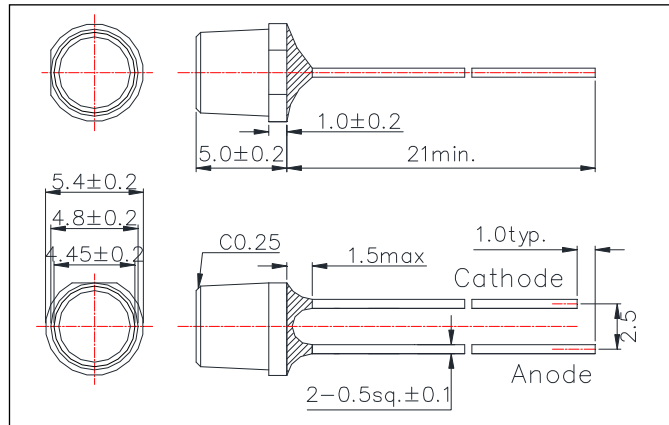


## L590-05 High Bright Yellow LED Lamp

<Specifications>

- Chip Material: AlGaInP
- Chip DimensionL 350um x 350um
- Number of Chips: 1pcs
- Peak Wavelength: 590nm typ.
- Package Type: Φ5mm Clear Molding
- Lead Frame: Soldered (Lead Free)
- Lens: Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Tc=25°C]			
Item	Symbol	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	350	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		2.1	2.3	V
	VFP	IFP=100mA		2.5		
Total Radiated Power*	PO	IF=20mA		2.9		mW
		IFP=100mA		15		
Radiant Intensity**	IE	IF=20mA		2.0		mW/sr
		IFP=100mA		15		
Brightness	IV	IF=20mA		430		mcd
Luminous Flux	ΦV	IF=20mA		2300		mlm
Peak Wavelength	λP	IF=20mA	580		600	nm
Half Width	Δλ	IF=20mA		14		nm
Viewing half Angle	θ1/2	IF=20mA		±49		deg
Rise Time	tr	IF=20mA		30		ns
Fall Time	tf	IF=20mA		25		ns

