

L1450-35K42N

Stem type LED with high output power

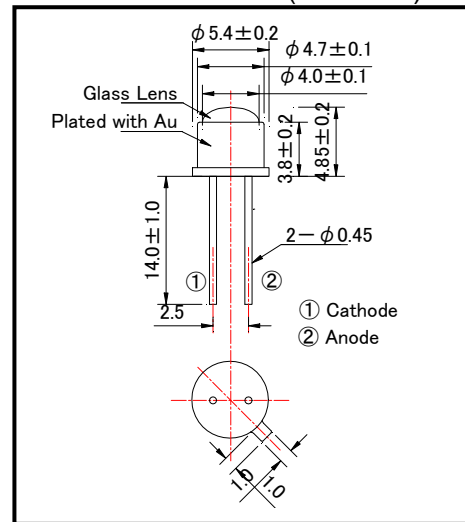
L1450-35K42N is an InGaAs/InP LED mounted on TO-46 stem and hermetically sealed with spherical glass ball lens being designed for high beam uses.

On forward bias it emits a spectral band of radiation, which peaks at 1450nm.

◆ Specifications

1) Product Name	LED Lamp
2) Type No.	L1450-35K42N
3) Chip	
(1) Chip Material	InGaAsP
(2) Chip dimension	350um*350um
(2) Peak Wavelength	1450nm typ.
4) Package	
(1) Type	TO-46 stem
(2) Lens	Unspherical Glass Lens
(3) Cap	Gold plated

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	130	mW
Forward Current	IF	100	mA
Pulse Forward Current	IFP	500	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	330	K/W
Junction Temperature	Tj	100	°C
Operating Temperature	TOPR	-30 ~ +80	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature	TSOL	265	°C

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

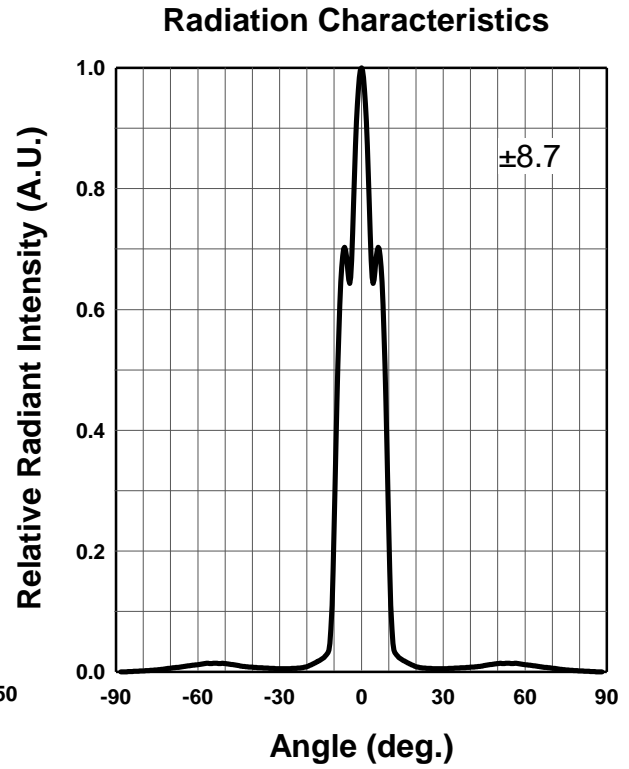
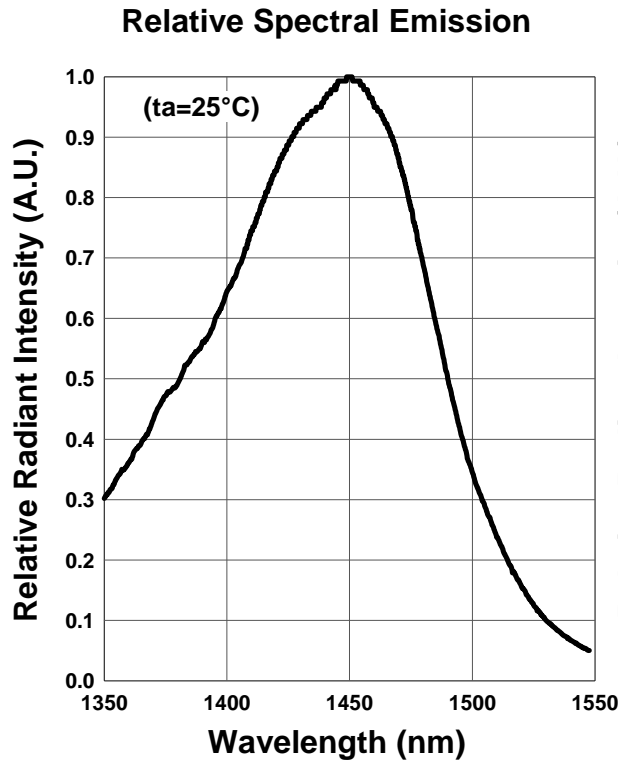
‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C.

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.0		V
Radiated Power	PO	IF=50mA		1.3		mW
Radiant Intensity	IE	IF=50mA		4.0		mW/sr
Peak Wavelength	λ_P	IF=50mA	1400	1450	1500	nm
Half Width	$\Delta\lambda$	IF=50mA		110		nm
Viewing Half Angle	$\theta_{1/2}$	IF=50mA		±8.7		deg.
Rise Time	tr	IF=50mA		10		ns
Fall Time	tf	IF=50mA		10		ns

‡Radiated Power is measured by G8370-85.

‡Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2742.



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.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.