

## L450-30M32 High Beam Blue LED

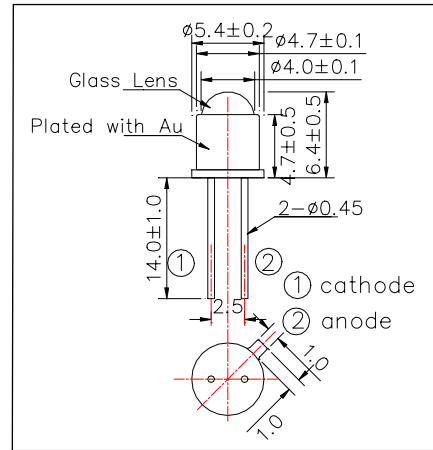
L450-30M32 is an InGaN LED mounted on TO-18 stem with ball glass lens, and designed for sensing devices.

On forward bias it emits a spectral band of radiation, which peaks at 450nm.

Outer Dimension (Unit:mm)

<Specifications>

1. Product Name: LED Lamp
2. Type Number: L450-30M32
3. Chip:
  - Chip material: InGaN
  - Dimension: 300um x 300um
  - Peak Wavelength: 450nm
4. Package
  - Stem: TO-18 Stem
  - Lens: Ball Glass Lens
  - Cap: Gold Plated



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	200	mW
Forward Current	IF	50	mA
Pulse Forward Current*	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	180	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=10μs

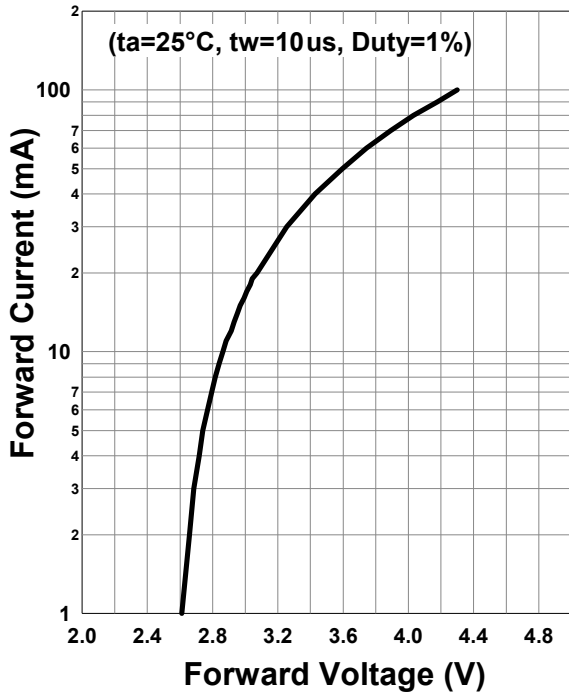
\*\* Soldering condition must be completed within 5 seconds at 250°C

Electro-Optical Characteristics [Ta=25°C ]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		3.0	4.0	V
		IF=100mA		4.3		
Radiated Power*	PO	IF=20mA		13		mW
		IF=100mA		49		
Radiant Intensity**	IE	IF=20mA		21		mW/sr
		IF=100mA		80		
Luminous Flux	ΦV	IF=20mA		0.4		lm
Peak Wavelength	λP	IF=20mA	440	450	460	nm
Half Width	Δλ	IF=20mA		20		nm
Wavelength (Dominant)	λD	IF=20mA		455		nm
Viewing Half Angle	θ1/2	IF=20mA		±12		deg
Rise Time	tr	IF=20mA		40		ns
Fall Time	tf	IF=20mA		40		ns

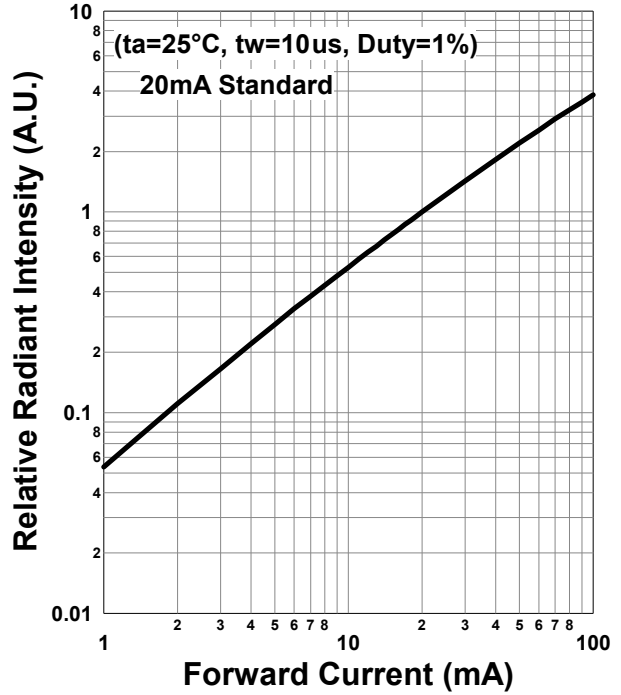
\* Measured by S3584-08

\*\* Measured by CIE17-2007 Condition B.

