Marubeni

Data Sheet

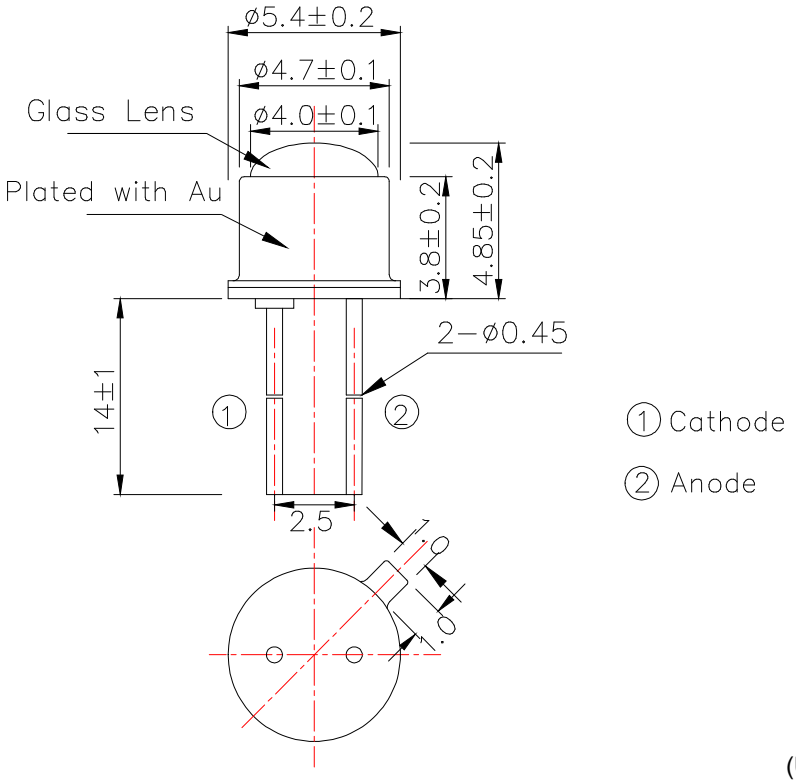
2023.06

PRELIMINARY

L565-30K42

Stem Type LED Lamp

Outline and Internal Circuit



(Unit : mm)

Features

- Non-hermetic package
- Chip Material : GaP
- Chip Dimension : 350um * 350um
- Number of Chips : 1pce
- Peak Wavelength : 565nm typ.
- Stem: TO-46 type
- Lens : UnSpherical Glass
- Cap : Gold Plated

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Power Dissipation	PD	120	mW
Forward Current	IF	50	mA
Pulse Forward Current	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthjs	500	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)

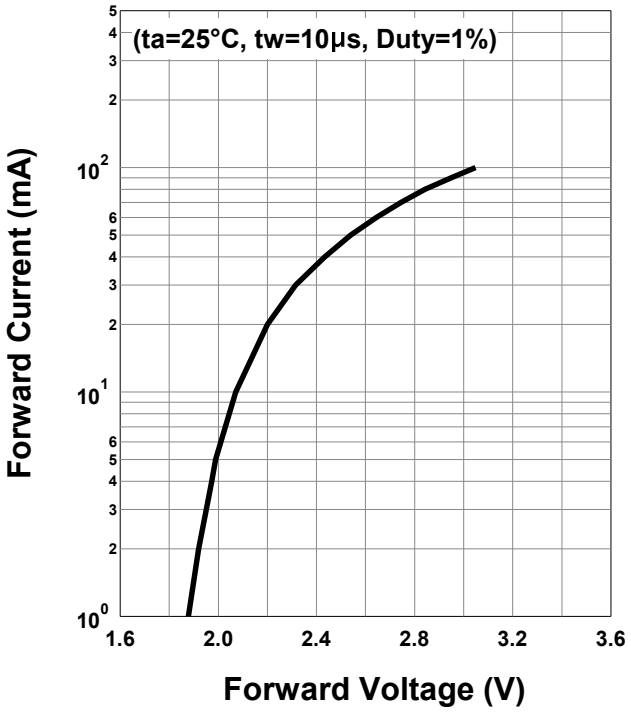
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		2.2	2.4	V	IF=20mA*
	VFP		3.0			IFP=100mA**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	0.08	0.12		mW	IF=20mA*
			0.51			IFP=100mA**
Radiant Intensity	IE		0.6		mW/sr	IF=20mA**
			2.5			IFP=100mA**
Luminous Flux	ΦV		80		mlm	IF=20mA**
Peak Wavelength	λp	555		575	nm	IF=20mA*
Dominant Wavelength	λD		570		nm	IF=20mA**
Half Width	Δλ		28		nm	IF=20mA**
Viewing Half Angle	θ1/2		±7		deg.	IF=20mA**

