

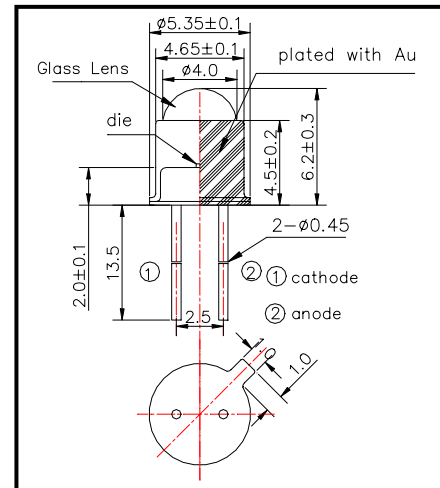
# L1550-35M32L

Stem type LED with high radiant intensity

L1550-35M32L is an InGaAsP LED mounted on a TO-18 stem with a spherical glass lens being designed for high radiant intensity.

On forward bias, it emits a spectral band of radiation, which peaks at 1550nm.

◆ Outer dimension (Unit: mm)



◆ Features

- 1) High radiated intensity
- 2) High Reliability

◆ Specifications

- 1) Product Name           NIR LED Lamp
- 2) Type No.                L1550-35M32L
- 3) Chip Spec.
  - (1) Material                InGaAs/InP
  - (2) Peak Wavelength    1550nm
- 4) Package
  - (1) Type                    TO-18 stem
  - (2) Lens                    Spherical glass lens
  - (3) Cap                     Gold plated

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	130	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current	IFP	1000	mA	Ta=25°C
Reverse Voltage	VR	3	V	Ta=25°C
Junction Temperature	TJ	100	°C	
Thermal Resistance	Rthjp	330	K/W	
Operating Temperature	TOPR	-30 ~ +80	°C	
Storage Temperature	TSTG	-40 ~ +100	°C	
Soldering Temperature	TSOL	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

‡Thermal resistance: junction – ambient, leads 7mm, soldered on PCB.

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		0.95	1.35	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power	PO	IF=50mA	1.0	1.4		mW
Radiant Intensity	IE	IF=50mA		3.0		mW/sr
Peak Wavelength	λP	IF=50mA	1500	1550	1600	nm
Half Width	Δλ	IF=50mA		115		nm
Centroid Wavelength	λC	IF=50mA		1525		nm
Viewing Half Angle	θ 1/2	IF=50mA		±9		deg.
Rise Time	tr	IF=50mA		10		ns
Fall Time	tf	IF=50mA		10		ns

‡Total Radiated Power is measured by G8370-85.

‡Radiant Intensity is measured by AQ2140 & AQ2742