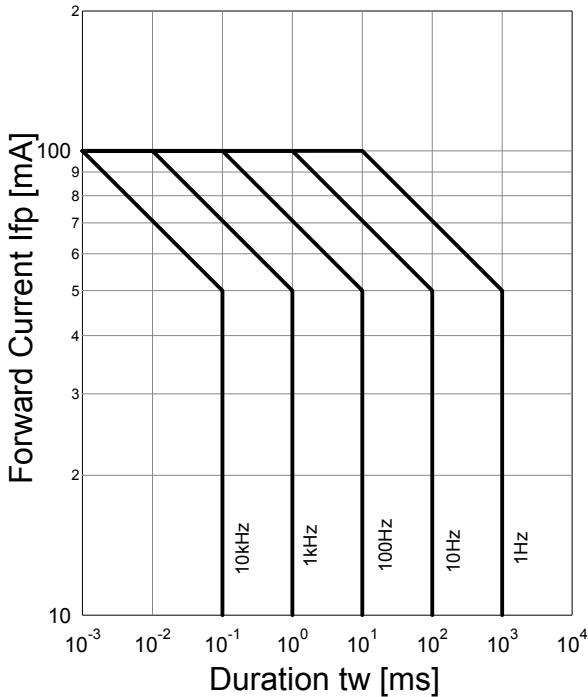
**Forward Current - Forward Voltage**



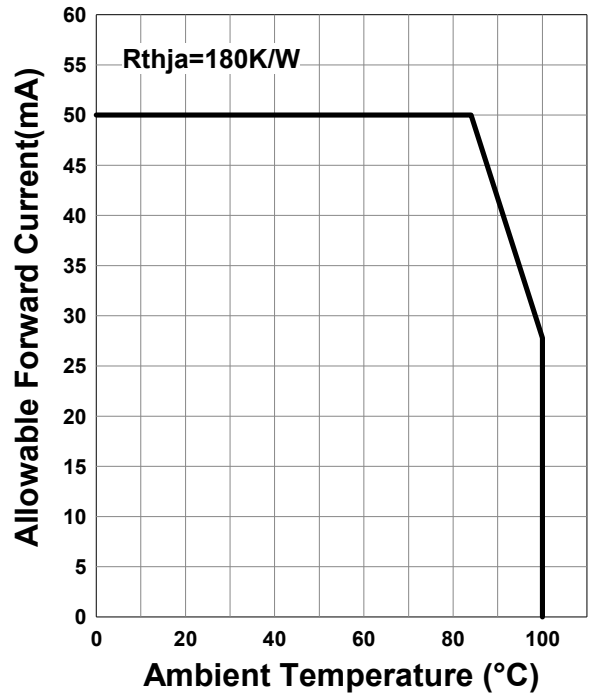
**Relative Radiant Intensity - Forward Current**

