

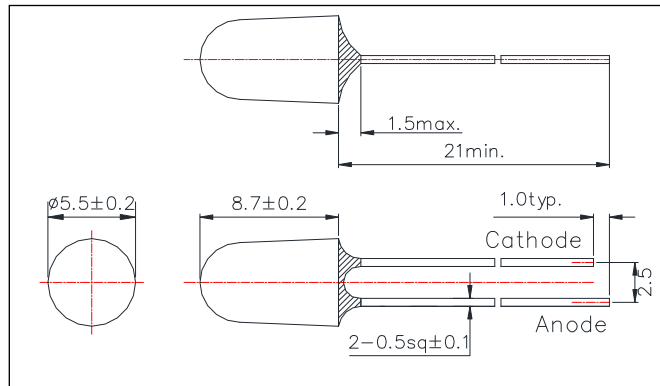
**L850D-06-50L6CU**

Infrared LED Lamp

Outer Dimension (Unit:mm)

<Specifications>

- Chip Material: AlGaAs
- Chip Dimension: 500um x 500um
- Number of Chips: 1pcs
- Peak Wavelength: 850nm Typ.
- Package Type:  $\Phi$ 5mm Clear Molding
- Lead Frame: Soldered on Cu made (Lead Free)
- Lens: Epoxy Resin



Absolute Maximum Ratings[Tc=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	170	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	2000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	120	°C
Thermal Resistance	Rthja	140	K/W
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	265	°C

\* Duty=1% and Pulse Width=10 $\mu$ s.

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

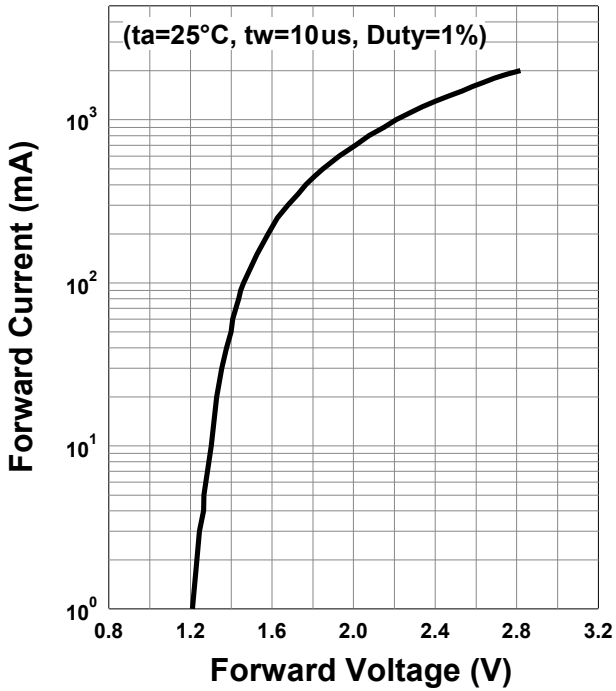
Electro-Optical Characteristics[Tc=25°C]						
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=50mA		1.4	1.5	V
		IF=100Ma T=20ms		1.5		
Total Radiated Power*	PO	IPF=2A		2.8		mW
		IF=50mA		30		
Radiant Intensity**	IE	IF=100Ma T=20ms		60		mW/sr
		IF=50mA		320		
		IPF=2A		9700		
Peak Wavelength	$\lambda$ P	IF=50mA	840		865	nm
Half Width	$\Delta\lambda$	IF=50mA		22		nm
Viewing Half Angle	$\theta$ 1/2	IF=50mA		$\pm$ 4		deg
Rise Time	tr	IF=50mA		10		ns
Fall Time	tf	IF=50mA		15		ns

\* Measured by S3584-08

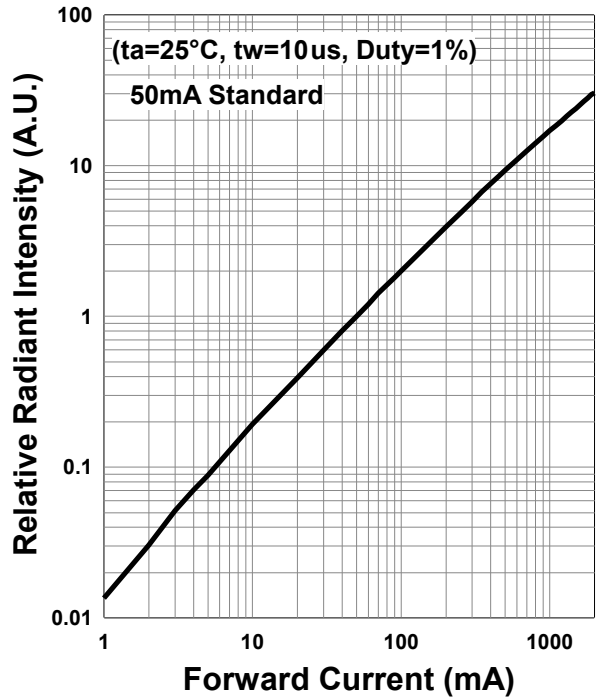
\*\* Measured by CIE127-2007 Condition B

