

> Mechanical Specification:

(1) Dimension

- Chip size: 26 mil x 26 mil ($660 \pm 25 \mu\text{m} \times 660 \pm 25 \mu\text{m}$)
- Thickness: 5.9 mil ($150 \pm 10 \mu\text{m}$)
- Anode pad: $131 \pm 10 \mu\text{m} \times 470 \pm 10 \mu\text{m}$
- Cathode pad: $156 \pm 10 \mu\text{m} \times 509 \pm 10 \mu\text{m}$

(2) Metallization

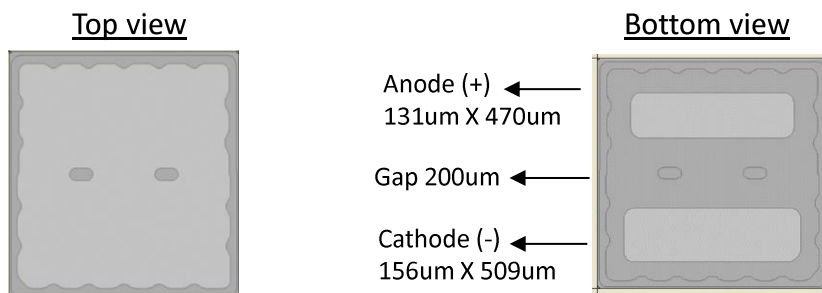
- Electrode pad: Au

Features:

- Compatible with Solder Process
- High Power Density
- Low Rth and Long life time

Applications:

- Backlight



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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Forward Voltage	Vf1	If = 10μA	1.6	-	-	V	
	Vf2	If = 225mA	-	3.1	3.4	V	
Reverse Current	Ir	Vr = 5V	-	-	2.0	μA	
Dominant Wavelength ⁽²⁾	λd	If = 225mA	445	-	455	nm	
Spectra Half-width	Δλ	If = 225mA	-	25	-	nm	
Radiant Flux ⁽³⁾⁽⁴⁾	Po	A82	If = 225mA	360	-	380	mW
		A83		380	-	400	

Note:

(1) ESD protection during chip handling is recommended.

(2) Basically, the wavelength span is 10nm; however, customers' special requirements are also welcome.

(3) Radiant flux is determined by EPISTAR standard.

(4) Radiant flux measurement allows a tolerance of ±15%.

> Absolute Maximum Ratings:

Parameter	Symbol	Condition	Rating	Unit
Forward DC Current	If	Ta = 25°C	≤ 400	mA
Reverse Voltage	Vr	Ta = 25°C	≤ 5	V
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	-	-	260 (<5sec) *	°C

Note: Maximum ratings are package dependent. The above maximum ratings were determined using by EPISTAR standard. Forward current and junction temperature will cause the damage of LEDs if over the absolute maximum ratings.

*Reflow soldering should not be done more than two times.

> Characteristic Curves:

Fig.1 – Relative luminous Intensity vs. Forward Current

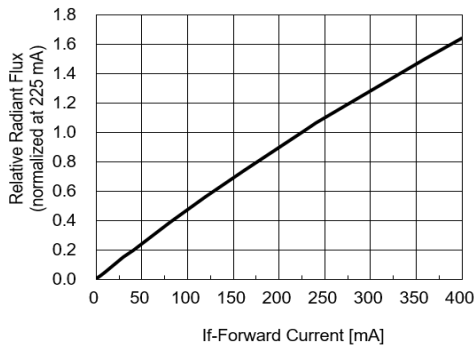


Fig.2 – Forward Current vs. Forward Voltage

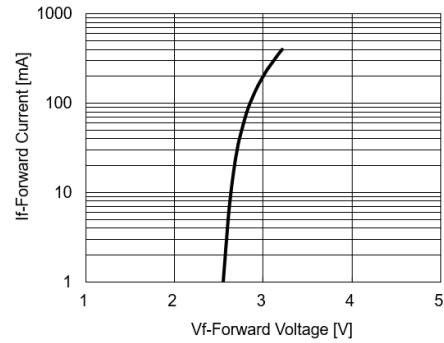


Fig.3 – Relative Intensity (@225mA) vs. Ambient Temperature

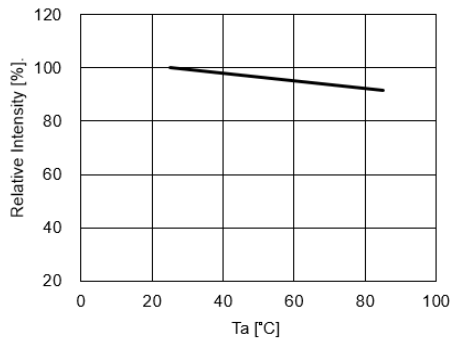


Fig.4 – Forward Voltage (@225mA) vs. Ambient Temperature

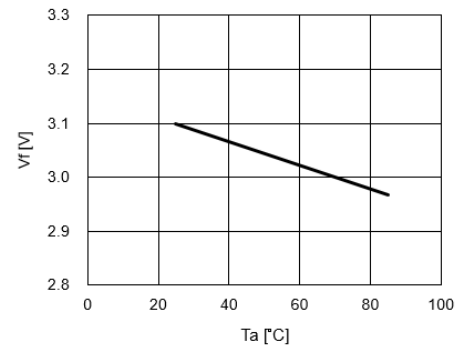


Fig.5 – Dominant Wavelength (@225mA) vs. Ambient Temperature

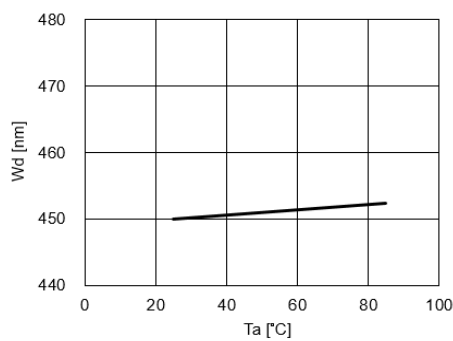


Fig.6 – Maximum Driving Forward DC Current vs. Ambient Temperature (De-rating based on Tj max. = 125°C)

