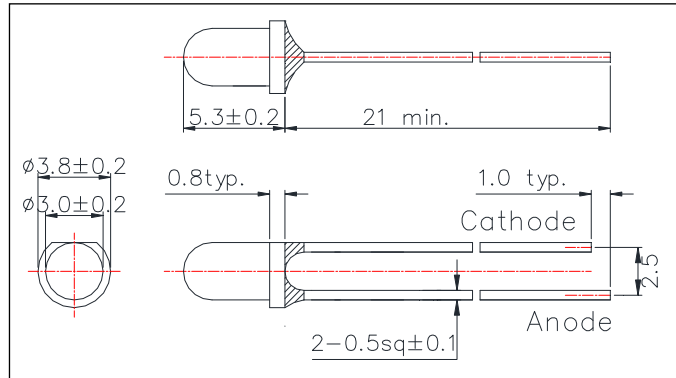


L645-33
Super Bright Red LED Lamp

<Specifications>

- Chip Material: AlGaInP
- Chip Dimension: 300um x 300um
- Number of Chips: 1pcs
- Peak Wavelength: 645nm typ.
- Package Type: Φ3mm Crear Molding
- Lead Frame: Soldered (Lead Free)
- Lens: Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Tc=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	120	mW
Forward Current	IF	50	mA
Pulse Forward Current*	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	170	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	265	°C

*Duty=1% and Pulse Width=10us

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

Electro-Optical Characteristics [Tc=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		2.3	2.4	V
	VFP	IFP=100mA		3.4		
Total Radiated Power*	PO	IF=20mA		11		mW
		IFP=100mA		55		
Radiant Intensity**	IE	IF=20mA		40		mW/sr
		IFP=100mA		200		
Brightness	IV	IF=20mA		2700		mcd
Luminous Flux	ΦV	IF=20mA		1500		mlm
Peak Wavelength	λP	IF=20mA	635		655	nm
Dominant Wavelength	λD	IF=20mA		632		nm
Half Width	Δλ	IF=20mA		16		nm
Viewing half Angle	θ1/2	IF=20mA		±20		deg
Rise Time	tr	IF=20mA		25		ns
Fall Time	tf	IF=20mA		20		ns