Typical Characteristic Curves

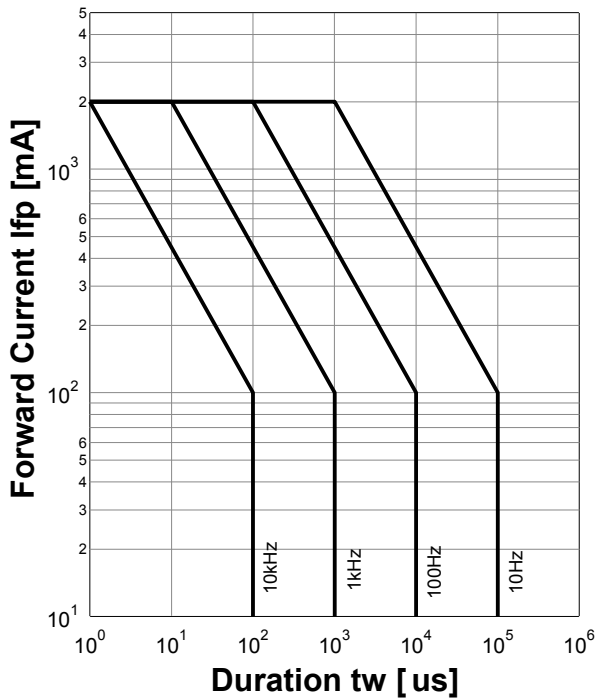
Forward Current - Forward Voltage



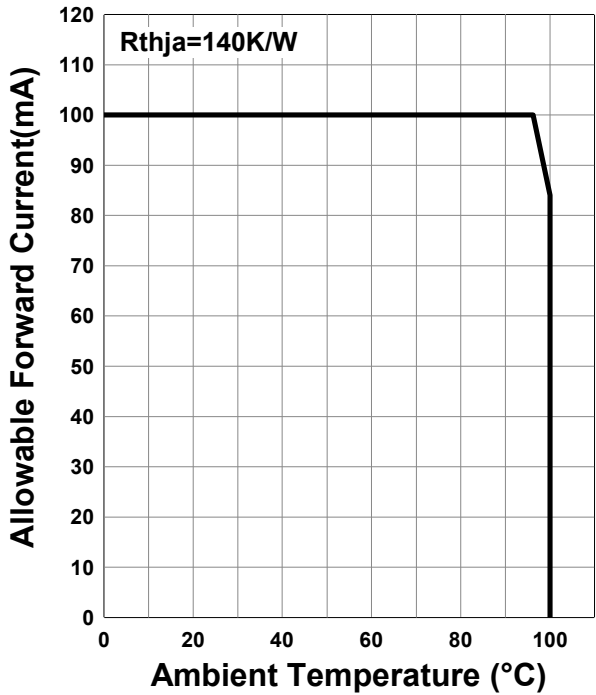
Relative Radiant Intensity - Forward Current

