

**L450R-03**

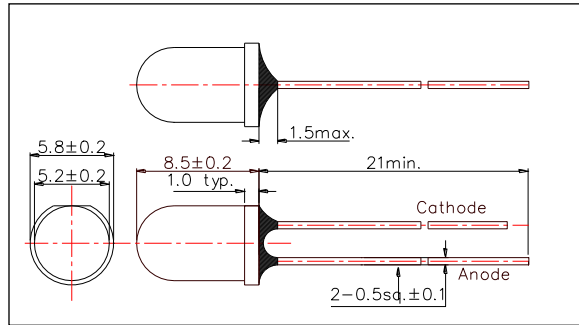
Blue LED Lamp with UV Resistant Resin

L450R-03 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 450nm. This R series is designed for long life under UV wavelength.

<Specifications>

1. Product Name: Blue LED Lamp
2. Type Number: L450R-03
3. Chip:
  - Chip material: InGaN
  - Peak Wavelength: 450nm typ.
4. Package
  - Type: Φ5mm clear molding
  - Resin Material: Silicone Resin
  - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	120	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

\* Duty=1% and Pulse Width=10us.

\*\* Soldering condition must be completed within 5 second at 250°C.

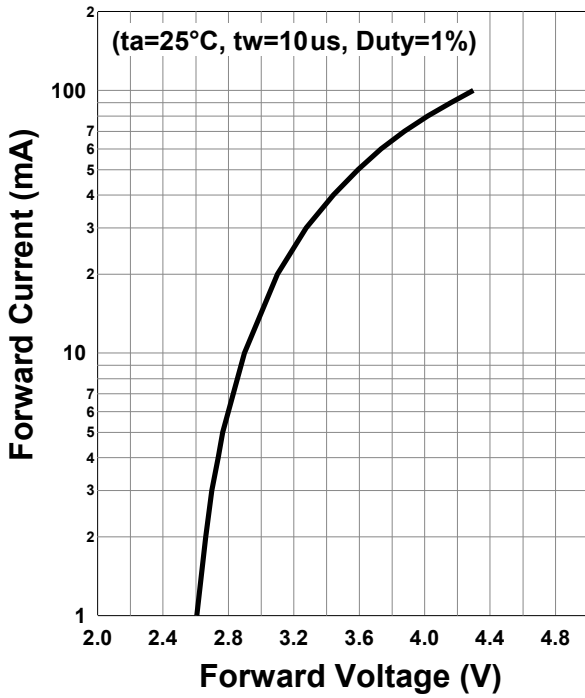
Electro-Optical Characteristics [Ta=25°C ]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		3.1	4.0	V
	VFP	IFP=100mA		4.4		
Radiated Power*	PO	IF=20mA		20		mW
		IFP=100mA		80		
Radiant Intensity**	IE	IF=20mA		38		mW/sr
		IFP=100mA		150		
Peak Wavelength	λP	IF=20mA	440	450	460	nm
Half Width	Δλ	IF=20mA		20		nm
Viewing Half Angle	θ1/2	IF=20mA		±10		deg
Rise Time	Tr	IF=20mA		60		ns
Fall Time	tf	IF=20mA		50		ns

\* Measured by S3584-08

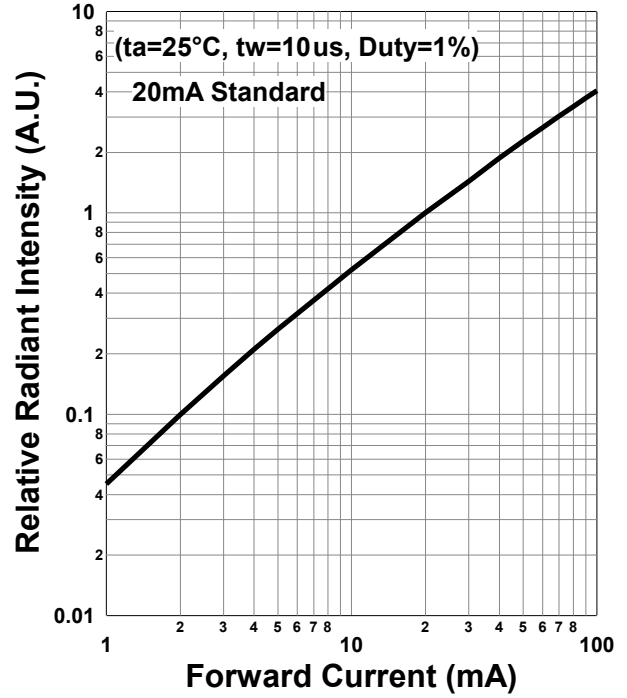
\*\* Measured by CIE127-2007 Condition B



