

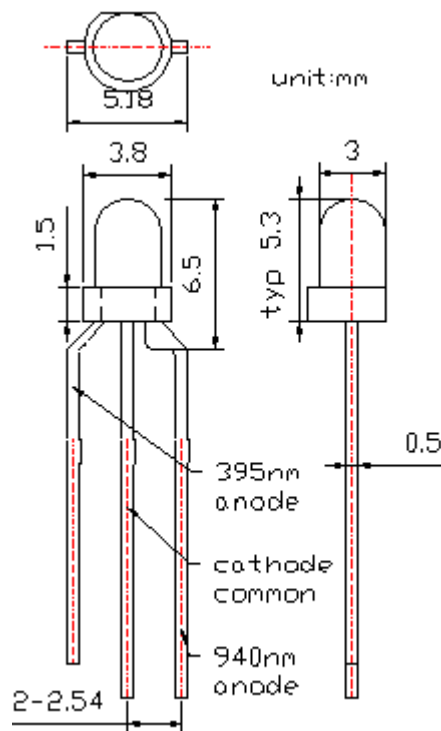
Data Sheet

PRELIMINARY

L395/940R-34

Bi-color LED Lamp

Outline and Internal Circuit



(Unit : mm)

Feature

- Chip Material : InGaN / AlGaAs
- Chip Dimension : 350um * 350um / 400um * 400um
- Number of Chips : 2pcs
- Peak Wavelength: 395nm typ. / 940nm typ.
- Package Type : ϕ 3mm clear molding
- Lead Frame : Soldered (Lead Free)
- Lens : UV Resin

395nm

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	90	mW
Forward Current	IF	20	mA
Pulse Forward Current	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	300	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-20 ~ +100	°C
Storage Temperature	Tstg	-20 ~ +100	°C
Soldering Temperature	TSOL	265	°C

‡Pulse Forward Current condition: Duty 1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed with 3 seconds at 265°C.

Optical and Electrical Characteristics (Tc=25°C)

(*: 100% testing, **: reference value)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		3.3	4.3	V	IF=20mA*
	VFP		3.8			IFP=100mA**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO		18		mW	IF=20mA*
			72			IFP=100mA**
Peak Wavelength	λp	390		400	nm	IF=20mA*
Half Width	Δλ		17		nm	IF=20mA**
Rise Time	tr		10		ns	IF=20mA**
Fall Time	tf		10		ns	IF=20mA**

‡ Radiated Power is measured by S3584-08.

940nm

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	150	mW
Forward Current	IF	100	mA
Pulse Forward Current	IFP	1000	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	300	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-20 ~ +100	°C
Storage Temperature	Tstg	-20 ~ +100	°C
Soldering Temperature	TSOL	265	°C

‡Pulse Forward Current condition: Duty 1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed with 3 seconds at 265°C.

Optical and Electrical Characteristics (Tc=25°C)

(*: 100% testing, **: reference value)

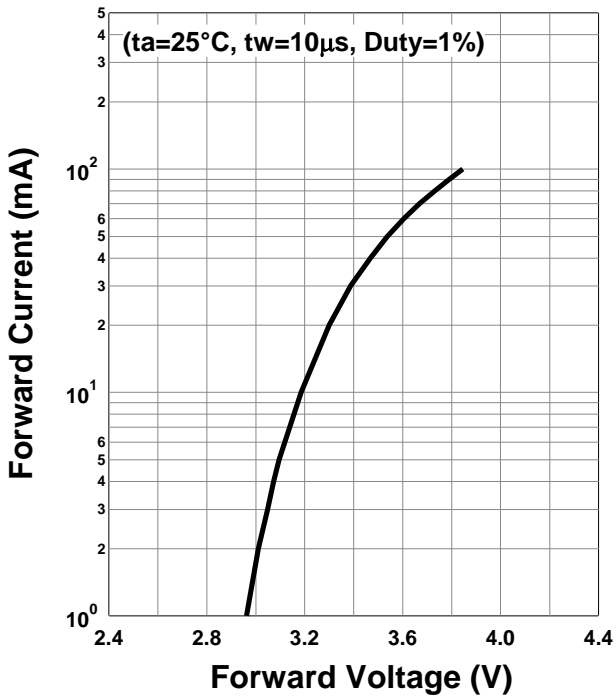
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		1.2	1.5	V	IF=20mA*
	VFP		2.7			IFP=1A**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO		6.5		mW	IF=20mA*
			280			IFP=1A**
Peak Wavelength	λ_p	930		950	nm	IF=20mA*
Half Width	$\Delta\lambda$		50		nm	IF=20mA**
Rise Time	tr		1000		ns	IF=20mA**
Fall Time	tf		1000		ns	IF=20mA**

‡ Radiated Power is measured by S3584-08.

