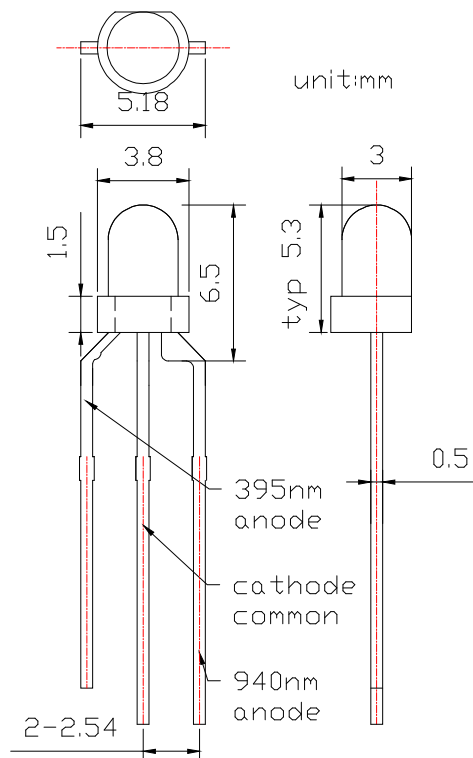


PRELIMINARY

L405V/940DR-34

Multi Wavelength LED

Outline and Internal Circuit



Features

- Chip Material : InGaN(405nm) , AlGaAs(940nm)
- Chip Dimension : 350um * 350um
- Number of Chips : 2pcs
- Peak Wavelength : 405 / 940nm typ.
- Lead Frame Die : Silver Plated on Copper
- Package Resin : PA9T Resin
- Lens : Epoxy Resin

405nm

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	200	mW
Forward Current	IF	50	mA
Pulse Forward Current	IFP	100	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

‡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		3.3	4.0	V	IF=20mA*
	VFP		3.7			IFP=100mA**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	22	32		mW	IF=20mA*
			120			IFP=100mA**
Luminous Flux	Φv		150		mlm	IF=20mA**
Peak Wavelength	λp	400		410	nm	IF=20mA*
Dominant Wavelength	λD		420		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	170	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

‡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)

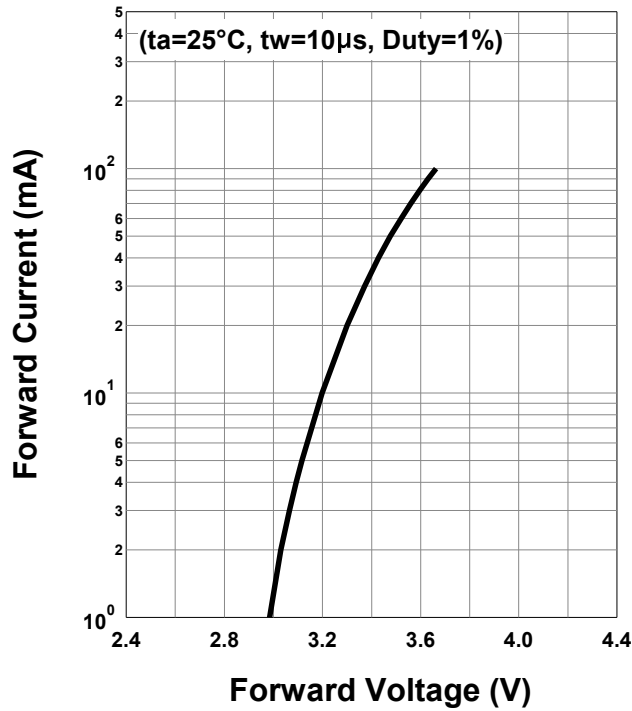
(*: 100% testing, **: reference value)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		1.3	1.7	V	IF=20mA*
	VFP		2.1			IFP=1A**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	8.0	12		mW	IF=20mA*
			500			IFP=1A**
Peak Wavelength	λp	930		955	nm	IF=20mA*
Half Width	Δλ		40		nm	IF=20mA**
Rise Time	tr		10		ns	IF=20mA**
Fall Time	tf		15		ns	IF=20mA**

