

L1450-35M00

Stem type LED with high output power

L1450-35M00 is an InGaAsP LED mounted on a TO-18 stem with an epoxy resin lens being designed for high output power uses.

On forward bias it emits a spectral band of radiation, which peaks at 1450nm.

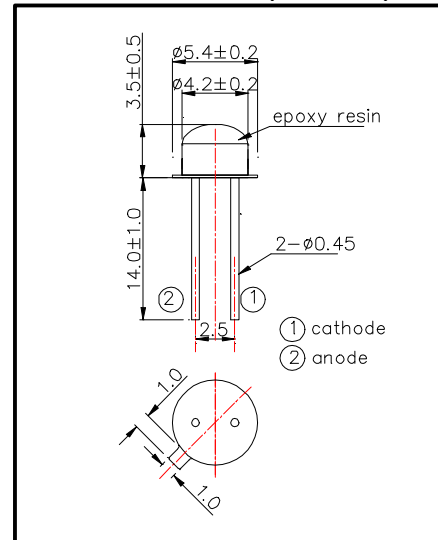
Outer dimension(Unit:mm)

Features

- 1) High radiated intensity
- 2) Wide Viewing Half Angle

Specifications

- | | |
|---------------------|------------------|
| 1) Product Name | NIR LED Lamp |
| 2) Type No. | L1450-35M00 |
| 3) Chip Spec. | |
| (1) Material | InGaAs/InP |
| (2) Peak Wavelength | 1450nm |
| 4) Package | |
| (1) Type | TO-18 stem |
| (2) Lens | Epoxy Resin lens |
| (3) Cap | Gold plated |



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	100	mA	$T_a=25^\circ\text{C}$
Pulse Forward Current	I_{FP}	1000	mA	$T_a=25^\circ\text{C}$
Reverse Voltage	V_R	3	V	$T_a=25^\circ\text{C}$
Operating Temperature	T_{OPR}	-20 ~ +90	$^\circ\text{C}$	
Storage Temperature	T_{STG}	-30 ~ +100	$^\circ\text{C}$	
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	$I_F=20\text{mA}$		0.8	1.3	V
Reverse Current	I_R	$V_R=3\text{V}$			10	μA
Total Radiated Power	P_O	$I_F=20\text{mA}$	0.5	1.0		mW
Peak Wavelength	λ_P	$I_F=20\text{mA}$	1400	1450	1500	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		100		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F=20\text{mA}$		± 60		deg.
Rise Time	t_r	$I_F=20\text{mA}$		10		ns
Fall Time	t_f	$I_F=20\text{mA}$		10		ns

‡ Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2742

EPITEX INC. : 4, Nishiaketa-Cho, Higashi-Kujyou, Minami-Ku, Kyoto, Japan

Tel.: ++81-75-682-2338 Fax: ++81-75-682-2267

e-mail: sales-dep@epitex.com

<http://www.epitex.com>