

L490-__U Greenish Blue LED Lamp

This series of L490-__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 490nm.

1) Specifications

- (1) Chip material InGaN
- (2) Peak wavelength 490nm 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	µA
Total Radiated Power	P _O	I _F =20mA		1.2		mW
Peak Wavelength	λ _P	I _F =20mA	480	490	500	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
L490-01U	±9°		1500		Φ5	1
L490-02U	±4°		3000		Φ5	2
L490-03U	±12°		1400		Φ5	3
L490-04U	±20°		400		Φ5	4
L490-05U	±30°		150		Φ5	5
L490-06U	±5°		4000		Φ5	6
L490-09U	±18°(Long)		780		Φ5	7
	±14°(Short)			Oval		
L490-10U	±5°		7000		Φ10	8
L490-33U	±16°		750		Φ3	9
L490-36U	±32°		280		Φ3	10

‡ Brightness is measured by Tektronix J-16.

‡ Total Radiated Power is measured by Photodyne #500.