‡ Radiated Power is measured by S3584-08.

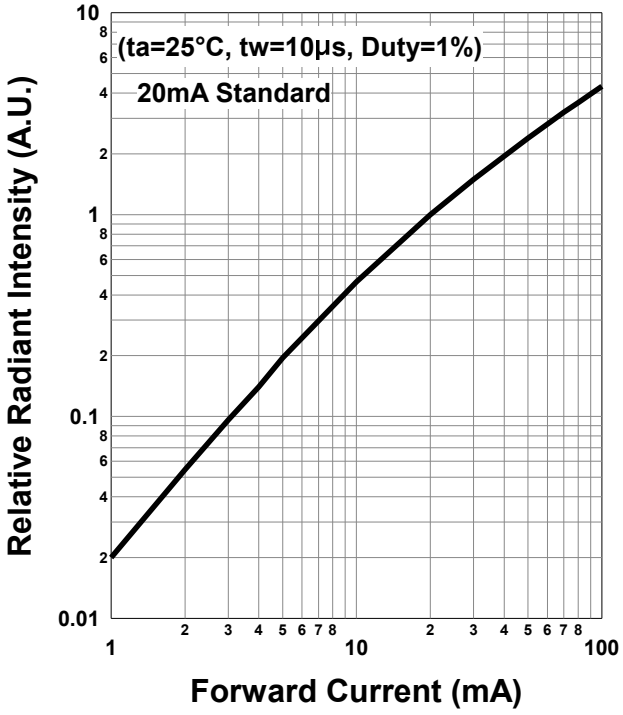
‡ Radiant Intensity is measured by CIE127-2007 Condition B.

