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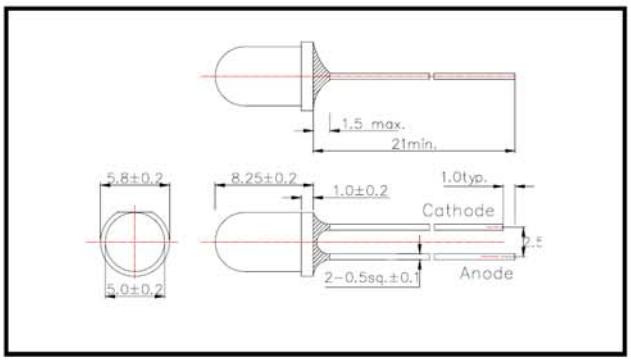
LED870F-03U Infrared LED Lamp

LED870F-03U is an AlGaAs LED mounted on a lead frame with a clear epoxy lens.
On forward bias, it emits a spectral band of radiation which peaks at 870nm.

♦Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	LED870F-03U
3) Chip	
(1) Chip Material	AlGaAs
(2) Chip Dimension	0.4mm*0.4mm
(3) Peak Wavelength	870nm typ.
4) Package	
(1) Type	Φ5mm clear molding
(2) Resin Material	Epoxy Resin

♦Outer dimension(Unit: mm)



♦Absolute Maximum Ratings

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA DC		1.45	1.55	V
		IF=100mA, tp=20ms		1.50	1.75	
Pulsed Forward Voltage	VFP	IF=1A		3.5	4.0	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power	PO	IF=50mA DC	18.0	24.0		mW
		IF=100mA, tp=20ms		48.0		
Radiant Intensity	IE	IF=50mA DC	50	70		mW/sr
		IF=100mA, tp=20ms		140		
Peak Wavelength	λP	IF=50mA DC	860	870	880	nm
Half Width	Δλ	IF=50mA DC		40		nm
Viewing Half Angle	θ 1/2	IF=50mA DC		±15		deg.
Rise Time	tr	IF=50mA DC		15		ns
Fall Time	tf	IF=50mA DC		10		ns

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