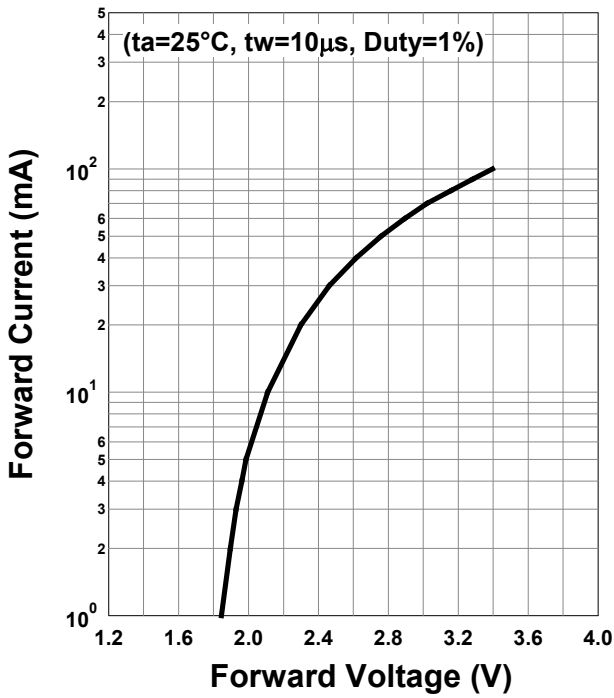
* Measured by S3584-08

** Measured by CIE127-2007 Condition B

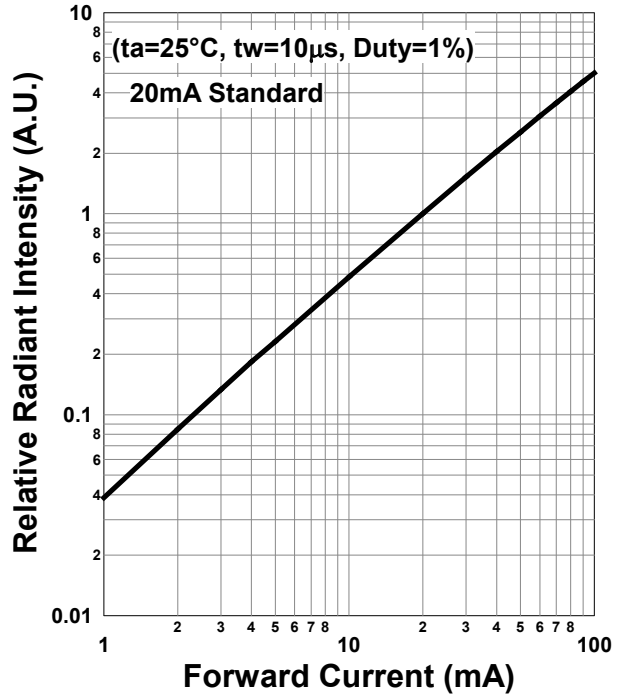


Typical Characteristic Curves

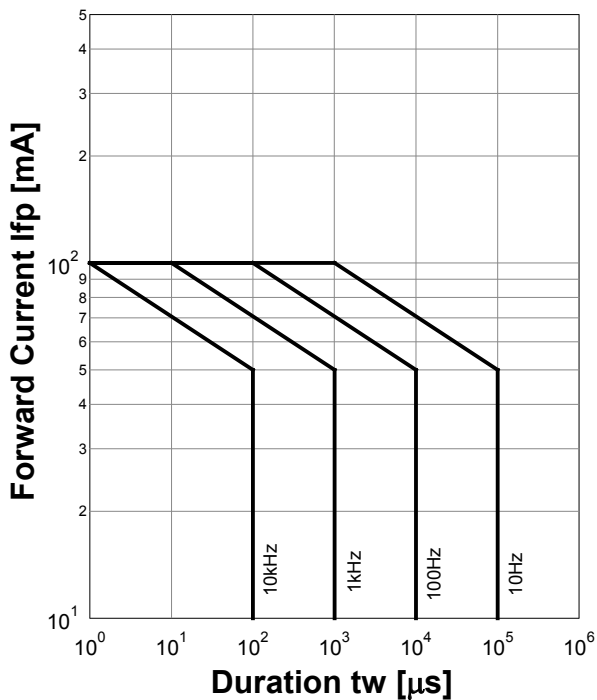
Forward Current - Forward Voltage



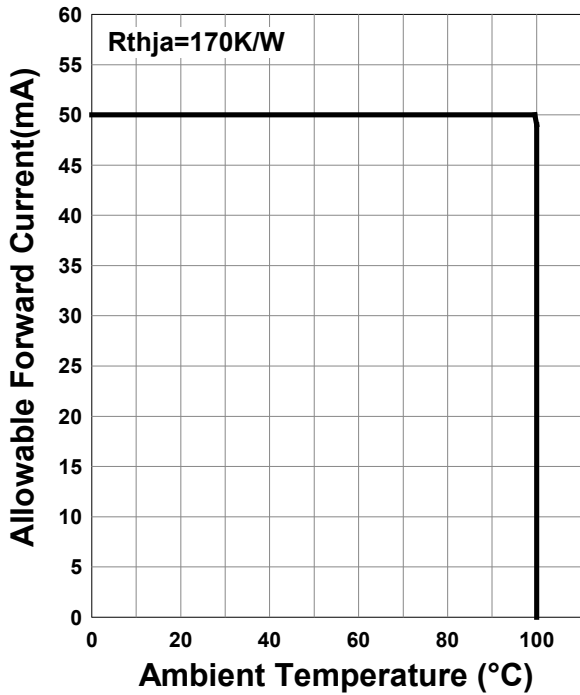
Relative Radiant Intensity - Forward Current

