

L405-__ _V Violet LED Lamp

This series of L405-__ _V 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 405nm.

1) Specifications

- (1) Chip material InGaN
- (2) Peak wavelength 405nm 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		10.0		mW
Peak Wavelength	λ _P	I _F =20mA	395	405	415	nm
Half Width	Δλ	I _F =20mA		15		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
L405-01V	±10°		40		Φ5	1
L405-02V	±5°		50		Φ5	2
L405-03V	±12°		25		Φ5	3
L405-04V	±23°		11		Φ5	4
L405-05V	±30°		2		Φ5	5
L405-06V	±9°		60		Φ5	6
L405-09V	±20°(Long)		20		Φ5	7
	±13°(Short)			Oval		
L405-10V					Φ10	8
L405-33V	±18°		25		Φ3	9
L405-36V	±28°		10		Φ3	10

‡Brightness is measured by Tektronix J-16.

‡Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2741