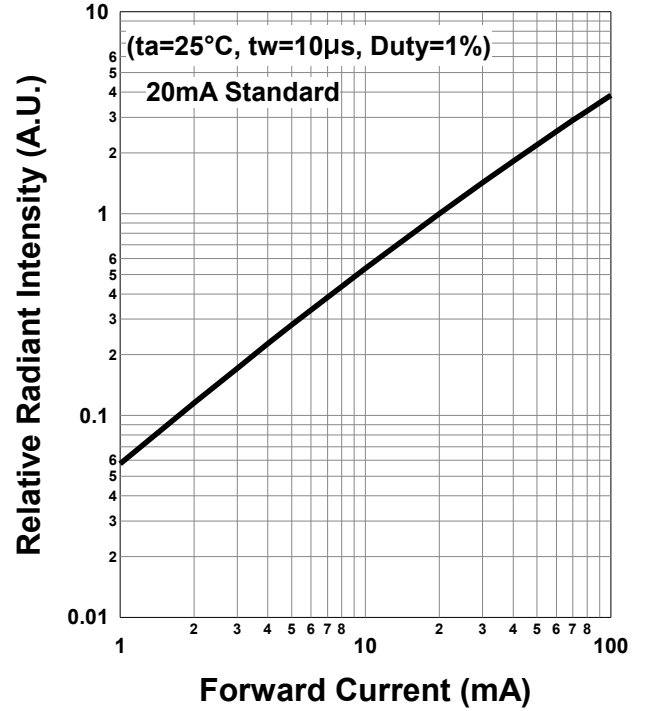
‡ Radiated Power is measured by S3584-08.

**Typical Characteristic
Curves 405nm**

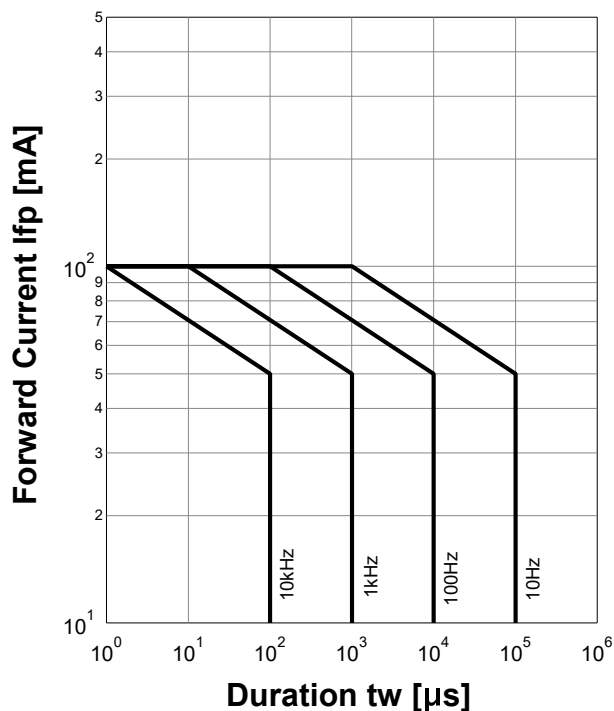
Forward Current - Forward Voltage



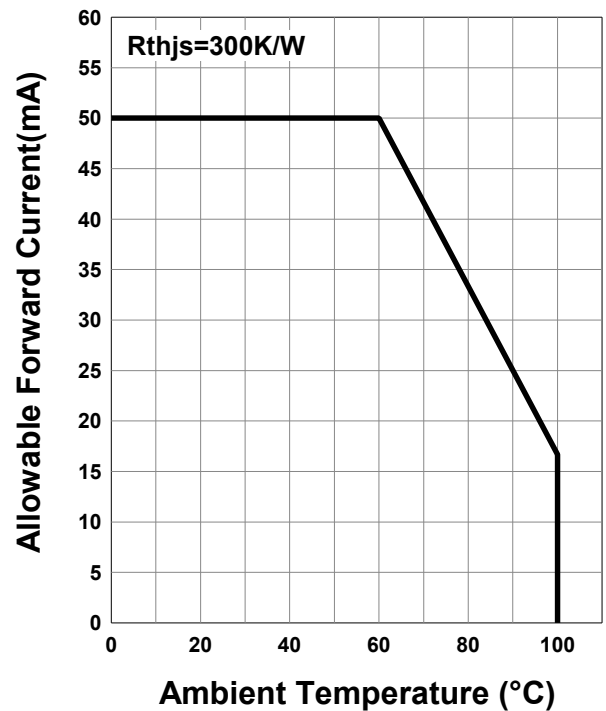
**Relative Radiant Intensity -
Forward Current**



