

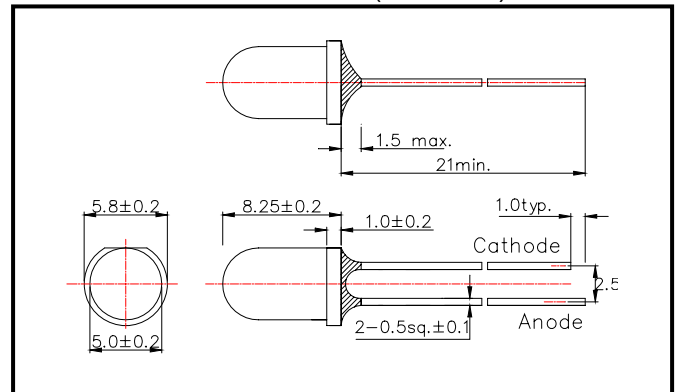
L450-03U Blue LED Lamp

L450-03U 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. | L450-03U |
| 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 ~ +85	$^\circ\text{C}$	
Storage Temperature	T_{STG}	-30 ~ +100	$^\circ\text{C}$	
Soldering Temperature	T_{SOL}	260	$^\circ\text{C}$	

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°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	uA
Total Radiated Power	P_O	$I_F=20\text{mA}$		1.3		mW
Brightness	I_V	$I_F=20\text{mA}$		250		mcd
Peak Wavelength	λ_P	$I_F=20\text{mA}$	440	450	460	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		50		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		±12		deg.

‡Brightness is measured by Tektronix J-16.

‡Radiant Intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2741