

L1450-35M32

Stem type LED with high output power

L1450-35M32 is an InGaAsP LED mounted on a TO-18 stem

with a spherical glass lens being designed for high output power uses.

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

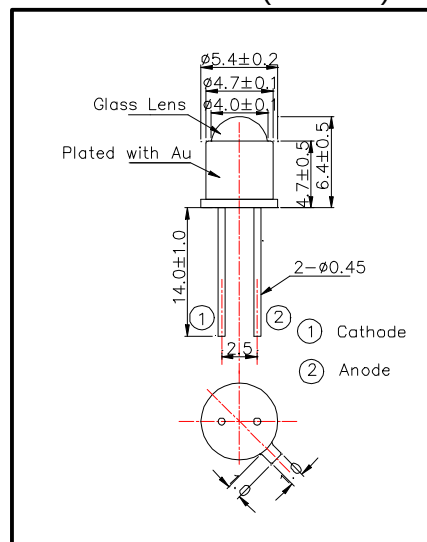
Features

- 1) High radiated intensity
- 2) High Reliability

Specifications

- 1) Product Name NIR LED Lamp
- 2) Type No. L1450-35M32
- 3) Chip Spec.
 - (1) Material InGaAs/InP
 - (2) Peak Wavelength 1450nm
- 4) Package
 - (1) Type TO-18 stem
 - (2) Lens Spherical glass lens
 - (3) Cap Gold plated

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	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	$I_F=20\text{mA}$	0.6	1.6		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	$\theta_{1/2}$	$I_F=20\text{mA}$		± 15		deg.
Rise Time	t_f	$I_F=20\text{mA}$		10		ns
Fall Time	t_r	$I_F=20\text{mA}$		10		ns

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

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