



L450-__U Blue LED Lamp

This series of L450-__U is an InGaN LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a band of visible light that peaks 450nm.

1) Specifications

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|---------------------|-------------------|
| (1) Chip material | InGaN |
| (2) Peak wavelength | 450nm typ. |
| (3) Package | Clear epoxy resin |
| (4) Lead frame | Soldered |

2) Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	120	mW	T _a =25°C
Forward Current	I _F	30	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	T _a =25°C
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	260	°C	

3) Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		3.8	4.3	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =20mA		1.3		mW
Peak Wavelength	λ _P	I _F =20mA	440	450	460	nm
Half Width	Δλ	I _F =20mA		30		nm

4) Characteristics of Brightness [T_a=25°C]

Type	Viewing Half Angle	Brightness I _F =20mA unit: mcd			Outer Dimension	
		Minimum	Typical	Maximum	Dimension	Figure
L450-01U	±10°		250		φ5	1
L450-02U	±5°		600		φ5	2
L450-03U	±12°		250		φ5	3
L450-04U	±23°		100		φ5	4
L450-05U	±30°		50		φ5	5
L450-06U	±9°		1000		φ5	6
L450-09U	±20°(Long)		150		φ5	7
	±13°(Short)				Oval	
L450-10U			1100		φ10	8
L450-33U	±18°		120		φ3	9
L450-36U	±28°		50		φ3	10

‡ Brightness is measured by Tektronix J-16.

‡ Total Radiated Power is measured by Photodyne #500.