

ECCV5-0VAG1-F0

Characters

Features:

- High radiant flux
- Long operation life
- Lambertian radiation

Applications:

- Printing
- Curing

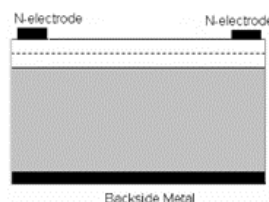
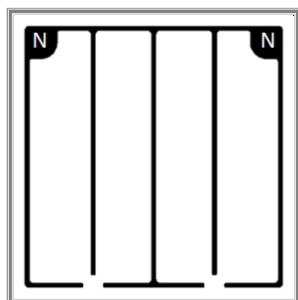
Dimension

Chip Size:

- 45 mil x 45 mil
($1143 \pm 25 \mu\text{m}$ x $1143 \pm 25 \mu\text{m}$)
Thickness: 6.3 mil ($160 \pm 25 \mu\text{m}$)
- Bonding pad: 4.7 mil ($120 \pm 10 \mu\text{m}$)

Metallization:

- Topside N electrode: Au alloy
- Backside metal: Au alloy



Electro-optical Characteristics ($T_a=25^\circ\text{C}$ ⁽¹⁾):

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	Vf1	If = 10 μ A	1.6	-	-	V
	Vf2	If = 1000mA	-	(3.6)	3.8	V
Peak Wavelength ⁽²⁾	λ_p	If = 1000mA	365	-	370	nm
Spectra Half-width	$\Delta\lambda$	If = 1000mA	-	(12)	-	nm
Radiant Flux ⁽³⁾⁽⁴⁾	Po	If = 1000mA	1400	-	1450	mW
			1450	-	1500	
			1500	-	1550	
			1550	-	1600	
			1600	-	1650	
			1650	-	1700	
			1700	-	1750	
			1750	-	1800	

Note:

(1) ESD protection during chip handling is recommended.

(2) Basically, the wavelength span is 5nm; however, customers' special requirements are also welcome.

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

(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	≤ 1000	mA
Junction Temperature	Tj	-	≤ 115	°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 Metal Core Printed Circuit Board (MCPCB) without an encapsulate. 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

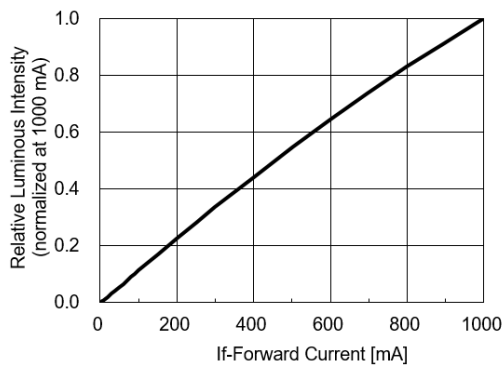


Fig.2 – Forward Current vs. Forward Voltage

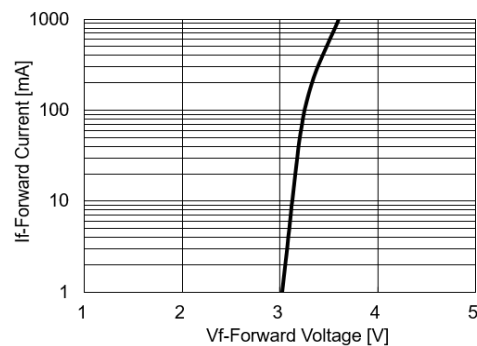


Fig.3 – Relative Intensity (@1000mA) vs. Ambient Temperature

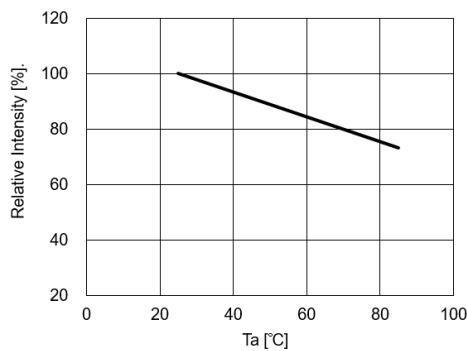


Fig.4 – Forward Voltage (@1000mA) vs. Ambient Temperature

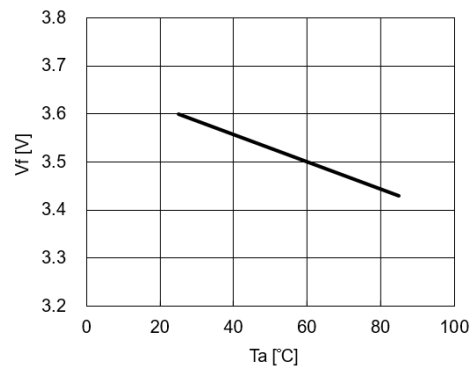


Fig.5 – Peak Wavelength (@1000mA) vs. Ambient Temperature

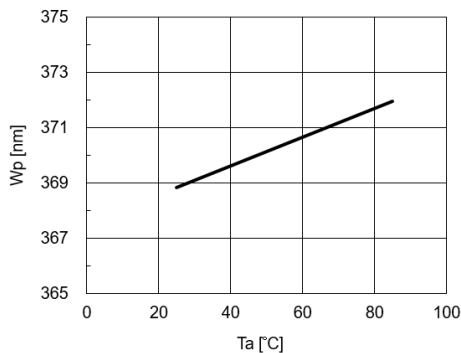


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 125°C)