Typical Characteristic Curves

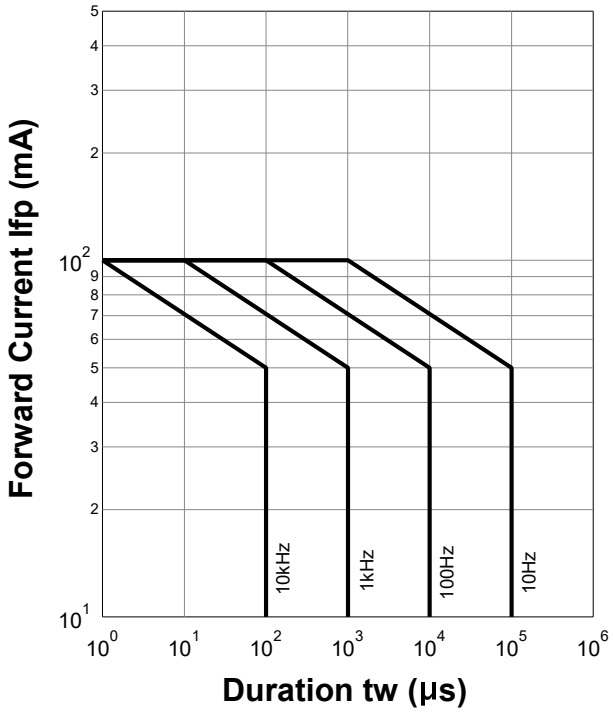
Forward Current - Forward Voltage



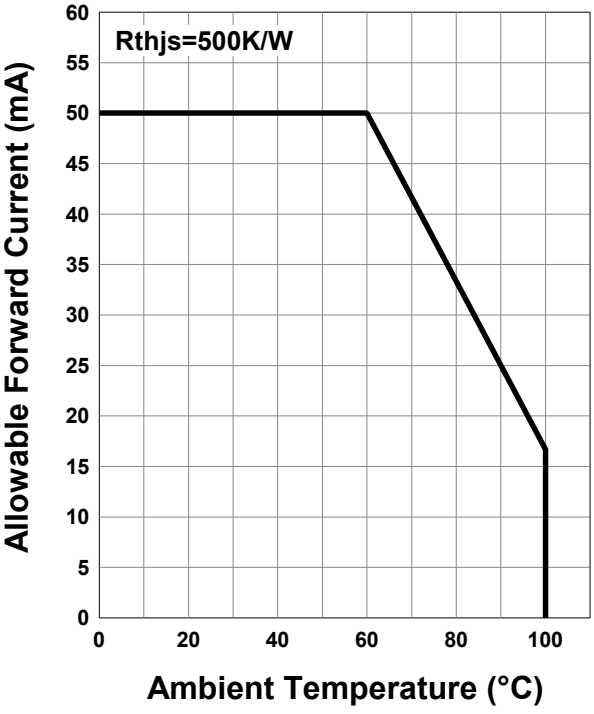
Relative Radiant Intensity - Forward Current

