

# L630-35M32

High Beam Red LED

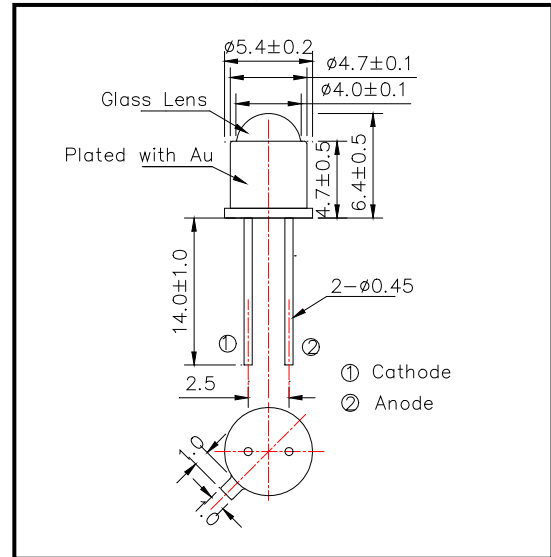
L630-35M32 is an AlGaInP LED mounted on TO-18 stem with ball glass lens, being designed for sensing devices.

On forward bias it emits a spectral band of radiation, which peaks at 630nm

### ◆ Specifications

1) Product Name	LED Lamp
2) Type No.	L630-35M32
3) Chip	
(1) Chip Material	AlGaInP
(2) Chip dimension	350um*350um
(2) Peak Wavelength	630nm typ.
4) Package	
(1) Type	TO-18 stem
(2) Lens	Ball 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>	190	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	75	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	100	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>	120	°C	
Operating Temperature	T <sub>OPR</sub>	-40 ~ +100	°C	
Storage Temperature	T <sub>STG</sub>	-40 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	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.

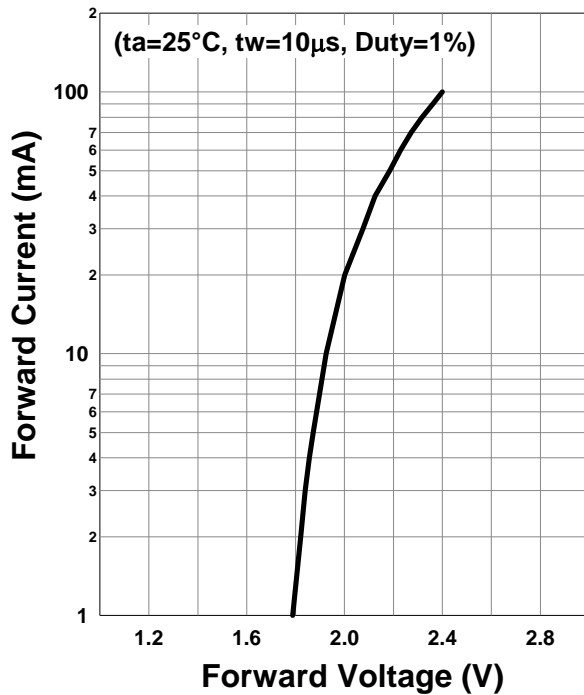
**◆ Electro-Optical Characteristics [Ta=25°C]**

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA		2.2	2.5	V
		I <sub>F</sub> =100mA		2.4		
Radiated Power	P <sub>O</sub>	I <sub>F</sub> =50mA		18		mW
		I <sub>F</sub> =100mA		33		
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =50mA		56		mW/sr
		I <sub>F</sub> =100mA		100		
Luminous Flux	Φ <sub>v</sub>	I <sub>F</sub> =50mA		3.8		lm
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	620	630	640	nm
Half Width	Δλ	I <sub>F</sub> =50mA		18		nm
Wavelength(dominant)	λ <sub>D</sub>	I <sub>F</sub> =50mA		620		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =50mA		±13		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		35		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		30		ns

