L470R-33

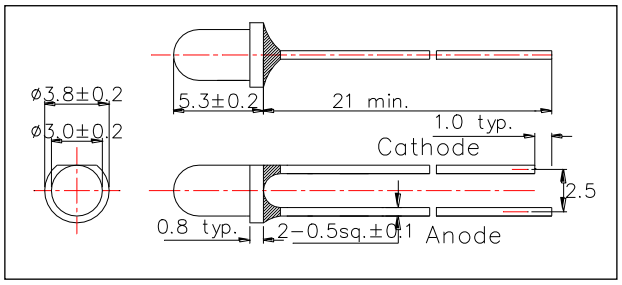
Blue LED Lamp with UV Resistant Resin

L470R-33 is an InGaN LED mounted on a lead frame with UV resistant resin.
On forward bias, it emits a band of visible light that peaks 465nm. This R series is designed for long life blue emission with UV band.

<Specifications>

1. Product Name: Blue LED Lamp
2. Type Number: L470R-33
3. Chip:
   - Chip material: InGaN
   - Peak Wavelength: 465nm typ.
4. Package
   - Type: Φ3mm Clear Molding
   - Resin Material: Silicone Resin
   - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25℃]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	180	mW
Forward Current	IF	50	mA
Pulse Forward Current*	IFP	200	mA
Reverse Voltage	VR	5	V
Thermal Resistance**	Rthja	270	K/W
Junction Temperature	Tj	100	℃
Operating Temperature	TOPR	-20 ~ +85	℃
Storage Temperature	TSTG	-20 ~ +100	℃
Soldering Temperature***	TSOL	265	℃

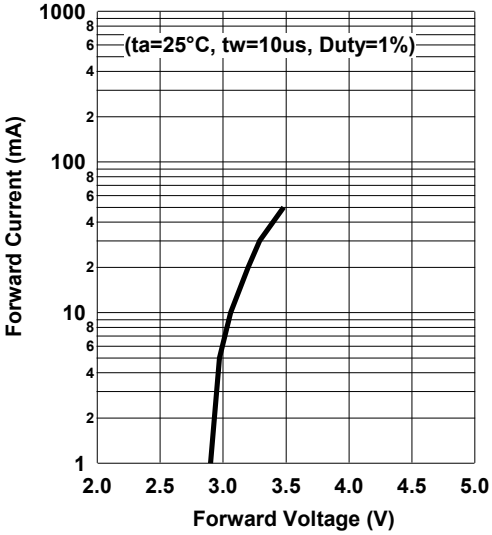
* Duty=1% and Pulse Width=10us.
** Junction - ambient, leads 7mm, soldered on PCB.
*** Soldering condition must be completed within 3 second at 265℃.

Electro-Optical Characteristics [Ta=25℃]							
Item		Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage		VF	IF=20mA		3.3	4.0	V
Reverse Current		IR	VR=5V			10	uA
Total Radiated Power*		PO	IF=20mA	10	18		mW
Radiant Intensity**		IE	IF=20mA		40		mW/sr
Brightness**		IV	IF=20mA		2500		mcd
Wavelength	Peak	λP	IF=20mA	460	465	475	nm
	Dominant	λD	IF=20mA		470		
Half Width		Δλ	IF=20mA		25		nm
Viewing Half Angle		θ1/2	IF=20mA		±14		deg

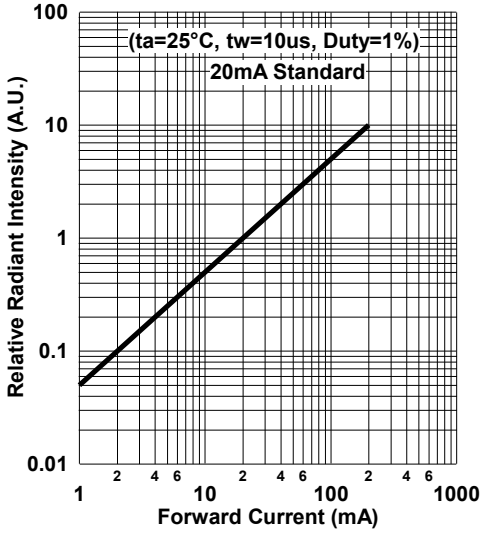
* Measured by S3584-08
** Measured by Tektronix J-16