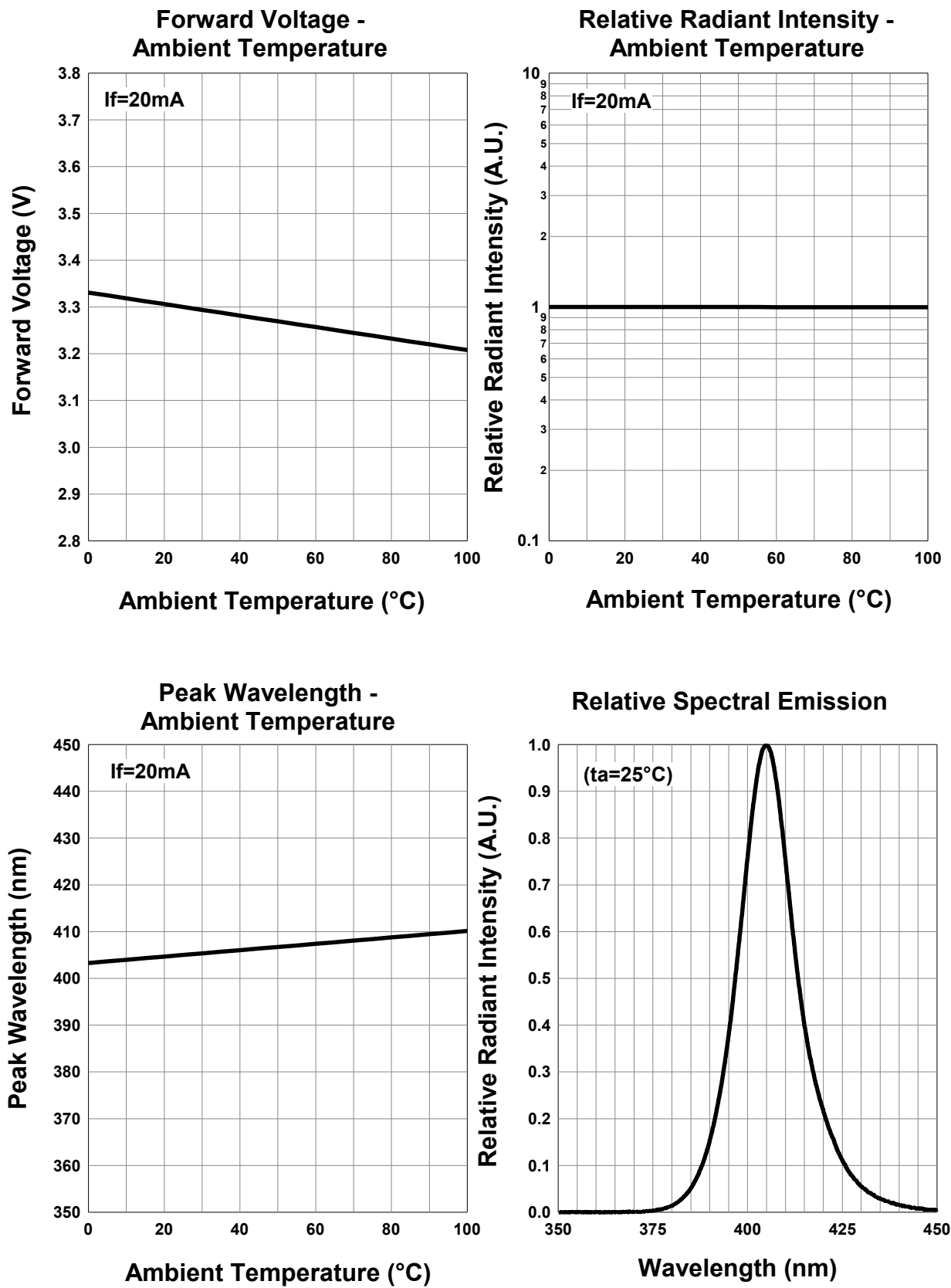
Forward Current - Pulse Duration



**Allowable Forward Current -
Ambient Temperature**

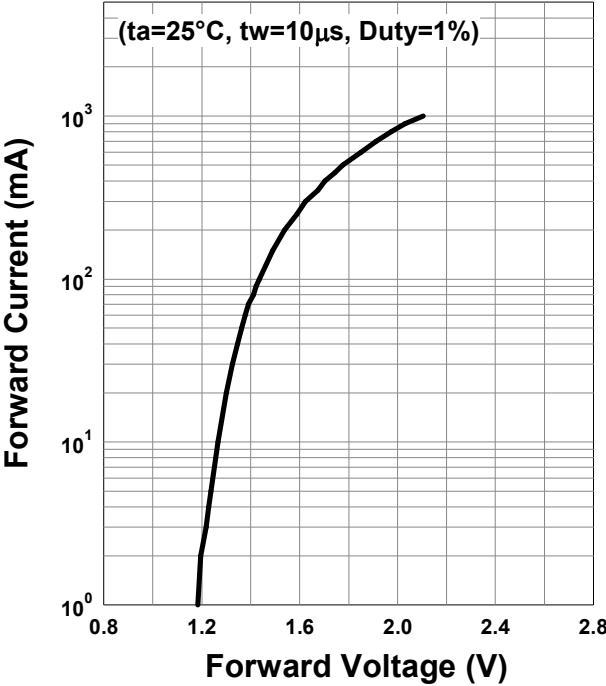


405nm

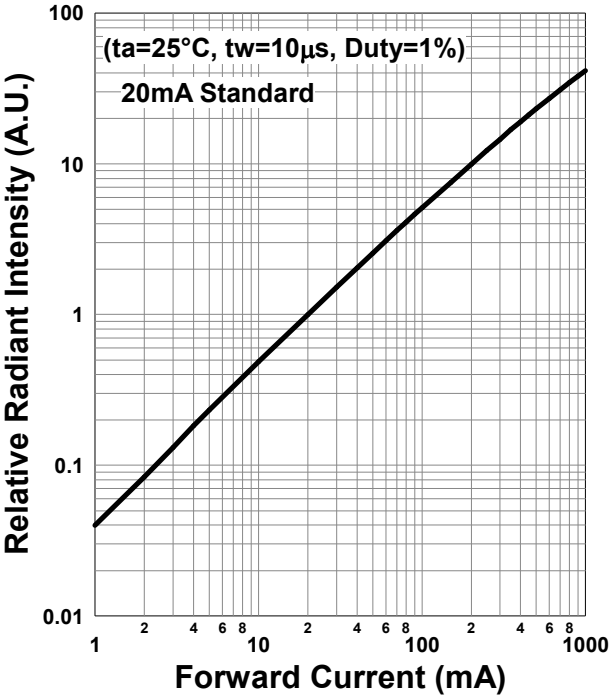


