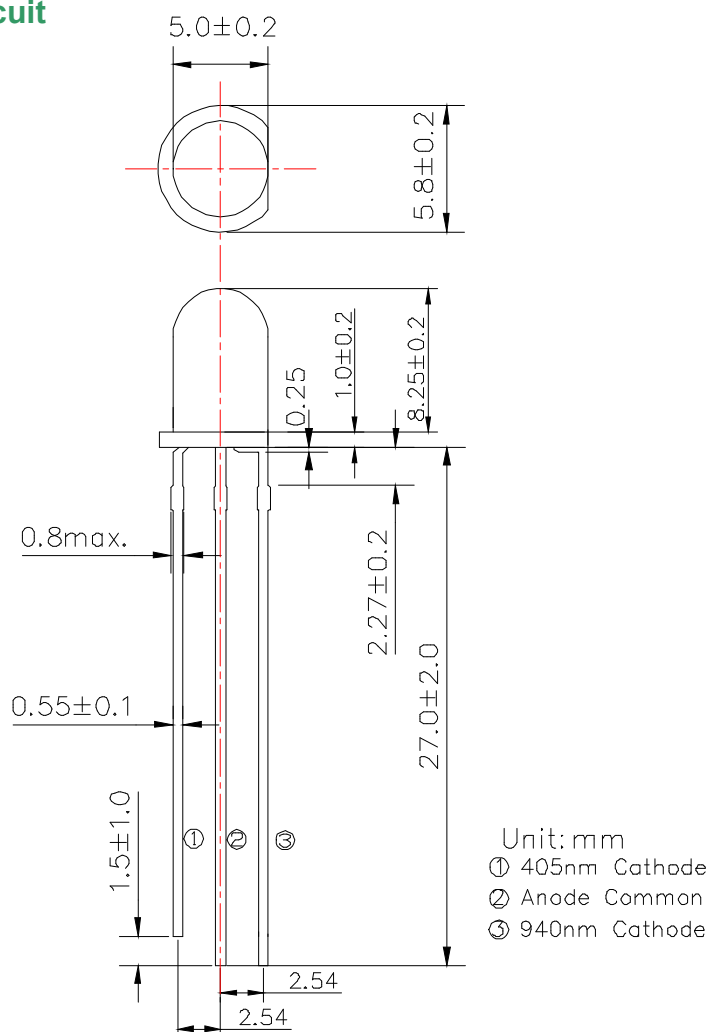




L660N/940-04A

Multi Wavelength LED

Outline and Internal Circuit



Features

- Chip Material : AlGaInP(660nm) , AlGaAs(940nm)
- Chip Dimension : 350um * 350um(660nm) , 400um * 400um(940nm)
- Number of Chips : 2pcs
- Peak Wavelength : 660 / 940nm typ.
- Lead Frame Die : Φ5mm clear molding
- Package Resin : Soldered (Lead Free)
- Lens : Epoxy Resin

Application

660nm

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	120	mW
Forward Current	IF	50	mA
Pulse Forward Current	IFP	300	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthjs	300	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	TSOL	250	°C

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

‡Soldering condition : Refer to technical support information on the website.

Optical and Electrical Characteristics (Tc=25°C)

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		1.9	2.3	V	IF=20mA*
	VFP		3.5			IFP=300mA**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	8.0	12		mW	IF=20mA*
			150			IFP=300mA**
Luminous Flux	Φv		800		mlm	IF=20mA**
Peak Wavelength	λp	650		670	nm	IF=20mA*
Dominant Wavelength	λD		640		nm	IF=20mA**
Half Width	Δλ		16		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	140	mW
Forward Current	IF	100	mA
Pulse Forward Current	IFP	1000	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthjs	300	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	TSOL	250	°C

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

‡Soldering condition : Refer to technical support information on the website.

