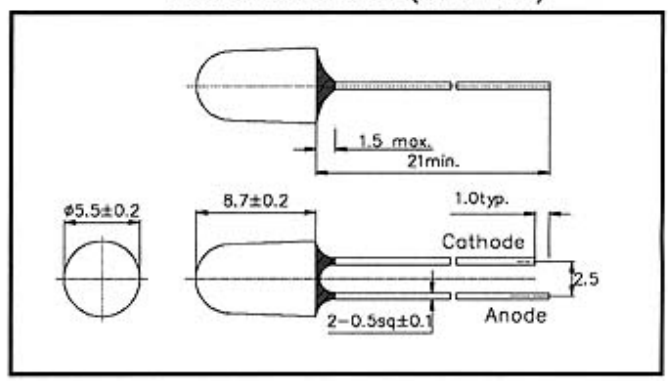
LED970-06 infrared LED

On forward bias it emits a spectral band of radiation, which peaks at 970nm.

♦Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	L970-06
3) Chip	
(1) Chip Material	GaAs
(2) Peak Wavelength	970nm 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	140	mW	Ta=25°C
Forward Current	I_F	100	mA	Ta=25°C
Pulse Forward Current	I_{FP}	1000	mA	Ta=25°C
Reverse Voltage	V_R	5	V	Ta=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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	I_F=50mA		1.30	1.45	V
Reverse Current	I_R	V_R=5V			10	uA
Total Radiated Power	P_O	I_F=50mA	2.5	4.0		mW
Radiant Intensity	I_V	I_F=50mA		20		mW/sr
Peak Wavelength	λ_P	I_F=50mA	960	970	980	nm
Half Width	$\Delta\lambda$	I_F=50mA		65		nm
Viewing Half Angle	$\theta_{1/2}$	I_F=50mA		±7		deg.
Rise Time	tr	I_F=50mA		1000		ns
Fall Time	tf	I_F=50mA		400		ns

‡Total Radiated Power is measured by Photodyne #500
‡Radiant Intensity is measured by Tektronix J-6512