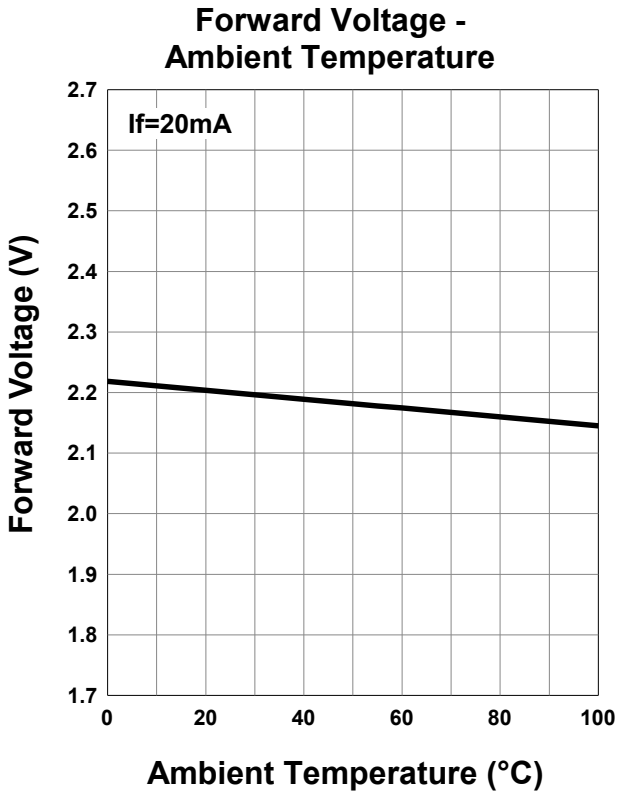


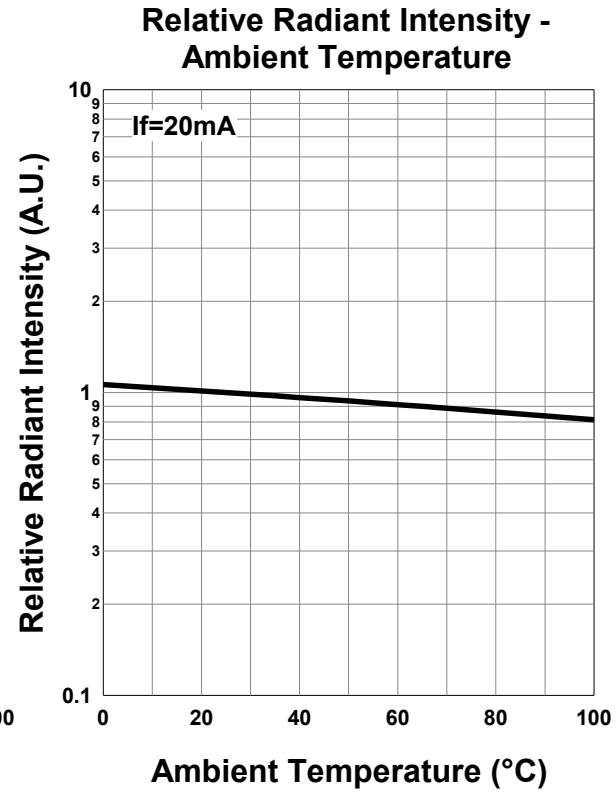
Forward Current - Pulse Duration

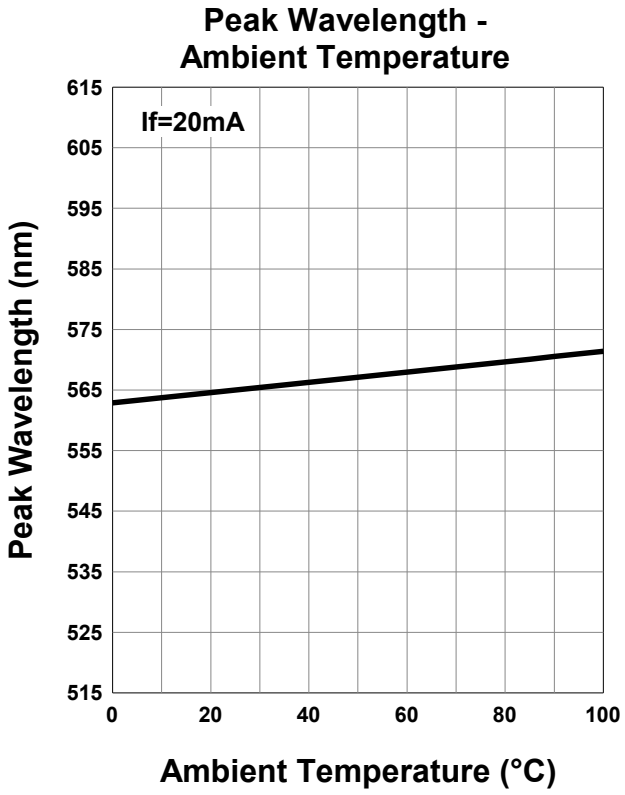


Allowable Forward Current - Ambient Temperature

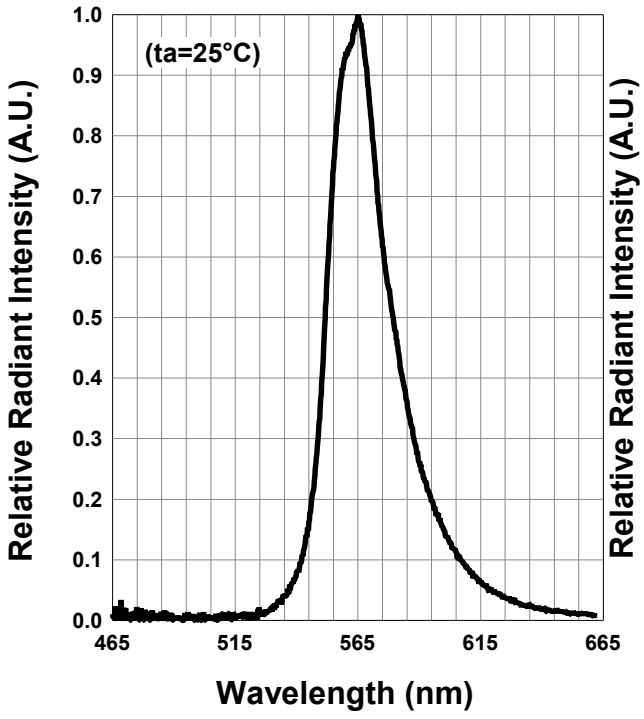



Forward Voltage -
Ambient Temperature
If=20mA
Forward Voltage (V)
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2.0
1.9
1.8
1.7
0
20
40
60
80
100
Ambient Temperature (°C)