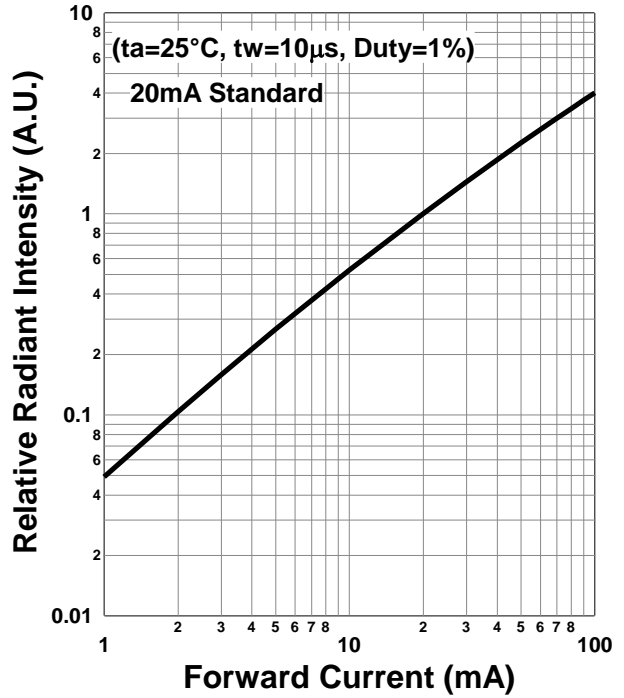
Typical Characteristic Curves

395nm

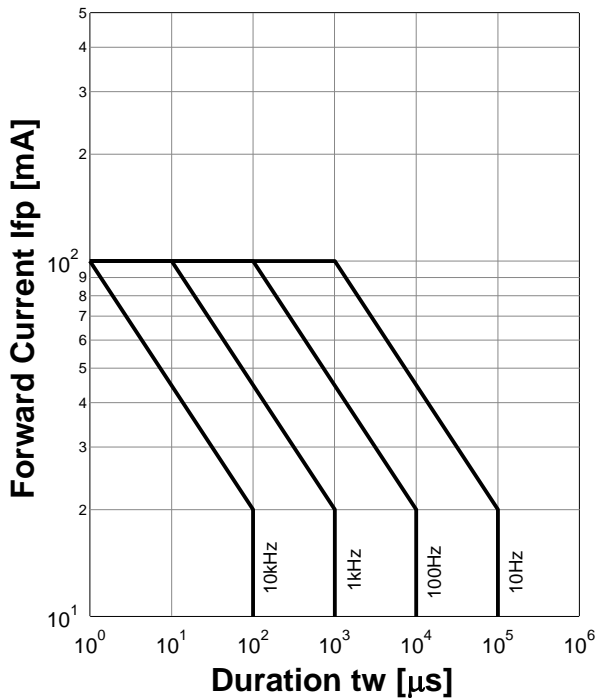
Forward Current - Forward Voltage



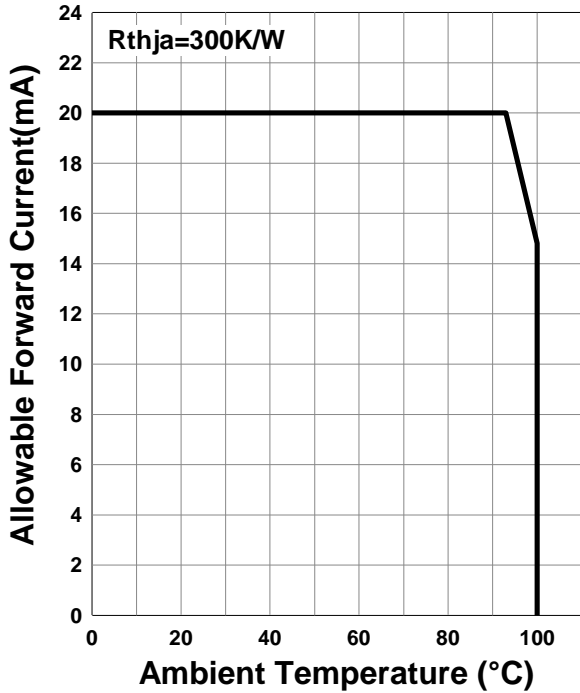
Relative Radiant Intensity - Forward Current



