

L735-40K42

Stem type LED with high beam

L735-40K42 is AlGaAs LED mounted on TO-46 stem with unspherical glass lens, being designed for high beam uses.

On forward bias, it emits a spectral band of radiation, which peaks at 735nm.

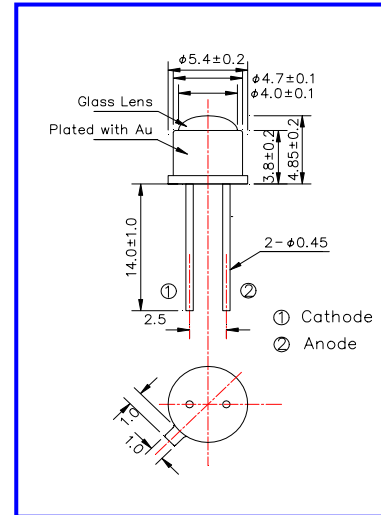
◆ Outer dimension(unit:mm)

◆ Features

- 1)High radiated intensity
- 2)High Reliability

◆ Specifications

- | | |
|--------------------|------------------------|
| 1)Product Name | Infrared LED Lamp |
| 2)Type No. | L735-40K42 |
| 3)Chip Spec. | |
| (1)Material | AlGaAs |
| (2)Peak Wavelength | 735nm |
| 4)Package | |
| (1)type | TO-46 stem |
| (2)Lens | Unspherical glass lens |
| (3)Cap | Gold plated |



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	200	mW	$T_a=25^\circ\text{C}$
Forward Current	I_F	100	mA	$T_a=25^\circ\text{C}$
Pulse Forward Current	I_{FP}	500	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	V_R	5	V	$T_a=25^\circ\text{C}$
Operating Temperature	T_{OPR}	-30 ~ +100	$^\circ\text{C}$	
Storage Temperature	T_{STG}	-30 ~ +110	$^\circ\text{C}$	
Soldering Temperature	T_{SOL}	260	$^\circ\text{C}$	

‡Pulse Forward Current condition : Duty=1% and Pulse Width=10us.

 ‡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	$I_F=20\text{mA}$		1.85	2.00	V
Reverse Current	I_R	$V_R=5\text{V}$			10	μA
Total Radiated Power	P_o	$I_F=20\text{mA}$	6	10		mW
Radiant Intensity	I_E	$I_F=20\text{mA}$		60.0		mW/sr
Peak Wavelength	λ_P	$I_F=20\text{mA}$	715	735	755	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		30		nm
Viewing Half Angle	$\Theta_{1/2}$	$I_F=20\text{mA}$		± 6		deg.
Rise Time	t_r	$I_F=20\text{mA}$		80		ns
Fall Time	t_f	$I_F=20\text{mA}$		80		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512