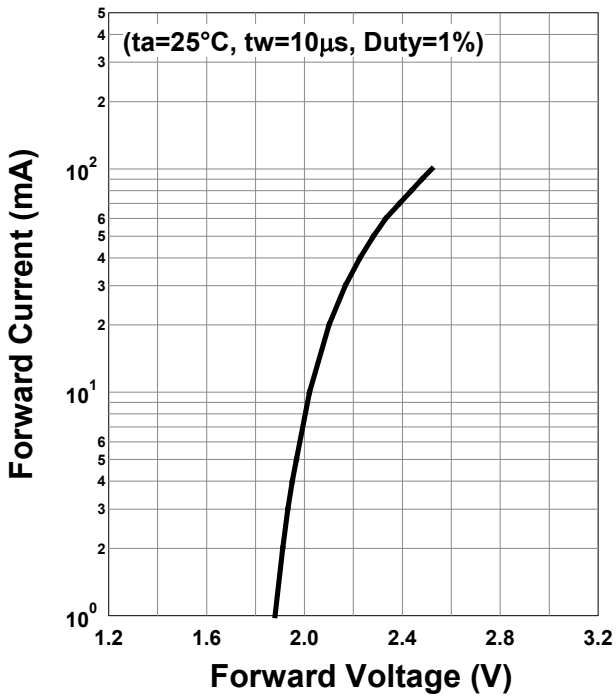
\* Measured by S3584-08

\*\* Measured by CIE127-2007 Condition B

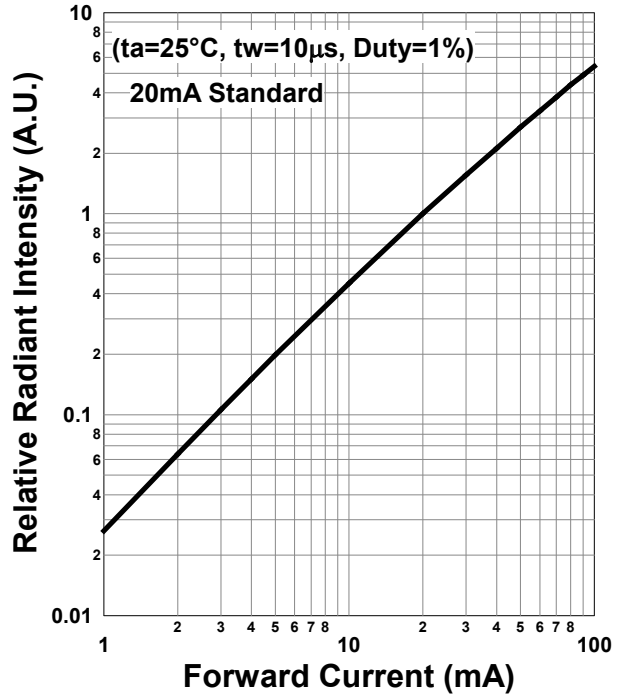


Typical Characteristic Curves

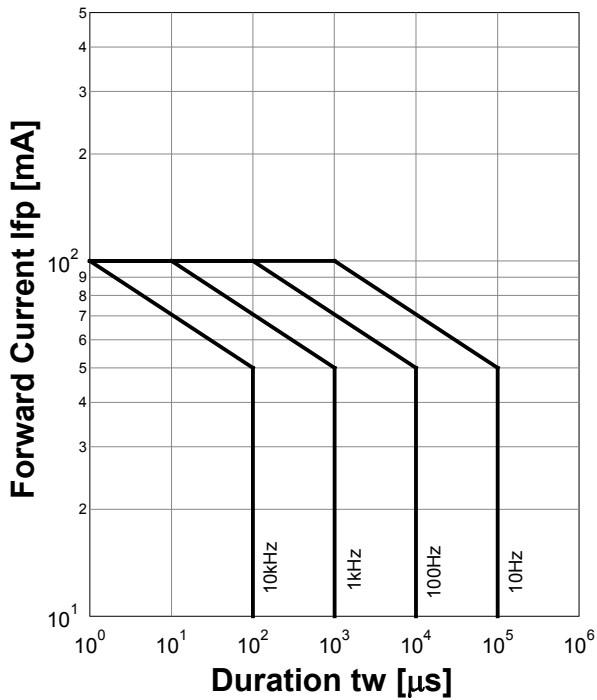
**Forward Current - Forward Voltage**



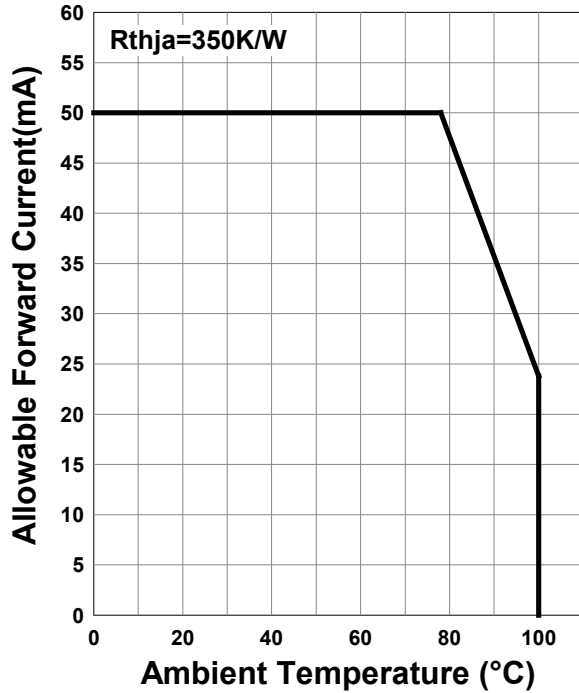
**Relative Radiant Intensity - Forward Current**

