

# L1300-35T52 High Power InGaAsP IR LED

L1300-35T52 is InGaAsP LED mounted on TO-18 stem and hermetically sealed with flat glass can.

On forward bias it emits a spectral band of radiation, which peaks at 1300nm.

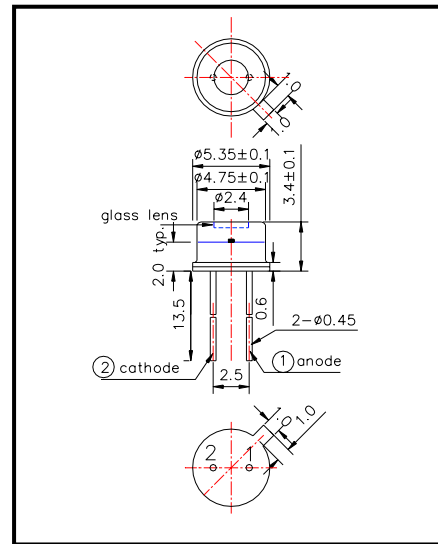
### ◆Features

- 1) Wide viewing angle
- 2) High Reliability
- 3) 350micron sq. die

### ◆Specifications

- |                     |                      |
|---------------------|----------------------|
| 1) Product Name     | NIR LED Lamp         |
| 2) Type No.         | L1300-35T52          |
| 3) Chip Spec.       |                      |
| (1) Material        | InGaAsP/InP          |
| (2) Peak Wavelength | 1300nm               |
| 4) Package          |                      |
| (1) Type            | TO-18 stem           |
| (2) Lens            | Φ2.4 flat glass lens |
| (3) Cap             | Gold plated          |

### ◆Outer dimension (Unit:mm)



### ◆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>	-30 ~ +80	°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=1us.

‡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		1.1	1.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Total Radiated Power	P <sub>O</sub>	I <sub>F</sub> =20mA		1.6		mW
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	1250	1300	1350	nm
Half Width	Δλ	I <sub>F</sub> =20mA		100		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =20mA		±55		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