

## L850F-06-55CU

## Infrared LED Lamp for High Current Drive

L850F-06-55CU is an AlGaAs LED mounted on a copper made 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. 4.3V.

## <Specifications>

Product Name: Infrared LED Lamp
 Type Number: L850F-06-55CU

3. Chip:

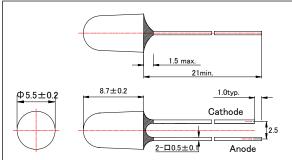
- Chip material: AlGaAs

Dimension: 550um x 550umPeak Wavelength: 850nm typ.

4.Package

Type: Φ5mm Clear Molding
Resin Material: Epoxy Resin
Lead Frame: Cu made

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	2000	mA				
Reverse Voltage	VR	5	V				
Junction Temperature	Tj	100	°C				
Thermal Resistance**	Rthja	150	K/W				
Operating Temperature	TOPR	-30 ~ +85	°C				
Storage Temperature	TSTG	-30 ~ +100 °C					
Soldering Temperature***	TSOL	265	°C				

<sup>\*</sup> Duty=1% and Pulse Width=10us.

<sup>\*\*\*</sup> Soldering condition must be completed within 3 second at 265°C.

Electro-Optical Characteristics [Ta=25℃ ]									
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit			
Forward Voltage	VF	IF=50mA		1.42	1.50	V			
	VFP	IFP=1A		3.2	3.5				
		IFP=2A		3.6	4.3				
Reverse Current	IR	VR=5V			10	uA			
Total Radiated Power*	РО	IF=50mA	18	24		mW			
Radiant Intensity**	IE	IF=50mA	90	120		mW/sr			
Peak wavelength	λP	IF=50mA	835	850	865	nm			
Half Width	Δλ	IF=50mA		40		nm			
Viewing Half Angle	θ1/2	IF=50mA		±8		deg			
Rise Time	tr	IF=50mA		15		ns			
Fall Time	tf	IF=50mA		10		ns			

<sup>\*</sup> Measured by Photodyne #500



<sup>\*\*</sup> Junction - ambient, leads 7mm, soldered on PCB

<sup>\*\*</sup> Measured by Tektronix J-6512