

# L700-40T52

 stem type LED with flat glass

L700-40T52 is AlGaAs 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 700nm.

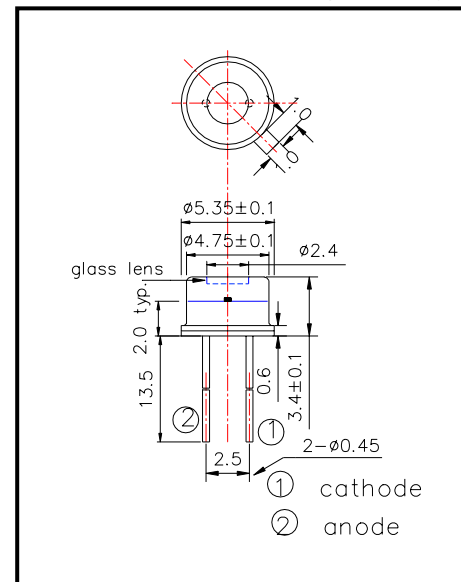
### ◆Features

- 1) Wide viewing angle
- 2) High Reliability

### ◆Specifications

- 1) Product Name      Infrared LED Lamp
- 2) Type No.          L700-40T52
- 3) Chip Spec.
  - (1) Material          AlGaAs
  - (2) Peak Wavelength 700nm
- 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>	110	mW	T <sub>a</sub> =25
Forward Current	I <sub>F</sub>	50	mA	T <sub>a</sub> =25
Pulse Forward Current	I <sub>FP</sub>	200	mA	T <sub>a</sub> =25
Reverse Voltage	V <sub>R</sub>	5	V	T <sub>a</sub> =25
Operating Temperature	T <sub>OPR</sub>	-30 ~ +100	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +110	°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 [T<sub>a</sub>=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA		1.90	2.30	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	1.0	2.0		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =20mA		0.5		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	680	700	720	nm
Half Width	Δλ	I <sub>F</sub> =20mA		20		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		80		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =20mA		80		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512