Forward Current - Pulse Duration

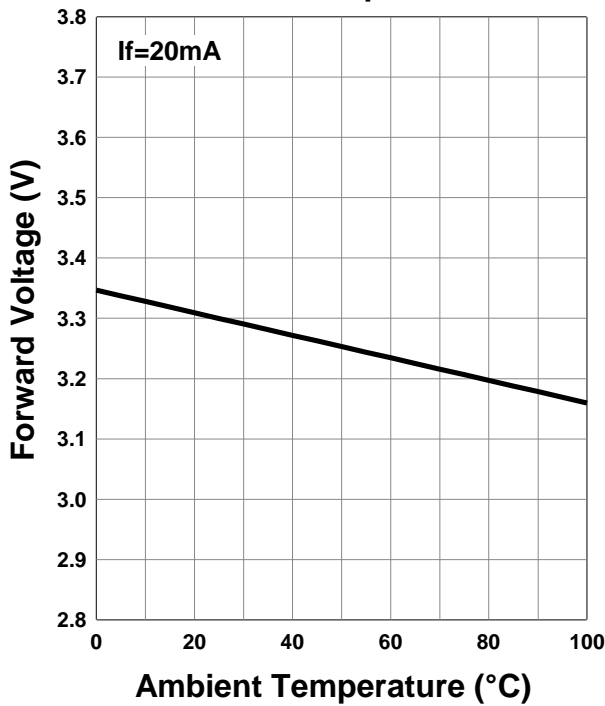


Allowable Forward Current - Ambient Temperature

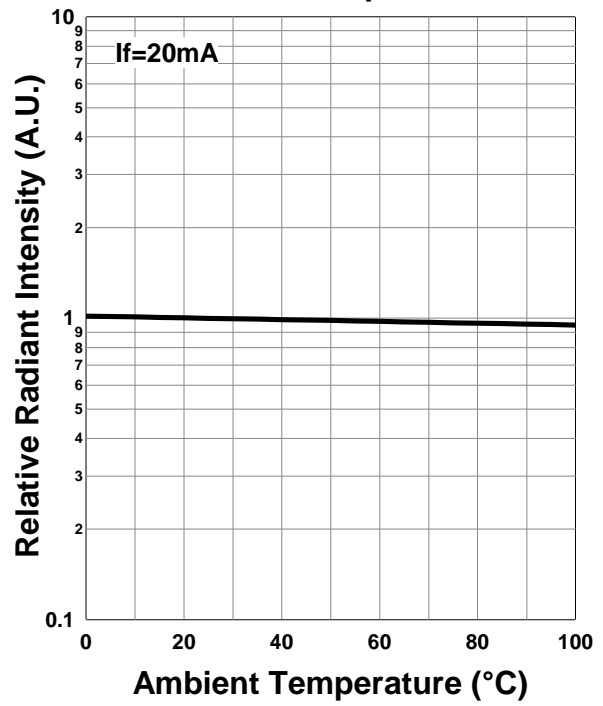


395nm

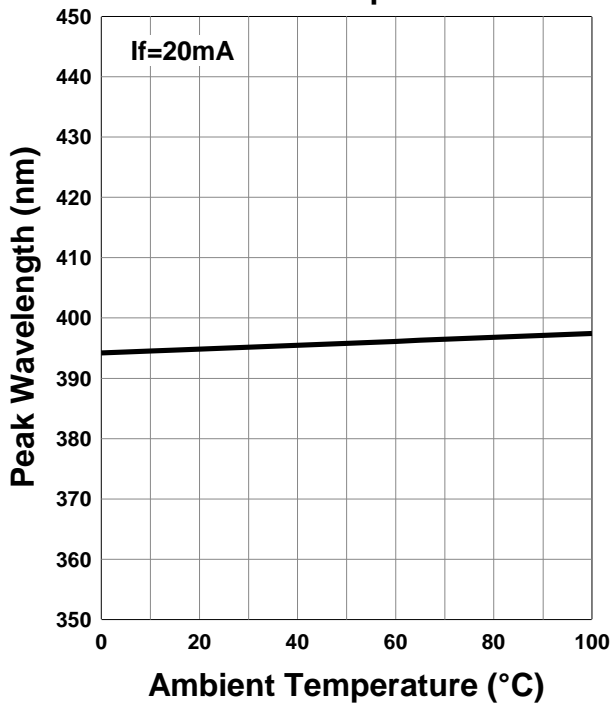
Forward Voltage - Ambient Temperature



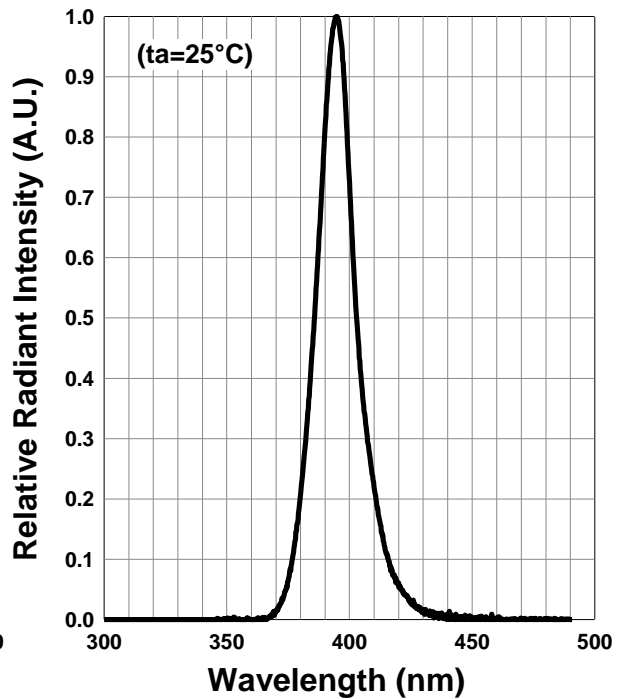
Relative Radiant Intensity - Ambient Temperature



