FL850D-03-50

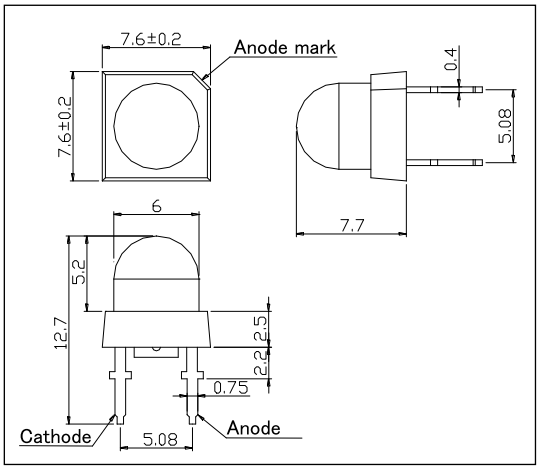
Super Flux Mold Type LED

FL850D-03-50 is an AlGaAs LED mounted on a lead frame and molded with super beam lens. On forward bias it emits a band of visible light which peaks 850nm.

<Specifications>

1. Product Name: Super Flux Mold Type LED
2. Type Number: FL850D-03-50
3. Chip:
   - Chip material: GaAlAs
   - Chip Dimension: 800um x 800um
   - Chip Number: 1pc
   - Peak Wavelength: 850nm
4. Package
   - Type: Super Beam Type LED
   - Resin Material: Epoxy Resin
   - Lead Frame: Silver Plated Cupper

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	500	mW	Ta=25℃
Forward Current	IF	200	mA	Ta=25℃
Pulse Forward Current*	IFP	2000	mA	Ta=25℃
Reverse Voltage	VR	5	V	Ta=25℃
Thermal Resistance	Rthja	120	K/W	
Junction Temperature	Tj	100	℃	
Operating Temperature	TOPR	-40 ~ +85	℃	
Storage Temperature	TSTG	-40 ~ +100	℃	
Soldering Temperature**	TSOL	265	℃	

* Duty=1% and Pulse Width=10us
** Soldering Condition must be completed within 3 seconds at 265℃

Electro-Optical Characteristics[Tw=25℃]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=200mA		1.7	2.3	V
	VFP	IFP=2A		3.3		
Radiated Power*	PO	IF=200mA		90		mW
		IFP=2A		760		
Radiated Intensity**	IE	IF=200mA		400		mW/sr
		IFP=2A		3400		
Peak Wavelength	λP	IF=200mA	840	850	860	nm
Half Width	Δλ	IF=200mA		38		nm
Viewing Half Angle	θ1/2	IF=100mA		±10		deg
Rise Time	tr	IF=200mA		40		ns
Fall Time	tf	IF=200mA		50		ns