Typical Characteristic
Curves 940nm

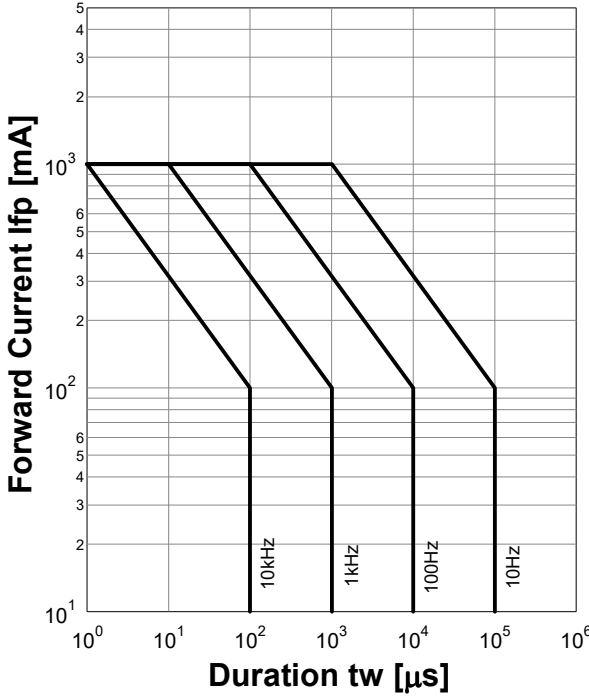
Forward Current - Forward Voltage



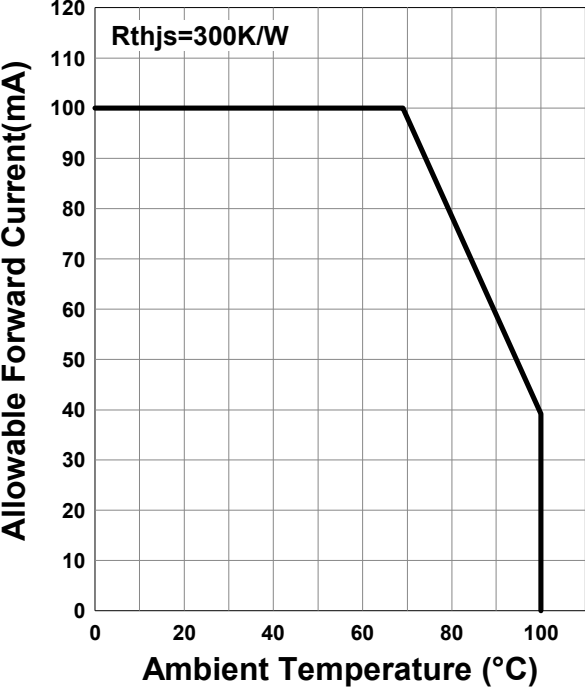
Relative Radiant Intensity -
Forward Current