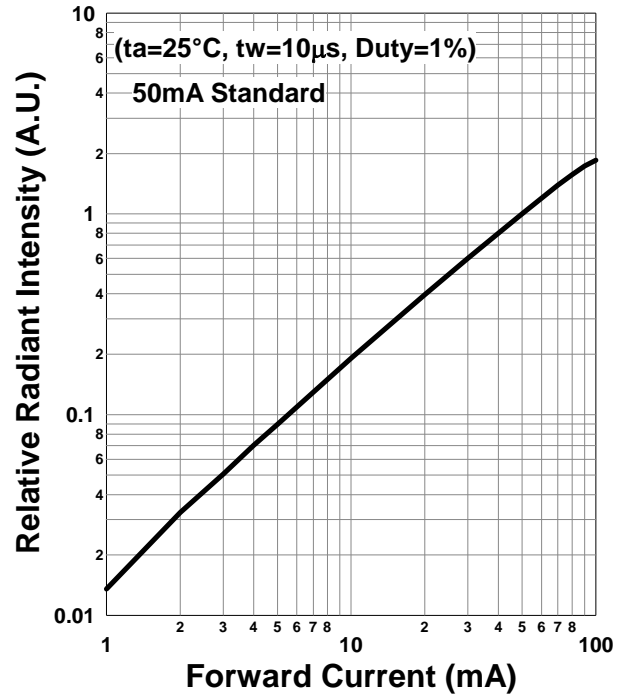
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE17-2007 Condition B.

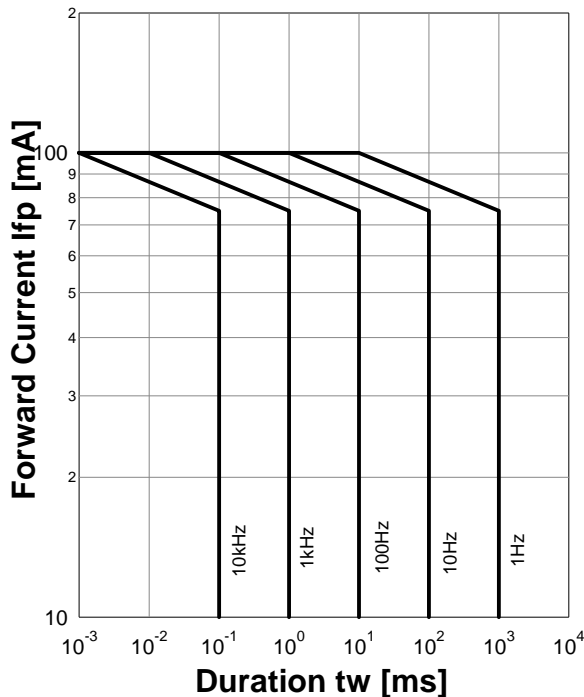
**Forward Current - Forward Voltage**



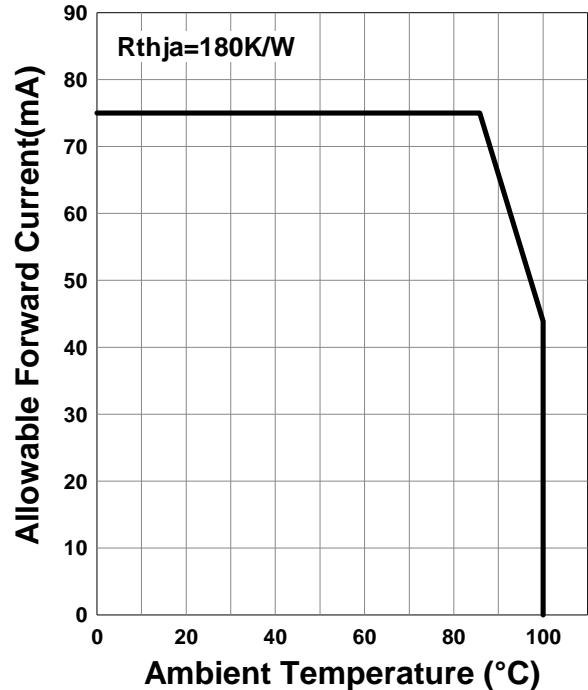
**Relative Radiant Intensity - Forward Current**