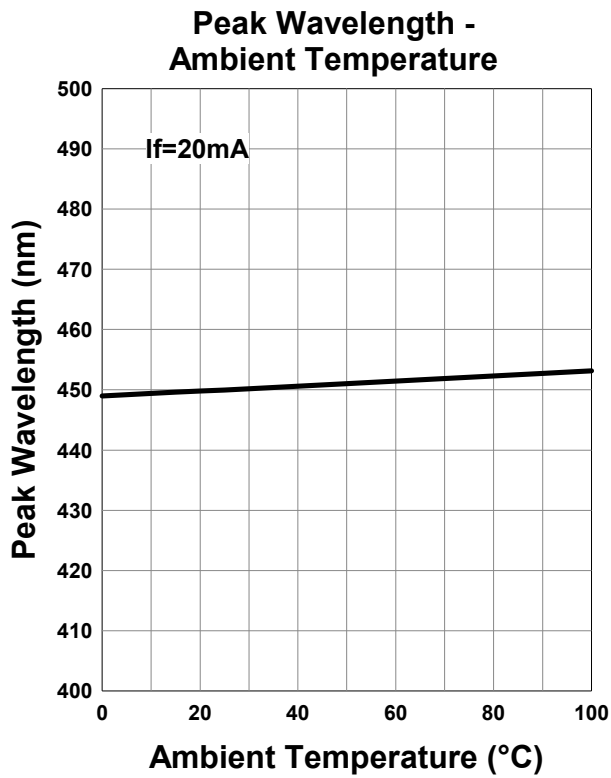
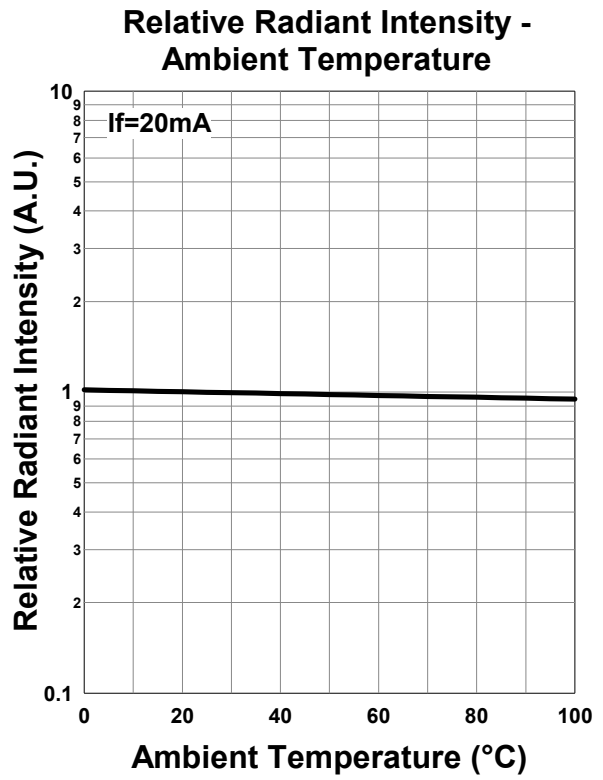
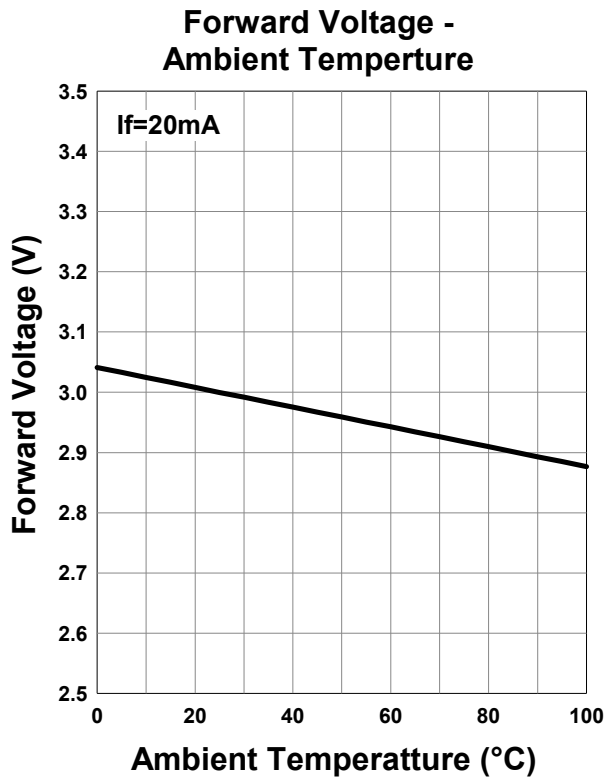