Optical and Electrical Characteristics (Tc=25°C)

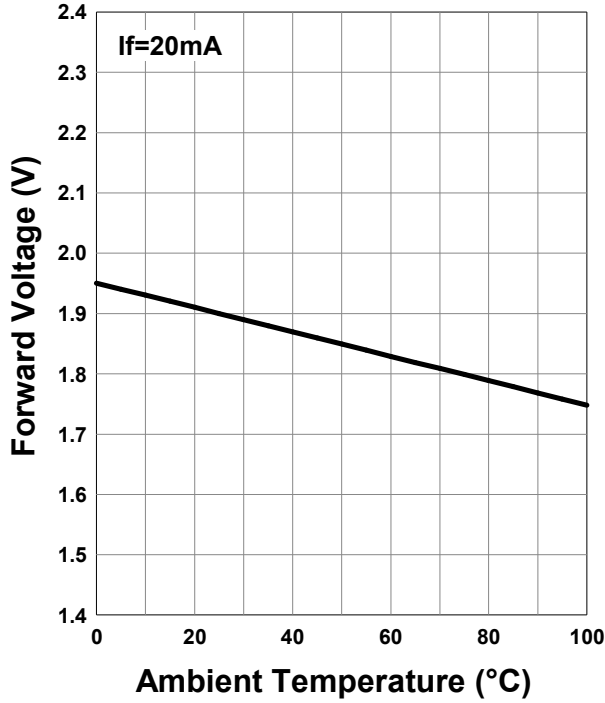
(*: 100% testing, **: reference value)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		1.2	1.4	V	IF=20mA*
	VFP		2.2			IFP=1A**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	2.9	4.2		mW	IF=20mA*
			190			IFP=1A**
Peak Wavelength	λ_p	930		950	nm	IF=20mA*
Half Width	$\Delta\lambda$		50		nm	IF=20mA**
Rise Time	tr		200		ns	IF=20mA**
Fall Time	tf		800		ns	IF=20mA**

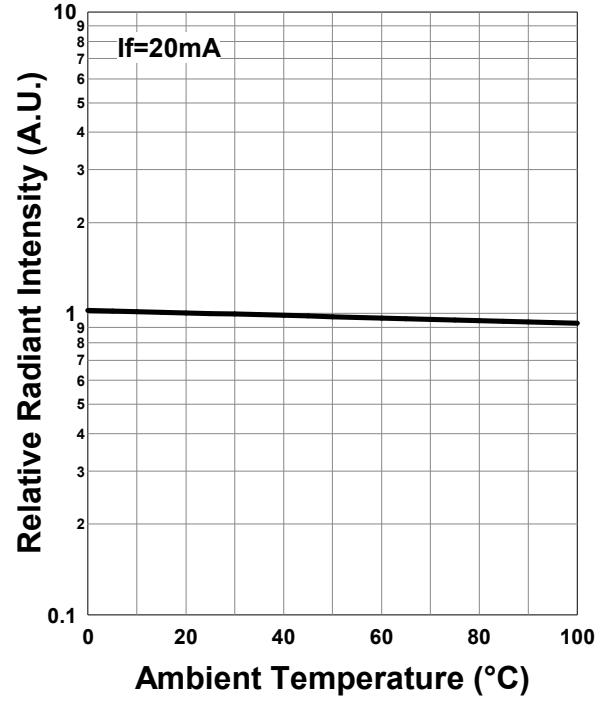
‡ Radiated Power is measured by S3584-08.