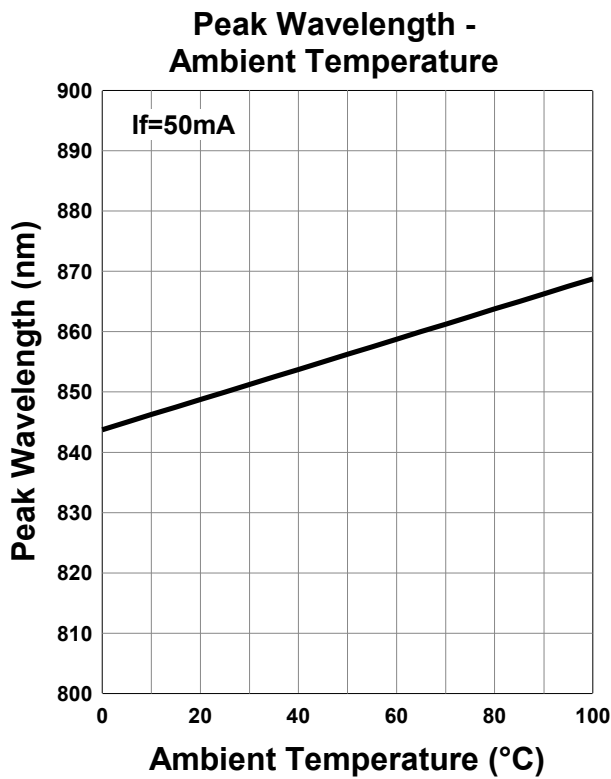
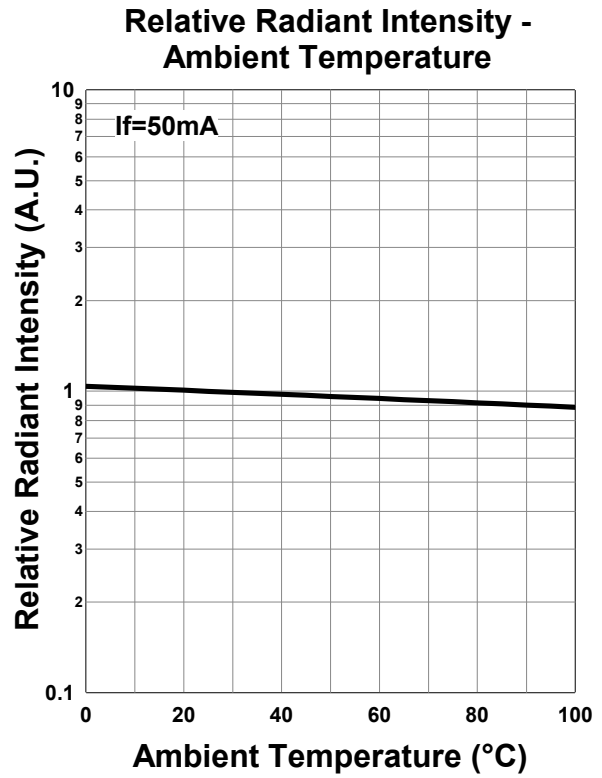
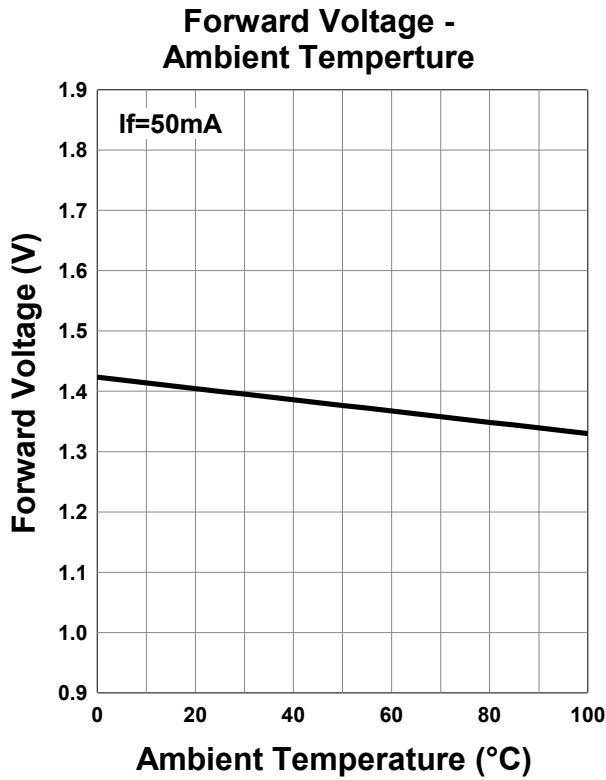