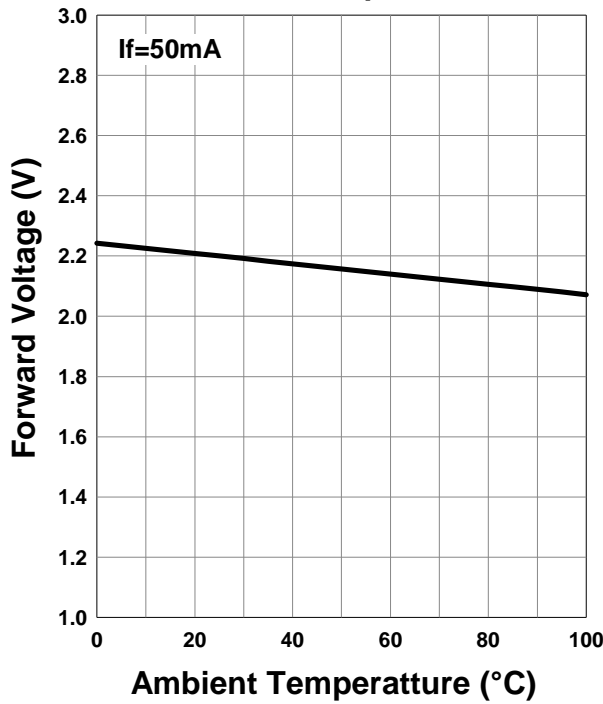
**Forward Current - Pulse Duration**



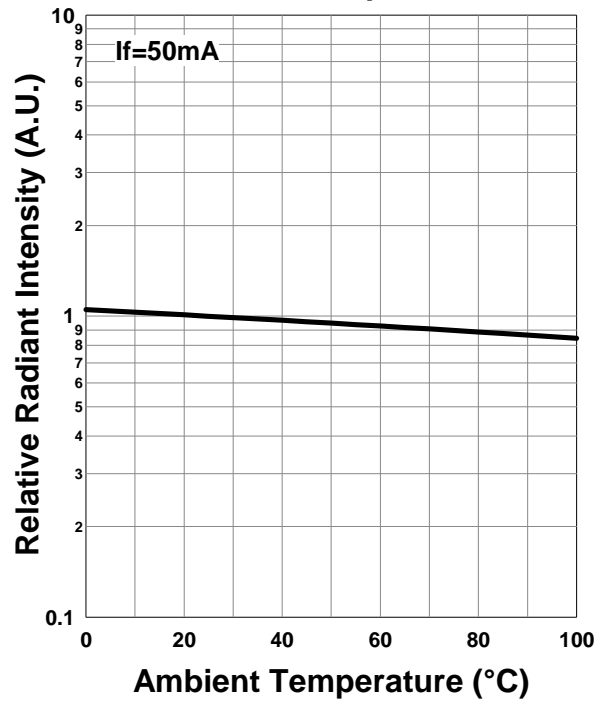
**Allowable Forward Current - Ambient Temperature**



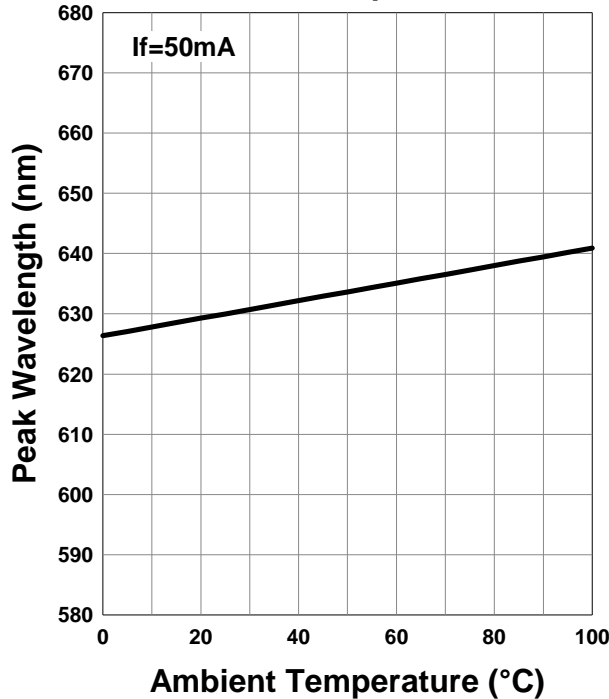
**Forward Voltage - Ambient Temperature**



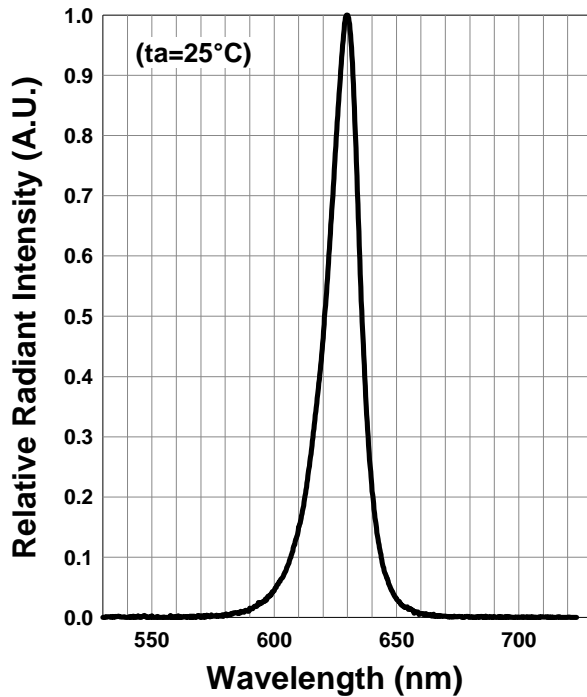
**Relative Radiant Intensity - Ambient Temperature**