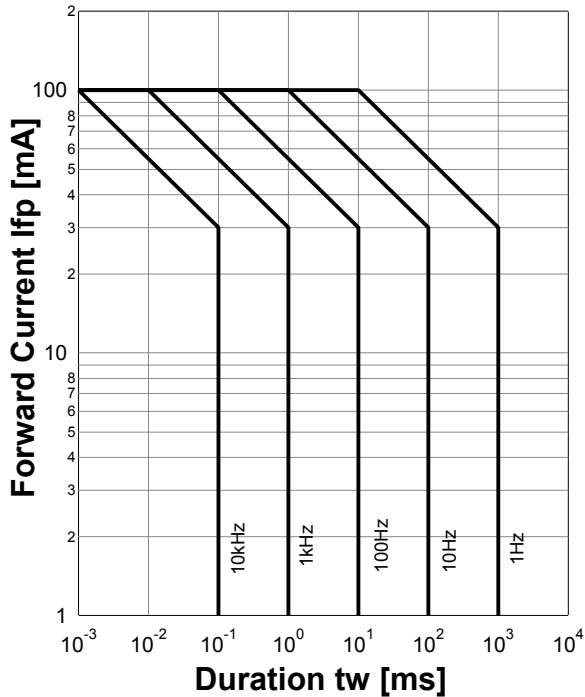
**Forward Current - Forward Voltage**



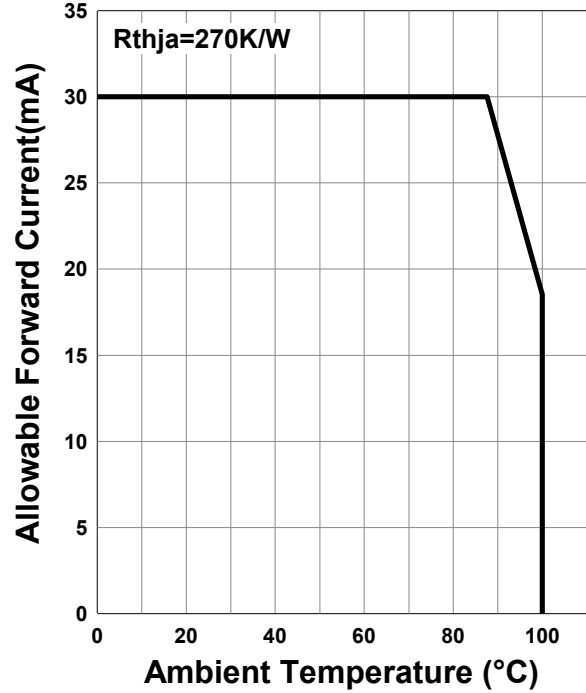
**Relative Radiant Intensity - Forward Current**