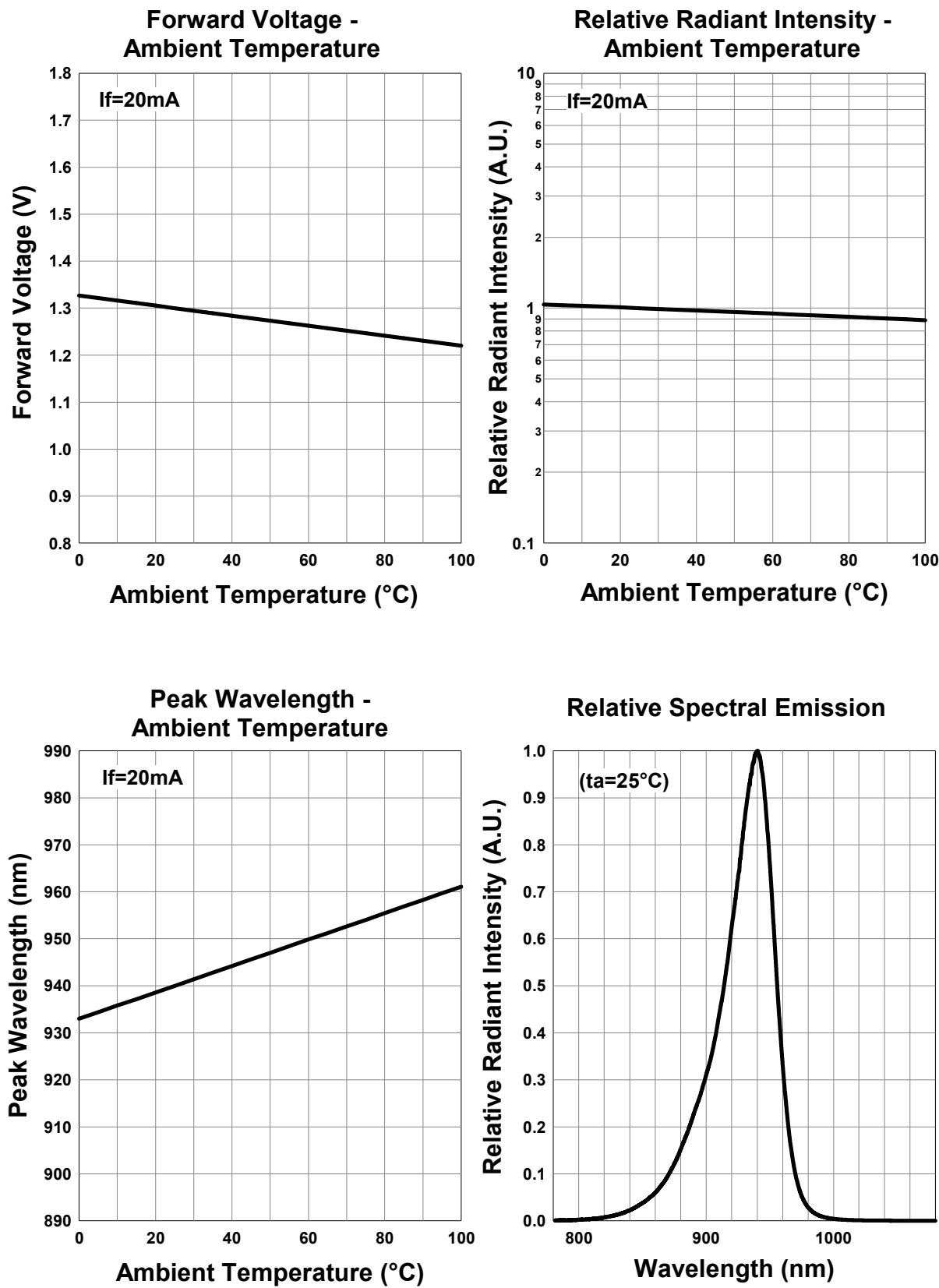
Forward Current - Pulse Duration



Allowable Forward Current -
Ambient Temperature



940nm



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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