660nm

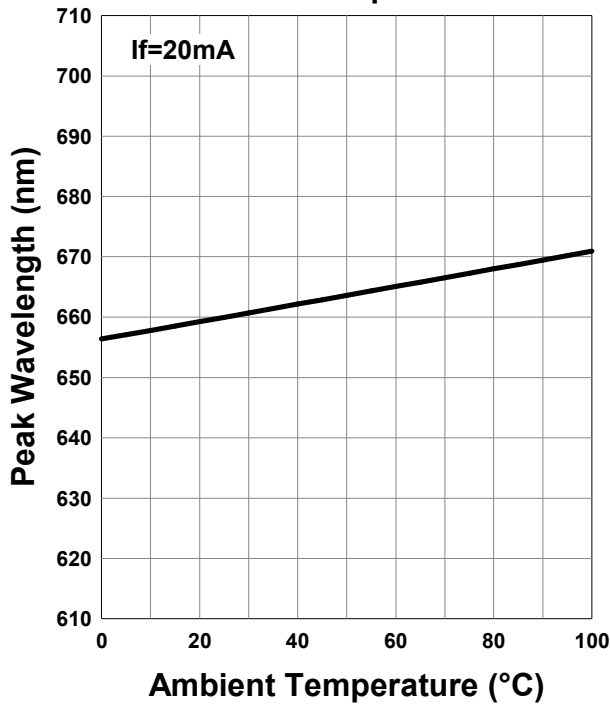
Forward Voltage - Ambient Temperature



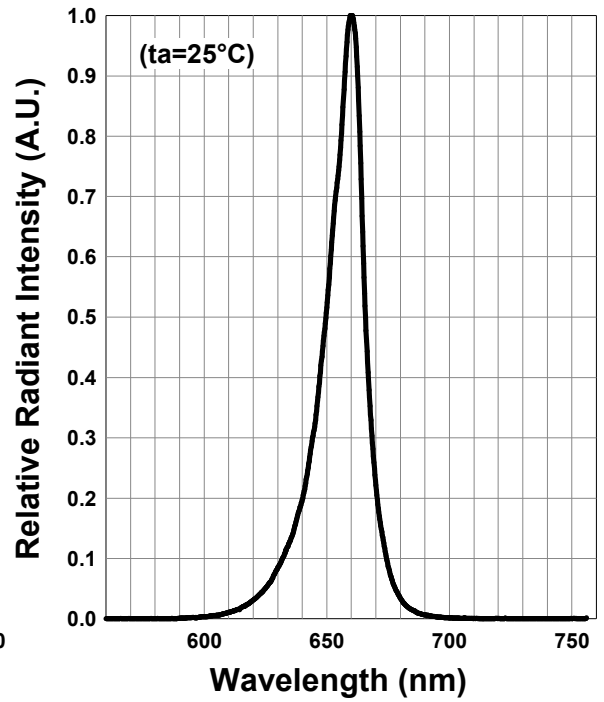
Relative Radiant Intensity - Ambient Temperature