* Measured by S3584-08
** Measured by Tektronix J-6512

RoHS Compliant

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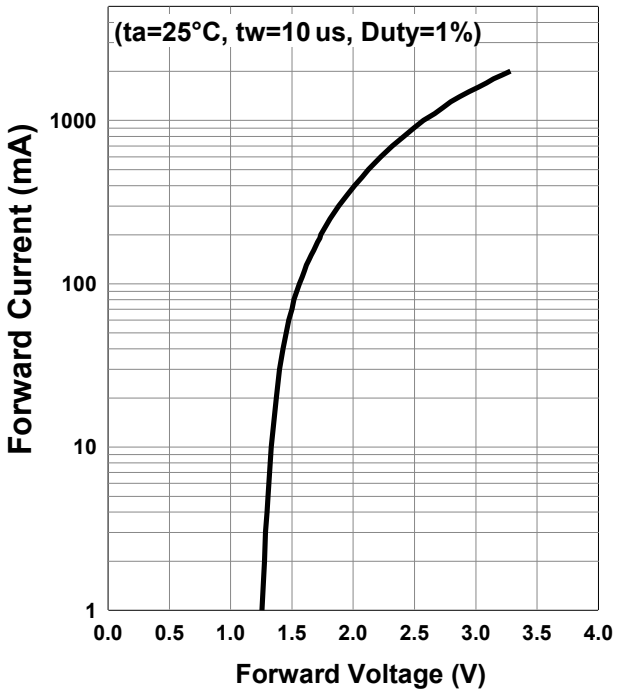
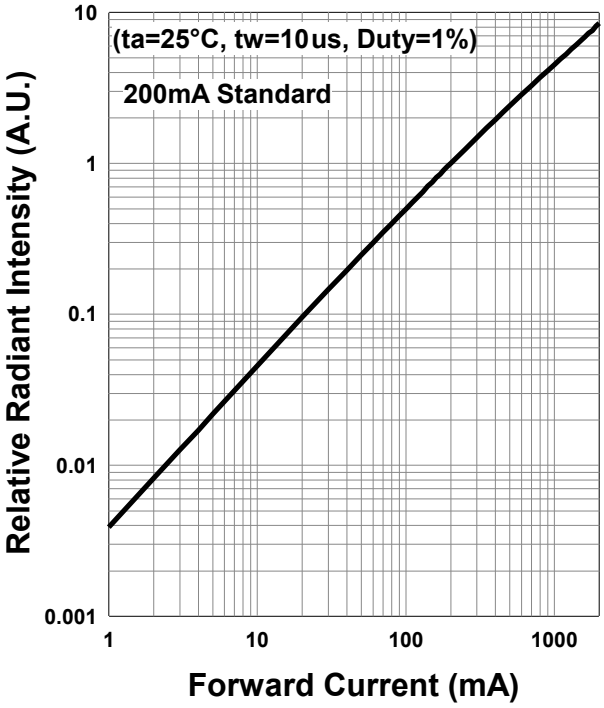
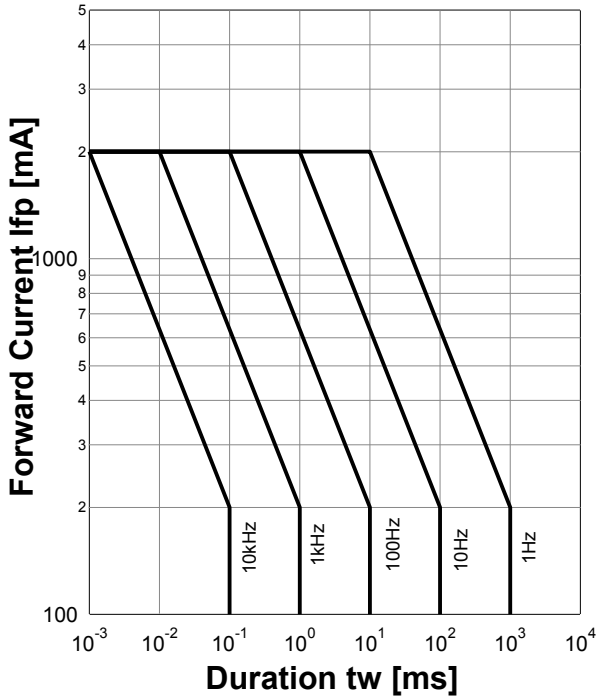
Forward Curent - Forward Voltage