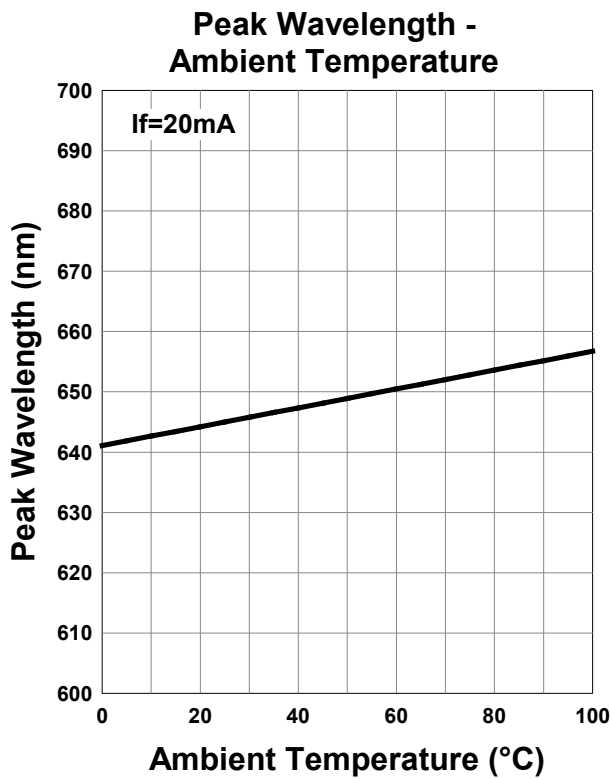
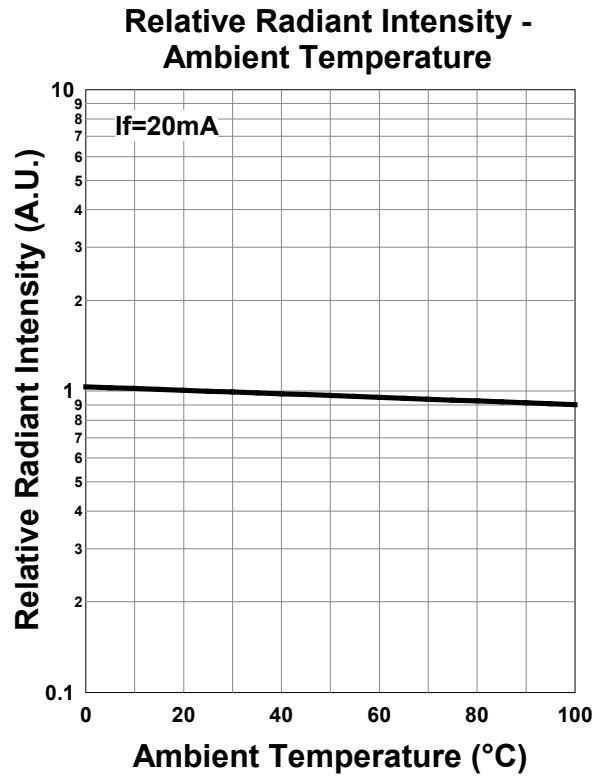
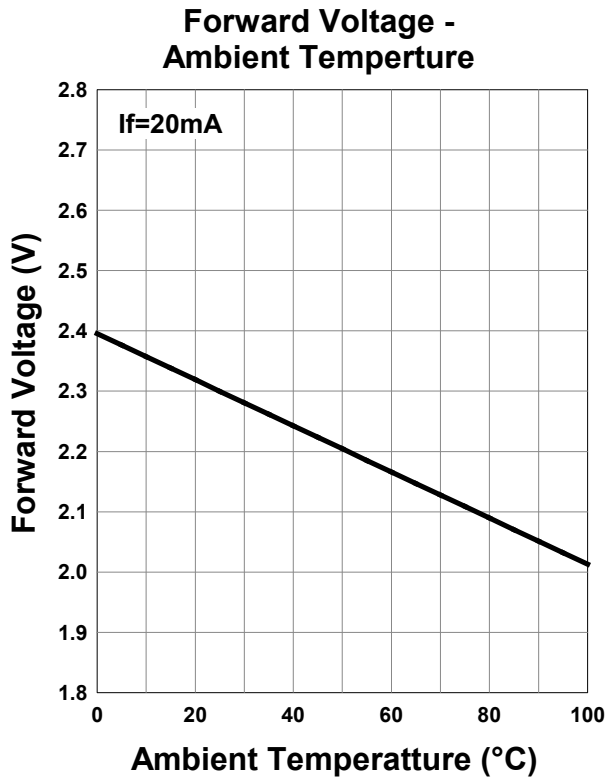


