

L850D-022-2C

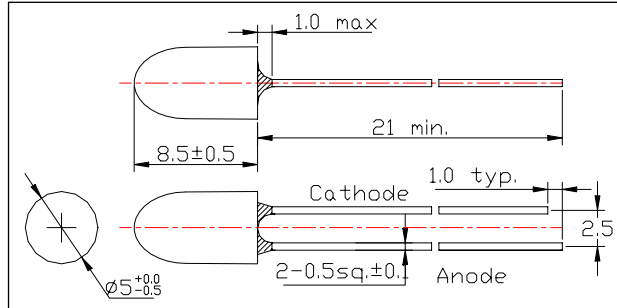
Infrared LED Lamp

L850D-022-2C is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a spectral band of radiation that peaks at 850nm.

<Specifications>

1. Product Name: Infrared LED Lamp
2. Type Number: L850-022-2C
3. Chip:
 - Chip material: AlGaAs
 - Peak Wavelength: 850nm typ.
4. Package
 - Type: Φ5mm 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	215	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	1000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	100	°C
Thermal Resistance**	Rthja	230	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.

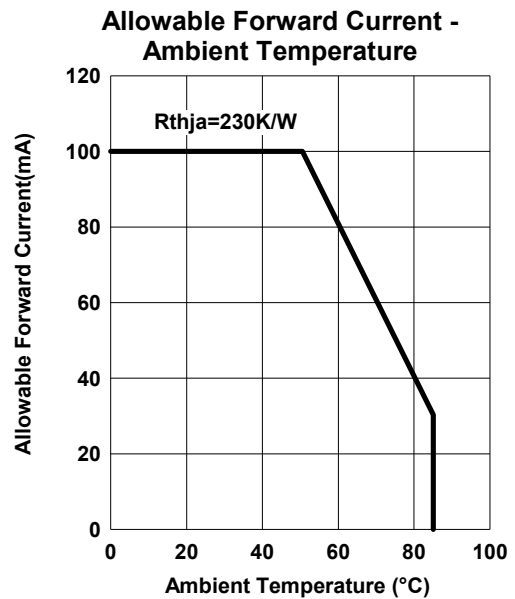
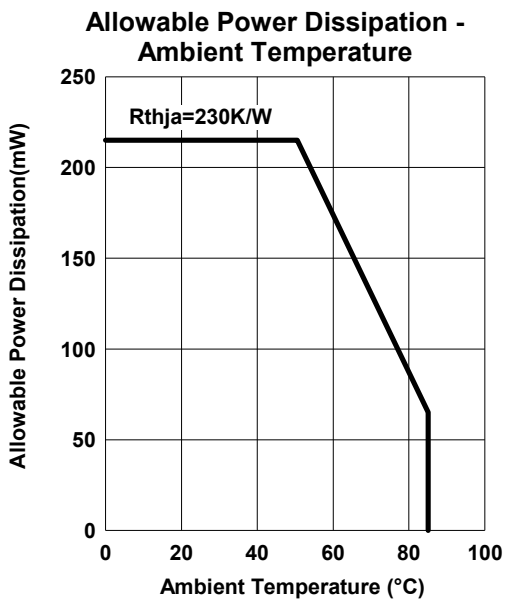
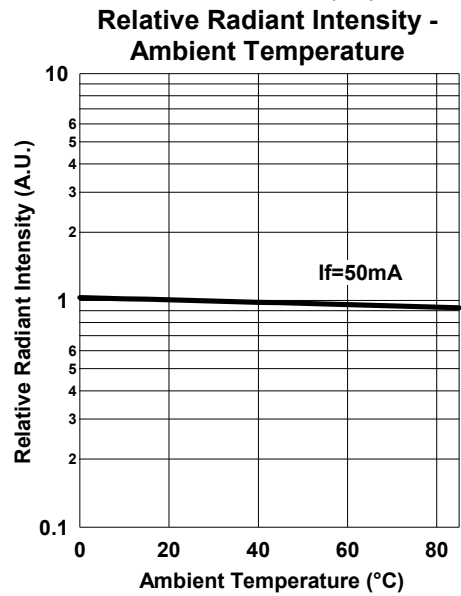
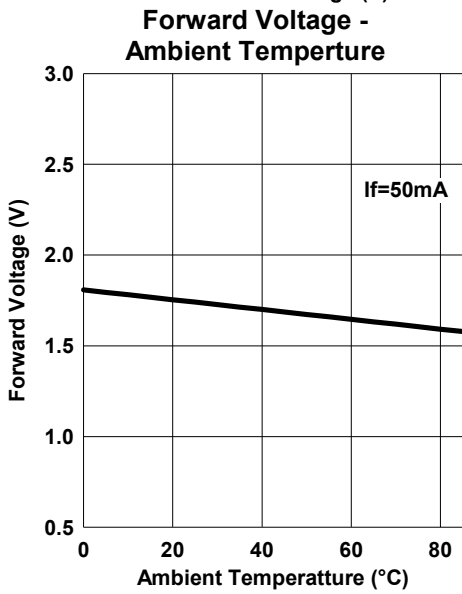
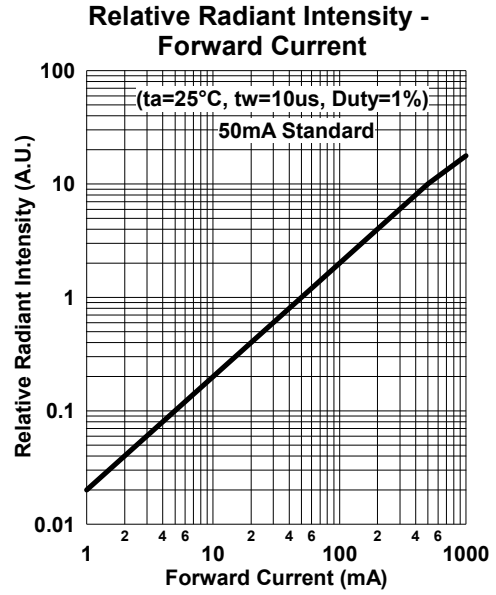
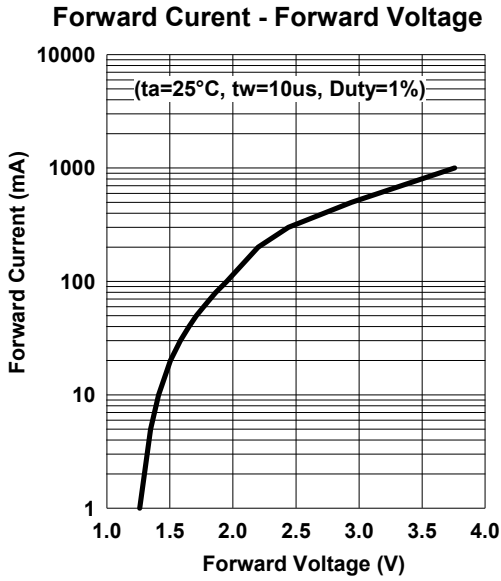
** Junction-ambient, leads 7mm, soldered on PCB