Forward Current - Pulse Duration

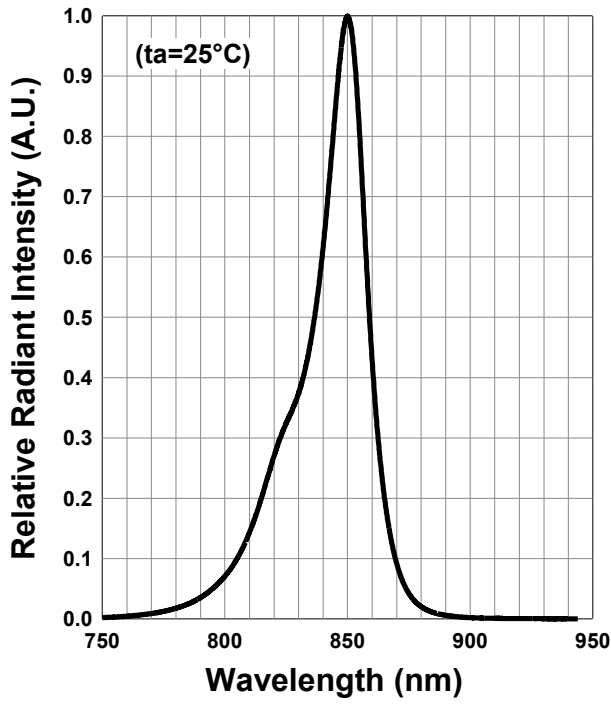


Allowable Forward Current - Ambient Temperature

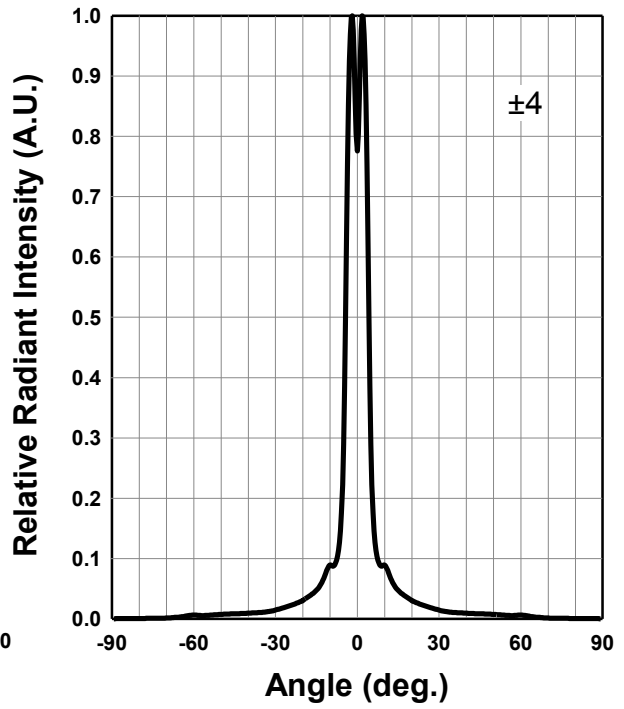




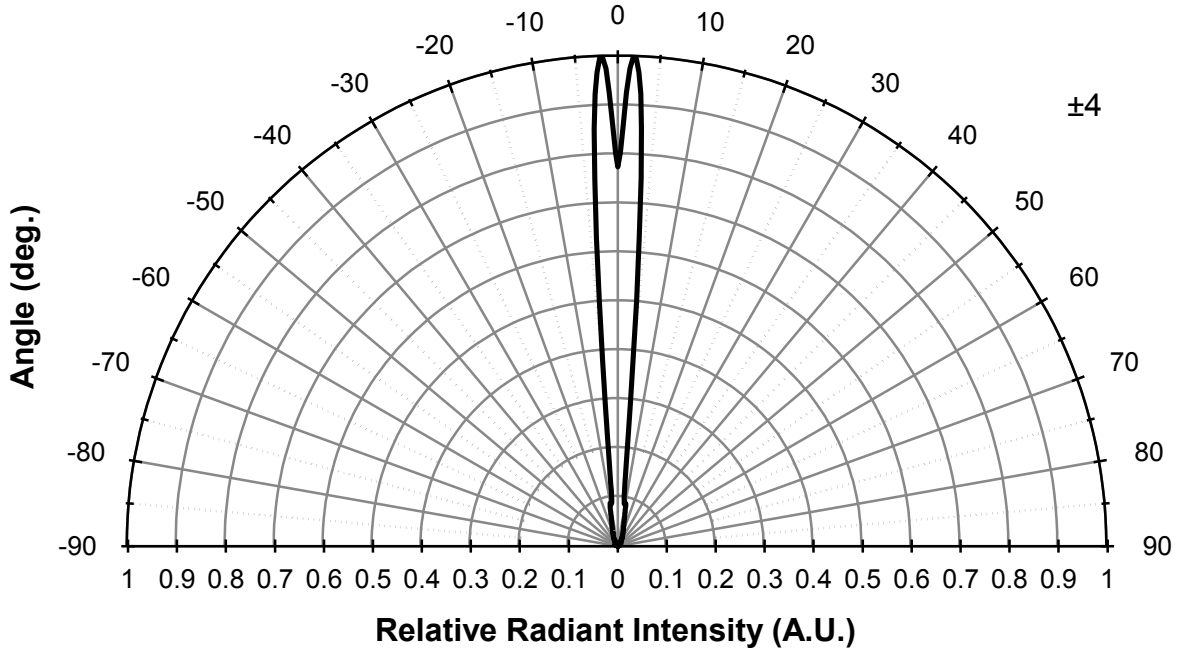
**Relative Spectral Emission**



**Radiation Characteristics**



**Radiation Characteristics**



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Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

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