

# L450-01U Blue LED

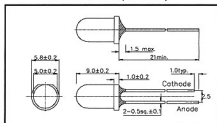
L450-01U is an InGaN LED mounted on a lead frame with a clear epoxy lens.

On forward bias it emits a band of visible light, which peaks 450nm.

## ◆ Specifications

- |                     |                    |
|---------------------|--------------------|
| 1) Product Name     | Blue LED Lamp      |
| 2) Type No.         | L450-01U           |
| 3) Chip             |                    |
| (1) Chip Material   | InGaN              |
| (2) Peak Wavelength | 450nm typ.         |
| 4) Package          |                    |
| (1) Type            | Φ5mm clear molding |
| (2) Resin Material  | Epoxy Resin        |
| (3) Lead Frame      | Soldered           |

## ◆ Outer dimension (Unit : mm)



## ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	$P_D$	120	mW	$T_a = 25^\circ\text{C}$
Forward Current	$I_F$	30	mA	$T_a = 25^\circ\text{C}$
Reverse Voltage	$V_R$	5	V	$T_a = 25^\circ\text{C}$
Operating Temperature	$T_{OPR}$	$-30 \sim +85$	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	$-30 \sim +100$	$^\circ\text{C}$	
Soldering Temperature	$T_{SOL}$	260	$^\circ\text{C}$	

‡Soldering condition: Soldering condition must be completed within 3 seconds at  $260^\circ\text{C}$

## ◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$		3.8	4.3	V
Reverse Current	$I_R$	$V_R = 5\text{V}$			10	$\mu\text{A}$
Total Radiated Power	$P_O$	$I_F = 20\text{mA}$		1.3		mW
Brightness	$I_v$	$I_F = 20\text{mA}$		250		mcad
Peak Wavelength	$\lambda_P$	$I_F = 20\text{mA}$	440	450	460	nm
Half Width	$\Delta\lambda$	$I_F = 20\text{mA}$		30		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F = 20\text{mA}$		$\pm 10$		deg.

‡Brightness is measured by Tektronix J-16.

‡Total Radiated Power is measured by Photodyne #500