

# L1085-35K00

Stem type LED

L1085-35K00 is an InGaAsP LED mounted on a TO-46 stem with an epoxy lens.

It is designed for high output power and wide viewing angle use.

On forward bias, it emits a spectral band of radiation, which peaks at 1085nm.

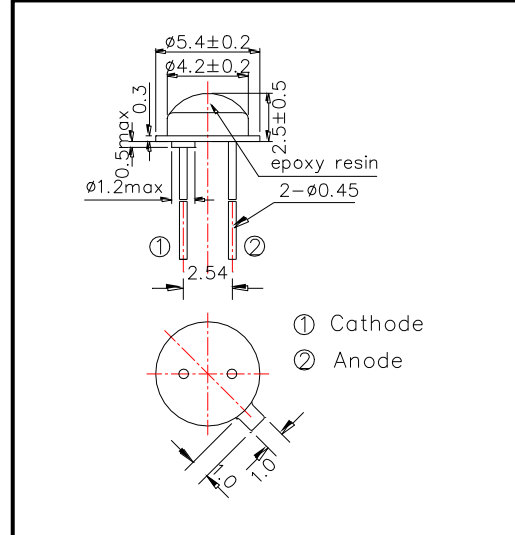
◆ Features

- 1) High radiated intensity
- 2) Wide Viewing angle

◆ Specifications

- |                     |                   |
|---------------------|-------------------|
| 1) Product Name     | NIR stem type LED |
| 2) Type No.         | L1085-35K00       |
| 3) Chip Spec.       |                   |
| (1) Material        | InGaAs/InP        |
| (2) Peak Wavelength | 1085nm            |
| 4) Package          |                   |
| (1) Type            | TO-46 stem        |
| (2) Lens            | Epoxy resin       |

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>d</sub>	130	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	100	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	500	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	3	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-30 ~ +80	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	265	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA		1.15	1.35	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Radiated Power	P <sub>O</sub>	I <sub>F</sub> =50mA	4.0	8.0		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =50mA		3.0		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	1060	1085	1100	nm
Half Width	Δλ	I <sub>F</sub> =50mA		50		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =50mA		±70		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		30		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		20		ns

‡Radiated Power is measured by HPK G8370-85.

‡Radiant Intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2742