

# L1550-03 Infrared LED Lamp

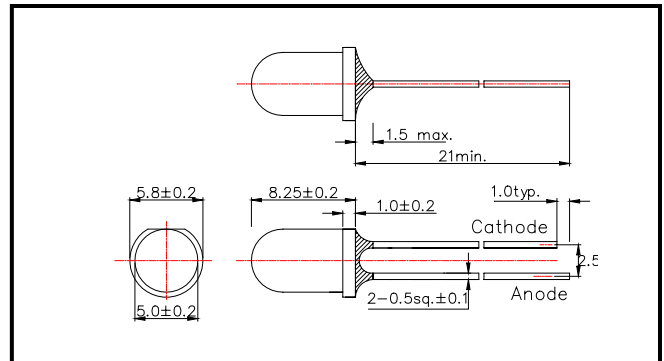
L1550-03 is an InGaAsP LED mounted on a lead frame with a clear epoxy lens.

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

### ◆ Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	L1550-03
3) Chip	
(1) Chip Material	InGaAsP
(2) Peak Wavelength	1550nm typ.
4) Package	
(1) Type	Φ5mm clear molding
(2) Resin Material	Epoxy Resin
(3) Lead Frame	Soldered

### ◆ 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 ~ +85	°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 [T<sub>a</sub>=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA		1.0	1.5	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Radiated Power	P <sub>O</sub>	I <sub>F</sub> =50mA	0.5	1.5		mW
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	1500	1550	1600	nm
Half Width	Δλ	I <sub>F</sub> =50mA		100		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =50mA		±15		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		10		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		10		ns

‡Total Radiated Power is measured by Photodyne #500

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