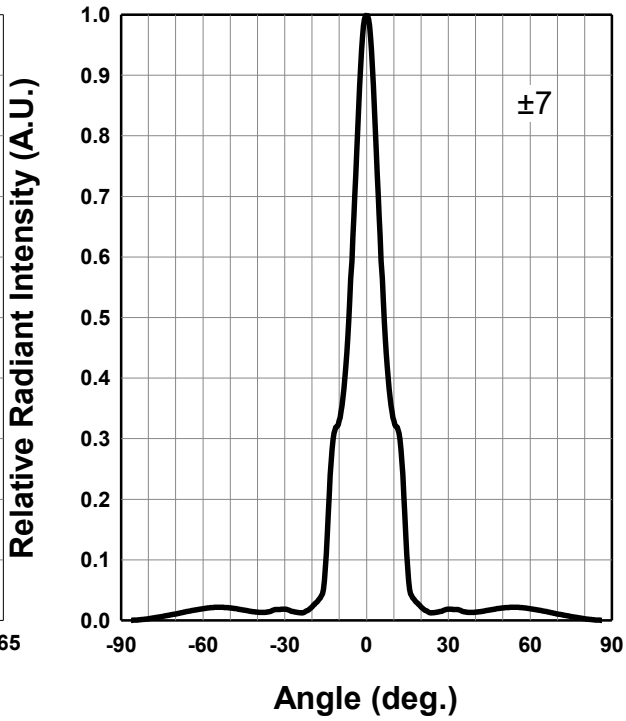

Relative Radiant Intensity -
Ambient Temperature
If=20mA
Relative Radiant Intensity (A.U.)
10
9
8
7
6
5
4
3
2
1
0.1
0
20
40
60
80
100
Ambient Temperature (°C)


Peak Wavelength -
Ambient Temperature
If=20mA
Peak Wavelength (nm)
615
605
595
585
575
565
555
545
535
525
515
0
20
40
60
80
100
Ambient Temperature (°C)

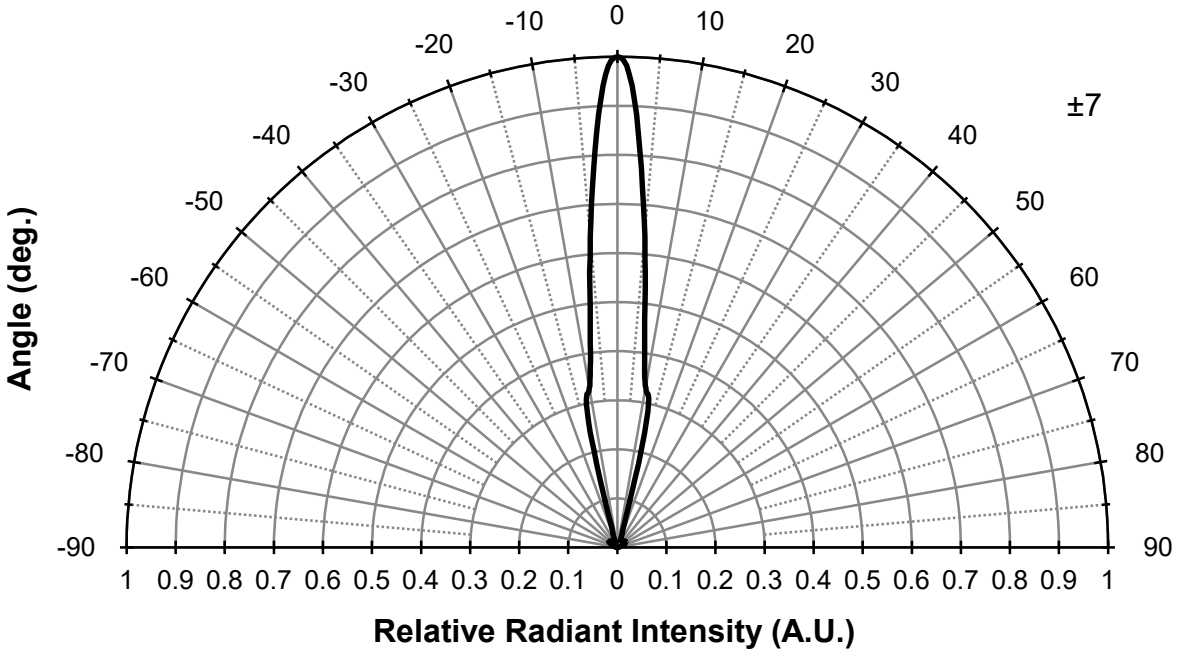
Relative Spectral Emission



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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