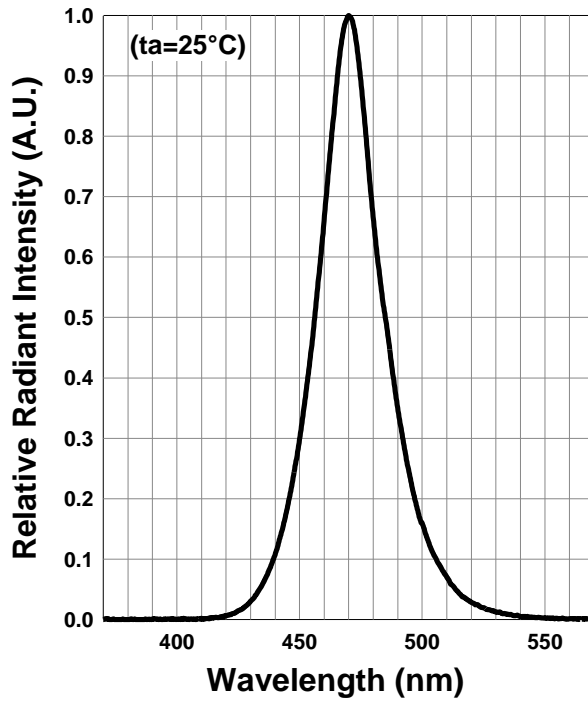
**Relative Radiant Intensity - Ambient Temperature**



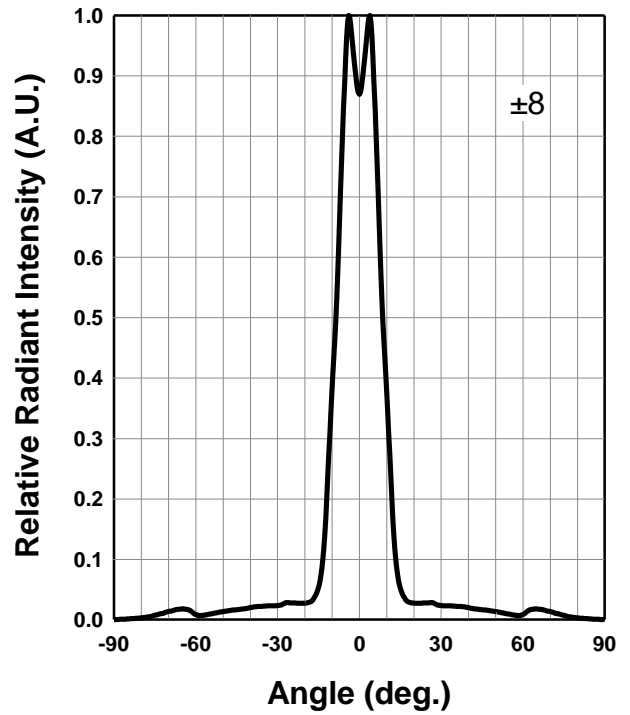
**Peak Wavelength - Ambient Temperature**



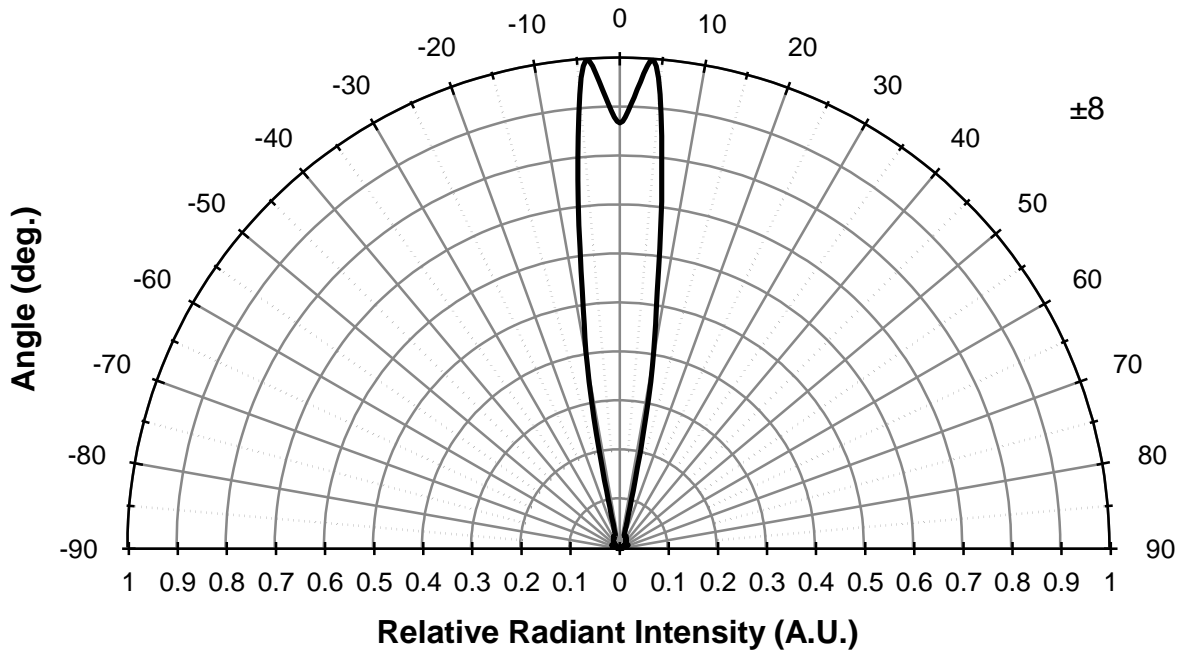
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



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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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