

> Mechanical Specification:

(1) Dimension

- Chip size: 8 mil x 15 mil ($205 \pm 25 \mu\text{m} \times 380 \pm 25 \mu\text{m}$)
- Thickness: 4.3 mil ($110 \pm 10 \mu\text{m}$)
- P bonding pad: 2.8 mil ($70 \pm 10 \mu\text{m}$)
- N bonding pad: 2.8 mil ($70 \pm 10 \mu\text{m}$)

(2) Metallization

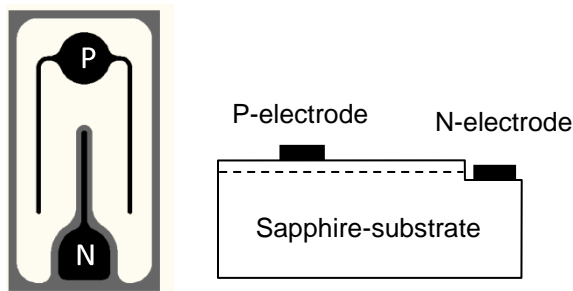
- Topside P electrode: Au alloy
- Topside N electrode: Au alloy

Features:

- Long operation life
- Lambertian radiation

Applications:

- UV air purifier
- Medical applications
- Curing



> Electro-optical Characteristics at 25°C: ⁽¹⁾

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	Vf1	If = 10μA	1.6	-	-	V
	Vf2	If = 20mA	-	3.2	3.4	V
Peak Wavelength ⁽²⁾	λ_p	If = 20mA	395	-	415	nm
Spectra Half-width	$\Delta\lambda$	If = 20mA	-	15	-	nm
Radiant flux ⁽³⁾⁽⁴⁾	Po	If = 20mA	26	-	28	mW
			28	-	30	
			30	-	32	
			32	-	34	

Note:

(1) ESD protection during chip handling is recommended.

(2) Basically, the wavelength span is 20nm; however, customers' special requirements are also welcome.

(3) Radiant flux is determined by using an Ag-plated TO-can header without an encapsulant.

(4) Radiant flux measurement allows a tolerance of $\pm 15\%$.

> Absolute Maximum Ratings:

Parameter	Symbol	Condition	Rating	Unit
Forward DC Current	If	Ta = 25°C	≤ 50	mA
Junction Temperature	Tj	-	≤ 125	°C
Storage Temperature	Tstg	Chip	-40 ~ +85	°C
		Chip-on-tape/storage	5 ~ 35	°C
		Chip-on-tape/transportation	-20 ~ +65	°C
Temperature during Packaging	-	-	280(<10sec)	°C

Note: Maximum ratings are package dependent. The above maximum ratings were determined using a Printed Circuit Board (PCB) without an encapsulant. Stresses in excess of the absolute maximum ratings such as forward current and junction temperature may cause damage to the LED.

> Characteristic Curves:

Fig.1 – Relative luminous Intensity vs. Forward Current

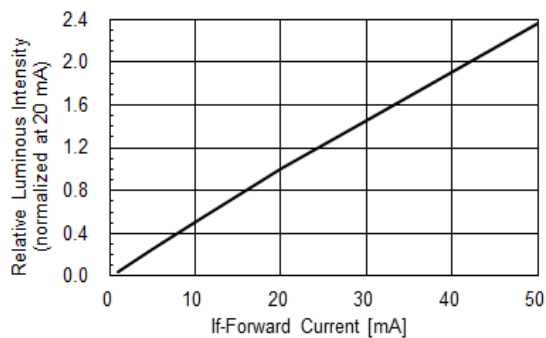


Fig.2 – Forward Current vs. Forward Voltage

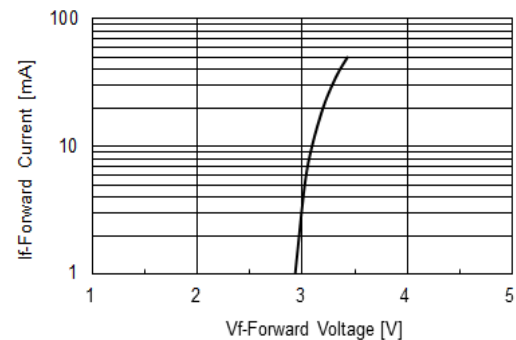


Fig.3 – Relative Intensity (@20mA) vs. Ambient Temperature

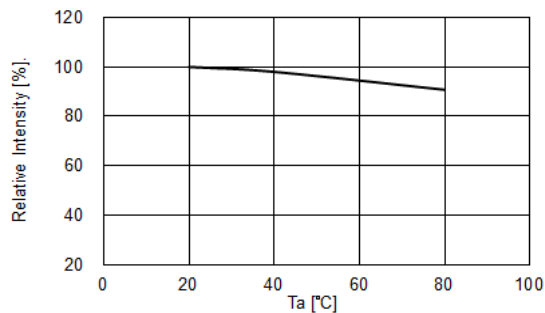


Fig.4 – Forward Voltage (@20mA) vs. Ambient Temperature

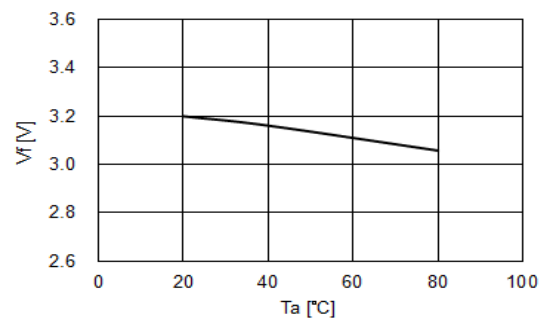


Fig.5 – Peak Wavelength (@20mA) vs. Ambient Temperature

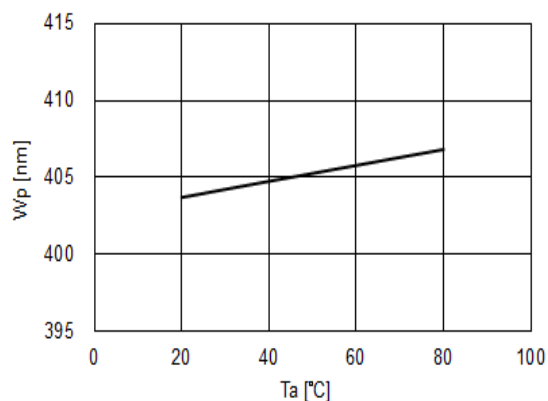


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 125°C)