**Forward Current - Pulse Duration**

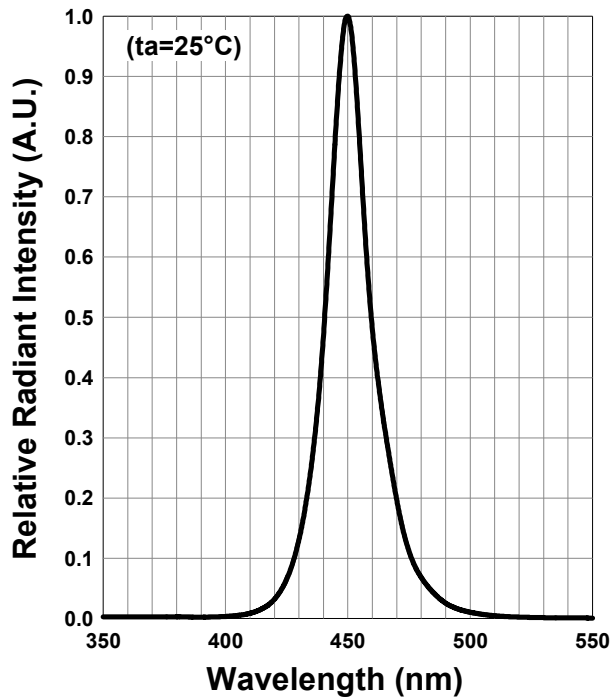


**Allowable Forward Current - Ambient Temperature**

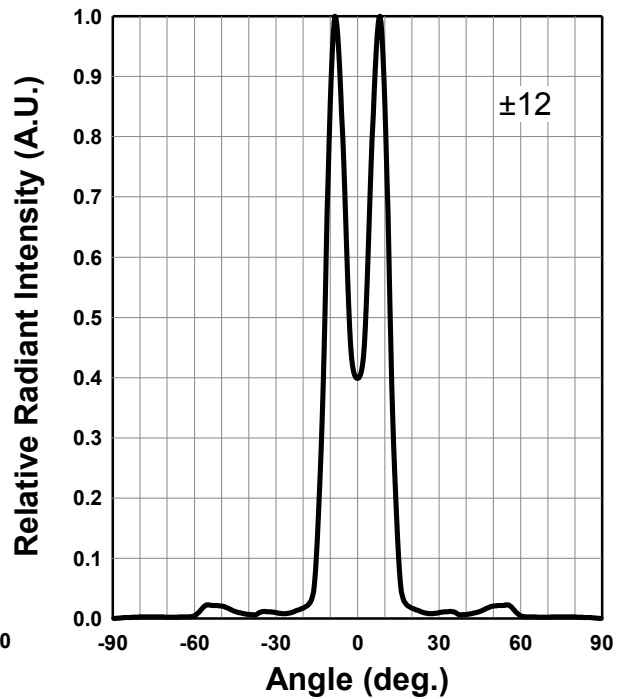




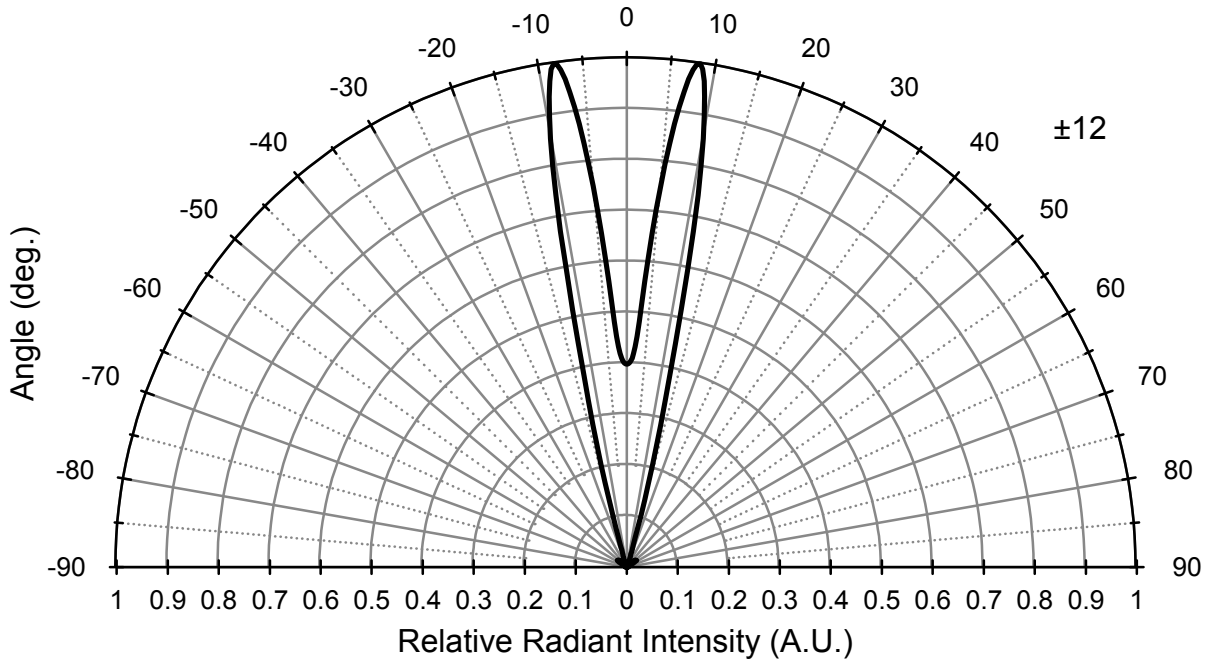
Relative Spectral Emission



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.

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