Peak Wavelength - Ambient Temperature

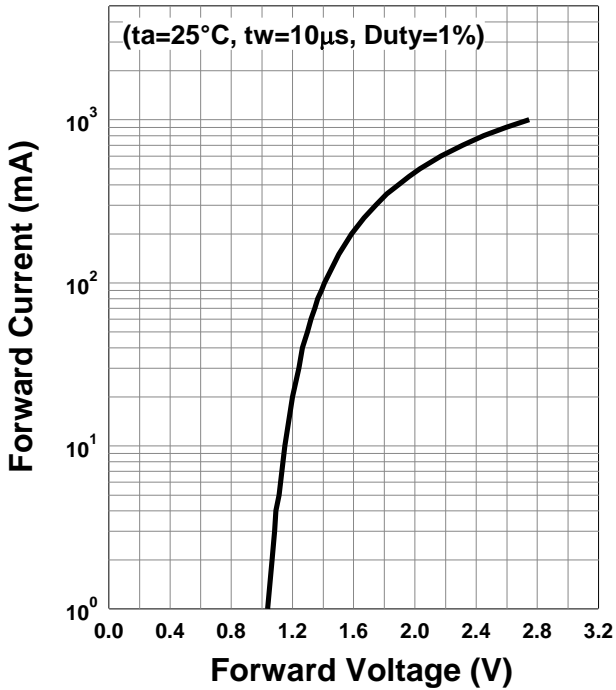


Relative Spectral Emission

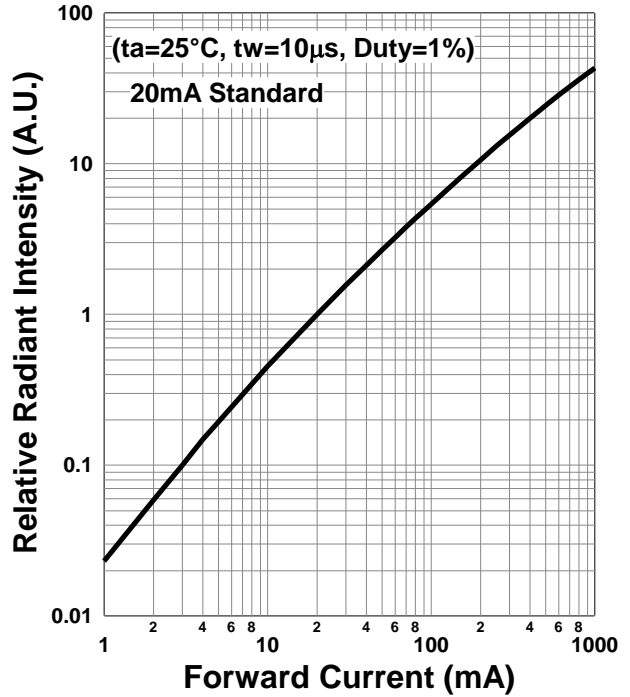


Typical Characteristic Curves
940nm

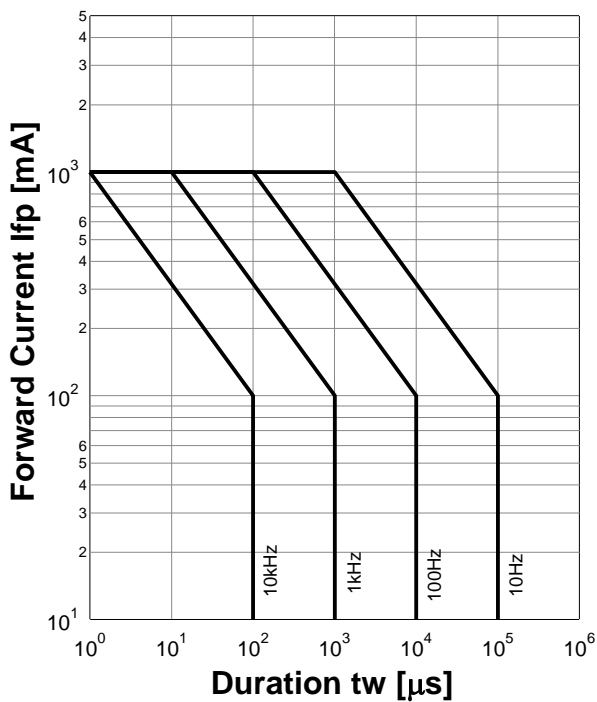
Forward Current - Forward Voltage



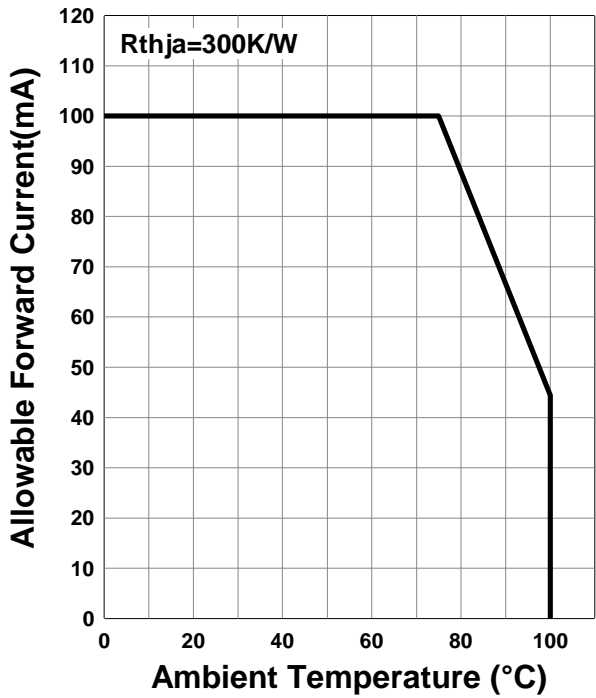
Relative Radiant Intensity - Forward Current