RoHS Compliant

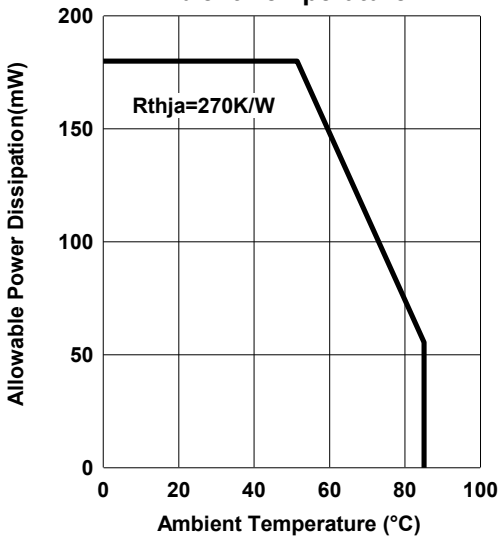
Forward Curent - Forward Voltage



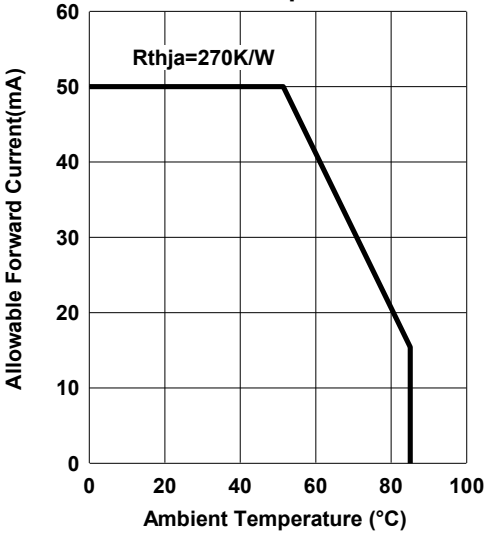
Relative Radiant Intensity - Forward Current



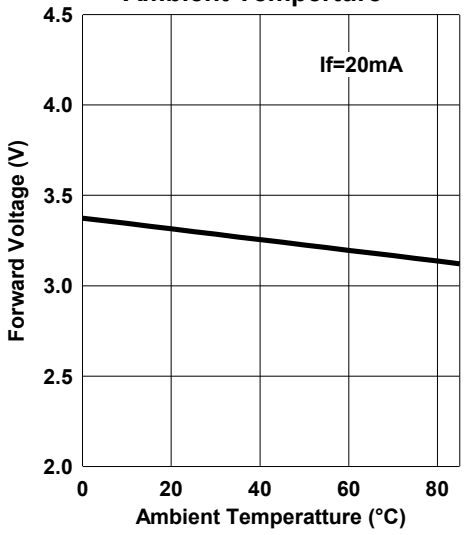
Allowable Power Dissipation - Ambient Temperature



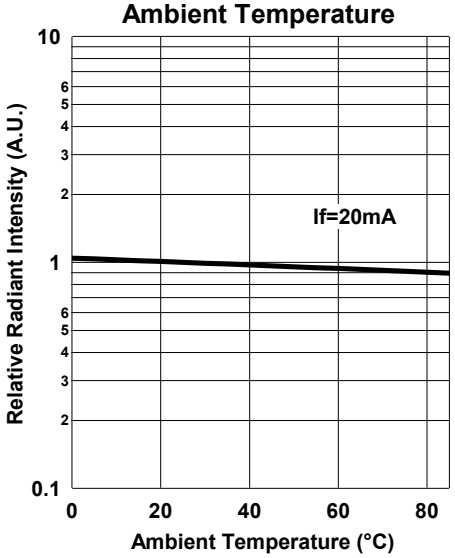
Allowable Forward Current - Ambient Temperature



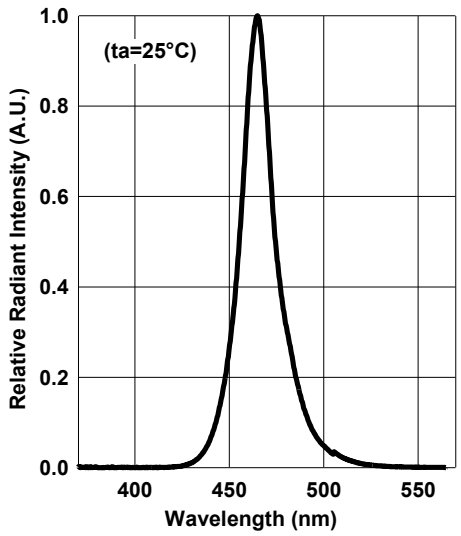
Forward Voltage - Ambient Temperture



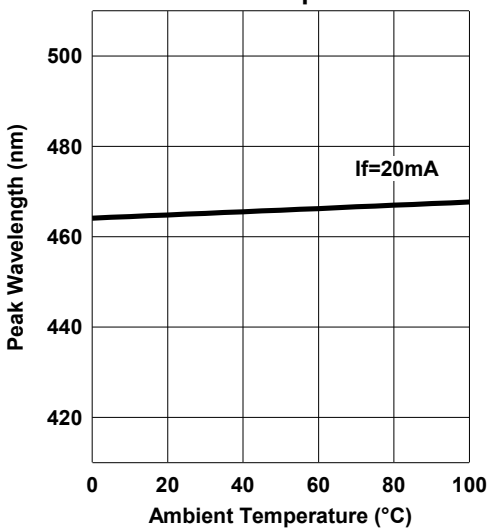
Relative Radiant Intensity - Ambient Temperature



Relative Spectral Emission



Peak Wavelength - Ambient Temperature



Radiation Characteristics