Peak Wavelength - Ambient Temperature

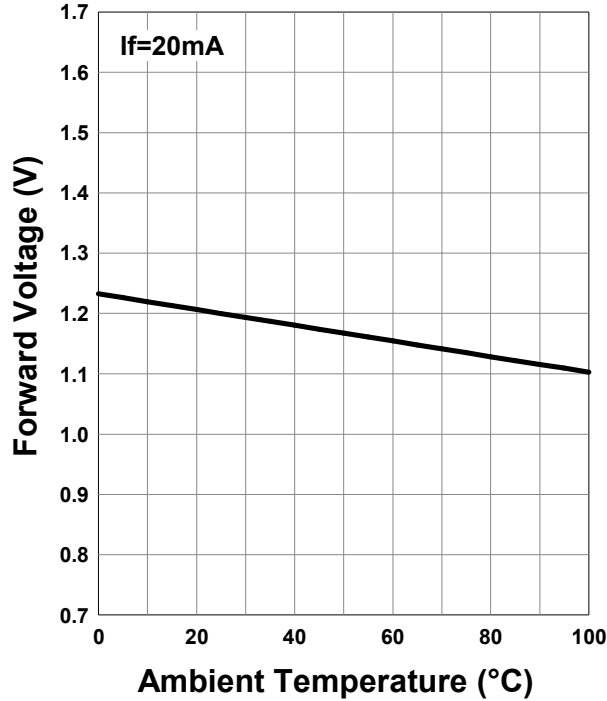


Relative Spectral Emission

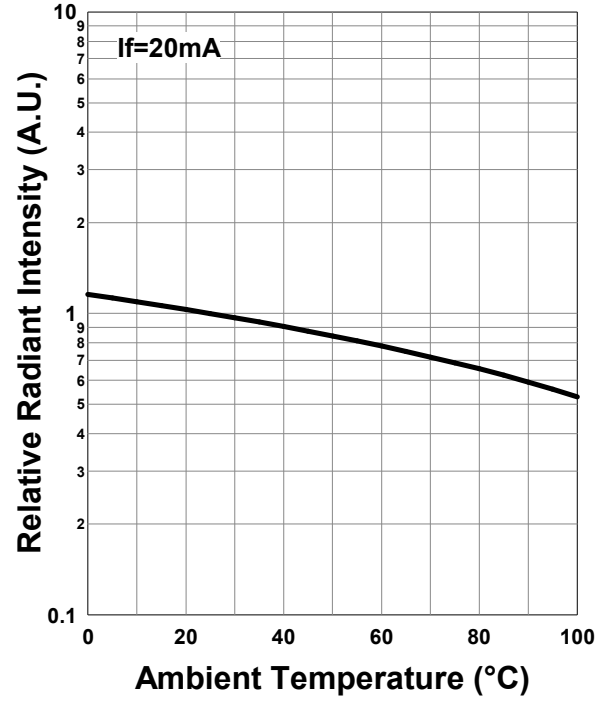


940nm

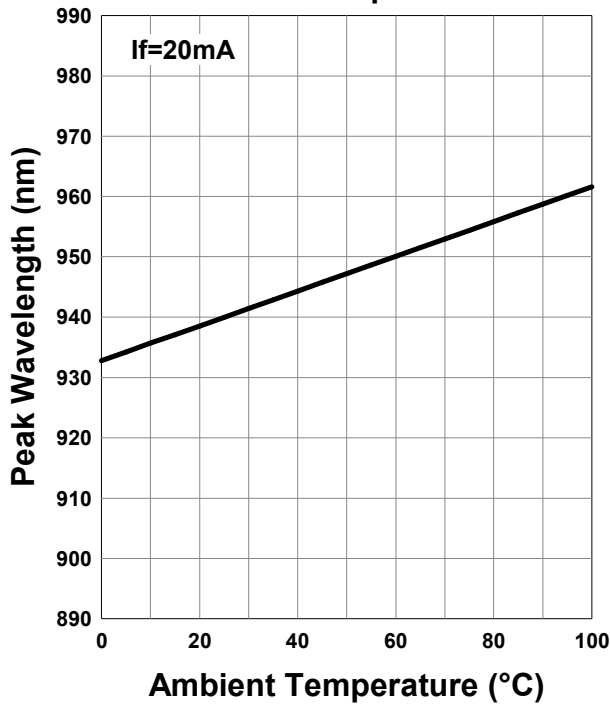
Forward Voltage - Ambient Temperature



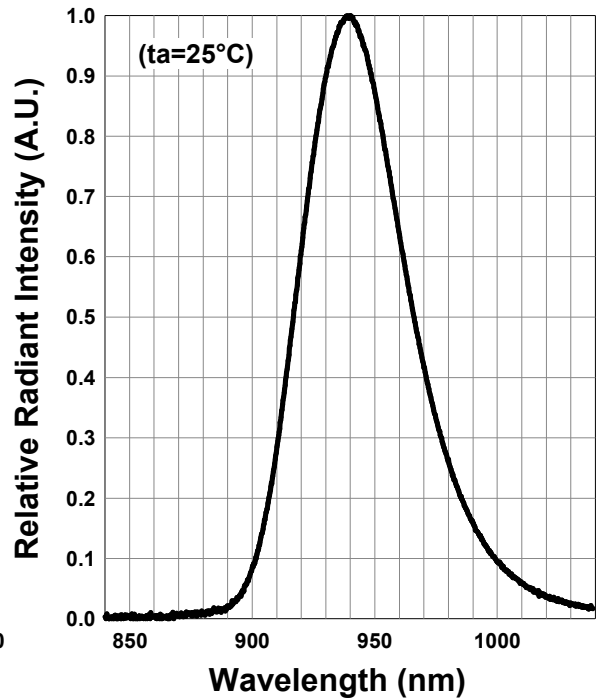
Relative Radiant Intensity - Ambient Temperature



Peak Wavelength - Ambient Temperature



Relative Spectral Emission



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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