

# L1200-35M00

Stem type LED with high output power

L1200-35M00 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 1200nm.

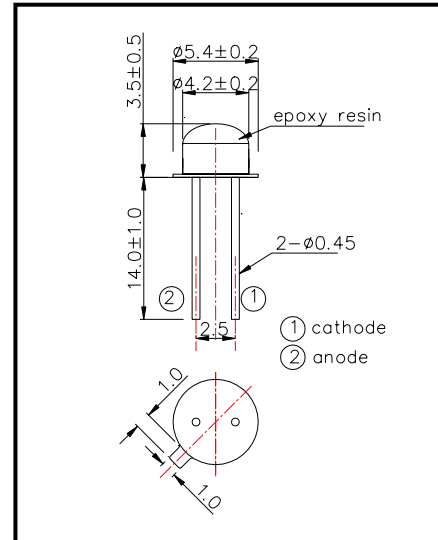
◆ Outer dimension (Unit:mm)

◆ Features

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

◆ Specifications

- |                     |                  |
|---------------------|------------------|
| 1) Product Name     | NIR LED Lamp     |
| 2) Type No.         | L1200-35M00      |
| 3) Chip Spec.       |                  |
| (1) Material        | InGaAs/InP       |
| (2) Peak Wavelength | 1200nm           |
| 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 <sub>D</sub>	120	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>	1000	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	5	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-20 ~ +90	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	260	°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 <sub>F</sub>	I <sub>F</sub> =20mA		0.8	1.3	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =3V			10	uA
Total Radiated Power	P <sub>O</sub>	I <sub>F</sub> =20mA	0.12	0.25		mW
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	1150	1200	1250	nm
Half Width	Δλ	I <sub>F</sub> =20mA		100		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =20mA		±50		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =20mA		10		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =20mA		10		ns

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