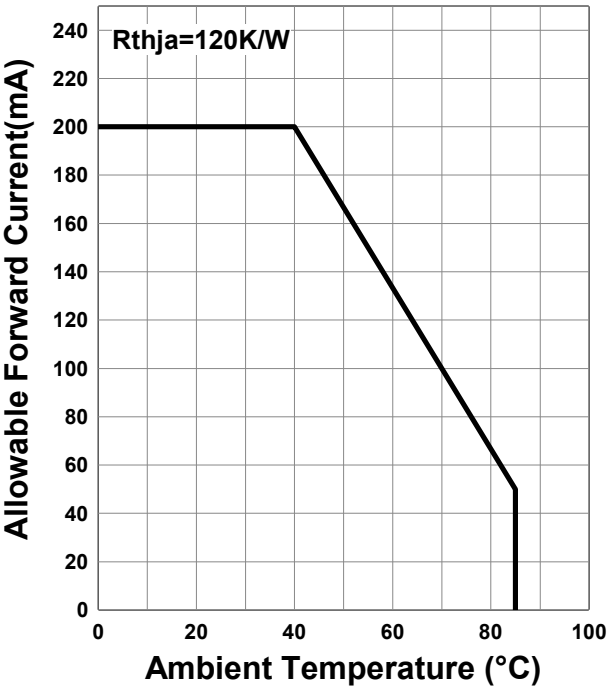
Relative Radiant Intensity - Forward Current



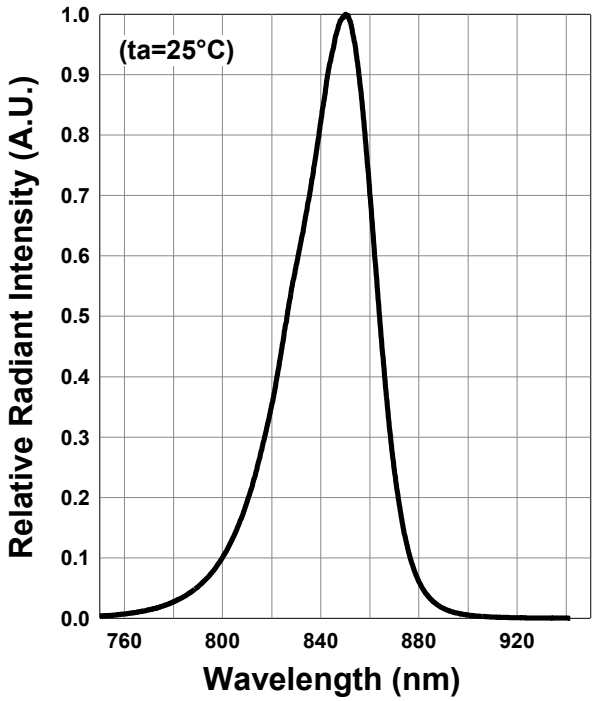
Forward Current - Pulse Duration



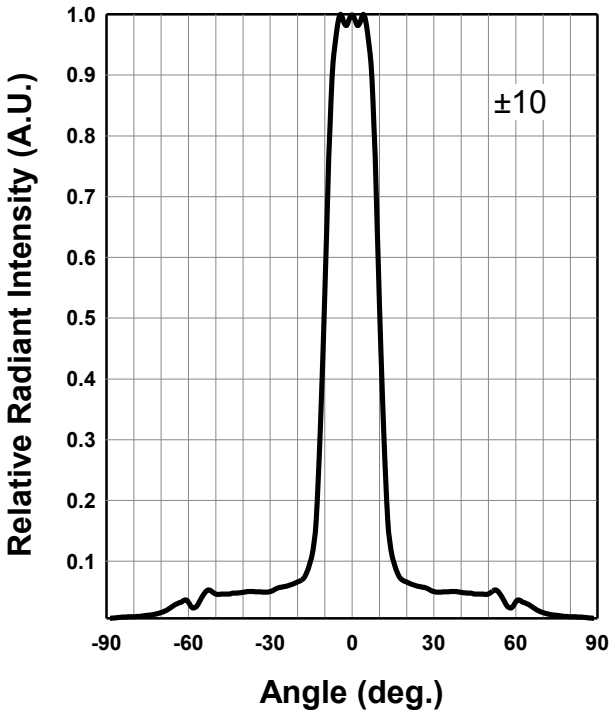
Allowable Forward Current - Ambient Temperature



Relative Spectral Emission



Radiation Characteristics



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Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

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.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

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