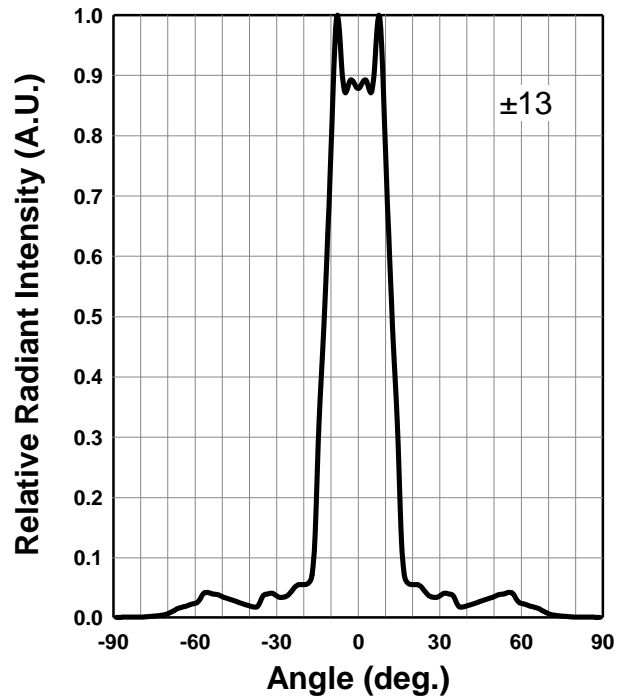
**Peak Wavelength - Ambient Temperature**



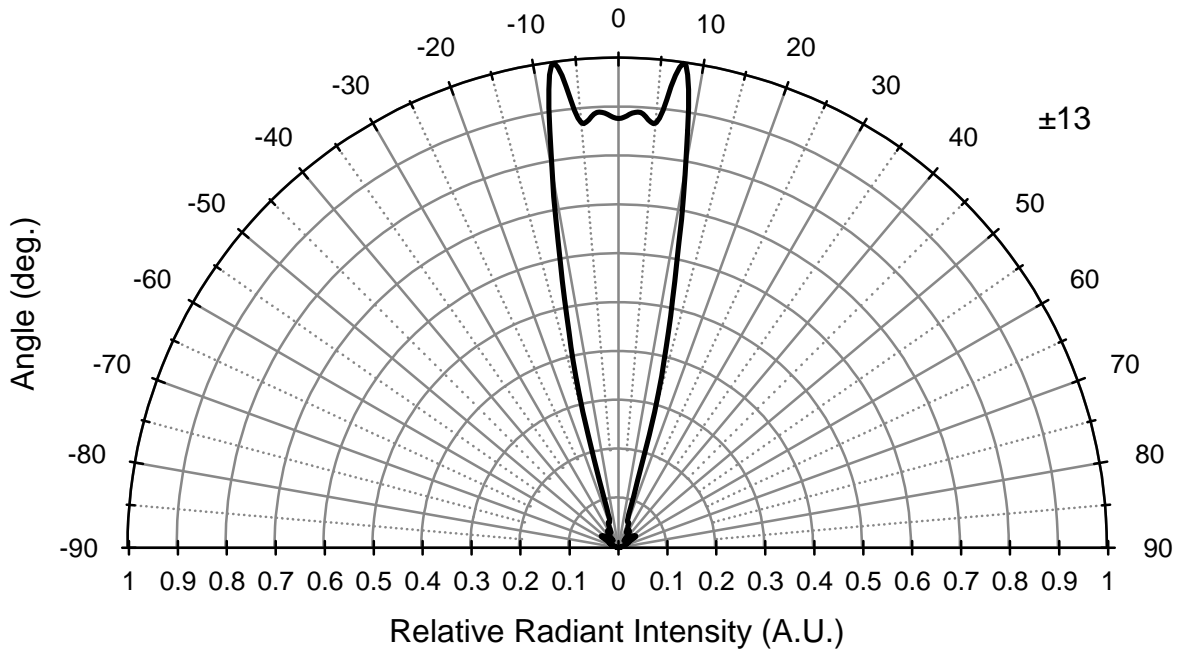
Relative Spectral Emission



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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