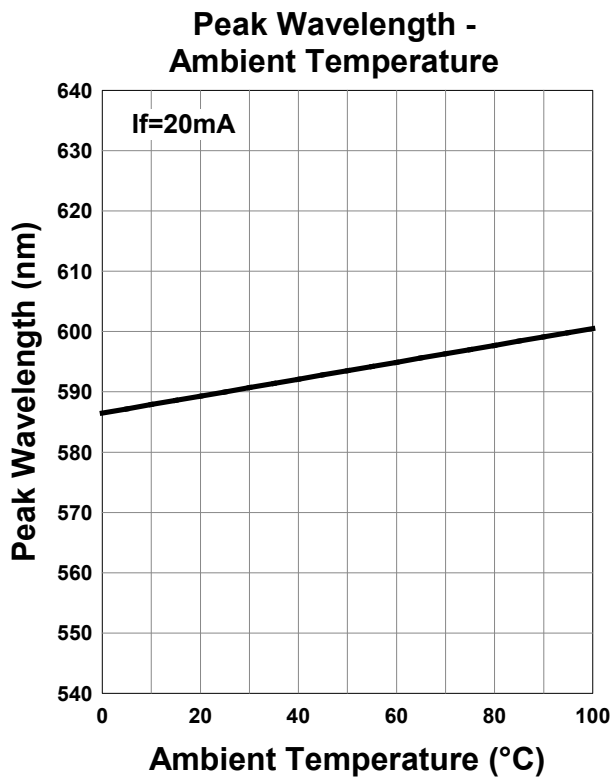
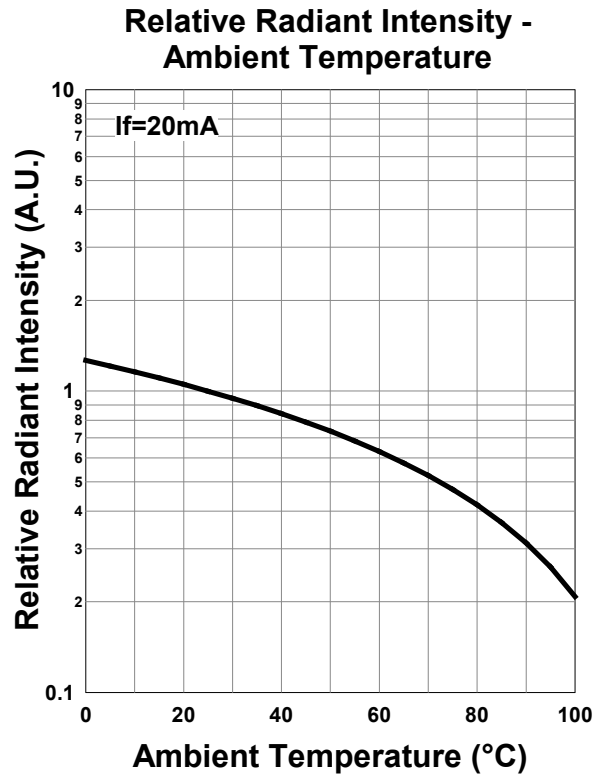
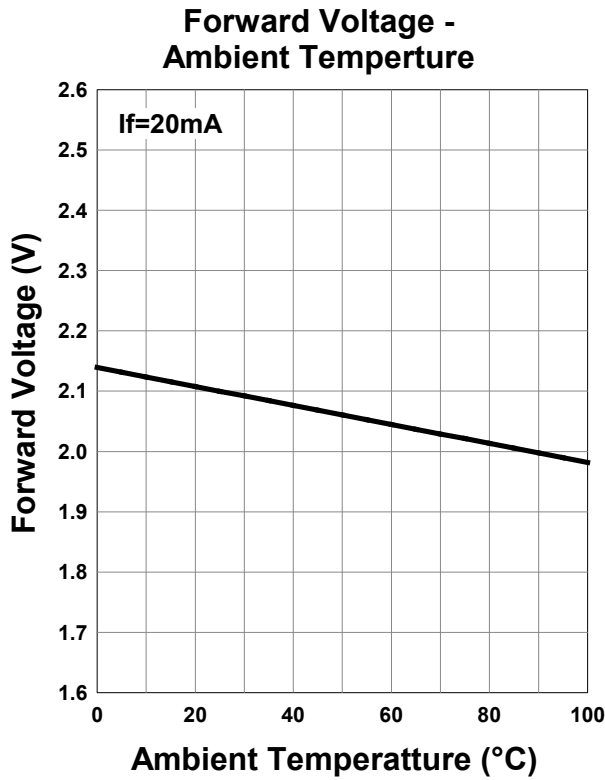