Forward Current - Pulse Duration

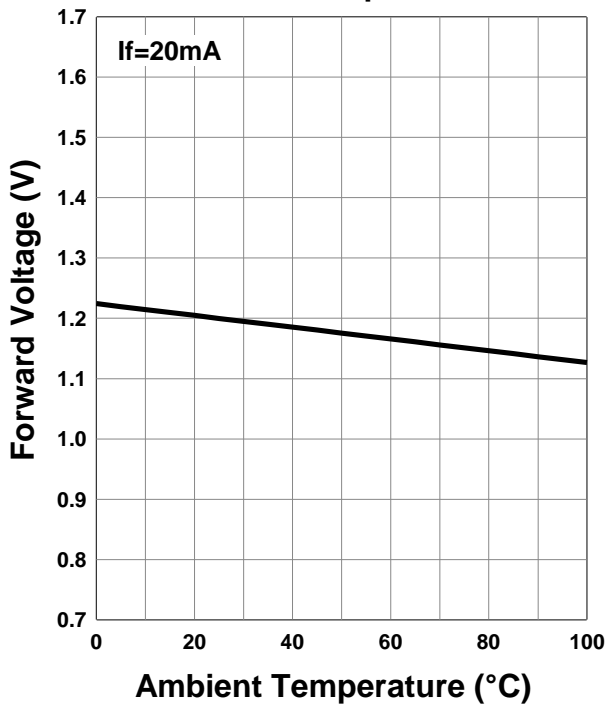


Allowable Forward Current - Ambient Temperature

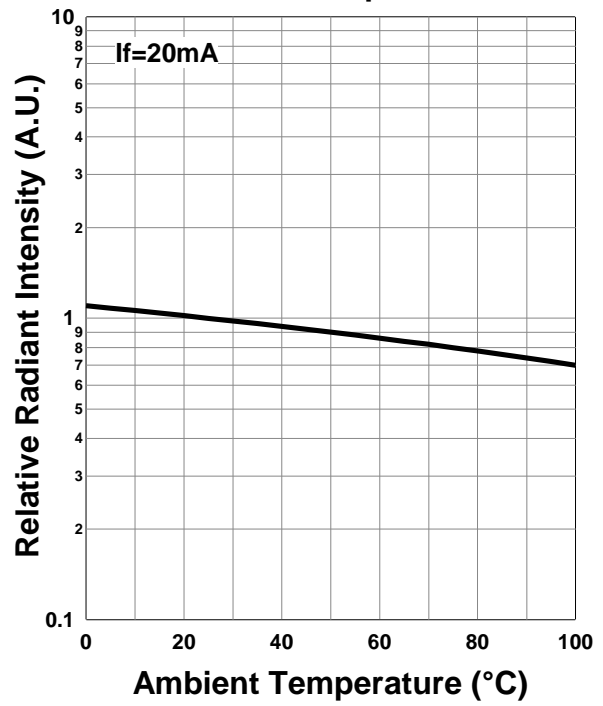


940nm

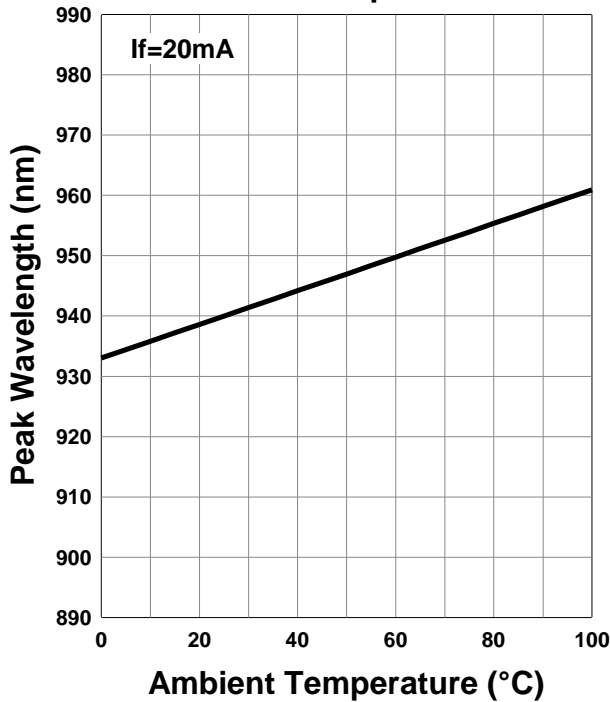
Forward Voltage - Ambient Temperature



