

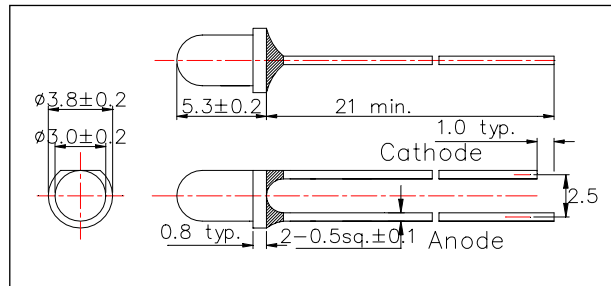
L870-33-2D**Infrared LED Lamp**

L870-33-2D(L870-33DW) is an AlGaAs LED mounted on a lead frame with a clear epoxy lens, which die has offset pads and double wire bonding for high current use. On forward bias, it emits a spectral band of radiation that peaks at 870nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L870-33-2D
3. Chip:
 - Chip material: AlGaAs
 - Dimension: 400um x 400um
 - Peak Wavelength: 870nm typ.
4. Package
 - Type: Φ3mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered(Lead Free)

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	150	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	1000	mA
Reverse Voltage	VR	5	V
Operating Temperature	TOPR	-30 ~ +85	°C
Storage Temperature	TSTG	-30 ~ +100	°C
Soldering Temperature**	TSOL	265	°C

* Duty=1% and Pulse Width=10us.

** Soldering condition must be completed within 3 second at 265 °C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.40	1.60	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	15	22		mW
Radiant Intensity**	IE	IF=50mA	18	40		mW/sr
Peak Wavelength	λP	IF=50mA	860	870	880	nm
Half Width	$\Delta\lambda$	IF=50mA		40		nm
Viewing Half Angle	$\theta_{1/2}$	IF=50mA		±15		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512

