

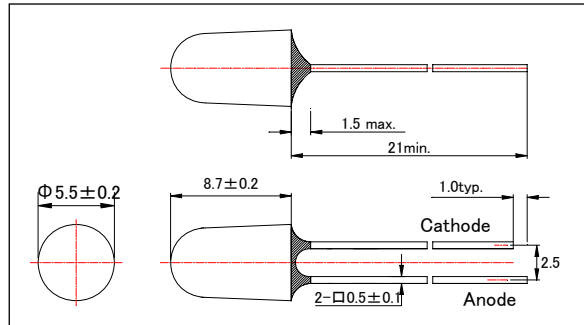
L850F-06-55**Infrared LED Lamp for High Current Drive**

L850F-06-55 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 850nm. These devices are intended to be operated at pulsed current of 2A under max. 4.0V.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L850F-06-55
3. Chip:
 - Chip material: AlGaAs
 - Dimension: 550um x 550um
 - Peak Wavelength: 850nm typ.
4. Package
 - Type: Φ5mm Clear Molding
 - Resin Material: Epoxy Resin
 - Lead Frame: Soldered

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	155	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	2000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance**	Rthja	220	K/W
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature***	TSOL	265	°C

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

** Junction - ambient, leads 7mm, soldered on PCB

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

Electro-Optical Characteristics[Tc=25°C]						
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=100mA		1.45	1.55	V
		IFP=2A		2.8	4.0	
Total Radiated Power*	PO	IF=100mA	36	46		mW
		IFP=2A		920		
Radiant Intensity**	IE	IF=100mA		200		mW/sr
		IFP=2A		4000		
Peak Wavelength	λ_p	IF=50mA	840	850	860	nm
Half Width	$\Delta\lambda$	IF=50mA		40		nm
Viewing Half Angle	$\theta_{1/2}$	IF=50mA		±10		deg
Rise Time	tr	IF=50mA		15		ns
Fall Time	tf	IF=50mA		10		ns

* Measured by Photodyne #500

** Measured by Tektronix J-6512