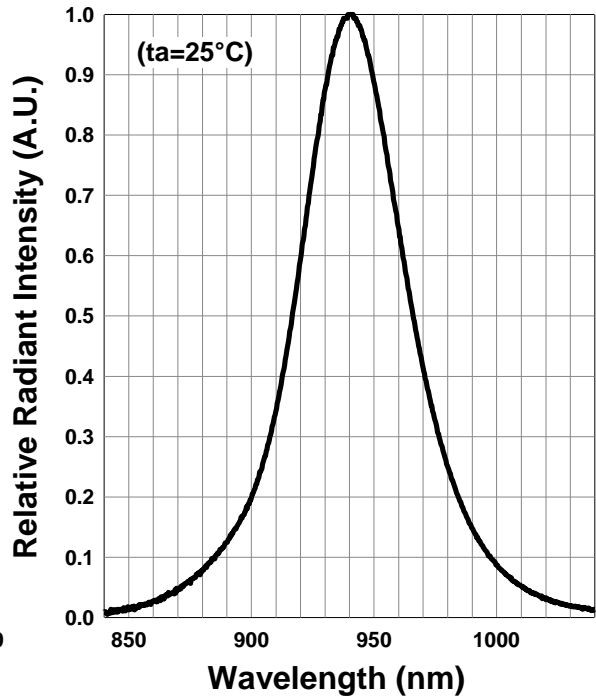
Relative Radiant Intensity - Ambient Temperature



Peak Wavelength - Ambient Temperature



Relative Spectral Emission



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

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