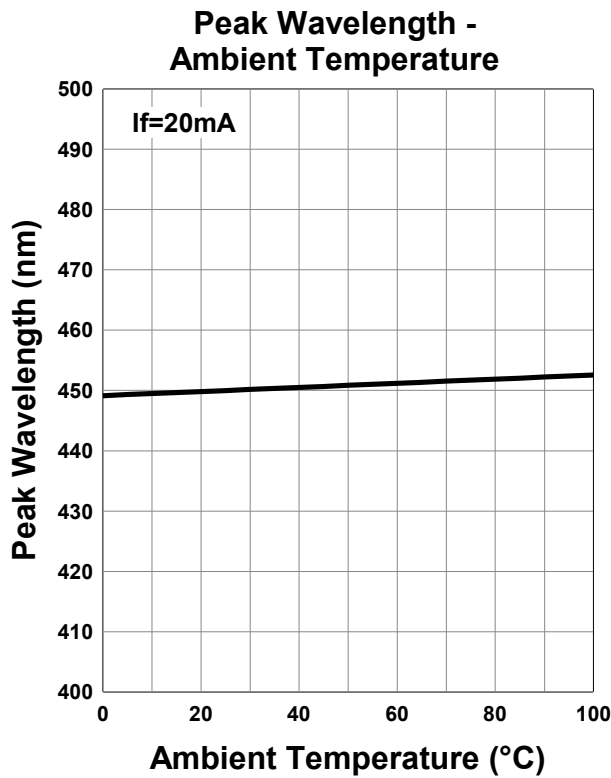
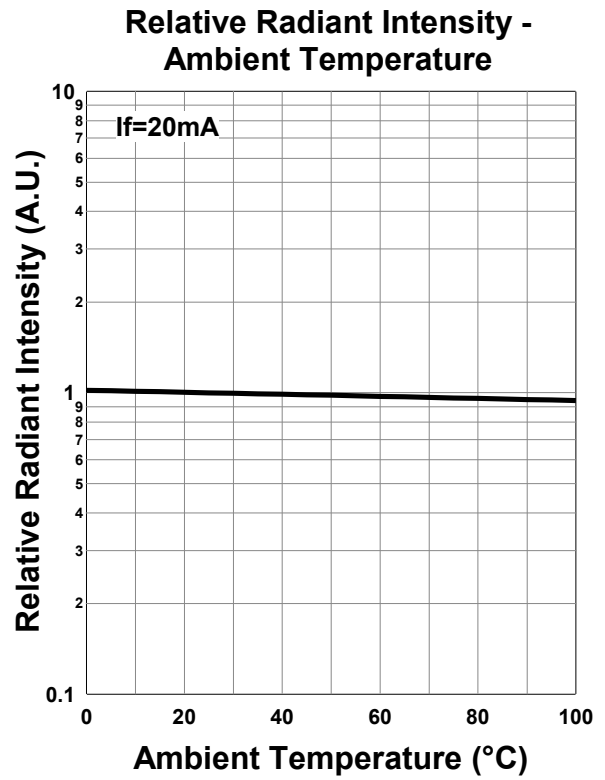
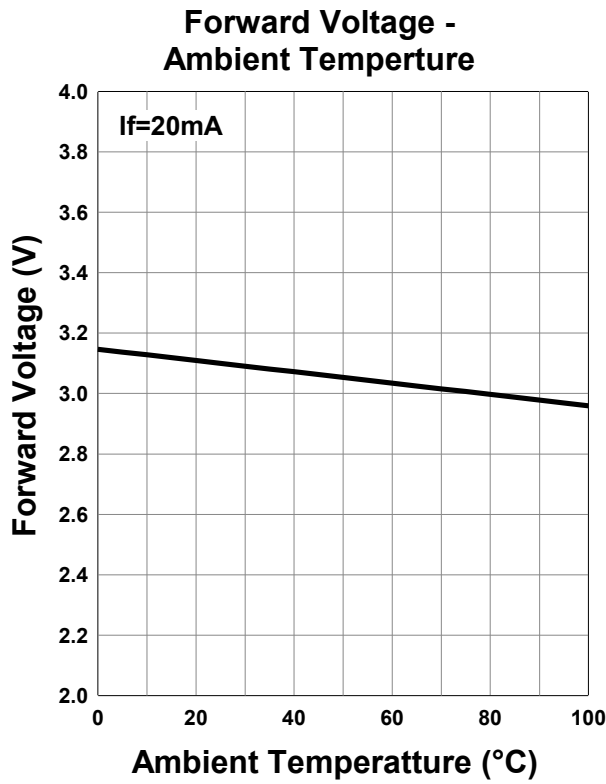