Forward Current - Pulse Duration

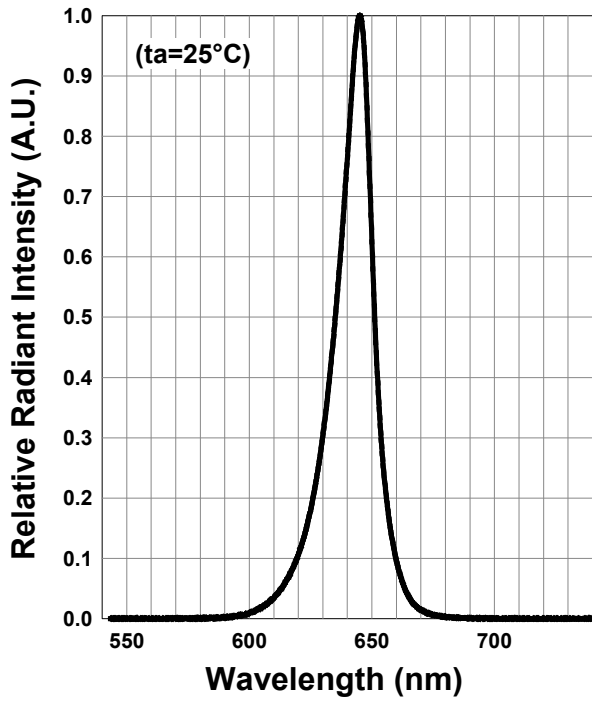


Allowable Forward Current - Ambient Temperature

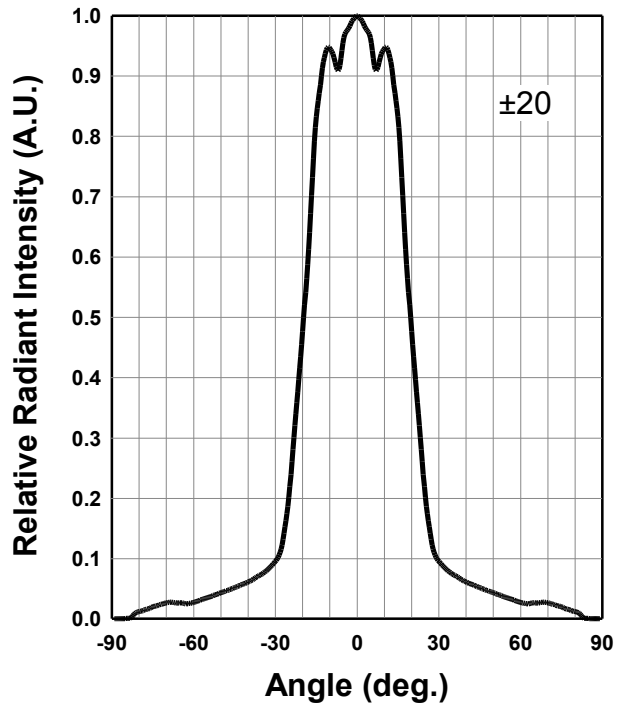




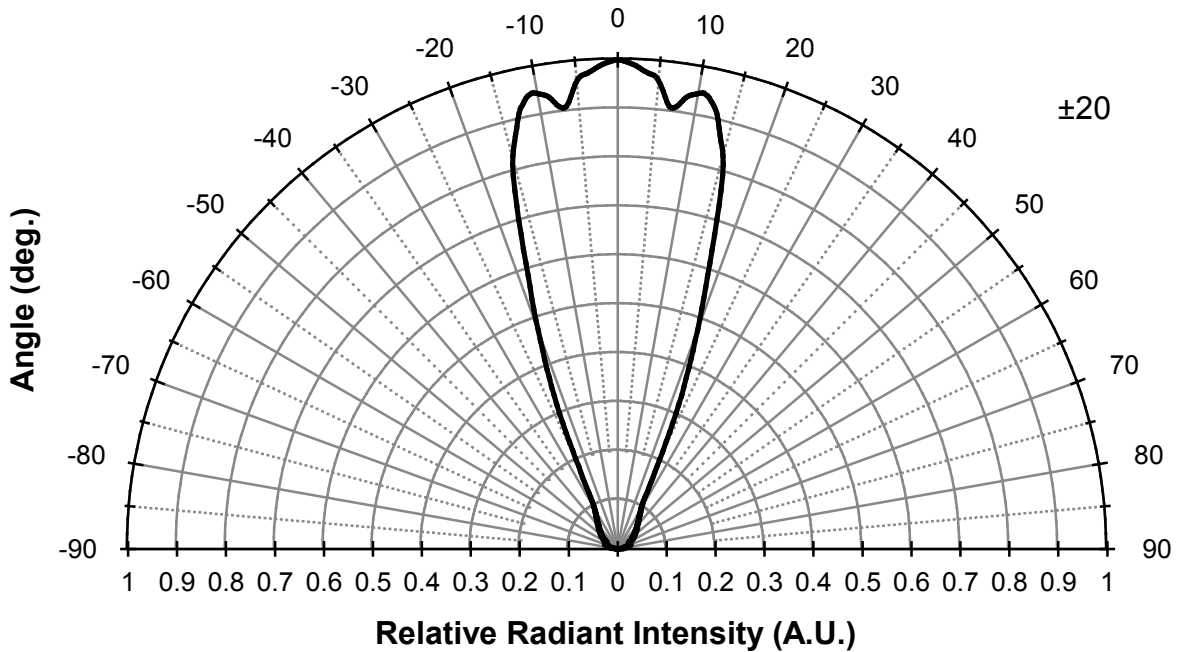
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



Disclaimer

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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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