**Forward Current - Pulse Duration**

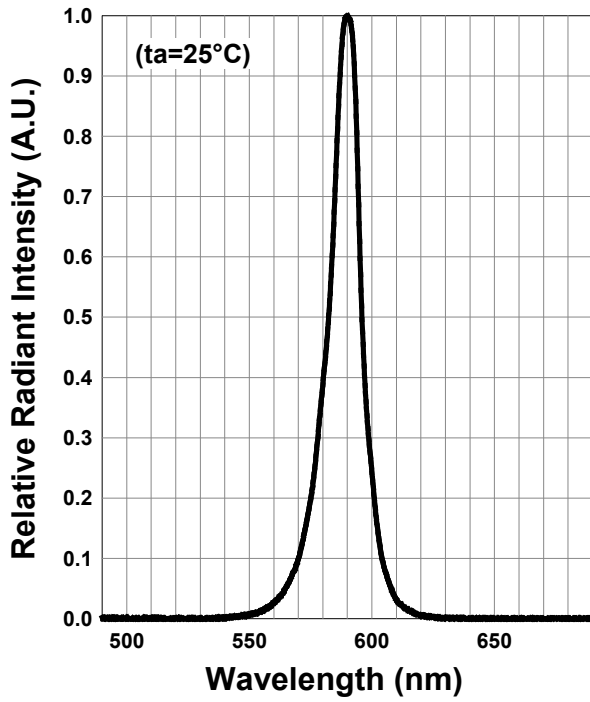


**Allowable Forward Current - Ambient Temperature**

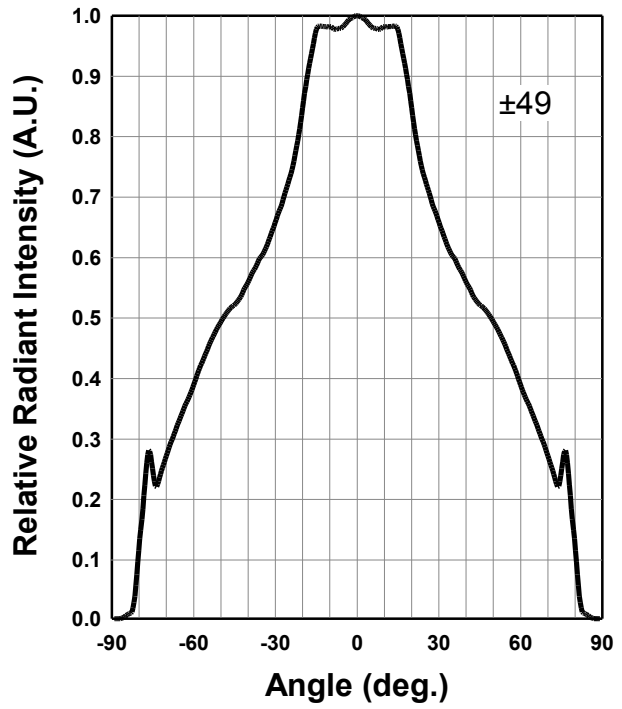




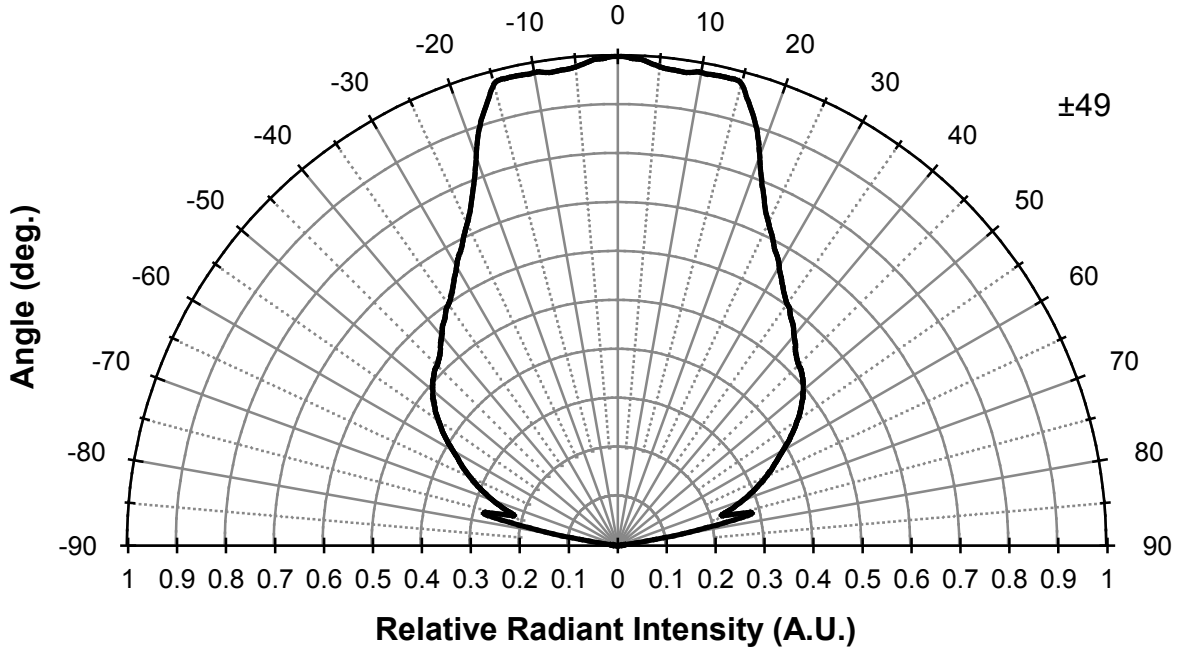
**Relative Spectral Emission**



**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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