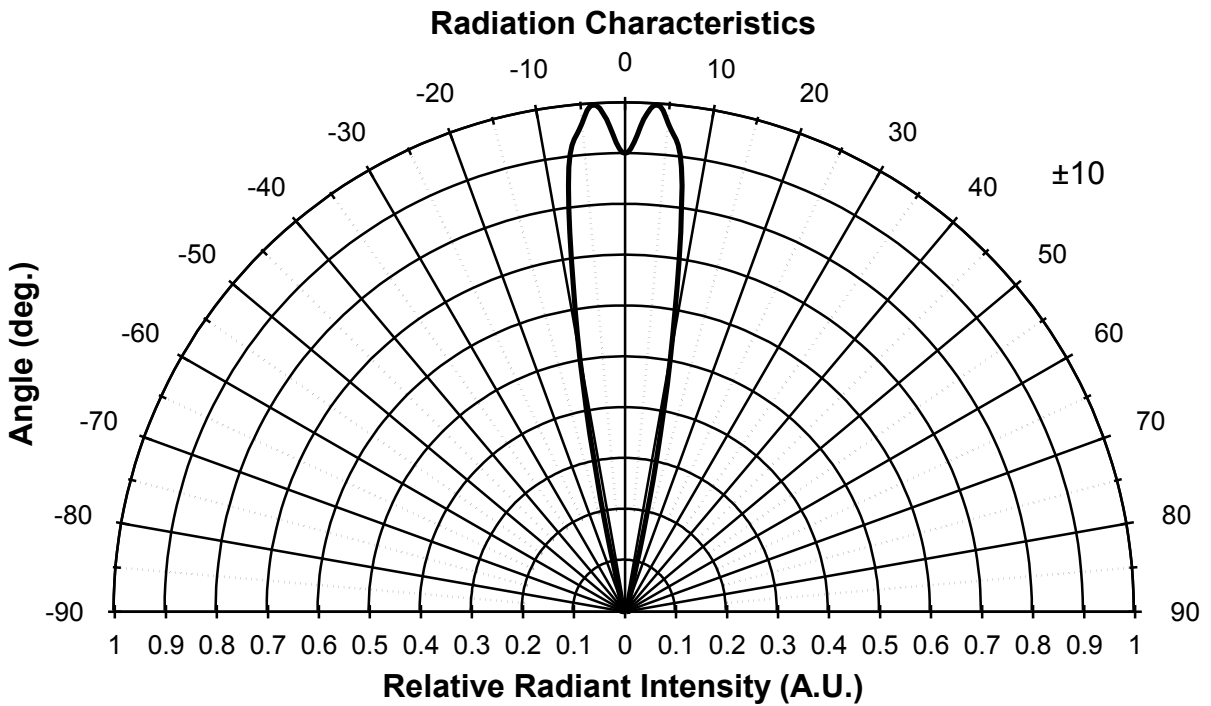
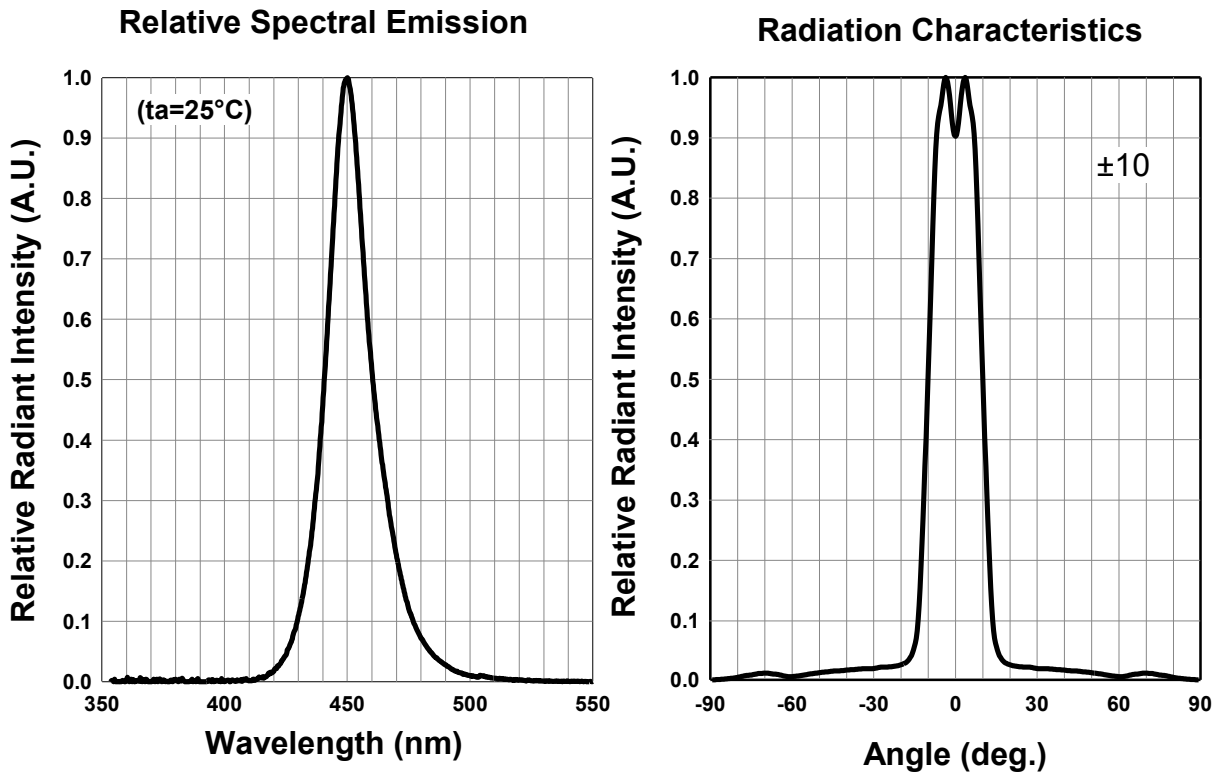
**Forward Current - Pulse Duration**



**Allowable Forward Current - Ambient Temperature**







**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.

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