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA DC		1.70	1.90	V
		IF=100mA, tp=20ms		1.95	2.15	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA DC	16	25		mW
		IF=100mA, tp=20ms		50		
Radiant Intensity**	IE	IF=50mA DC		105		mW/sr
		IF=100mA, tp=20ms		210		
Peak wavelength	λP	IF=50mA DC	840	850	860	nm
Half Width	Δλ	IF=50mA DC		30		nm
Viewing Half Angle	θ1/2	IF=50mA DC		±3		deg
Rise Time	tr	IF=50mA DC		25		ns
Fall Time	tf	IF=50mA DC		15		ns

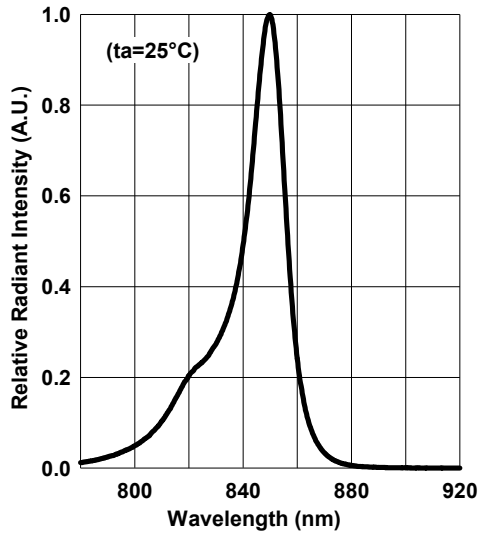
* Measured by Photodyne #500

** Measured by Tektronix J-6512

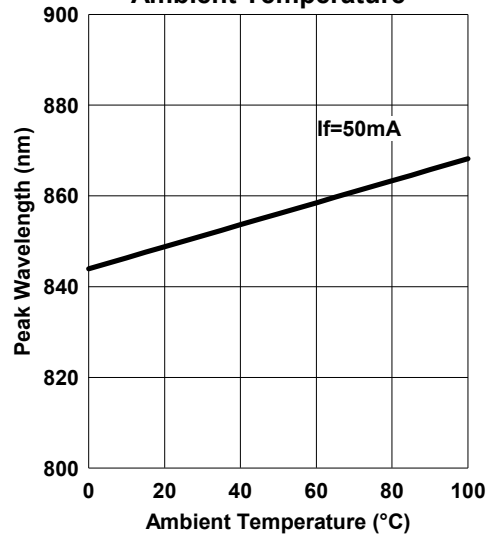




Relative Spectral Emission



Peak Wavelength - Ambient Temperature



Radiation Characteristics

