

L1050-03 Infrared LED Lamp

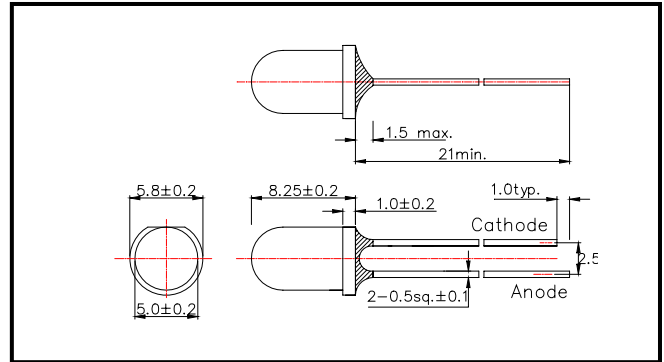
L1050-03 is an InGaAsP LED mounted on a lead frame with a clear epoxy lens.

On forward bias, it emits a spectral band of radiation, which peaks at 1050nm.

◆ Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	L1050-03
3) Chip	
(1) Chip Material	InGaAsP
(2) Peak Wavelength	1050nm 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 _D	120	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	1000	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	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_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.25	1.55	V
Reverse Current	I _R	V _R =5V			10	uA
Radiated Power	P _O	I _F =50mA	0.5	1.0		mW
Peak Wavelength	λ _P	I _F =50mA	1000	1050	1100	nm
Half Width	Δλ	I _F =50mA		100		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±15		deg.
Rise Time	t _r	I _F =50mA		10		ns
Fall Time	t _f	I _F =50mA		10		ns

‡Total Radiated Power is measured by Photodyne #500

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